Do note disclosures influence value relevance more after financial statement placement becomes more uniformly prominent? Evidence from ASU 2011-05

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Abstract: We examine whether financial statement note disclosures play an enhanced role in value relevance when the placement of line items among financial statements becomes more uniformly prominent. We consider ASU 2011-05, which prohibited reporting other comprehensive income (OCI) in the statement of changes in stockholders' equity, and report two main findings. First, using a larger sample and longer time period than early studies examining ASU 2011-05, we document that, relative to firms unaffected by this prohibition, firms required to change OCI placement exhibited positive changes in OCI value relevance after ASU 2011-05 became effective, in line with the FASB's stated goal of raising OCI prominence. This finding resolves the seemingly puzzling findings of early studies, which documented an unexpected incremental decrease in OCI value relevance for these firms. Second, we find that this effect is enhanced when OCI-related note disclosures are more specific and numeric, and are more readable, more stable, or shorter in length. Collectively, our findings suggest that financial statement placement and note disclosure characteristics interact in a manner such that when financial statement line items influence valuation to a greater extent via prominent placement, qualitative characteristics of accompanying note disclosures assume this role more prominently as well.

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1. Introduction

U.S. GAAP requires firms to report other comprehensive income ("OCI") and its components on the face of the financial statements. However, prior to ASU 2011-05, firms were afforded discretion over which financial statement would display such OCI. Under the then-prevailing SFAS 130, *Reporting Comprehensive Income* (issued in 1997), there existed three OCI placement alternatives: [1] in the income statement itself, immediately below net income; [2] in a separate statement of comprehensive income that begins with net income; or [3] in the statement of changes in stockholders' equity ("SCSE"). In June 2011, the FASB issued ASU 2011-05, *Presentation of Comprehensive Income,* which eliminated the option of reporting OCI in the SCSE.[1] Firms are now required to report OCI either: [1] in a single continuous statement of comprehensive income, or [2] in a separate statement of comprehensive income that must immediately follow the income statement. For expositional purposes, we refer to both approaches (which are similar to the first two options allowed under the previous SFAS 130 regime) as "performance statement" placement, to distinguish them from SCSE placement that was allowed prior to ASU 2011-05.[2]

The FASB's stated objective of ASU 2011-05 was to increase the prominence of OCI.

[1] ASU 2011-05 additionally required firms to present reclassification adjustments from OCI to net income (i.e., "recycling") on the face of the financial statement containing OCI. However, after firms reported difficulties in implementation (as well as expressing concerns regarding potentially cluttered OCI reporting), this requirement was delayed by ASU 2011-12. The FASB later issued ASU 2013-02, which allowed firms to report reclassification adjustments either on the face of the financial statements or in the notes to the financial statements. Aside from this mandatory disclosure of recycling adjustments, the actual wording and content of note disclosures related to OCI did not change as a result of these ASUs. The provisions of ASU 2011-05 and ASU 2013-02 are contained in ASC 220-10-45.

[2] While the FASB initially proposed that firms report OCI in one continuous statement of comprehensive income, it ultimately concluded that the differences between one continuous statement and two consecutive statements were minimal and that both approaches would adequately increase the prominence of OCI without compromising its ease of comparability with net income (see paragraph BC10 of ASU 2011-05). Note that prior to ASU 2011-05, firms that reported OCI in a separate statement of comprehensive income were not required to present this statement immediately following the income statement.

Prior research suggests that the manner of display of financial statement information affects the value relevance of such information.[3] However, two early studies (Schaberl and Victoravich 2015; Lin, Martinez, Wang, and Yang 2018) find that for firms changing OCI placement from the SCSE to a more prominent performance statement, OCI value relevance actually *declined* in the early years after ASU 2011-05 adoption—presumably not the FASB's intention. The authors of both studies call for future research to help explain their seemingly puzzling findings.

Our objective is two-fold. First, we reexamine the impact of ASU 2011-05 on OCI value relevance, answering these early studies' call for further research on their unexpected findings. Second, we investigate whether textual characteristics of note disclosures describing OCI differentially influence OCI value relevance for firms that were required to change OCI placement under ASU 2011-05, as we expect that a more prominent display of OCI in the financial statements would draw greater investor attention to OCI-related note disclosures. This rule modification provides a quasi-experimental setting to study the consequences of a mandatory change in OCI's placement in the absence of changes to its measurement.[4]

We first examine overall OCI value relevance reported in the SCSE versus a performance statement and find that OCI is value-relevant regardless of where it is placed. We next reexamine the puzzling early results on OCI value relevance shortly after ASU 2011-05 adoption. As these studies examined a relatively short post-ASU 2011-05 adoption period, their seemingly puzzling results could reflect a transitional period as financial statement users become accustomed to the new and more transparent reporting location. We find that the initial negative impact of ASU

[3] For example, Bartov and Mohanram (2014) find that the return sensitivity to gains/losses from early debt extinguishments is stronger after SFAS 145 prohibited such gains/losses from being classified as an extraordinary item, suggesting that more prominent placement in the income statement elicits a stronger market reaction.
[4] As we discuss later, we establish our sample period so that there are no major changes to OCI components or measurement.

2011-05 on OCI value relevance does indeed appear to have been a temporary phenomenon: When we consider a longer post-ASU 2011-05 sample period—beyond the one- or two-year period examined in Lin et al. (2018) and Schaberl and Victoravich (2015)—we find that the incremental change in OCI value relevance for firms that changed their OCI placement from the SCSE to a performance statement is positive. These results suggest that ASU 2011-05 did indeed enhance the value relevance of reported OCI amounts over a longer time horizon, and that initial concerns over its seemingly negative impact on investor responses may have been premature.

Although we find that promoting OCI's prominence on the face of financial statements has a positive incremental effect on its value relevance, it is unclear whether this change in prominence (and thus perceived importance) is directly driving this effect, or if promoting OCI prominence achieves this effect instead via changing investors' information acquisition and processing behavior.[5] Answering this research question allows us to investigate a potential underlying mechanism leading to the observed impact of financial information placement on the value relevance of such information.

The FASB's desire to increase the prominence of OCI and improve its comparability and transparency via mandated performance statement reporting may be interpreted by investors as OCI being of greater importance and thus worthy of more detailed examination. In addition, consistent with Brown's (1997) survey evidence that analysts view the SCSE as relatively unimportant for valuation, Maines and McDaniel (2000) contend that heightened cognition toward financial information reported in a performance statement (as opposed to the SCSE) will afford more performance signals to OCI when it is reported in a performance statement, leading to investors perceiving performance-statement-reported OCI to be of greater importance for

[5] For example, investors, upon noticing the newly prominent display of OCI, may exert greater effort to find and analyze OCI-related disclosures in financial statement notes.

equity valuation. As a result, we expect that heightened OCI prominence will change the way investors assess OCI-related note disclosures in financial statements, and that the qualities of such disclosures themselves (e.g., textual concreteness and clarity) will influence how investors absorb and price OCI information when OCI is more prominently displayed.

We find that the concreteness and clarity of OCI note disclosures play an especially important role in influencing the extent to which ASU 2011-05 enhances OCI value relevance for firms that were required to change OCI placement from the SCSE to a performance statement ("treatment firms") relative to firms that had reported OCI in a performance statement before ASU 2011-05 and thus were not required to change placement ("control firms"). In particular, ASU 2011-05 is especially impactful for treatment firms when OCI note disclosures exhibit a higher degree of specificity, contain a greater amount of numeric content, display a higher level of readability, remain more consistent from period to period, or are shorter in length. Moreover, when we condition our analyses on investor sophistication, our main results are more pronounced when the company has a less sophisticated investor base, suggesting that less sophisticated investors (who are more likely to ignore note disclosures to begin with or exhibit less ability to understand and interpret such disclosures) are more likely to benefit from the concreteness and clarity of note disclosures after the ASU 2011-05 mandate. Robustness analyses show that our results are not driven by observable differences in firm characteristics between the treatment and control groups. These results complement and enhance the findings of Bartov and Mohanram (2014) by highlighting the important role of note disclosures underlying the phenomenon of differential investor response to alternative financial statement placement.

Our study contributes to the literature by linking two lines of research and providing evidence that financial statement placement and financial disclosures are both important factors

that may affect the value relevance of earnings numbers. One longstanding line of research examines the consequences of the placement of numerical amounts within or across financial statements (e.g., Bartov and Mohanram 2014; Chambers, Linsmeier, Shakespeare, and Sougiannis 2007) or the consequences of recognizing or disclosing such items (e.g., Michels 2017). The other line of research, exploiting more recent developments in linguistic and textual analysis, investigates how disclosure characteristics influence investor valuation (e.g., Li 2008; Brown and Tucker 2011). Overall, our results on OCI value relevance and its relationship to note disclosure characteristics before versus after mandatory performance statement reporting suggest that financial statement notes play an especially important role when OCI amounts appear more prominent to, and draw more attention from, investors. Our study links the above two lines of research and suggests that either of these two qualities of financial reporting (namely, financial statement placement and note disclosure characteristics) considered in isolation does not yield a complete picture in terms of how investors react to reported financial information.

Our study helps resolve the seemingly paradoxical findings of prior research, which suggested that OCI value relevance incrementally decreased for firms that changed their OCI reporting to a more prominent performance statement location. We find that when we examine a more extensive sample of firms and a longer time horizon after the adoption of ASU 2011-05, OCI value relevance for these firms is indeed incrementally positive. Our results suggest that, after a short transitional period, the FASB's objectives for ASU 2011-05 with regards to greater OCI prominance appear to have been achieved.

We also contribute to the literature by providing a plausible mechanism for the positive impact of OCI performance statement reporting on enhanced OCI value relevance. Our findings suggest that the additional effort in acquiring and processing OCI information in note disclosures

induced by the shift in OCI reporting location, rather than the mere shift in OCI reporting location, explains the incremental increase in OCI value relevance for treatment firms. These findings should be of interest to regulators and standard setters because our evidence suggests that promoting the prominence of an earnings component on the face of financial statements should be considered in conjunction with other requirements on accompanying note disclosures. The SEC has recently made efforts to improve the quality of corporate disclosures in annual reports.[6] Our study suggests that the SEC's efforts in regulating financial reporting disclosures will be consequential when it deliberates how the display of financial statement items—upon which such disclosures expound—influences valuation usefulness.

The remainder of this paper proceeds as follows: Section 2 reviews prior literature and develops research hypotheses. Section 3 describes the research methodology, including sample selection and research design. Section 4 presents our main results. Section 5 presents additional analyses. Section 6 concludes the paper.

2. Literature Review and Hypothesis Development

2.1 ASU 2011-05 and OCI Valuation

When the FASB issued SFAS 130 in 1997, it encouraged firms to report OCI and its components in a performance statement rather than in the SCSE.[7] However, most firms chose the

[6] For example, in August 2020, the SEC announced a broad set of rule amendments intended to ensure that disclosures in regulated filings "are rooted in materiality and are designed to facilitate an understanding of each registrant's business, financial condition, and prospects". The SEC also stated that the new disclosure rules "are designed for this information to be presented on a basis consistent with the lens that management and the board of directors use to manage and assess the registrant's performance." (SEC press release 2020-192)

[7] The FASB in June 1996 issued an Exposure Draft which initially proposed requiring OCI performance statement reporting (with the option of either a one- or two-statement approach as described in Section 1). The FASB received 281 comment letters in response, with the large majority arguing against performance statement reporting. See paragraphs 50-67 in the Basis for Conclusions section of SFAS 130.

SCSE (Chambers et al. 2007).[8] Two experimental studies examine how these alternative reporting locations affect investor processing of OCI. Hirst and Hopkins (1998) find that analysts better detect earnings management when OCI is reported in a performance statement. Maines and McDaniel (2000) find that non-professional investors incorporate OCI volatility in judgments of firm performance when OCI is reported in a performance statement, but not when reported in the SCSE.

While these experimental studies support the FASB's belief that performance statement placement increases OCI prominance, survey evidence and archival research findings are mixed. Drake et al. (2019) survey professionals' usage of financial statements and find that these professionals assign no significant differences in the importance attached to the balance sheet, the income statement, and the statement of cash flows. This implies that although standard setters aim to promote the significance of OCI by placing it in a more "prominent" performance statement, the change of OCI placement may not affect professionals (or sophisticated information users) in their processing of OCI information.[9] Chambers et al. (2007) test OCI value relevance using archival data and find that OCI under SFAS 130 is more value-relevant when reported in the SCSE than in a performance statement. On the other hand, Rees and Shane (2012) note that prior research does not provide consistent evidence on how different reporting locations allowed under SFAS 130 influence the way investors use and price OCI.

Two archival studies investigate the early impact of ASU 2011-05, which mandated the placement of OCI in a performance statement. Schaberl and Victoravich (2015) and Lin et al.

[8] We find that 85% of our sample firms chose to report OCI in the SCSE during the pre-ASU 2011-05 period, which is generally consistent with the findings of Chambers et al. (2007) and other prior studies.
[9] Drake et al. (2019) also show evidence that professional investors believe that OCI footnotes may not be as useful as other footnotes. However, Drake et al. note that their findings are inconsistent with prior research suggesting that OCI is associated with firm value.

(2018) both find, somewhat surprisingly, that OCI value relevance for treatment firms (i.e., those required to change OCI placement from the SCSE to a performance statement) actually *declines* relative to control firms (i.e., those which already reported OCI in a performance statement and thus did not change) in the immediate post-ASU 2011-05 period. These findings, together with Chambers et al. (2007), are puzzling in that they suggest that a more prominent OCI placement results in less value-relevant OCI information.[10] However, both studies examine very short (one or two years) post-ASU 2011-05 periods, and Schaberl and Victoravich (2015) conjecture that these puzzling results could reflect a transitional period as financial statement users become accustomed to the new and more prominent reporting location.

Notwithstanding a potential transitional period immediately after ASU 2011-05 adoption, we expect that the mandated placement of OCI to a more prominent performance statement will ultimately have a positive impact on the value relevance of OCI, as investors will place more importance on OCI reported in a performance statement and thus absorb the OCI information in their valuation to a greater extent. There are several reasons why investors may ultimately place more importance on OCI post-ASU 2011-05.

First, the FASB's argument that increased OCI prominence will lead investors to believe that OCI deserves more attention than previously afforded is consistent with Clor-Proell and Maines (2014), who contend that financial statement users might react differently to recognized versus disclosed information as a result of standard setters' own views on the matter.[11]

[10] We note, however, that Cao and Dong (2020), using a sample from 2004 through 2014, find that the incremental market reaction to OCI volatility, i.e., a second moment measure of OCI, is stronger for firms that were required to change OCI placement from the SCSE to a performance statement. Their results are consistent with our finding that the prominence of OCI placement affects market valuation of OCI.

[11] Paragraph BC7 of the Basis for Conclusions section of ASU 2011-05 states: "The Boards' proposal to require that components of other comprehensive income be reported in a single continuous statement resulted from their desire to increase the prominence of other comprehensive income." Meanwhile, Paragraph BC9 discusses "the need to improve the comparability and transparency in reported comprehensive income".

Additionally, while surveys of financial statement users reveal that such users ostensibly view OCI as less important in firm valuation, Drake et al. (2019) note that this is inconsistent with a large body of research suggesting that OCI components are associated with firm value, e.g., Soo and Soo (1994) and Louis (2003) on foreign subsidiary translation adjustments; Campbell (2015) on fair value changes of derivatives used in cash flow hedges; Yu (2013) on pension-related OCI items under SFAS No. 158; and Dong, Ryan, and Zhang (2014) and Barth, Beaver, and Landsman (1996) on unrealized gains and losses on investment securities. This incongruity between OCI's perceived lack of importance in user surveys and actual importance as revealed through its association with firm value partly motivated the FASB to increase OCI prominence.[12]

Second, Brown (1997) finds that analysts regard the SCSE as the least important financial statement. This view of market participants is supported by research finding that managers opportunistically chose OCI placement. Lee, Petroni, and Shen (2006) find that OCI gains and losses on available-for-sale securities that are used to smooth earnings are more likely to appear in the SCSE. Bamber, Jiang, Petroni, and Wang (2010) report that managers are less likely to display OCI in a performance statement when their equity compensation is more sensitive to stock price changes. These studies imply that managers believe that market participants place more importance on OCI when it is reported in a performance statement.

Third, Maines and McDaniel (2000) further identify four cognitive sources that encourage investors to place greater importance on OCI: [1] the placement of OCI and its components in a statement of performance; [2] labeling it with the term comprehensive

[12] Moreover, the FASB noted that respondents to its own exposure drafts proposing changes to OCI display often conveyed the sentiment that OCI was important in determining firm value, noting the "importance of including other comprehensive income items in a prudent analysis of an entity's economic exposure", and that "the arbitrary line distinguishing items of net income from items of other comprehensive income is an important reason to present all nonowner changes in equity together, thereby increasing the prominence of other comprehensive income." (see Paragraphs BC9-BC10 of ASU 2011-05)

"income"; [3] the proximity of OCI and its components with net income in one or two statements of performance; and [4] the isolation of OCI and its components as the sole type of information in a statement of performance rather than along with share capital and retained earnings in the SCSE. Maines and McDaniel (2000) contend that these cognitive dimensions will attach more performance-related signals to OCI, which usually attract more cognitive efforts from investors to search for and impound OCI information in their valuation.[13]

We thus hypothesize that firms which reported OCI in the SCSE before ASU 2011-05 and thus were required to change OCI placement to a performance statement (i.e., treatment firms) will experience a positive change in OCI value relevance relative to firms that already reported OCI in a performance statement and thus were not impacted by ASU 2011-05 (i.e., control firms). Formally, we state our first hypothesis in the alternate form as follows:

> *H1: Relative to control firms, treatment firms experience a positive change in OCI value relevance (from pre- to post-ASU 2011-05).*

2.2 Note Disclosures and OCI Valuation Post-ASU 2011-05

In H1, we posit that more prominent OCI placement increases OCI value relevance. This increase, however, may not be uniform across all firms. If investors place more importance on OCI following ASU 2011-05, we expect that investors will increase their efforts to acquire and assess OCI information contained in financial statement notes—an important source of such information. When investors exert more efforts to glean information from note disclosures, the extent to which they absorb such information may depend on the note disclosures' textual characteristics. Hirshleifer and Teoh (2003) suggest that informationally equivalent presentations

[13] As discussed earlier, Maines and McDaniel (2000) also note that the volatility of OCI is more likely to be incorporated in investors' evaluation of firm performance when such OCI is reported in a performance statement rather than the SCSE, which could influence the firm's decision (in the pre-ASU 2011-05 period) on whether or not to display OCI in a separate performance to begin with. As we discuss later, in our main tests we adopt a two-stage regression approach to address potential self-selection of firms into treatment and control groups, and we control for OCI volatility in the first-stage regression.

have different effects on perceptions when investors have limited attention and processing power, and that information presented in a salient and readily processed form can be absorbed more easily than non-salient and hard-to-process information. Muller, Riedl, and Sellhorn (2015) find that equity prices are more strongly associated with fair value estimates when those estimates are recognized rather than disclosed, and that lower information processing costs mitigate this differential, suggesting that note disclosures have an impact on the value relevance of the related amounts depending on how accessible the note disclosures are. Therefore, we contend that when investors rely more on the notes to financial statements to search for and evaluate OCI information, the concreteness and clarity of those notes disclosures will influence the extent to which they absorb OCI information, and thus influence the value relevance of OCI.

We proxy for concreteness and clarity using an array of textual characteristics based on prior studies. Specifically, we examine four textual characteristics, including the specificity, relative mix of hard numeric information, readability, and overall length, of OCI-related note disclosures. The following hypotheses focus on how each of these textual characteristics of OCI note disclosures influence the extent to which the change in OCI value relevance (from pre- to post-ASU 2011-05 adoption) differs between control and treatment firms.

Specificity. More specific (i.e., less boilerplate) disclosures have more information content (Hope, Hu, and Lu 2016), as more precise information allows investors to better assess the valuation implications of underlying accounting numbers. More specific disclosures contain information and signals that are easy to extract, process and verify (Bozanic et al. 2017; Bonsall et al. 2017). After firms change their OCI placement from the SCSE to a more prominent performance statement, we expect that investors will rely more on OCI note disclosures and thus benefit more from firms' more specific discussion of OCI information in their OCI evaluation.

Therefore, we posit greater increases in OCI value relevance for treatment firms that provide more specific OCI note disclosures (by using specific terms such as organizations, locations, dates, and monetary amounts, etc.) after the increase in the prominence of OCI numbers, relative to control firms. Therefore, we state our hypothesis on the specificity of OCI disclosures in the alternate form as follows:

> *H2a: Relative to control firms, treatment firms experience a greater positive change in OCI value relevance (from pre- to post-ASU 2011-05) when they provide more specific OCI note disclosures in the post-ASU 2011-05 period.*

Numeric intensity.[14] Financial disclosures often comprise a mix of quantitative and qualitative information. Prior studies typically view quantitative information (proxied by numerical intensity, measured as the proportion of numbers in the text) as being more useful to investors than qualitative information. Botosan (1997) argues that a greater amount of numerical data in a firm's annual report provides more precise and useful information that allows investors to better assess firm prospects, which in turn may lower the firm's cost of equity. Similarly, Mercer (2004) argues that investors perceive management forecasts with greater numerical precision as more credible. Additionally, quantitative information is more precise and readily verifiable than qualitative information because it can be more easily benchmarked to expectations. Prior studies suggest that the use of numbers in disclosures enhances the credibility of such disclosures, and that a greater percentage of numbers (i.e., a higher numeric intensity) in the text improves disclosure quality (e.g., Henry 2008; Bozanic, Dietrich, and Johnson 2017; Dyer, Lang, and Stice-Lawrence 2017). We hypothesize in the alternate form as follows:

[14] Note that the numeric intensity measure is correlated with the specificity measure because specificity includes numbers as part of its measurement. Although it can be argued that the numeric intensity measure is a subset of the specificity measure, we include the numeric intensity construct as a separate measure because of its wide use in the literature and that it captures the effect specifically of numeric information disclosure exclusive of other terms such as organizations and locations.

H2b: Relative to control firms, treatment firms experience a greater positive change in OCI value relevance (from pre- to post-ASU 2011-05) when they provide more numeric information in OCI note disclosures in the post-ASU 2011-05 period.

Readability. Prior studies find that managers have incentives to hide bad news or cover up poor performance by using complex and unreadable disclosures. Li (2008) finds that firms reporting losses or transitory profits prepare less readable annual reports. Kim, Wang, and Zhang (2019) find that firms with less readable 10-Ks are associated with a greater likelihood of future stock price crashes. This suggests that managers hide adverse information via obscure language. A few studies examine the consequences of the readability of note disclosures in annual reports. For example, Chen and Tseng (2020) find that less readable note disclosures are associated with greater bond yield spreads, suggesting that unreadable note disclosures increase information risk. Abernathy, Guo, Kubick, and Masli (2018) find that the readability of note disclosures is informative about audit engagement risk in that firms providing less readable notes pay higher audit fees, have longer audit report lags, and have greater future likelihood of financial misstatement. We expect a greater increase in OCI value relevance for firms that changed their OCI placement in the post-ASU 2011-05 period and provided more readable discussion of OCI information in note disclosures. Formally, we state our hypothesis in alternate form as follows:

H2c: Relative to control firms, treatment firms experience a greater positive change in OCI value relevance (from pre- to post-ASU 2011-05) when they provide more readable OCI-related note disclosures in the post-ASU 2011-05 period.

Length. Longer OCI disclosures may either provide more information or instead reflect managers' attempt to obfuscate information by burying it in unrelated details (Loughran and McDonald 2014). On one hand, when longer disclosures reveal more inside information to outsiders, investors are better informed about OCI transactions (Dhaliwal, Radhakrishnan, Tsang, and Yang 2012; Callen, Khan, and Lu 2013). On the other hand, the length of disclosure is positively related to information and business complexity, and in such cases longer disclosure

might be used as a device to obscure negative information. Loughran and McDonald (2020) show that length of disclosures is highly correlated to business complexity. Multiple studies use the number of words in an annual report as a proxy for informational complexity (Li 2008; You and Zhang 2009; Lehavy, Li, and Merkley 2011, Loughran and McDonald 2014, and Dyer et al. 2017). Li (2008) finds that firms with losses or transient income tend to provide lengthy annual reports, presumably to deter investors from fully extracting and processing negative information. Because length of disclosures has conflicting implications on disclosure informativeness, we hypothesize in the non-directional form as follows:

> *H2d: Relative to control firms, treatment firms' change in OCI value relevance (from pre- to post-ASU 2011-05) is unrelated to the length of OCI note disclosures in the post-ASU 2011-05 period.*

3. Sample and Measurement

3.1 Sample Selection

We start with 19,882 reporting entities that filed 10-Ks with SEC's EDGAR system during the period from 2006 through 2017. Our sample period includes two balanced subperiods of six years before and after ASU 2011-05 took effect for fiscal years beginning after December 15, 2011 (with early adoption permitted).[15] We end our post-ASU 2011-05 period in 2017 because ASU 2016-01 became effective in 2018 and substantially changed OCI components with regards to financial instruments.[16]

[15] Within our sample, 585 (or 19.9%) firms early adopted ASU 2011-05 and changed their OCI reporting from the SCSE to a performance statement. We find that our main results hold when excluding these firms from our sample.
[16] Specifically, ASU 2016-01 made two significant changes that affected OCI: First, it eliminated the "available-for-sale" classification for passive equity securities investments, meaning that such investments must now be marked-to-market with fair value changes going directly to net income, rather than initially going to OCI and then being "recycled" to net income upon disposition of the underlying securities. Second, it required firms to report in OCI (rather than in net income) gains and losses associated with changes in a firm's own credit risk on liabilities for which the firm elected the fair value option.

We programmatically determine a firm's reporting location of OCI before and after the adoption of ASU 2011-05 by utilizing XBRL reporting of 10-Ks, which has been required by the SEC since 2010. We develop Python programs to scan financial statement titles in all 10-Ks available in XBRL format. By comparing a firm's financial statement titles before and after the effective date of ASU 2011-05, we can determine whether, how, and when the firm changes its placement of OCI with a high rate of accuracy and without the need of costly hand-collection. Appendix A illustrates this method with an example.[17]

Of the 19,882 entities who filed 10-Ks with EDGAR during 2006–2017, we delete 9,436 entities which did not adopt XBRL reporting (for our automated method). We further delete 3,191 entities which are not included in Compustat and 1,334 entities not in CRSP.[18] We require sample firms to file at least one Form 10-K in both the pre- and post-ASU 2011-05 periods, and we delete an additional 1,707 entities not satisfying this requirement. With other constraints (e.g., data unavailability), we arrive at a sample of 2,940 firms and 28,907 firm-year observations over the period from 2006 to 2017. Table 1 Panel A presents the sample selection process.

The sample selection in our study differs from those of Schaberl and Victoravich (2015) and Lin et al. (2018) in two significant ways: [1] our automated method allows us to collect OCI reporting locations for a much larger number of firms; and [2] we cover more years in the post-ASU 2011-05 period, which allows us to identify any structural shift over a longer term.[19]

[17] Our method relies on XBRL files that have been available since 2010. We assume that the OCI reporting location before 2010 is the same as the year of 2010. We randomly select 100 firms and find that firms are all consistent in their OCI reporting location before 2010, suggesting that our assumption is valid. We also find in our manual check on these 100 firms that the OCI reporting location changes determined by the Python programs are accurate.
[18] Most deleted entities are trusts, closed-end funds, and partnerships that are included in the EDGAR universe but are excluded from Compustat and CRSP.
[19] As previously mentioned, Lin et al. (2018) and Schaberl and Victoravich (2015) both examine relatively short post-ASU 2011-05 periods (one and two years, respectively). As the value relevance of OCI might have changed or stabilized over longer periods of time, we use a longer post-adoption period to re-examine the impact of mandatory performance statement placement on OCI value relevance.

3.2 Changes in the Reporting Location of OCI Following ASU 2011-05

Table 1 Panel B presents the reporting location of OCI year by year. During the pre-ASU 2011-05 period between 2006 and 2011, on average, 84% of firms elected to report OCI in the SCSE, 12% in two separate statements of performance, while only a small fraction of firms (4%) in a single continuous statement of performance. After ASU 2011-05 eliminated the option of reporting OCI in the SCSE, the great majority of firms that previously reported OCI in the SCSE elected to report OCI in two separate but consecutive statements of performance. Table 1 Panel C reports the types of changes in OCI reporting location following ASU 2011-05. Of the 2,940 unique firms in our sample, 519 (17.7%) firms changed their OCI reporting location from the SCSE to a single continuous statement of performance, 2,047 (69.6%) firms changed the OCI reporting location from the SCSE to two separate but consecutive statements of performance, 100 (3.4%) firms continued to report OCI in a single continuous statement of performance, and the remaining 274 (9.3%) firms continued to report OCI in two statements of performance.[20]

3.3 Measurement of Textual Characteristics of OCI Disclosures

In this study, we examine the implications of four key textual characteristics of OCI-related disclosures in financial statement notes: specificity, numeric intensity, readability, and length. Prior studies find that these textual characteristics reflect the concreteness and clarity of disclosures and have capital market implications (e.g., Li 2008; Brown and Tucker 2011; Loughran and McDonald 2014; Hope, Hu, and Lu 2016; Dyer et al. 2017). To measure the textual characteristics, we develop Python programs to systematically download 10-K filings

[20] We find no instances in our sample of 2,940 firms where a firm previously reported OCI in a single continuous statement of performance before ASU 2011-05 and then switched to reporting OCI in two statements of performance after ASU 2011-05 (or vice versa). Prior to ASU 2011-05, firms that reported a separate statement of comprehensive income were not required to display this statement immediately after the income statement. Of the 274 firms that elected to present two separate statements of performance during the pre-ASU 2011-05 period, 189 presented these statements consecutively, while 85 presented the two statements non-consecutively. All 274 of these firms reported OCI in two separate but consecutive statements of performance following ASU 2011-05.

from EDGAR and extract OCI-related disclosures based on keywords and phrases.

Following Hope et al. (2016), we construct the specificity measure as the density of named entities in the text. A higher density of named entities indicates that the disclosures contain more concrete details and are less likely to be boilerplate. To construct the numeric intensity measure, we count all the numbers in OCI-related disclosures following Blankespoor (2019) and then scale this count by the total token count of OCI-related disclosures. We measure readability using the Gunning Fog Index as in prior studies (e.g., Li 2008; Miller 2010; Lehavy et al. 2011; Rennekamp 2012; Lo, Ramos, and Rogo 2017).[21] A higher Fog index indicates the text is less readable. Finally, we follow prior research (e.g., You and Zhang 2009; Campbell, Chen, Dhaliwal, Lu, and Steele 2014; Cazier and Pfeiffer 2015) to measure length using the percentage of the word count of OCI-related disclosures in the notes to financial statements. More details about these measures can be found in Appendix B.

4. Regression Specifications and Main Results

4.1 Descriptive Statistics

Table 2, Panel A summarizes the distributions of key variables in our study. The mean (median) net income scaled by market value is −0.025 (+0.045), and 25.3% of the firm-years in our sample report a loss. While its mean and median are close to zero, OCI scaled by market value ranges from −0.163 to +0.167 at the 1st and 99th percentiles, and from −0.050 to +0.044 at the 5th and 95th percentiles.[22] We decompose OCI into five components: [1] derivative gains and losses (*CIDERGL*), [2] unrealized gains and losses on available-for-sale securities

[21] Bonsall, Leone, Miller and Rennekamp (2017) propose another measure of financial reporting readability, the Bog index, which is constructed by using commercial editing software. The Bog index is based on a proprietary algorithm. We choose to use the Fog index for better replicability.
[22] In our sample, 95.6% of firm-years report non-zero OCI.

(*CISECGL*), [3] pension adjustments (*CIPEN*), [4] foreign currency translation adjustments (*CICURR*), and [5] other OCI amounts that are not included in the four components above (*CIOTHER*). Each of these five components of OCI has a median value of zero, with *CIPEN* and *CICURR* exhibiting the widest ranges from the 5th to 95th percentiles. Table 2, Panel B compares the mean and median of the variables in the pre- and post-ASU 2011-05 periods. The mean value *OCI* variable decreases from 0.009 in the pre-period to −0.002 in the post-period, which is mainly caused by the decrease in the currency exchange OCI (*CICURR*). The means of NI change from −0.034 in the pre-period to −0.017 in the post-period.

In addition, as shown in Figure 1, foreign currency translation adjustments and pension adjustments are the two major OCI components of greatest magnitude (relative to other OCI components) through our sample years.[23] Figure 2 depicts the percentage of firms reporting each OCI component in each year from 2006 through 2017. The percentages are largely stable for individual components, ranging from 35% to 50% across the five OCI components.

Table 2 Panel A shows that the median firm devotes 2.8% of its note disclosure words to OCI (*LENGTH*). At the median, these OCI-related disclosures contain 7.6% specific words (*SPECIFICITY*) and 0.7% numbers (*NUMINT*) amongst their total word count, and have a Fog index of 20.1 (*FOG*).[24]

Table 3 presents correlations among our main variables. We find that our main textual characteristic variables are not significantly related to the amount of OCI, except for *FOG*, which is significantly and positively correlated to the amount of OCI. Two disclosure characteristic measures (*SPECIFICITY* and *NUMINT*) are highly correlated (0.701), which is not surprising

[23] When we restrict Figure 2 to firm-years with non-zero OCI amounts, we find similar patterns.
[24] Consistent with Cazier and Pfeiffer (2016) and Dyer et al. (2017), we find that 10-Ks have become longer and less readable over time, with the median overall 10-K length increasing from 33,716 words to 45,827 words and the median Fog index increasing from 19.95 to 20.24 over our sample period.

because numeric information is considered as one class of specific words in the construction of *SPECIFICITY* measure. Note that these two measures are different—*SPECIFICITY* is a broader measure based on specific terms, both qualitative and quantitative, whereas *NUMINT* captures only the number of numbers.

4.2 Overall Value Relevance of OCI over Full Sample Period

Before we examine the *relative* changes in OCI value relevance around ASU 2011-05 for treatment firms (i.e., difference-in-differences), we first examine the overall value relevance of OCI over the full sample period, conditional on OCI reporting locations, by running the following regression of Lin et al. (2018):

$$RET_{i,t} = \alpha_1 NI_{i,t} + \alpha_2 LOSS_{i,t} \times NI_{i,t} + \alpha_3 SCSE_{i,t} \times OCI_{i,t} + \alpha_4 SP_{i,t} \times OCI_{i,t} + \varepsilon_{i,t} \quad (1)$$

where *RET* is the 12-month return, accumulated from eight months before to four months after fiscal year end; *NI* is net income before extraordinary items; *LOSS* equals one when *NI* is negative and zero otherwise; *OCI* is other comprehensive income; *SCSE* is an indicator variable equal to one if the firm reports OCI in the SCSE and zero otherwise; *SP* is an indicator variable equal to one if the firm reports OCI in a performance statement and zero otherwise.[25] *NI* and *OCI* are scaled by market value eight months prior to the year-end. The subscripts *i* and *t* index firm and year, respectively.

Table 4 reports regression results of equation (1) and its alternative forms (including variables indicating OCI reporting format and measuring specific OCI components). Column (1) shows a significantly positive relation between *RET* and *OCI* before controlling for OCI placement. Column (2) shows that OCI is value-relevant regardless of whether it is placed in the SCSE or in a performance statement. However, consistent with prior studies (e.g., Chambers et.

[25] We follow the model in Lin et al. (2018) and do not include the main effect of *LOSS*. In untabulated analyses, we find that our results are similar when we include the *LOSS* main effect.

al. 2007), the association between *RET* and *OCI* is greater when OCI is reported in the SCSE relative to when OCI is placed in a performance statement, and the differential association is significant in an untabulated one-tailed test.[26] Column (3) regression results further distinguish the placement of OCI in a single continuous performance statement (*SP1* = 1) from the placement in two separate performance statements (*SP2* = 1), and show a greater coefficient for *SP1* × *OCI* relative to *SP2* × *OCI*, and the difference is significant (one-tailed test untabulated).

We next decompose OCI into five components to evaluate the value relevance of OCI from different business activities: derivative gains and losses (*CIDERGL*), gains and losses on available-for-sale securities (*CISECGL*), pension adjustments (*CIPEN*), foreign currency translation adjustments (*CICURR*), and others (*CIOTHER*). Column (4) summarizes the regression results before OCI placement is controlled for, showing significantly positive coefficients for three OCI components (*CIDERGL*, *CICURR*, and *CIOTHER*)[27], but insignificant coefficients for the other two components.[28] After controlling for OCI placement, Column (5)

[26] Note that Lin et al. (2018), using S&P 500 firms over 2000–2006 (see their Table 2), find that only OCI reported in the SCSE is value-relevant. However, when examining S&P 500 firms over 2000–2012 (see their Table 6), they find that OCI in the SCSE and in a performance statement are both value-relevant. We similarly find that OCI is value-relevant in our broader sample of 2,940 firms over 2006–2017, regardless of its reporting location. The value relevance of OCI appears to be sensitive to sample composition and period.

[27] Note that the Column 4 regression coefficients of some individual OCI components (e.g., 1.719 for *CICCURR*) are greater than the coefficient of pre-OCI net income variable *NI* (0.667). The greater magnitude of the individual OCI components is attributable to the small standard deviations of individual OCI components (e.g., 0.036 for *CICURR* as shown in Table 3) relative to that of NI (0.577 as shown in Table 2), rather than a revelation of their different economic significance. For example, for a change of one standard deviation in *CICURR*, the return (CAR) change is 0.061 (= 1.706 × 0.036); in contrast, for a change of one standard deviation in *NI*, the CAR change is 0.450 (= 0.780 × 0.577).

[28] Rees and Shane (2012) note that the existing research on individual OCI components shows mixed results in terms of value relevance. These mixed results could be attributable to prior research using different OCI data, namely, as-if OCI amounts in the pre-SAFS 130 periods and actual OCI amounts in post-SFAS 130 periods. Our sample period is after SFAS 130 and thus we use actual OCI amounts. While OCI components should ideally be studied in the context of specific business operational models (Campbell 2015), the relative value-relevance of individual OCI components is beyond the scope of our paper. We focus on total OCI and the effect of a change of placement on its value relevance. Overall, our decomposition results show positive signs for all OCI components despite differences in the coefficients of individual OCI components, which is consistent with Chambers et al.'s (2007) finding that after SAFS 130, actual reported OCI components are positively associated with stock prices.

shows that for OCI reported in the SCSE, four components (*CIDERGL*, *CIPEN*, *CICURR*, and *CIOTHER*) have significant positive coefficients that are of greater magnitude than the four corresponding coefficients of OCI reported in a performance statement. The *CISECGL* component, in contrast, is insignificant when placed in the SCSE but significant when placed in a performance statement. The component regression results are largely consistent with Column (2) and (3) results, along with prior research, suggesting that, overall, OCI placed in the SCSE is of greater value relevance than OCI placed in a performance statement.[29]

4.3 OCI Value Relevance before and after ASU 2011-05 Adoption

We use the following regression specification to test our first hypothesis:

$$RET_{i,t} = \gamma_1 NI_{i,t} + \gamma_2 LOSS_{i,t} \times NI_{i,t} + \gamma_3 TREAT_i + \gamma_4 POST_t + \gamma_5 TREAT_i \times POST_t + \gamma_6 OCI_{i,t} + \gamma_7 POST_t \times OCI_{i,t} + \gamma_8 TREAT_i \times OCI_{i,t} + \gamma_9 TREAT_i \times POST_t \times OCI_{i,t} + \varepsilon_{i,t} \quad (2)$$

where *TREAT* is an indicator variable that equals one for firms that reported OCI in the SCSE pre-ASU 2011-05 (and thus were required to change the reporting location to a performance statement) and zero otherwise. *POST* equals one for the post-ASU 2011-05 sample period and zero otherwise.

Since firms self-selected to be in the treatment or control group in this study, we use Heckman's two-step procedure to correct for a possible self-selection bias related to firms' OCI placement decision prior to ASU 2011-05. In the first step, we estimate an OCI placement election model based on Lin et al. (2018), using the firms in our sample:

$$SP_i = \beta_0 + \beta_1 AVG\_SIZE_i + \beta_2 AVG\_LEV_i + \beta_3 AVG\_MB_i + \beta_4 AVG\_ROA_i + \beta_5 AVG\_VOL\_OCI_i + \beta_6 AVG\_OCI\_COMPLEXITY_i + \beta_7 AVG\_ABS\_OCI_i + \beta_8 AVG\_ABS\_CIDERGL_i + \beta_9 AVG\_ABS\_CISECGL_i + \beta_{10} AVG\_ABS\_CIPEN_i + \quad (3)$$

[29] In robustness checks, we run alternative return regressions in Table 4 with additional control variables identified in prior literature, including growth (market-to-book ratio), firm size, leverage ratio, beta, and meeting or beating earnings target. The results (not tabulated) are very similar. For example, after including these control variables, Column (5) regression results show a positive coefficient of 1.037 for the interaction term *SCSE* × *CIDERGL*, 0.068 for *SCSE* × *CISECGL*, 0.539 for *SCSE* × *CIPEN*, 3.211 for *SCSE* × *CICURR*, and 3.543 for *SCSE* × *CIOTHER*, which are all comparable to the Table 4, Column (5) coefficients.

$\beta_{11}AVG\_ABS\_CICURR_i + \beta_{12}AVG\_ABS\_OTHER_i + \varepsilon_i$

where all variables are defined in Appendix C and are measured, at the firm level, as the mean value over the pre-ASU 2011-05 sample period (i.e., 2006–2011). In addition to the variables used Lin et al.'s (2018) model, we include additional instrumental variables of market-to-book (*AVG_MB*), OCI volatility (*AVG_VOL_OCI*), and total OCI (*AVG_ABS_OCI*). As shown in Table 5, we find that firms with larger market capitalization (*AVG_SIZE*), more OCI components (*AVG_OCI_COMPLEXITY*), and a greater amount of currency translation adjustments and other adjustments (*AVG_ABS_CICURR* and *AVG_ABS_CIOTHER*) are more likely to report OCI in the SCSE prior to ASU 2011-05.[30]

In the second-step Heckman procedure, we estimate Equation (2) after controlling for the Inverse Mills Ratio (*IMR*) from the Heckman first-step results. Our main coefficient of interest is γ_9 on the three-way interaction term *TREAT* × *POST* × *OCI*, which measures the incremental change in OCI value relevance (from before to after ASU 2011-05 adoption) for the treatment firms relative to the control firms.

As noted previously, early studies examining the immediate impact of ASU 2011-05 use a relatively small sample and a short post-ASU 2011-05 period, with Lin et al. (2018) examining S&P 500 firms only one year in the post-ASU 2011-05 period, and Schaberl and Victoravich (2015) examining 1,000 randomly selected firms and only two years in the post-ASU 2011-05 period. Both studies find that the value relevance of OCI for treatment firms upon ASU 2011-05 adoption actually exhibits an incremental *decline* relative to control firms, a result which would

[30] We report two goodness of fit statistics for the estimation of the first-stage equation, pseudo R^2 (0.103) and the area under the receiver operating characteristic (ROC) curve (0.718). The latter is the estimated probability that the model ranks a randomly selected firm that elects the SCSE option higher than a randomly selected bank that does not elect the SCSE option. Random guessing generates an area under the ROC curve equal to 0.5, and perfect prediction generates 1. Hosmer, Lemeshow, and Sturdivant (2013) suggest that a model with an area under the ROC curve of 0.70–0.80 (above 0.80) is acceptable (excellent).

be inconsistent with the FASB's goal of increasing the prominence and transparency of OCI.

However, when we use our expanded sample (2,940 firms) with a longer sample period (six years before and six years after ASU 2011-05), we find that the three-way interaction term *TREAT* × *POST* × *OCI* has a significantly positive coefficient of 0.776, as shown in the column labeled "Overall Sample" of Table 6 Panel A. The coefficient on *POST* × *OCI*, meanwhile is significantly negative (−1.417). Thus, while control firms experienced a decrease in OCI value relevance upon adoption of ASU 2011-05, the decrease for treatment firms was significantly less, suggesting a positive effect of mandatory placement change on OCI value relevance.

As a comparison, we reproduce Lin et al.'s (2018) differing results (see their Table 8) in the second column of Table 6 Panel A. In particular, Lin et al. (2018) obtain a significantly negative coefficient of −2.061. To investigate whether the differing results are caused by any potential sample difference, we replicate the Lin et al. (2018) regression by limiting our analyses to the same sample firms and sample period as in Lin et al.'s (2018) study. We find very similar results to theirs, as reported in the third column of Table 6 Panel A, labelled "Replicate Lin et al. (2018)", which suggests that the sample difference (in terms of both sample firms and sample period) between our paper and both Lin et al. (2018) and Schaberl and Victoravich (2015) may drive the differences in results.

To further examine whether the results from Lin et al. (2018) and Schaberl and Victoravich (2015) are merely a temporary phenomenon and whether investors eventually grow accustomed to the new reporting practices, we separately re-estimate Equation (3) using all firm-years before ASU 2011-05 adoption plus each one of the six years subsequent to ASU 2011-05 adoption. As shown in Table 6 Panel B, we find that the three-way interaction term *TREAT* × *POST* × *OCI* does not load in the first year and the second year following ASU 2011-05

adoption—the exact post-ASU 2011-05 years examined by Lin et al. (2018) and Schaberl and Victoravich (2015). Starting from the third year following ASU 2011-05, the coefficient on the three-way interaction term becomes significantly positive as expected. Overall, these annual regression analyses are consistent with our first hypothesis, suggesting that the initial puzzling results found in earlier studies were indeed a temporary phenomenon, and that over a longer period of time the effect of mandatory OCI performance statement placement on OCI value relevance is positive for treatment firms relative to control firms.

4.4 Note Disclosure Characteristics and OCI Value Relevance around ASU 2011-05

Our second set of hypotheses predicts that qualities of OCI-related note disclosure characteristics will influence the positive incremental change in OCI value relevance for treatment firms relative to control firms. To test these hypotheses, we examine the difference in the three-way interaction term between subsamples partitioned based on four textual characteristics of OCI note disclosures, including specificity (H2a), numeric intensity (H2b), readability (H2c), and length (H2d). Specifically, for each of the Fama-French 12 industry-year groups, we group firms into above-median and below-median subsamples based on the distribution of each textual characteristic variable. We then run the Equation (2) regression separately within each subsample. We test the differences in the coefficient on the three-way interaction term (*TREAT* × *POST* × *OCI*) between the above- and below-median subsamples.

Table 7 reports the regression results of Equation (2) for testing our four conditioning hypotheses. Consistent with our H2a prediction, we find that the coefficient on *TREAT* × *POST* × *OCI* is significantly positive for the above-median *SPECIFICITY* subsample, but insignificant for the below-median subsample. The difference in the three-way interaction terms between the two *SPECIFICITY*-partitioned subsamples is significant (1.023 − 0.102 = 0.921, one-tail *p*-value

= 0.062). Consistent with H2b, we find that the coefficient on *TREAT* × *POST* × *OCI* is significant for the above-median *NUMINT* subsample, but insignificant for the below-median subsample, with the difference in three-way interaction terms being significant (1.130 − 0.364 = 0.766, one-tail *p*-value = 0.0695). To test H2c, we use the *FOG* index measure, where a higher *FOG* value suggests lower level of readability and vice versa.[31] Consistent with H2c, the coefficient on *TREAT* × *POST* × *OCI* is significant for the below-median *FOG* (higher readability) subsample, but insignificant for the above-median *FOG* (lower readability) subsample, and the difference is significant (1.543 − 0.257 = 1.286, one-tail *p*-value = 0.019).

Finally, we test H2d by partitioning our sample on median values of *LENGTH*. The coefficient of *TREAT* × *POST* × *OCI* is insignificant for the above-median *LENGTH* subsample, but significantly positive for the below-median subsample, with their difference being significant (1.275 − 0.256 = 1.019, two-tail *p*-value = 0.096).[32] This result is consistent with the argument that longer OCI disclosure tends to be more complex and thus less transparent, and thus shorter disclosures are more informative for investors to evaluate OCI in the post-ASU 2011-05 period.

In summary, we find that OCI disclosure characteristics influence the differential magnitude of increased OCI value relevance for treatment firms relative to control firms.[33] When OCI note disclosures have higher specificity, numeric intensity, readability, or shorter length, the value relevance of OCI increases more for treatment firms than for control firms.

[31] Using alternative readability measures such as Flesch Reading Ease and Flesch-Kincaid produces comparable results.

[32] We use a two-tail test of significance here because our hypothesis H2d is non-directional.

[33] Note that all regressions in Table 7 show significantly negative coefficients on the two-way interaction term *POST* × *OCI*, indicating declined OCI value relevance for the "control" firm group—firms that reported OCI in performance statements in both pre- and post-periods. The declined value relevance for the "control" group could be caused by the changes in the composition of OCI over time, although this is beyond the scope of our paper. Our research shows that the change of OCI placement from the SCSE to a performance statement, when accompanied with note disclosures of certain characteristics as identified in our paper, helps mitigate the decline in OCI value relevance in the post period.

5. Additional Analyses

5.1 Note Disclosure Influence on OCI Value Relevance and Investor Sophistication

As a further analysis, in this section we investigate whether the impact of note disclosure characteristics on the relationship between financial statement placement changes and OCI value relevance varies cross-sectionally with proxies for the level of investor sophistication. If sophisticated investors are likely to more diligently scrutinize note disclosures that accompany the main financial statements to begin with, then their investment decisions (and the influence of notes on such investment decisions) should be less impacted by changes in OCI placement. Lawrence (2013) finds that individual investors invest more in firms with financial disclosures that are clearer and more concise (as measured by Length and Fog Index). He also finds that this relationship is less pronounced for more professional and financially literate investors.

We employ two empirical proxies for the level of investor sophistication: [1] The proportion of the firm's shares held by institutional investors, and [2] the number of analysts following the firm. To measure the level of institutional ownership, we take the total number of shares owned by institutional investors reported in the Thomson Reuters 13-F reporting S34 database, as a percentage of the firm's total shares outstanding at the end of the fiscal year.[34] To measure the level of analyst coverage, we take the total number of unique analysts who have provided an earnings forecast for that fiscal year in the I/B/E/S database.

We then partition the sample based on the median values of institutional ownership and analyst coverage and re-run our main regression specification for these two subsamples. The results are reported in Table 8. For brevity, we report only the triple interaction coefficient, while

[34] Institutional ownership is reported as of the end of each calendar quarter, and if a firm has a non-calendar quarter fiscal year end, we use institutional ownership at the end of the calendar quarter closest to the firm's fiscal year-end.

all other variables from Table 7 are omitted. The first column group ("All Obs") replicates the main result with the triple interaction loading more strongly in the group with more specific disclosures, greater numerical intensity, and lower Fog value (i.e., greater clarity). The subsequent columns show that these differential results between subgroups of concreteness and clarity are more strongly pronounced among firms with lower institutional ownership and lower analyst following. For example, under the *SPECIFICITY* (H2a) partition, in the low institutional ownership group the *TREAT* × *POST* × *OCI* coefficient for firms with above median note specificity loads significantly positive and is significantly greater than the coefficient for firms with below median specificity. However, this pattern does not manifest in the high institutional ownership group, and in fact in this group, the above-median specificity firms have a coefficient *lower* in magnitude than the below-median specificity firms. A similar pattern holds for the analyst following partition, and our other cross-sectional partitions of numerical intensity and *FOG* Index, with only the results for the length partition being somewhat mixed.

Overall, this analysis suggests that our main results on the cross-sectional impact of note disclosure characteristics on the relationship between financial statement placement and OCI value relevance is greater when the firm has a less sophisticated investor base, consistent with the idea that more sophisticated investors, who are more likely to diligently scrutinize note disclosures to begin with, are less likely incrementally impacted by note disclosure clarity. On the other hand, less sophisticated investors benefit more from note disclosures of greater clarity, which help them better assess the value relevance of OCI amounts.

5.2 Balanced Sample Constructed Using Entropy Balancing

As a robustness test, we balance the treatment and control groups by using entropy balancing to further ensure that the results for our hypothesis testing reported in Table 7 are not

driven by observable differences in firm characteristics between the two groups of firms. Entropy balancing is a weighting procedure proposed by Hainmueller (2012) and operationalized by Hainmueller and Xu (2013) to adjust the weight of each observation in the control group to mitigate observable differences in specified covariates between the treatment and control groups. Relative to propensity score matching, an advantage of this procedure is that it does not require a larger control group relative to the treatment group for the purpose of choosing one matched observation from the control group for each treatment observation. As noted previously, most firms chose SCSE reporting before ASU 2011-05 adoption, thus giving us considerably more treatment firms than control firms, and entropy balancing offers a solution to create an appropriately balanced control group. We balance the control group based on the variables used in the Heckman first-stage model in Equation (3) so that there is no statistical difference in the means of these variables between the treatment and balanced control groups.

In Table 9, we rerun tests for our hypotheses (H2a to H2d) using the entropy-balanced control group. For brevity, we report only the coefficient on the main variable of interest, i.e., *TREAT* × *POST* × *OCI*. Overall, the results are comparable to those in Table 8. Notably, the results are stronger for H2a (specificity), and H2b (numeric intensity) than those using the non-balanced sample with higher significance levels. These results provide assurance that our main results are not driven by differences in characteristics between the treatment and control groups.

6. Conclusion

Prior to ASU 2011-05, many firms historically reported other comprehensive income in the statement of changes in stockholders' equity. ASU 2011-05 removed this option and started requiring firms to report OCI in a performance statement: either in the income statement itself or

in a separate statement of comprehensive income following the income statement. In our study, we first re-investigate the value relevance of OCI before and after this financial statement placement was made uniformly prominent in a performance statement.

Using a longer sample period and larger set of firms than earlier studies that investigated the immediate impacts of ASU 2011-05, we find that the change in OCI value relevance from before to after ASU 2011-05 adoption was greater for treatment firms (i.e., those firms that previously reported OCI in the SCSE and thus were required to change OCI placement) relative to control firms (i.e., those firms that previously reported OCI in a performance statement). This finding addresses a somewhat paradoxical result reported by Lin et al. (2018) and Schaberl and Victoravich (2015), which both found that the incremental OCI value relevance of treatment firms was actually negative, seemingly running counter to the FASB's stated goal of achieving greater transparency for OCI reporting through more prominent OCI placement.

These results in particular address a speculative remark by Schaberl and Victoravich (2015) in discussing their puzzling findings of negative incremental value relevance in the early years of ASU 2011-05 adoption: "[T]he 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 ASU 2011-05 was met in the long-term." (p. 246) Our findings suggest that this was indeed the case: the negative effect appeared to be part of a transitory period upon adoption of ASU 2011-05, and was ultimately reversed over a longer time horizon, as investors became accustomed to the new financial statement structure brought about by ASU 2011-05.

We then examine the role that note disclosures play in influencing the extent to which

ASU 2011-05 differentially influences OCI value relevance for treatment firms versus control firms, as the enhanced prominence of OCI in a performance statement should draw investor attention to notes describing such OCI. We find that the overall incremental increase in value relevance for treatment firms vis-a-vis control firms is stronger when firms have OCI-related note disclosures that contain more specific words, contain more numerical information, or are more readable. We also find that this incremental increase is greater when OCI disclosures are shorter in length overall. Further conditioning analyses suggest that less sophisticated investors are impacted more by OCI's enhanced placement prominence, as more sophisticated investors were likely to be diligently scrutinizing the notes to begin with.

Our study lies at the intersection of two streams of research, each examining a certain aspect of financial reporting. The first stream examines whether the value relevance and predictive power of earnings depend on its placement (e.g., Bartov and Mohanram 2014), and whether it is recognized or disclosed (e.g., Michels 2017). The second stream uses linguistic and textual analyses to examine whether and how financial statement disclosure characteristics influence investor reactions and other firm outcomes (e.g., Li 2008; Hope et al. 2016; Brown and Tucker 2011). Our findings suggest that examining either of these two financial reporting aspects in isolation may not tell the whole story: Using the setting of ASU 2011-05 and its imposed change of OCI reporting location, we find that these two financial reporting aspects interact in a manner such that when a particular financial statement item is placed in a more prominent location—influencing valuation to a greater extent—accompanying note disclosures on that item "step up" to assume a more prominent role in its valuation as well.

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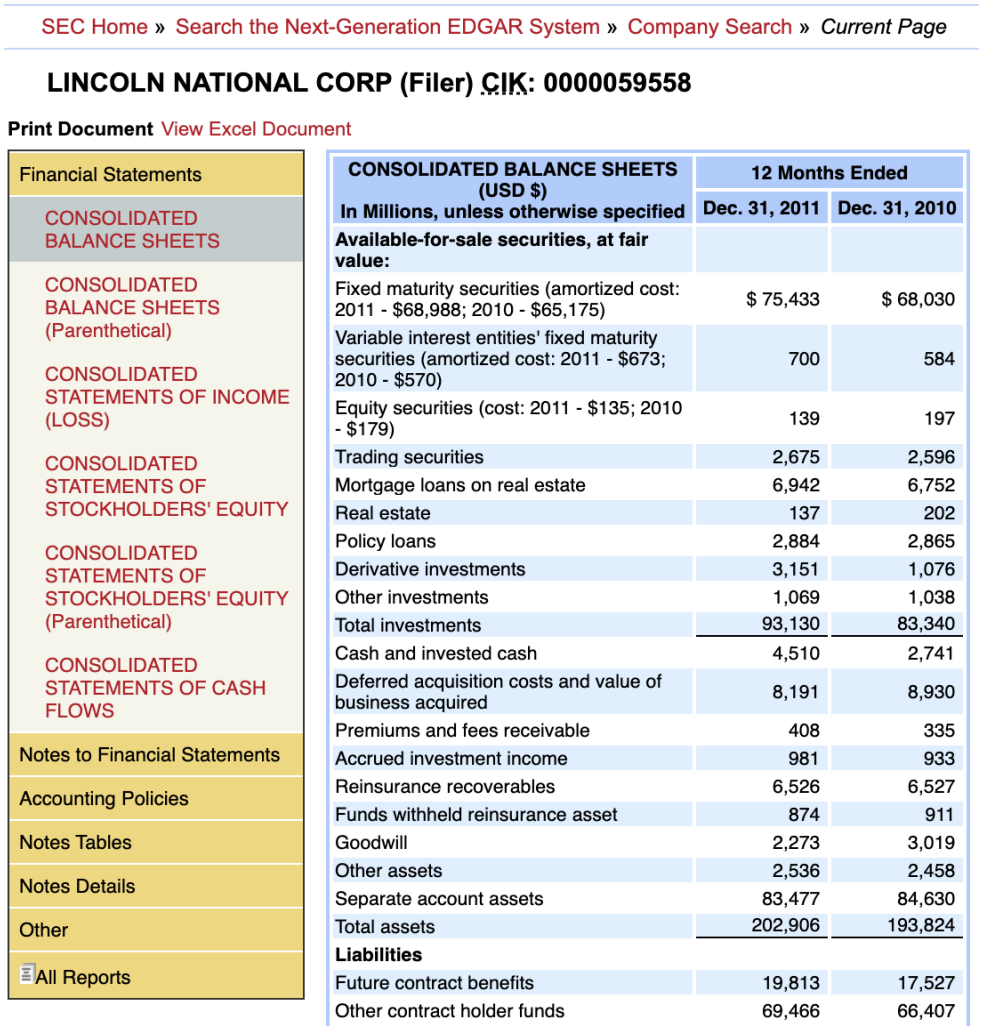
Appendix A: Obtaining OCI Placement from XBRL Reporting

The SEC requires publicly traded firms to file their 10-Ks at EDGAR in an XBRL format starting from 2010, two years before ASU 2011-05 took effect. If an XBRL format is available, an "Interactive Data" button will be displayed beside a 10-K form. When the "Interactive Data" button is clicked, the left pane of the new webpage will display all titles of financial statements, from which we determine where OCI is reported. For example, for the fiscal year ended December 31, 2011, all titles of Lincoln National Corporation's financial statements are displayed as follows:



SEC Home » Search the Next-Generation EDGAR System » Company Search » *Current Page*

LINCOLN NATIONAL CORP (Filer) CIK: 0000059558

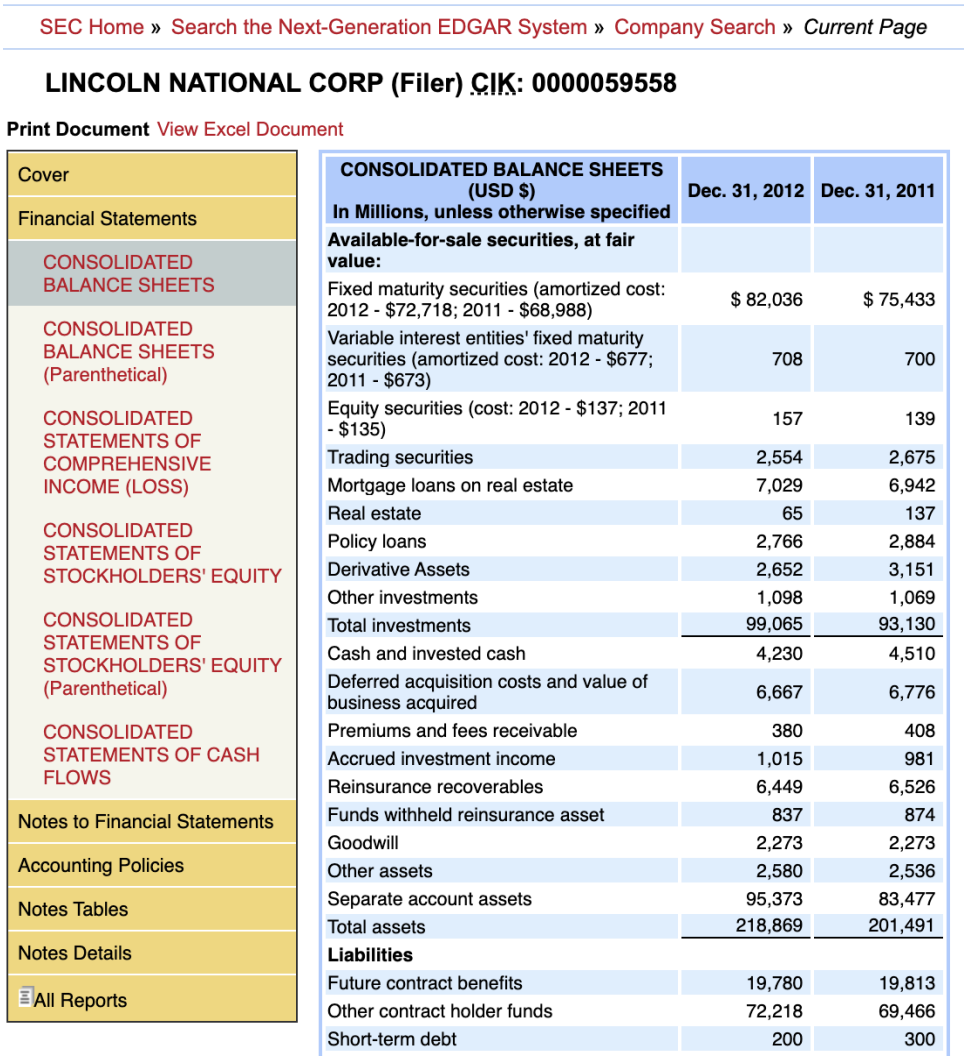
Print Document View Excel Document

- Financial Statements
  - CONSOLIDATED BALANCE SHEETS
  - CONSOLIDATED BALANCE SHEETS (Parenthetical)
  - CONSOLIDATED STATEMENTS OF INCOME (LOSS)
  - CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
  - CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Parenthetical)
  - CONSOLIDATED STATEMENTS OF CASH FLOWS
- Notes to Financial Statements
- Accounting Policies
- Notes Tables
- Notes Details
- Other
- All Reports

CONSOLIDATED BALANCE SHEETS (USD $) In Millions, unless otherwise specified	12 Months Ended	
	Dec. 31, 2011	Dec. 31, 2010
Available-for-sale securities, at fair value:		
Fixed maturity securities (amortized cost: 2011 - $68,988; 2010 - $65,175)	$ 75,433	$ 68,030
Variable interest entities' fixed maturity securities (amortized cost: 2011 - $673; 2010 - $570)	700	584
Equity securities (cost: 2011 - $135; 2010 - $179)	139	197
Trading securities	2,675	2,596
Mortgage loans on real estate	6,942	6,752
Real estate	137	202
Policy loans	2,884	2,865
Derivative investments	3,151	1,076
Other investments	1,069	1,038
Total investments	93,130	83,340
Cash and invested cash	4,510	2,741
Deferred acquisition costs and value of business acquired	8,191	8,930
Premiums and fees receivable	408	335
Accrued investment income	981	933
Reinsurance recoverables	6,526	6,527
Funds withheld reinsurance asset	874	911
Goodwill	2,273	3,019
Other assets	2,536	2,458
Separate account assets	83,477	84,630
Total assets	202,906	193,824
Liabilities		
Future contract benefits	19,813	17,527
Other contract holder funds	69,466	66,407

Appendix A: Obtaining OCI Placement from XBRL Reporting (Continued)

For fiscal year ended December 31, 2012, all titles of Lincoln National Corporation's financial statements are displayed as follows:



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LINCOLN NATIONAL CORP (Filer) CIK: 0000059558

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- Cover
- Financial Statements
  - CONSOLIDATED BALANCE SHEETS
  - CONSOLIDATED BALANCE SHEETS (Parenthetical)
  - CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
  - CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
  - CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Parenthetical)
  - CONSOLIDATED STATEMENTS OF CASH FLOWS
- Notes to Financial Statements
- Accounting Policies
- Notes Tables
- Notes Details
- All Reports

CONSOLIDATED BALANCE SHEETS (USD $) In Millions, unless otherwise specified	Dec. 31, 2012	Dec. 31, 2011
Available-for-sale securities, at fair value:		
Fixed maturity securities (amortized cost: 2012 - $72,718; 2011 - $68,988)	$ 82,036	$ 75,433
Variable interest entities' fixed maturity securities (amortized cost: 2012 - $677; 2011 - $673)	708	700
Equity securities (cost: 2012 - $137; 2011 - $135)	157	139
Trading securities	2,554	2,675
Mortgage loans on real estate	7,029	6,942
Real estate	65	137
Policy loans	2,766	2,884
Derivative Assets	2,652	3,151
Other investments	1,098	1,069
Total investments	99,065	93,130
Cash and invested cash	4,230	4,510
Deferred acquisition costs and value of business acquired	6,667	6,776
Premiums and fees receivable	380	408
Accrued investment income	1,015	981
Reinsurance recoverables	6,449	6,526
Funds withheld reinsurance asset	837	874
Goodwill	2,273	2,273
Other assets	2,580	2,536
Separate account assets	95,373	83,477
Total assets	218,869	201,491
Liabilities		
Future contract benefits	19,780	19,813
Other contract holder funds	72,218	69,466
Short-term debt	200	300

Based on the pattern of financial statement titles, we can determine that Lincoln National Corporation changed OCI placement from the statement of stockholders' equity to a single statement of comprehensive income, starting from the fiscal year of 2012.

We develop Python programs to (1) scan financial statement titles from XBRL reporting starting from 2010; (2) standardize financial statement titles (e.g., remove extra spaces and punctuations, uniform equivalent financial statement titles such as "balance sheets" and "statement of financial position"); and (3) analyze the pattern of title changes and determine whether, how, and when a firm changes its OCI placement. This algorithm can be applied to a large sample of firms with a high rate of accuracy at a minimal cost.

Appendix B: Procedures for Extracting OCI-Related Note Disclosures and Constructing Textual Measures

To construct our textual measures of OCI disclosures, we design Python programs that sequentially perform the following steps:

(1) Download 10-K filings from EDGAR.
(2) Parse the 10-K filings into clean text by removing exhibits and HTML tags.
(3) Extract the footnotes to financial statements.
(4) Identify and extract OCI disclosures as those paragraphs that contain any key phrases (described below).
(5) Analyze the textual attributes of OCI disclosures to derive textual measures used for our empirical tests.

Footnote disclosures are included in Form 10-K Item 8, "Financial Statements and Supplementary Data". For filings that use XBRL reporting, we extract the footnotes using XBRL markers. For other filings submitted before firms' adoption of XBRL formats, we extract section Item 8 from the 10-K filing and then extract the footnotes from that section. To identify section Item 8, we (1) remove the Table of Contents; (2) exclude section numbers indicating references to the actual section (i.e., expressions such as "refer to Item 8" and "see Item 8", etc.); (3) iteratively evaluate each section number based on whether it is tagged as a heading in the original filing, its logical sequence relative to other section numbers, and its relative place in the 10-K filing. We then extract the text between the headings "Item 8" and "Item 9", which mark the beginning and ending of section Item 8. Section Item 8 includes financial statements, the auditor's report, supplementary schedules, and detailed notes to the financial statements. We remove the statements, schedules, and auditor report to obtain the footnotes to financial statements. Finally, we identify OCI-related disclosures by extracting all paragraphs containing keywords "Comprehensive Income", "Comprehensive earning", or "Comprehensive Loss" (case insensitive and including plural forms) from the notes to the financial statements.

Specificity: We construct the specificity measure based on the density of named entities in the text. Named entity recognition is a technique in natural language processing that identifies named identities and classifies them into predefined categories. We use the 7-class Stanford Named Entity Recognition (NER) package, which classifies named entries into seven categories: location, person, organization, money, percent, date, and time. We scale the number of named entities by the total number of words net of stop words. A greater percentage of such specific terms indicates that the disclosures provide more concrete details.

Numeric intensity: Following Blankespoor (2019), we first clean the text by excluding years, dates, numbers in references to sections (e.g., "Note 7", "Item 8", and "Section 2"), and numbers that are part of descriptions such as "Level 2" and "No. 2". We then calculate the measure as the number of numbers divided by the number of tokens (excluding punctuations).

Fog Index: We calculate the fog index as 0.4 × (words per sentence + 100 × percentage of complex words), where complex words are defined as words that consist of three or more syllables. To construct the Fog index, we write a Python program that improves on the algorithm implemented in the Perl library, Lingua::EN::Fathom. To increase the accuracy of sentence tokenization, we normalize the text by removing dots from common abbreviations, and use the NLTK tokenizer, which implements a start-of-the-art sentence tokenization algorithm. We count the number of syllables of a word by first looking it up in the CMU pronouncing dictionary (available at: http://www.speech.cs.cmu.edu/cgi-bin/cmudict). If the word is not found in the dictionary, we then apply the syllable-counting algorithm as implemented in Lingua::EN::Fathom, which is based on the number of vowels in the word. These two improvements significantly increase the accuracy of the Fog measure.

Length: The length is based on the word count of OCI-related disclosures, which are identified as paragraphs containing key OCI-related phrases mentioned above.

Appendix C: Variable Definitions

OCI Placement Variables

SCSE — An indicator variable that equals one if OCI is reported in the statement of changes in stockholders' equity, and zero otherwise.

SP — An indicator variable that equals one if OCI is reported either in a single continuous statement of performance or in two separate but consecutive statements of performance, and zero otherwise.

SP1 — An indicator variable that equals one if OCI is reported in a single continuous statement of performance, and zero otherwise.

SP2 — An indicator variable that equals one if OCI is reported in two separate but consecutive statements of performance, and zero otherwise.

Financial and Stock Return Variables

NI — Net income scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

LOSS — An indicator variable that equals one if the firm reports a net loss in a year, and zero otherwise.

OCI — OCI scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

CIDERGL — Derivative gains and losses, a component of OCI, scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

CISECGL — Unrealized gains and losses on available-for-sale securities, a component of OCI, scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

CIPEN — Pension adjustments, a component of OCI, scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

CICURR — Foreign currency translation adjustments, a component of OCI, scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

CIOTHER — Any other adjustments, a component of OCI, scaled by the market value of common shares outstanding 8 months before the fiscal year-end.

RET — Buy-and-hold raw stock return during the period from 8 months before to 4 months after the fiscal year-end.

Textual Analysis Variables

SPECIFICITY — The number of specific words in OCI disclosures according to the seven classes identified by the Stanford NER package, scaled by the total number of words of OCI disclosures with stop words removed.

NUMINT — The number of numbers in OCI disclosures scaled by the number of tokens excluding punctuations in OCI disclosures.

FOG — Gunning Fog Index of OCI disclosures, calculated as 0.4 × (words per sentence + percent of complex words), where complex words are those having three or more syllabuses. A higher value indicates a less readability.

LENGTH — The word count of OCI disclosures in the notes to financial statements, scaled by the total word count of the notes to financial statements. OCI disclosures are identified as paragraphs that contain "other comprehensive income", "other comprehensive loss", or "other comprehensive earning" (case insensitive and including plural forms).

Appendix C: Variable Definitions (Continued)

Heckman's First-Stage Variables

AVG_SIZE — The average firm size during the pre-ASU 2011-05 period, where firm size is measured as the natural log of the market value of common shares outstanding at the fiscal year-end.

AVG_LEV — The average leverage during the pre-ASU 2011-05 period, where leverage is measured as the sum of long-term debt and debt in current liabilities, divided by total assets.

AVG_MB — The average market-to-book during the pre-ASU 2011-05 period, where market-to-book is measured as the market value of outstanding shares divided by shareholders' equity at the fiscal year end.

AVG_ROA — The average return on assets (ROA) during the pre-ASU 2011-05 period, where ROA is measured at income before extraordinary items divided by beginning-of-year total assets.

AVG_VOL_OCI — The average relative volatility of OCI during the pre-ASU 2011-05 period, where the relative volatility of OCI is measured as the standard deviation of CI scaled by beginning-of-year total assets over the past five years, divided by the standard deviation of net income scaled by beginning-of-year total assets over the past five years.

AVG_OCI_COMPLEXITY — The average number of OCI components during the pre-ASU 2011-05 period.

AVG_ABS_OCI — The average of the absolute value of *OCI* scaled by beginning-of-year total assets during the pre-ASU 2011-05 period.

AVG_ABS_CIDERGL — The average of the absolute value of *CIDERGL* scaled by beginning-of-year total assets during the pre-ASU2011-05 period.

AVG_ ABS_CISECGL — The average of the absolute value of *CISECGL* scaled by beginning-of-year total assets during the pre-ASU2011-05 period.

AVG_ ABS_CIPEN — The average of the absolute value of *CIPEN* scaled by beginning-of-year total assets during the pre-ASU2011-05 period.

AVG_ ABS_CICURR — The average of the absolute value of *CICURR* scaled by beginning-of-year total assets during the pre-ASU2011-05 period.

AVG_ ABS_CIOTHER — The average of the absolute value of *CIOTHER* scaled by beginning-of-year total assets during the pre-ASU2011-05 period.

Other Variables

TREAT — An indicator variable that equals one if the firm changes the placement of OCI from the statement of changes in stockholders' equity to either one or two statements of performance, and zero otherwise.

POST — An indicator variable that equals one if the firm's fiscal year precedes the adoption of ASU 2011-05, and zero otherwise.

IMR — The inverse Mills ratio estimated from Heckman's first-stage probit model.

INSTITUTIONAL OWNERSHIP — The total number of shares owned by institutional investors reported in the Thomson Reuters 13-F reporting S34 database as a percentage of the firm's total shares outstanding. We measure institutional ownership using the calendar quarter reporting date that is closest to the firm's fiscal year end.

ANALYST FOLLOWING — The number of unique analysts in the I/B/E/S database who have provided an earnings forecast for the fiscal year.

FIGURE 1: Mean absolute value of OCI components (scaled by total assets) by year

This figure displays the average absolute value of each OCI component, scaled by beginning-of-year total assets, in each year from 2006 through 2017.

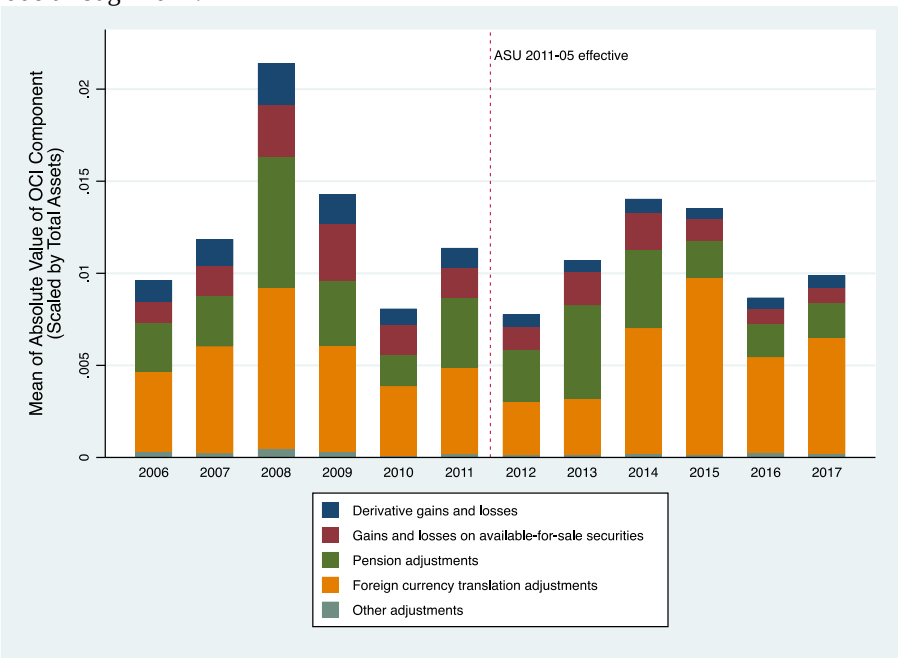

FIGURE 2: Percentage of Firms Reporting OCI Components by Year

This figure displays the percentage of firms reporting each OCI component in each year from 2006 through 2017.

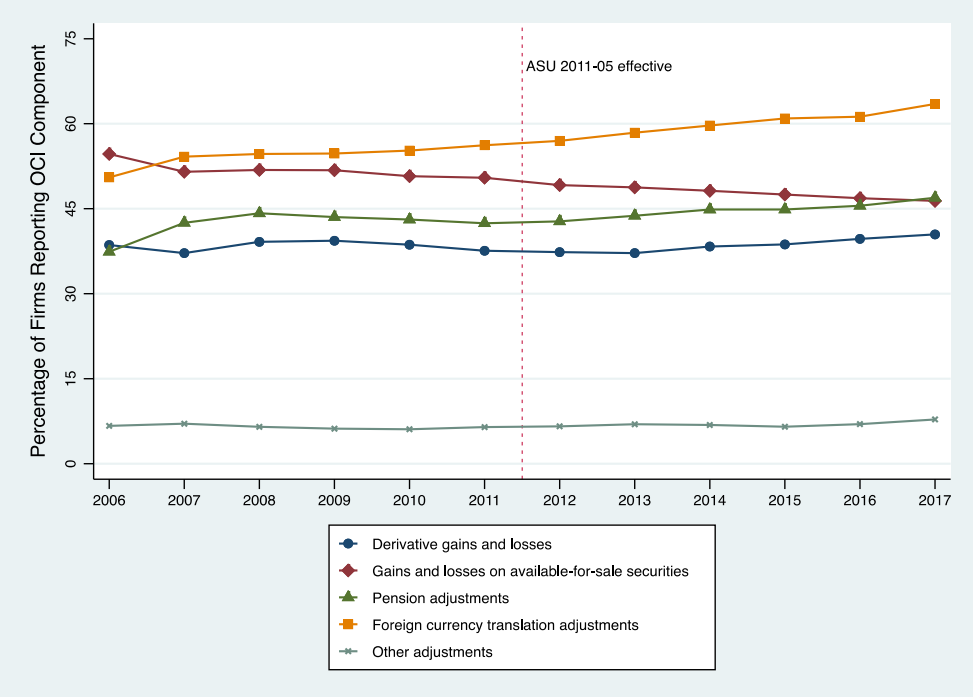

TABLE 1: Sample Selection and OCI Reporting Location

The sample consists of 28,907 firm-years (representing 2,940 unique firms) over the period from 2006 through 2017. Panel A outlines the sample selection procedure. Panel B presents, for each year in our sample period, the percentage of sample firms reporting OCI in the statement of stockholders' equity, in two separate but consecutive statements of income, and in a single continuous statement of comprehensive income. Panel C classifies the 2,940 unique firms in our sample based on their OCI reporting location before and after ASU 2011-05.

Panel A: Sample selection process

	Firms	Firm-Years
All firms on EDGAR with fiscal year end during 2006–2017	19,882	99,379
Less: Firms not adopting XBRL	(9,436)	(21,945)
Less: Firms not on Compustat	(3,191)	(21,207)
Less: Firms not on CRSP	(1,334)	(7,758)
Less: Firms not filing a 10-K in pre- or post-ASU2011-05	(1,707)	(7,075)
Less: Firms whose change type cannot be determined by the algorithm	(711)	(6,877)
Less: Firms incompliant with ASU2011-05	(466)	(4,652)
Less: Firms without required data	(97)	(958)
Final sample	2,940	28,907

Panel B: Reporting Location of OCI

	In the statement of shareholders' equity		In a single continuous statement of performance		In two separate statements of performance		
Year	# of Firms	Percent	# of Firms	Percent	# of Firms	Percent	Total
2006	1,462	86%	46	3%	184	11%	1,692
2007	1,996	88%	63	3%	220	10%	2,279
2008	2,147	88%	71	3%	226	9%	2,444
2009	2,203	88%	72	3%	231	9%	2,506
2010	2,175	83%	115	4%	323	12%	2,613
2011	1,942	71%	203	7%	593	22%	2,738
2012	457	16%	492	17%	1,868	66%	2,817
2013	9	0%	535	20%	2,157	80%	2,701
2014	0	0%	508	20%	2,067	80%	2,575
2015	0	0%	481	20%	1,940	80%	2,421
2016	0	0%	417	19%	1,758	81%	2,175
2017	0	0%	357	18%	1,589	82%	1,946
	12,391		3,360		13,156		28,907

Panel C: Type of Changes in Reporting Location of OCI

	Type of Change	Number of Firms	Percent
1.	Change OCI reporting location from the statement of shareholders' equity to a single continuous statement of performance	519	17.7%
2.	Change OCI reporting location from the statement of shareholders' equity to two separate but consecutive statements of performance	2,047	69.6%
3.	Continue to report OCI in a single continuous statement of performance	100	3.4%
4.	Continue to report OCI in two separate statements of performance	274	9.3%
		2,940	100%

TABLE 2: Descriptive Statistics

The sample consists of 28,907 firm-years (representing 2,940 unique firms) over the period from 2006 through 2017. Panel A displays descriptive statistics for the firm-years in our sample. Panel B compares the mean/median distributions of pre- and post-ASU 2011-05 period of our sample. Appendix C provides variable definitions.

Panel A: Descriptive Statistics of Firm-Years in the Full Sample

	Mean	Std Dev	P5	P25	P50	P75	P95	N
NI	−0.025	0.577	−0.361	−0.001	0.045	0.071	0.145	28,907
LOSS	0.253	0.435	0.000	0.000	0.000	1.000	1.000	28,907
OCI	0.004	0.314	−0.050	−0.005	0.000	0.004	0.044	28,907
CIDERGL	0.000	0.034	−0.003	0.000	0.000	0.000	0.003	28,907
CISECGL	0.005	0.279	−0.008	0.000	0.000	0.000	0.015	28,907
CIPEN	−0.001	0.066	−0.015	0.000	0.000	0.000	0.009	28,907
CICURR	−0.001	0.036	−0.021	0.000	0.000	0.000	0.016	28,907
CIOTHER	0.000	0.045	0.000	0.000	0.000	0.000	0.000	28,907
RET	0.121	0.604	−0.569	−0.161	0.072	0.299	0.896	28,907
SPECIFICITY	0.085	0.063	0.000	0.040	0.076	0.119	0.197	23,865
NUMINT	0.009	0.011	0.000	0.000	0.007	0.014	0.029	23,865
FOG	20.1	2.2	16.7	18.8	20.1	21.4	23.6	23,865
LENGTH	0.034	0.033	0.005	0.015	0.028	0.044	0.080	23,865
IMR	1.695	0.297	1.146	1.549	1.711	1.902	2.091	28,495

Panel B: Mean/Median Distributions of the Pre- and Post-ASU2011-05 Periods

	Pre-ASU 2011-05			Post-ASU 2011-05			Difference			
	Mean	Median	N	Mean	Median	N	Mean	P	Median	P
NI	−0.034	0.046	14,205	−0.017	0.044	14,702	0.017	0.010	−0.002	0.020
LOSS	0.256	0.000	14,205	0.249	0.000	14,702	−0.007	0.145	0.000	0.145
OCI	0.009	0.000	14,205	−0.002	0.000	14,702	−0.011	0.003	0.000	0.000
CIDERGL	0.001	0.000	14,205	0.000	0.000	14,702	−0.001	0.205	0.000	0.000
CISECGL	0.010	0.000	14,205	−0.001	0.000	14,702	−0.011	0.001	0.000	0.000
CIPEN	−0.003	0.000	14,205	0.001	0.000	14,702	0.004	0.000	0.000	0.000
CICURR	0.001	0.000	14,205	−0.003	0.000	14,702	−0.004	0.000	0.000	0.000
CIOTHER	0.000	0.000	14,205	0.000	0.000	14,702	0.000	0.626	0.000	0.905
RET	0.104	0.020	14,205	0.137	0.109	14,702	0.033	0.000	0.089	0.000
SPECIFICITY	0.087	0.079	11,347	0.083	0.074	12,518	−0.004	0.000	−0.005	0.000
NUMINT	0.010	0.007	11,347	0.009	0.006	12,518	−0.001	0.000	−0.001	0.000
FOG	19.966	19.950	11,347	20.242	20.240	12,518	0.276	0.000	0.290	0.000
LENGTH	0.031	0.026	11,347	0.036	0.029	12,518	0.005	0.000	0.003	0.000

TABLE 3: Correlations

The sample consists of 28,907 firm-years (representing 2,940 unique firms) over the period from 2006 through 2017. This table displays correlations among the main firm-year variables in our sample. Pearson (Spearman) correlations are displayed below (above) the diagonal. Numbers displayed in italics below each correlation coefficient represent *p*-values. Appendix C provides variable definitions.

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*	*(13)*
(1) NI		−0.753	0.043	0.017	0.029	−0.011	0.039	0.000	0.266	−0.010	−0.004	−0.002	0.001
		0.000	*0.000*	*0.003*	*0.000*	*0.056*	*0.000*	*0.990*	*0.000*	*0.129*	*0.585*	*0.745*	*0.939*
(2) LOSS	−0.303		−0.012	−0.014	−0.016	0.013	−0.004	−0.003	−0.198	0.009	0.007	0.010	−0.001
	0.000		*0.051*	*0.022*	*0.007*	*0.027*	*0.458*	*0.632*	*0.000*	*0.146*	*0.315*	*0.138*	*0.930*
(3) OCI	−0.335	0.013		0.180	0.428	0.389	0.603	0.034	0.136	0.000	0.002	−0.007	−0.013
	0.000	*0.025*		*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.999*	*0.734*	*0.273*	*0.042*
(4) CIDERGL	−0.193	0.014	0.651		−0.006	0.014	0.002	−0.013	0.083	−0.010	−0.020	−0.002	−0.002
	0.000	*0.019*	*0.000*		*0.346*	*0.021*	*0.775*	*0.028*	*0.000*	*0.141*	*0.002*	*0.722*	*0.730*
(5) CISECGL	−0.394	0.017	0.958	0.607		−0.022	0.055	−0.027	0.051	0.002	0.008	0.000	−0.001
	0.000	*0.003*	*0.000*	*0.000*		*0.000*	*0.000*	*0.000*	*0.000*	*0.720*	*0.248*	*0.962*	*0.940*
(6) CIPEN	0.104	−0.019	0.207	0.011	0.007		0.138	−0.006	0.065	0.010	0.009	−0.008	−0.002
	0.000	*0.002*	*0.000*	*0.054*	*0.221*		*0.000*	*0.300*	*0.000*	*0.125*	*0.158*	*0.210*	*0.799*
(7) CICURR	−0.059	0.003	0.123	0.015	0.011	−0.034		0.001	0.106	0.005	0.005	−0.011	−0.026
	0.000	*0.567*	*0.000*	*0.009*	*0.059*	*0.000*		*0.850*	*0.000*	*0.490*	*0.477*	*0.084*	*0.000*
(8) CIOTHER	0.151	−0.001	0.136	−0.005	0.005	−0.058	0.025		0.021	−0.014	−0.012	0.010	−0.002
	0.000	*0.841*	*0.000*	*0.412*	*0.411*	*0.000*	*0.000*		*0.000*	*0.035*	*0.074*	*0.120*	*0.726*
(9) RET	−0.032	−0.071	0.067	0.083	0.053	−0.043	0.127	0.033		−0.015	−0.004	0.020	0.029
	0.000	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*		*0.024*	*0.580*	*0.002*	*0.000*
(10) SPECIFICITY	0.003	0.004	−0.004	0.000	−0.004	0.004	−0.002	−0.009	−0.015		0.714	−0.239	0.187
	0.670	*0.508*	*0.525*	*0.966*	*0.552*	*0.563*	*0.767*	*0.185*	*0.022*		*0.000*	*0.000*	*0.000*
(11) NUMINT	0.000	−0.002	0.001	0.004	0.001	0.000	0.001	−0.007	−0.006	0.701		−0.117	0.367
	0.963	*0.813*	*0.927*	*0.533*	*0.863*	*0.964*	*0.882*	*0.304*	*0.385*	*0.000*		*0.000*	*0.000*
(12) FOG	−0.016	0.009	0.016	0.006	0.014	0.012	0.001	0.001	0.015	−0.271	−0.111		0.002
	0.013	*0.160*	*0.015*	*0.345*	*0.029*	*0.076*	*0.911*	*0.942*	*0.022*	*0.000*	*0.000*		*0.771*
(13) LENGTH	−0.005	0.005	−0.003	−0.001	−0.002	−0.002	−0.001	−0.005	0.011	0.115	0.158	−0.015	
	0.424	*0.432*	*0.689*	*0.893*	*0.815*	*0.818*	*0.894*	*0.421*	*0.092*	*0.000*	*0.000*	*0.021*	

TABLE 4: The Overall Value Relevance of OCI Over the Full Sample Period

This table presents regressions of overall OCI value relevance over the sample period. The dependent variable is cumulative return from eight months prior to four months after the fiscal year-end date. Industry fixed effects are included. Appendix C provides variable definitions. Influential observations with an absolute R-Student value greater than 2 are deleted. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels respectively.

	(1)	(2)	(3)	(4)	(5)
Intercept	0.047	0.046	0.038	0.054	0.034
	(1.214)	(1.196)	(1.003)	(1.428)	(0.904)
NI	0.604	0.617	0.795	0.667	0.879
	(4.168)***	(4.757)***	(8.663)***	(5.299)***	(9.850)***
NI × LOSS	-0.488	-0.503	-0.683	-0.558	-0.782
	(-3.222)***	(-3.729)***	(-6.971)***	(-4.237)***	(-8.154)***
OCI	0.329				
	(4.421)***				
SCSE × OCI		0.457	0.443		
		(3.073)***	(3.040)***		
SP × OCI		0.171			
		(1.969)**			
SP1 × OCI			0.416		
			(5.032)***		
SP2 × OCI			0.233		
			(2.945)***		
CIDERGL				1.195	
				(4.084)***	
CISECGL				0.066	
				(1.405)	
CIPEN				0.075	
				(0.426)	
CICURR				1.719	
				(11.678)***	
CIOTHER				1.212	
				(3.551)***	
SCSE × CIDERGL					1.214
					(3.154)***
SCSE × CISECGL					0.046
					(0.751)
SCSE × CIPEN					0.565
					(3.392)***
SCSE × CICURR					3.269
					(13.058)***
SCSE × CIOTHER					3.628
					(4.940)***
SP × CIDERGL					0.259
					(0.411)
SP × CISECGL					0.402
					(4.351)***
SP × CIPEN					0.455
					(2.327)**
SP × CICURR					0.636
					(4.592)***
SP × CIOTHER					0.352
					(0.757)
Adjusted R^2	0.050	0.051	0.055	0.067	0.081
N	28,184	28,184	28,181	28,155	28,146

TABLE 5: Heckman's First-Stage Regression

This table presents the results of our first-stage Heckman regression to address potential self-selection bias in OCI reporting location prior to the ASU 2011-05 requirement to report OCI in a performance statement. Appendix C provides variable definitions. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels respectively.

	SP
Intercept	-1.407
	(0.004)***
AVG_SIZE	0.026
	(0.259)
AVG_LEV	-0.114
	(0.510)
AVG_MB	0.000
	(0.000)***
AVG_ROA	0.100
	(0.444)
AVG_VOL_OCI_NI	-0.005
	(0.531)
AVG_OCI_COMPLEXITY	0.144
	(0.001)***
AVG_ABS_OCI	-9.515
	(0.224)
AVG_ABS_CIDERGL	10.724
	(0.166)
AVG_ ABS_CISECGL	3.117
	(0.377)
AVG_ ABS_CIPEN	6.925
	(0.394)
AVG_ ABS_CICURR	13.926
	(0.083)*
AVG_ ABS_CIOTHER	27.533
	(0.057)*
Industry fixed effect	Yes
Pseudo R^2	0.103
Area under ROC curve	0.718
N	2,818

TABLE 6: The Relative Change in OCI Value Relevance upon ASU 2011-05 for Treatment Firms

Panel A performs difference-in-differences regressions using our full sample and Lin et al.'s (2018) sample, comparing the change in OCI value relevance (from before to after ASU 2011-05 adoption) between treatment firms (i.e., those firms that previously reported OCI in the SCSE and were thus required to change OCI placement to a performance statement) and control firms (i.e., those firms that were already reporting OCI in a performance statement before ASU 2011-05 adoption and thus were unaffected by the new rules). Panel B performs the same regressions with all years before ASU 2011-05 adoption and each of subsequent years to ASU 2011-05. The dependent variable is cumulative return from eight months prior to the fiscal year-end date to four months after the fiscal year-end date. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels respectively.

Panel A: The Relative Change in OCI Value Relevance upon ASU 2011-05 Using the Present Study's Full Sample and Lin et al.'s (2018) Sample

	Overall Sample	***Lin et al. (2018)***	***Replicate Lin et al. (2018)***
Intercept	0.034	−0.004	0.085
	(1.768)*	(–0.260)	(3.329)***
NI	0.723	0.975	0.648
	(5.225)***	(4.310)***	(2.797)***
NI × LOSS	-0.583	−0.447	–0.270
	(-4.087)***	(–1.760)*	(–0.822)
TREAT	0.007	−0.026	–0.019
	(0.614)	(–1.590)	(–0.808)
POST	0.082	−0.022	0.124
	(6.596)***	(–1.050)	(3.791)***
TREAT × POST	0.006	0.035	–0.022
	(0.407)	(1.330)	(–0.549)
OCI	1.627	−0.806	–1.243
	(9.519)***	(–1.820)*	(–1.436)
POST × OCI	-1.417	1.860	1.797
	(-5.512)***	(3.470)***	(1.767)*
TREAT × OCI	-1.125	0.925	1.962
	(-4.158)***	(1.600)	(2.129)**
TREAT × POST × OCI	**0.776**	**−2.061**	**–2.256**
	(2.115)**	**(–2.910)*****	**(–2.084)****
IMR	-0.029		
	(-3.809)***		
Adjusted R^2	0.076	0.082	0.074
N	22,559	1,014	1,026

TABLE 6: The Relative Change in OCI Value Relevance upon ASU 2011-05 for Treatment Firms (Continued)

Panel B: The Relative Change in OCI Value Relevance in Each Year Following ASU 2011-05

	All Years Preceding ASU 2011-05 plus Each Year Following ASU 2011-05					
	1st Year	***2nd Year***	***3rd Year***	***4th Year***	***5th Year***	***6th Year***
Intercept	0.042	0.019	0.015	-0.003	0.009	0.013
	(2.111)**	(0.830)	(0.606)	(-0.121)	(0.389)	(0.542)
NI	0.953	1.084	1.153	1.242	1.117	1.095
	(8.273)***	(6.729)***	(6.850)***	(6.822)***	(6.848)***	(6.408)***
NI × LOSS	-0.823	-0.973	-1.019	-1.116	-0.993	-0.979
	(-6.715)***	(-5.698)***	(-5.717)***	(-5.822)***	(-5.813)***	(-5.440)***
TREAT	0.016	0.015	0.017	0.016	0.014	0.014
	(1.468)	(1.388)	(1.525)	(1.441)	(1.295)	(1.295)
POST	0.164	0.138	0.039	-0.045	0.148	0.070
	(7.857)***	(6.827)***	(1.905)*	(-1.964)**	(6.804)***	(2.767)***
TREAT × POST	-0.059	0.001	0.030	0.046	-0.025	0.029
	(-2.581)***	(0.036)	(1.343)	(1.895)*	(-1.044)	(1.084)
OCI	1.587	1.561	1.565	1.549	1.565	1.563
	(9.337)***	(9.471)***	(8.961)***	(8.992)***	(9.247)***	(9.382)***
POST × OCI	-2.197	-0.551	-1.607	-1.452	-1.509	-1.416
	(-3.686)***	(-1.625)	(-4.804)***	(-4.032)***	(-4.184)***	(-4.870)***
TREAT × OCI	-1.108	-1.091	-1.102	-1.093	-1.097	-1.094
	(-4.156)***	(-4.162)***	(-4.116)***	(-4.110)***	(-4.149)***	(-4.157)***
TREAT × POST × OCI	0.507	0.086	1.629	1.511	1.144	0.934
	(0.722)	(0.216)	(3.540)***	(3.099)***	(2.543)**	(2.286)**
IMR	-0.046	-0.036	-0.036	-0.028	-0.031	-0.032
	(-4.620)***	(-3.586)***	(-3.444)***	(-2.693)***	(-2.963)***	(-3.066)***
Adjusted R^2	0.088	0.092	0.082	0.083	0.090	0.082
N	12,967	12,887	12,844	12,729	12,599	12,268

TABLE 7: The Effect of OCI Disclosure Concreteness and Clarity on the Value Relevance of OCI

This table presents the same regression specification as in the first column of Table 6 Panel A, partitioned into subsamples based on the disclosure characteristics of *SPECIFICITY*, *NUMINT*, *FOG*, and *LENGTH*. Appendix C provides variable definitions. Influential observations with an absolute R-Student value greater than 2 are deleted. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels respectively.

	SPECIFICITY (H2a)		***NUMINT (H2b)***		***FOG (H2c)***		***LENGTH (H2d)***	
	> Median	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**
Intercept	0.030	0.016	0.028	0.030	0.064	-0.023	0.016	0.038
	(1.268)	(0.771)	(1.231)	(1.244)	(2.879)***	(-1.040)	(0.663)	(1.655)*
NI	1.016	0.636	0.925	0.628	0.553	1.143	0.950	0.608
	(7.441)***	(6.573)***	(7.074)***	(4.231)***	(4.673)***	(9.412)***	(7.067)***	(4.331)***
NI × *LOSS*	-0.902	-0.465	-0.795	-0.477	-0.396	-1.021	-0.818	-0.455
	(-6.254)***	(-4.462)***	(-5.723)***	(-3.074)***	(-3.167)***	(-7.875)***	(-5.686)***	(-3.080)***
TREAT	-0.015	0.031	0.002	0.011	0.011	0.006	-0.016	0.029
	(-0.989)	(2.081)**	(0.130)	(0.729)	(0.750)	(0.394)	(-1.067)	(1.892)*
POST	0.082	0.086	0.076	0.090	0.077	0.094	0.063	0.101
	(4.690)***	(4.891)***	(4.381)***	(5.089)***	(4.362)***	(5.332)***	(3.655)***	(5.630)***
TREAT × *POST*	0.022	-0.016	0.012	-0.001	0.004	0.003	0.031	-0.016
	(1.160)	(-0.829)	(0.620)	(-0.047)	(0.226)	(0.177)	(1.630)	(-0.844)
OCI	1.407	1.762	1.256	2.041	1.422	1.792	1.416	1.847
	(7.640)***	(6.647)***	(8.979)***	(13.147)***	(8.445)***	(8.412)***	(7.941)***	(9.531)***
POST × *OCI*	-1.266	-1.509	-1.234	-1.656	-1.163	-1.659	-0.574	-1.907
	(-3.654)***	(-4.151)***	(-4.233)***	(-5.367)***	(-4.018)***	(-4.220)***	(-1.614)	(-6.996)***
TREAT × *OCI*	-1.094	-0.726	-0.961	-0.944	-0.680	-1.379	-0.832	-1.404
	(-4.358)***	(-2.302)**	(-4.610)***	(-4.082)***	(-2.355)**	(-4.577)***	(-2.500)**	(-4.551)***
TREAT* × *POST* × *OCI	**1.023**	**0.102**	**1.130**	**0.364**	**0.257**	**1.543**	**0.256**	**1.275**
	(2.604)* **	**(0.225)**	**(3.230)*** **	**(0.959)**	**(0.622)**	**(3.351)*** **	**(0.538)**	**(3.305)*** **
IMR	-0.032	-0.019	-0.027	-0.027	-0.040	-0.011	-0.012	-0.040
	(-3.098)***	(-1.963)**	(-2.589)***	(-2.724)***	(-3.977)***	(-1.124)	(-1.148)	(-4.062)***
Adjusted R^2	0.084	0.080	0.077	0.086	0.075	0.089	0.087	0.072
N	11,263	11,294	11,223	11,334	11,248	11,311	11,236	11,323

TABLE 8: Investor Sophistication Conditioning Analyses

This table presents the same regression specification as in the first column of Table 7, partitioned into subsamples based on both disclosure characteristics and investor sophistication. For expositional brevity, only the coefficients on *TREAT* × *POST* × *OCI* are reported. In the column "All Obs", we reproduce the results in Table 7 from partitioning all observations into subsamples based on each disclosure characteristic only. Appendix C provides variable definitions. Investor sophistication is proxied by either institutional ownership or analyst following. High/low institutional ownership is defined as above/below the sample median of the institutional ownership in a firm. High/low analyst following is defined as above/below the sample median of the number of analysts following a firm. Influential observations with an absolute R-Student value greater than 2 are deleted. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels respectively.

	All Obs		***High Institutional Ownership Obs***		***Low Institutional Ownership Obs***		***High Analyst Following Obs***		***Low Analyst Following Obs***	
	SPECIFICITY (H2a)		***SPECIFICITY (H2a)***		***SPECIFICITY (H2a)***		***SPECIFICITY (H2a)***		***SPECIFICITY (H2a)***	
	> Median	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**
TREAT × *POST* × *OCI*	1.023	0.102	0.537	1.072	1.721	0.025	-0.996	0.227	2.528	0.449
	(2.604)***	(0.225)	(1.220)	(1.437)	(2.885)***	(0.046)	(-1.989)**	(0.287)	(4.221)***	(0.997)
Adjusted R^2	0.084	0.080	0.102	0.143	0.147	0.119	0.120	0.153	0.129	0.124
N	11,263	11,294	5,651	5,707	5,588	5,574	5,341	5,423	5,864	5,830
	NUMINT (H2b)		***NUMINT (H2b)***		***NUMINT (H2b)***		***NUMINT (H2b)***		***NUMINT (H2b)***	
	> Median	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**
TREAT × *POST* × *OCI*	1.130	0.364	0.756	1.096	1.749	0.273	-0.508	0.001	2.188	0.628
	(3.230)***	(0.959)	(1.741)*	(1.608)	(2.642)***	(0.507)	(-1.090)	(0.001)	(3.328)***	(1.314)
Adjusted R^2	0.077	0.086	0.103	0.144	0.133	0.130	0.111	0.165	0.110	0.141
N	11,223	11,334	5,635	5,724	5,552	5,612	5,326	5,436	5,813	5,882
	FOG (H2c)		***FOG (H2c)***		***FOG (H2c)***		***FOG (H2c)***		***FOG (H2c)***	
	> Median	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**
TREAT × *POST* × *OCI*	0.257	1.543	0.536	0.629	0.330	1.769	0.330	-0.887	0.564	2.613
	(0.622)	(3.351)***	(0.930)	(1.052)	(0.400)	(3.577)***	(0.623)	(-1.203)	(0.842)	(5.573)***
Adjusted R^2	0.075	0.089	0.147	0.097	0.092	0.161	0.154	0.118	0.078	0.165
N	11,248	11,311	5,658	5,702	5,535	5,630	5,359	5,406	5,800	5,895
	LENGTH (H2d)		***LENGTH (H2d)***		***LENGTH (H2d)***		***LENGTH (H2d)***		***LENGTH (H2d)***	
	> Median	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**
TREAT × *POST* × *OCI*	0.256	1.275	0.010	1.094	1.843	1.089	0.774	-0.914	1.343	1.694
	(0.538)	(3.305)***	(0.019)	(1.895)*	(2.515)**	(2.281)**	(1.941)*	(-1.427)	(1.737)*	(4.105)***
Adjusted R^2	0.087	0.072	0.130	0.107	0.135	0.125	0.153	0.120	0.123	0.113
N	11,236	11,323	5,643	5,716	5,551	5,616	5,342	5,420	5,813	5,883

TABLE 9: The Effect of OCI Disclosure Characteristics on the Value Relevance of OCI Using the Entropy Balancing Method

This table uses the same regression specification as Table 7 with the entropy balancing method implemented to deal with the imbalance between the treatment group and the control group. Treatment firms and control firms are re-weighted based on the first moments of the variables *AVG_SIZE*, *AVG_LEV*, *AVG_MB*, *AVG_ROA*, *AVG_VOL_OCI_NI*, *AVG_OCI_COMPLEXITY*, *AVG_ABS_OCI*, *AVG_ABS_CIDERGL*, *AVG_ABS_CISECGL*, *AVG_ABS_CIPEN*, *AVG_ABS_CICURR*, and *AVG_ABS_CIOTHER*. Appendix C provides variable definitions. For expositional brevity, only the coefficients on *TREAT* × *POST* × *OCI* are reported. Influential observations with an absolute R-Student value greater than 2 are deleted. T-statistics, calculated using heteroskedastic robust standard errors, are reported in parentheses. *, **, and *** indicate two-tail significance at 10%, 5%, and 1% levels respectively.

	Overall Sample	***SPECIFICITY (H2a)***		***NUMINT (H2b)***		***FOG (H2c)***		***LENGTH (H2d)***	
		> Median	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**	**> Median**	**< Median**
TREAT × *POST* × *OCI*	0.826	1.274	-0.089	1.369	0.211	0.359	1.698	0.409	1.201
	(1.868)*	(3.045)***	(-0.165)	(3.622)***	(0.430)	(0.721)	(3.153)***	(0.790)	(2.603)***
Adjusted R^2	0.110	0.118	0.120	0.110	0.128	0.098	0.133	0.129	0.102
N	22,559	11,263	11,294	11,223	11,334	11,248	11,311	11,236	11,323