Of Fogs and Bogs: Does Litigation Risk Make Financial Reports Less Readable?[*]

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1 Introduction

Companies' financial reports are often deemed to be opaque and difficult to digest, deepening information frictions and impairing stock liquidity. Extant literature finds that poor readability is associated with worse access to credit (Bonsall and Miller, 2017), greater analyst forecast dispersion (Lehavy et al., 2011) and greater stock volatility (Loughran and McDonald, 2014). Regulators have also expressed frustration with opaque or excessively complex disclosures, leading the Securities and Exchange Commission (SEC) to pass the Plain English Rule in 1998. The benefits of the rule were short-lived and firms' financial reports have, if anything, become less readable since then (Li, 2008; Loughran and McDonald, 2014). This begs the question of what might drive firms to produce reports of poor readability.

We hypothesize that litigation risk could be a salient factor in driving firms toward worse readability in their financial reports. Securities class action lawsuits (SCAs) often have negative outcomes for firms and their CEOs. SCAs, and the related SEC enforcement actions are known to harm CEOs' reputations and their career prospects and compensation (Karpoff et al., 2008; Humphery-Jenner, 2012). SCAs also damage a corporation's standing with customers and suppliers (Karpoff and Lott, 1993) and potentially worsen access to finance (Autore et al., 2014; Yuan and Zhang, 2014, 2016). Our hypothesis is that firms that are sufficiently concerned about litigation will seek to improve disclosure accuracy and thoroughness to reduce the risk of lawsuits, though the downside is that financial reports may become less readable. Hence, firms face a trade-off between issuing complex and thorough reports that mitigate firm litigation exposure – but that may, ironically, also impair the quality of information possessed by the firm's investors.

Attempts to improve disclosure accuracy can worsen readability for a variety of reasons. A report can be less readable because it uses complex words. Using words that convey sophisticated and subtle messages can be more accurate than simple declaratory statements, even if the latter would notionally make the report more readable. Indeed, complex words often have a range of meanings and interpretations. Such vagueness gives the firm more scope to argue that the report is capable of myriad interpretations; and thus, the disclosure was not false. Similarly, complex sentence structures provide caveats and qualifiers to fine-tune statements, which could be technically more accurate but also more convoluted. The use of legal words and related jargon can also add to the complexity of a report. This makes the reports more difficult to understand for retail

investors, or for analysts who face significant time pressure. However, it does enable firms to address specific legal causes of action; and thus, to pre-empt litigation by specifically and proactively countering it. Further, readability declines when firms attempt to stave off litigation by disclosing minutia, which can increase report thoroughness but also inundate an inexperienced or busy reader with excessive and abstruse information.

We explore the relation between readability and litigation risk by using a sample of US firms from 1993 to 2013, yielding around 96,000 firm-year observations in our panel data sample. The literature has developed different measures of financial report readability. We focus on 10-K reports to ensure comparability across firms. We assess readability using measures for both complexity and thoroughness. The complexity measures include the Fog index, which is a function of sentence length and the proportion of multi-syllabic words (Gunning, 1952), the PC index, which is the first principal component derived from six variations of the Fog index (Guay, Samuels, and Taylor, 2016), and the Bog index, which captures a broader set of plain English attributes beyond syllable counts, including those recommended by the SEC (Bonsall, Leone, Miller, and Rennekamp, 2017). We use file size (Loughran and McDonald, 2014) and word count to reflect the thoroughness of reports. All five measures are negatively associated with reading ease, that is, larger values of these measures indicate less readability.

We first test how financial report readability is affected when firms are subject to a lawsuit or face high litigation risk. We hypothesize that firms that experience a lawsuit will significantly alter their disclosure policies to reduce the likelihood of subsequent lawsuits. In particular, we expect firms to enhance disclosure accuracy and err on the side of "too much" rather than "too little" information, even at the expense of readability. Consistent with this hypothesis, we find that firms produce less readable 10-Ks after facing a SCA. This impact is not transitory and lasts several years after the SCA is eventually dismissed or settled. We also employ the model by Kim and Skinner (2012) to measure ex-ante litigation risk. Consistent with litigation risk being an important factor in disclosure practices and reinforcing our ex-post litigation results, we find that firms facing high ex-ante litigation risk produce less readable reports.

We next take steps to address endogeneity concerns. The aforementioned finding that litigation experienced several years earlier continues to influence readability indicates that it is not a short-lived mechanical effect. To further alleviate concern that a latent variable affects both report readability and litigation risk, we investigate how SCA exposure of a firm's managers and directors,

at *other* firms that they are affiliated with, impacts readability. We hypothesize that if managers or directors of a firm experience litigation at another firm, this will reduce readability at the focal firm, even when the focal firm is not the subject of litigation. That is, we argue that outside litigation exposure can make managers and directors more cognizant of the risks and consequences of litigation and induce them to reduce litigation risk by producing more voluminous but less readable financial reports at the focal firm. We consider both current litigation at another firm that a manager or director is affiliated with as well as past litigation experience at another firm that the CEO has worked for. We find that firms that are not currently subject to litigation but are connected to litigated firms through management or directors produce less readable 10-Ks. We also find that CEOs with prior SCA experience at another firm produce less readable 10-Ks. These results help to reduce endogeneity concerns as the litigation is occurring outside the focal firm but still impacts the focal firm's report readability.

We find that litigation exposure engenders key changes in both report thoroughness and complexity. Firms' reports become larger (i.e., file sizes increase) and contain more words. This suggests greater thoroughness in the disclosure, an attempt to cover all the bases when read in conjunction with our other results. The effects of litigation risk on the Fog, PC, and Bog indexes suggest changes in report complexity. Since these measures are not very intuitive, we dig deeper into the manner in which litigation affects complexity. We look at two specific components of the complexity indexes: words per sentence and complex word ratio, as well as two particular types of words: litigious words and uncertain words. We find some evidence that each of these components and types of words increase in response to litigation. That is, we find that the number of words per sentence and the use of complex words increases in response to litigation or when the risk of litigation is relatively high. This could be due to firms qualifying and hedging their statements. Moreover, depending on the regression setting, we also find that the use of litigious words and uncertain words increases. The increase in litigious words suggests that firms may pre-empt litigation by proactively addressing potential causes of action in their financial reports. The increase in uncertain words suggests a movement away from declaratory statements and a tendency toward conveying nuanced and intricate information that, while not inaccurate, may be more ambiguous.

To cross-validate our results, we explore how firms alter report readability around common litigation flashpoints. These include seasoned equity offerings (SEOs) and bond downgrades, around which shareholders might allege misleading disclosure if the firm's shares subsequently

decline in value. These events might make firms especially cautious about their disclosures, resulting in more exhaustive and complex filings. We find supporting evidence, with firms' financial report readability becoming worse around SEOs and bond downgrades. Other situations with heightened litigation risk that we explore are ones with abnormally high CEO compensation and the implementation of the Sarbanes-Oxley Act (SOX) of 2002. Abnormally high CEO pay is correlated with lawsuit risk (Peng and Röell, 2008), so we expect highly compensated CEOs to attempt to reduce litigation risk, potentially resulting in increasingly lengthy and complex disclosures. Consistent with this, we find that CEOs with abnormally high compensation tend to make reports less readable. The implementation of SOX is also likely to have increased litigation risk or, at a minimum, the exposure of CEOs to litigation risk through having to assume personal liability for any fraudulent reporting. Moreover, SOX increased disclosure and monitoring (Arping and Sautner, 2013), which implicitly increases scrutiny of managers' performance and thereby exposes managers to higher litigation risk. Consistent with these views, we find that readability deteriorates after the passage of SOX. Overall, the results from these additional tests corroborate the foregoing finding that firms appear to reduce readability in response to litigation risk.

We also investigate whether the CEO's perception of litigation risk impacts readability. Overconfident CEOs are likely to underestimate litigation risk as they tend to overestimate returns and underestimate risk, ironically increasing the likelihood that their firms are sued (Banerjee et al., 2018). We use both option-based and press-based measures of overconfidence and find that overconfident CEOs' reports exhibit less change in readability after litigation. This is consistent with overconfident CEOs taking fewer steps to reduce litigation risk.

To test our underlying premise that firms face a trade-off between litigation risk and readability, we examine how financial report readability affects subsequent litigation risk. We rely on the 1998 Plain English Rule for identification. In October 1998, the SEC implemented the Plain English Rule requiring firms to use plain English in their prospectus filings. Even though the rule targeted prospectus filings, the SEC encouraged the use of plain English in all filings, including 10-Ks. This appears to have been effective as Loughran and McDonald (2014) find that 10-Ks also became more readable in response to the rule. We thus use the 1998 Plain English Rule as an instrumental variable for each of our readability measures and apply two-stage least square regressions to test whether readability has implications for litigation risk. We restrict our sample to the 1996-2000 period (we exclude 1998, the year the rule is introduced). In the first stage we find

that, consistent with Loughran and McDonald (2014), 10-K readability improves after implementation of the 1998 Plain English Rule. In the second stage we find a negative relation between each of our instrumented readability measures and litigation risk. This suggests that disclosure policies that make reports more readable may have the downside of making firms more vulnerable to SCA lawsuits.

Finally, we investigate how firms respond to changes in the external information environment. In particular, we explore whether firms change their report readability in response to brokerage house mergers. A consequence of a brokerage house merger is that it exogenously reduces analyst coverage for some firms. The reduction in financial analyst reports could exacerbate information asymmetry by making it more difficult for investors to evaluate firm quality, especially when financial reports are complex. To offset the fall in analyst coverage, firms could modify disclosure policies by, for instance, improving direct information flow to investors by enhancing report readability. Using brokerage house mergers as an exogenous negative shock to analyst coverage, we find that affected firms appear to improve 10-K readability. This, along with our earlier results, suggests that firms respond to changes in the external environment by increasing or decreasing readability as the circumstances warrant.

Our study contributes to the literature in several ways. Some studies have analyzed firm's strategic reporting decisions (see Beyer, Cohen, Lys, and Walther, 2010 for a review). However, there is limited research on strategic reporting using disclosure readability and linguistic features. Prior studies on disclosure readability find that firms reduce readability in response to lower and less persistent earnings (Li, 2008) and higher short selling pressure (Li and Zhang, 2015). Firms also worsen readability if they engage in greater earnings management (Lo, Ramos and Rogo, 2017). We highlight that worsened readability can be a result of firms attempting to reduce litigation risk by providing accurate but complex and exhaustive disclosures, leading to a trade-off between litigation risk and readability. We also show that firms improve readability in response to an increase in information asymmetry brought about by an exogenous reduction in analyst coverage, consistent with firms trading off the costs and benefits of readability. Furthermore, we show that managerial overconfidence is associated with greater readability while prior or contemporaneous experience of litigation is associated with lower readability. Therefore, we show that reporting practices are influenced by the decision-makers' subjective assessment of the environment, which is in turn shaped by their behavioral traits and individual experiences.

In addition, there is no consensus on how managers change their financial disclosure behavior in response to high litigation risk. Studies such as Lev (1992), Kasznik and Lev (1995), Skinner (1997) and Field, Lowry, and Shu (2005) find that firms tend to provide high quality and more frequent financial disclosure to mitigate the potential negative effects of high litigation risk. On the other hand, Frost and Pownall (1994), Baginski et al. (2002), and Johnson et al. (2001) find that firms reduce the frequency of voluntary disclosure when facing high *ex ante* litigation risk, suggesting that firms might take a "small target" approach to how often they disclose information. Moreover, Rogers and Buskirk (2009) find that firms decrease the level of disclosure post litigation, but do not look at the quality or nature of that disclosure. Our results thus contribute to this strand of the literature by showing that managers trade-off readability with litigation risk, both ex ante and ex post, via making their disclosures longer and more complex, potentially involving the use of legalese and this has the effect of worsening disclosure readability.

2   Literature Review and Related Background

2.1   Annual report readability

There is a growing body of literature on 10-K readability. Recent studies find that reducing report readability can help firms obfuscate information that they want to hide (Li, 2008; Li and Zhang, 2015; Lo, Ramos and Rogo, 2017).[1] Although managers can use 10-K readability to obfuscate unfavorable information, low readability has its disadvantages, and indeed, could make obfuscation look worse when it is eventually discovered. For example, Biddle, Hilary, and Verdi (2009) find that firms with less readable financial statements make less efficient investments while Lehavy, Li, and Merkley (2011) find that greater analyst effort is required when financial statements are less readable (as evidenced by analyst earnings forecasts that have greater dispersion, lower accuracy and greater overall uncertainty). Similarly, Loughran and McDonald (2014) find that worse readability is associated with higher stock return volatility, greater analysts forecast error, greater analyst dispersion, and larger absolute earnings surprises. In addition, Bonsall and Miller (2017) find that less readable financial disclosures are associated with less favorable ratings, greater bond rating agency disagreement, and a higher cost of debt. Hwang and Kim (2017) find that firms with

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[1] For example, Li (2008) finds that firms with lower current and future earnings write less readable 10-Ks while Bloomfield (2008) finds that the 10-Ks of firms with positive and persistent earnings are easier to read.

less readable disclosures trade at significant discounts relative to fundamental value. In contrast, more readable documents tend to attract investors. For example, Miller (2010) finds that more readable filings are associated with more trading and less disagreement among small investors. You and Zhang (2009) find stronger investor underreaction with more complex 10-K reports while Rennekamp (2012) finds that more readable disclosures are associated with stronger reactions and at times, even overreaction. In addition, Lawrence (2013) finds that investment level and the returns of individual investors are increasing with clearer and more concise disclosures. Against this backdrop, we investigate why firms might continue to produce less readable reports.

2.2   Litigation risk

Securities class action lawsuits arise if the firm, or its officers, intentionally make false or misleading disclosures to inflate share prices and shareholders suffer losses because they purchase shares at the inflated price. SCAs often follow managers issuing erroneously optimistic statements (Roger, Buskirk, and Zechman, 2011). Prior studies find that SCAs and the related SEC enforcement actions harm CEO reputation and compensation (Karpoff, Lee, and Martin, 2008; Humphery-Jenner, 2012). Moreover, SCAs also worsen a corporation's stance with its customers and suppliers (Karpoff and Lott, 1993) and potentially worsen access to finance (Autore, Hutton, Peterson, and Smith, 2014; Yuan and Zhang, 2015, 2016). Thus, firms have an incentive to reduce litigation risk.

Managers appear to attenuate their behavior when firms are faced with high litigation risk. For example, overconfident CEOs appear to partially reign in their behavioral biases after they are sued and are put on notice about the risk of potential litigation (Banerjee et al., 2018), suggesting an attempt to mitigate future litigation risk. Ideally, managers could minimize litigation risk by providing accurate reports and more frequent disclosures (Field et al., 2005). However, fear persists that firms might be subject to vexatious lawsuits that arise merely because the share price declined, where investors attempt to search for any material information the firm might have overlooked in prior disclosures. Given that lawsuits per se can induce reputational damage, firms might seek to reduce litigation risk by providing lengthy and complex, though ultimately thorough and accurate disclosures.

2.3 The impact of litigation risk on readability

One way that firms can reduce litigation risk is by disclosing more information and hedging and caveating the information that they disclose. This can manifest in several ways that reduce readability. Managers could increase the volume of material that they disclose. Here, they would effectively inundate readers with information such that disclosures are technically more exhaustive and thorough, even if they are more difficult and time-consuming to process. This would manifest in an increased word count, for example. Further, managers might increase the complexity of their disclosures. Thus, rather than using declaratory statements, they might try to use more accurate – but also more ambiguous – complex words. This would help stave off allegations of inaccurate disclosure. Managers might also directly attempt to address potential causes of action. This can result in reports containing more litigious terms, which can directly grapple with, and preempt, potential legal considerations. If the firm fears SCAs, it could use such legal language preemptively. Finally, firms might try to hedge their statements more. Here, instead of straightforward statements, firms can qualify statements. In addition to the use of complex words, this would also manifest in increased sentence length. Thus, we hypothesize that firms facing higher litigation risk produce less readable reports.

We also anticipate that litigation experience at other firms will influence managerial actions at their present firm. This experience could come from working at a different firm that was sued. It could also come from having an interlocking directorship with a firm that is sued. Prior literature highlights that managers learn from experience in myriad corporate contexts, such as takeovers (Aktas et al, 2013) and divestitures (Humphery-Jenner et al, 2019). Further, directors can gain valuable knowledge and experience from their roles as directors at other firms and this knowledge spreads throughout directors' networks (Shropshire, 2010). Therefore, we expect that litigation experience, either at a prior firm or at an interlocked firm, will also shape firms' disclosure practices.

3 Data

3.1 Sample selection

Our main sample consists of 96,028 firm-year observation from 1993 to 2013. We start with the set of CRSP/Compustat firms. We then collect SEC 10-K readability data from the WRDS SEC Readability and Sentiment database. Following Loughran and McDonald (2014), we include 10-K filings, 10-K 405, 10KSB and 10KSB40 filings. We require that firms have a Compustat permanent ID match and have a gap of at least 180 days between two filings. The SEC analytics database provides data for reports filed from 1994 onwards. Thus, the first report can relate to activity that occurred during the preceding fiscal year.

We collect data on firms' annual accounting information, number of business segments, number of geographic segments and bond ratings from Compustat. We obtain data on stock returns and the number of shares outstanding from CRSP. Institutional holdings information is from Thomson Reuters 13-F filings, obtained via WRDS. CEO compensation information is from ExecuComp while analyst coverage data is from IBES. We collect litigation data from the Stanford Securities Class Action Clearinghouse (SCAC). As the SCAC data begins in 1996, our litigation sample begins in 1996. We use BoardEx to identify manager and board connections among firms and to derive data on current or prior SCA experience. Brokerage house mergers data is acquired from Marcin Kacpercayk's data library.[2] All continuous variables are winsorized at the first and 99th percentiles to mitigate the impact of outliers.

3.2 Readability measures

There are various ways to measure readability. We use several readability measures developed in the literature to ensure that our results do not merely reflect the specifics of any individual measure. We use 10-K file size and the number of words in the financial report to capture report thoroughness.[3] We use the three measures below to capture report complexity. Note that all three measures are negatively correlated with reading ease.

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[2] http://pages.stern.nyu.edu/~sternfin/mkacperc/public_html/~mkacperc.htm.

[3] As Bonsall, Leone, Miller, and Rennekamp (2017) note, the introduction of various file formats (e.g., HTML, XML, PDF) and picture format file attachments can lead to variation in 10-K file size through time that is unrelated to 10-K readability. As a result, we also use word count as another measure of report thoroughness.

Fog Index: A linear combination of syllables per word and words per sentence. Specifically, it is computed as 0.4*(average number of words in sentences + percentage of words of three or more syllables). The index estimates the number of years of education that readers need to understand the text. Since its development in Gunning (1952), the Fog Index has received significant use in prior studies.[4]

PC Index: The first principal component derived from six similarly defined readability measures: Flesch-Kincaid, LIX, RIX, Fog, ARI and SMOG. These six measures are effectively variations of functions based on the numbers of characters, syllables, words and sentences in a document. We follow the approach in Guay, Samuels, and Taylor (2016) in constructing this measure.

Bog Index: A multi-faceted measure of disclosure clarity based on plain English writing principles and the SEC guidelines for clear communication with investors. The Bog Index is computed by a computational linguistics software that captures a broader set of plain English attributes such as word familiarity, style problems, and sentence variety.[5] See Bonsall, Leone, Miller, and Rennekamp (2017) for a detailed description of its construction.

In addition to the three holistic complexity measures, we also use more specific measures of readability and writing characteristics to examine various facets of readability. We capture firms' tendency to add nuance and to hedge statements by computing the proportion of words that are deemed complex (contain three or more syllables) and the average words per sentence. We also calculate the proportion of words that are "uncertain" (as defined by Loughran and Macdonald, 2011) to capture firms' attempts to avoid declarative statements. Finally, we measure firms' tendency to address specific legal causes of action, potentially preemptively, by calculating the proportion of words that are "litigious" (as defined by Loughran and Macdonald, 2011). We note that these last two measures depend on relatively subjective classification of word types.

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[4] See e.g., Li (2008); Gary, Hilary and Verdi (2009); Lehavy, Li, and Merkley (2011); Dougal, Engelberg, Garcia, and Parsons (2012); Lo, Ramos and Rogo (2017).

[5] Bog is computed as the sum of three components: *Bog Index = (Sentence Bog + Word Bog – Pep)*.
Sentence Bog = (Average Sentence Length)^2/Long Sentence Limit, where the default long sentence limit is 35 words per sentence. *Word Bog = (Style Problems + Heavy Words + Abbreviations + Specialist)*250/Number of Words*, and *Pep=(Names + Interest Words + Conversational)*250/Number of Words + Sentence Variety*.

3.3   Summary statistics

The summary statistics for the full sample are in Table 1. The Appendix contains detailed descriptions of the variables we use throughout the paper. The average file size is around 3 MB and the average word count is around 30,000 words. As both variables display significant skewness, we use the natural log of these variables in regression analysis. The average for the Fog Index is 19.8, indicating that around 20 years of education is needed to understand an average 10-K filing. By construction, the average for the PC Index is zero while the average for the Bog Index is 82.3, consistent with the average reported in Bonsall, Leone, Miller, and Rennekamp (2017). These readability measures have increased over time. Figure 1 and Figure 2 plot the average Fog index and Bog index (respectively) over time. They highlight a steady worsening in readability. There is a small improvement in readability measures around 1998, following the SEC's plain English rule.

The firms in our sample have 1.83 geographic segments, and 1.64 business segments, on average, suggesting that the average firm in our sample has a moderate degree of business complexity. A little over half of our firms are incorporated in Delaware. Following Kim and Skinner (2012), we include sales growth, R&D expenses scaled by sales, adjusted market return, return volatility and skewness as control variables in SCA logit regressions. The litigation dummy mean is 0.015, indicating that a 1.5% of our firm year observations experience an SCA. On average, our firms have sales growth of 10%, a R&D to sales ratio of 18% and a market adjusted return of 4.8%.

[Insert Table 1 About Here]

4   Empirical Results

We begin by analyzing how firms adjust their reporting behavior following SCAs. We also explore how predicted litigation risk influences readability. We then provide cleaner identification of the effect by exploring the impact of litigation experienced at interlocked firms or experienced at other firms through prior employment. These tests help to mitigate endogeneity concerns. We then cross-validate our results by analyzing the relation between readability and factors that are common flash points for litigation. Additionally, we examine how CEOs' cognizance of litigation risk – as proxied by CEO overconfidence – influences reporting. Finally, we provide more insights by analyzing the

effects of a shock to readability (the 1998 Plain English Rule) and a shock to the firm's information environment (brokerage house mergers).

4.1   How do SCAs affect report readability?

We first investigate how firms adjust report readability following litigation. Our hypothesis is that class actions put managers on notice that their firm could be at risk of further litigation. Class action experience will encourage managers to take steps to reduce future litigation risk. We anticipate that one such step is to adjust their disclosure practices. This can include making disclosures more thorough, more nuanced (i.e., complex) and by directly addressing legal matters. All such matters might inadvertently worsen financial report readability.

We run OLS regression in which the dependent variable is the firm's 10-K report readability. We also analyze several metrics related to financial report readability, including the ratio of complex words and legalistic words (discussed in Section 4.3). We construct an indicator that equals one if the firm was the target of a SCA in the year to which that 10-K relates. Importantly, the 10-K will have been written after any such SCA filing, but pertain to the financial year in which it was filed (i.e., an SCA filed in year *t* is covered in the financial report pertaining to year *t*, but which is ultimately produced after year *t*'s conclusion, so after any SCA filing). We create another indicator variable if the firm was the target of an SCA during the prior three years. We look at both litigation filings (Table 2, Panel A) and litigation resolutions (Table 2, Panel B). We control for a standard set of control variables (see for example, Li, 2008). These include firm size, the market-to-book ratio, firm age, asset tangibility ratio, a loss indicator, a special items indicator, monthly return volatility, the number of geographic segments, the number of business segments, institutional ownership, and a Delaware incorporation dummy. We include year and industry fixed effects and cluster standard errors by firm.

In Panel A of Table 2 we investigate how firms respond to an SCA. We find that after an SCA, firms' readability measures significantly worsen. This lasts several years after the litigation is filed, as indicated by the positive and significant coefficients on both the *Litigation* and the *Lag1to3 Litigation* variables when analyzing the Fog, PC and Bog complexity measures as well as the file size and word count thoroughness measures. The statistically significant result for the lagged litigation measure also implies that we are not merely picking up a mechanical artefact of firms

having to disclose about the litigation following its filing. Rather, it appears that firms adopt a long-lasting change to disclosure practice.

In Panel B of Table 2 we investigate how readability changes after an SCA is resolved. The results largely echo those of Panel A. We find that even after an SCA is resolved, managers continue to produce less readable 10-Ks, consistent with managers seeking to mitigate litigation risk. Hence, the impact of SCAs on managers' reporting behavior is long-lived rather than transitory.

[Insert Table 2 About Here]

While the results from Table 2 show that readability worsens in response to litigation, we next explore the impact of ex-ante litigation risk (in the absence of actual litigation) on readability. We follow Kim and Skinner (2012) and create *SUE*, the predicted probability of an SCA from a logit regression, to measure ex-ante litigation risk for each firm each year (see the appendix for details). We define a firm as having relatively high litigation risk when the *SUE* measure is above the industry median. We report the results in Table 3. We find that the *Above Median SUE* coefficient is positive and statistically significant at the 1% level in all specifications, implying that an increased likelihood of litigation induces disclosure practices that worsen readability (both in terms of complexity and thoroughness). This is important because this effect cannot merely reflect the mechanical impact of reporting on litigation, but rather a response to litigation risk.

[Insert Table 3 About Here]

In the foregoing results, the coefficients on the control variables are consistent with expectations. Readability is worse for firms that are making a loss, potentially consistent with their greater need to explain why the firm is losing money and what steps the firm might take to improve results. Larger firms, and those with more business segments have worse readability, which is consistent with those firms' greater complexity and need to explain larger business structures and more operations. Firms with relatively more tangible assets (as a proportion of total assets) have better readability, consistent with those firms finding it easier to explain operations. Reports that are more positive in tone tend to be slightly more readable, indicating that firms that are more optimistic may attempt to convey that positive message more clearly to readers However, this is not always statistically significant.

4.2 How does SCA experience at other firms affect readability?

We take steps to mitigate identification concerns regarding the relation between readability and litigation. One concern with the foregoing results is that a latent variable might cause firms to be both more litigation prone and inclined to engage in worse disclosure. Further, there is the concern that a firm experiencing litigation might cause it to address the litigation in technical terms, creating a mechanical relation between litigation and readability. While looking at lagged litigation and ex-ante litigation risk mitigates such concerns, we take further steps to address identification issues.

4.2.1 *Litigation at interlocked firms*

We first explore whether director experience with current litigation at *other* firms influences the reporting at the focal firm. Such experience at interlocked firms represents an exogenous source of litigation experience. Further, research shows that other corporate behavior sprawls through the network of interlocked firms (Davis, 1991; Haunschild, 1993; Bizjak, Lemmon, and Whitby, 2009; Fracassi, 2016). We anticipate that if a director sits on the board of a firm being litigated, then all other firms she is associated with may reduce readability. While directors do not have sole responsibility for annual reports, they are expected to be cognizant of them and bear responsibility in litigation. This can cause them to directly or indirectly influence how the reports are written. This can be driven by either the knowledge gained from first-hand experience of the downsides involved in dealing with litigation (management time, firm reputation, etc.) or the perception of increased litigation risk. We define a firm as *Connected* if it is *not* currently being litigated but it is linked to at least one firm being litigated through an individual serving at both firms as an executive director, a non-executive director or a senior manager.

We report the results in Table 4. For each of the readability measures, the *Connected* coefficient is positive and significant. That is, annual report readability at the focal firm becomes less readable whether readability is measured through a composite index such as *Fog*, *PC*, or *Bog*, or through a thoroughness measure such as file size or word count. Moreover, firms reduce readability by between 2% and 7% of a standard deviation, depending on the measure of readability used. The results are consistent with firms making 10-Ks less readable after firms that they are connected to, through a board or management interlock, experience an SCA. As indicated, the

progression of litigation throughout directors' interlocking networks helps to reduce endogeneity and identification concerns.

<div style="text-align:center">[Insert Table 4 About Here]</div>

4.2.2 *CEO's prior litigation exposure*

We further cross-validate our results by exploring the impact of a CEO's prior litigation exposure on readability. We investigate whether a CEO's prior litigation experience, whether at their current firm (i.e., before they were CEO) or at a prior firm influences readability at their current firm. In particular, we create two different litigation experience variables: *SCA Experience* captures litigation experience in any firm before becoming CEO at the current firm and *SCA Experience Prior Firm* captures litigation experience only gained at other firms. We anticipate that litigation experience shapes the CEO's behavior as she will be more cognizant of the risks and implications of SCAs. To the extent that prior litigation experience is exogenous to readability at the current firm, this helps to potentially reduce identification concerns.

We report the results in Table 5. In Panel A, we analyze the role of the CEO's pre-CEO experience (at any firm, including their current firm). We find that the *SCA Experience* coefficient is positive and statistically significant using each of the readability measures. Thus, a CEO's prior exposure to SCAs is associated with less readability. The effect is similar to the main results: the CEO's prior litigation experience is associated with a worsening in the Fog and Bog measures and it is also associated with longer and larger annual reports.

As the results we reported earlier in Table 2 suggest that the impact of litigation on readability is not transitory, in Panel B of Table 5 we analyze the impact of the CEO's litigation exposure at a prior firm. This potentially helps reduce identification concerns as it circumvents the lingering impact of litigation at the current firm. Any relation between litigation exposure at a prior firm and readability likely reflects the impact of those prior learnings. We find that prior SCA experience is associated with worse readability when we use the *Fog*, *PC* and *Bog* measures but its relation to readability thoroughness measures (file size and word count) is weaker than more contemporaneous experience. Overall, these results are consistent with the foregoing results in which we analyze the relation between SCAs and readability.

<div style="text-align:center">[Insert Table 5 About Here]</div>

4.3   Specific attributes of report complexity

While the readability measures file size and word count, which we construe as a measure of report thoroughness, are straightforward to interpret, the composite readability measures Fog, PC and Bog, which we construe as a measure of report complexity are less intuitive. Thus, we dig further into the precise ways in which report complexity appears to worsen. We repeat the regression analysis from Tables 2 to 5 using various attributes of report complexity: average words per sentence, complex word ratio, "litigious" word ratio (Loughran and McDonald, 2011) and "uncertain" word ratio (Loughran and McDonald, 2011). The first two attributes are components of our composite readability measures and the last two give additional insight to potential attributes of report complexity.

We report the results in Table 6. In Panel A, where we rerun the regression analysis from Table 2 (i.e., the ex-post litigation regressions) we find that the number of words per sentence in the annual report increases after firms are litigated. This possibly reflects firms qualifying and hedging their statements more often post litigation. The annual report also contains more litigious words post litigation and this effect persists several years after the SCA is filed or resolved. This suggests that, rather than picking up the mere reporting of a legal case, firms are discussing more law-related factors in their reports. Firms also use more 'uncertain' words, which is consistent with firms attempting to hedge by avoiding declarative statements. In Panel B, where we rerun the regression analysis from Table 3 (i.e., the ex-ante litigation risk regressions) we find that, in addition to words per sentence and litigious words increasing, firms use more complex words, implying an increase in nuance in annual reports. In Panel C, where we rerun the regression analysis from Table 4 (i.e., the current litigation exposure regressions) we find that the use of complex words and litigious words increases. Finally, in Panel D, where we rerun the regression analysis from Table 5 (i.e., the prior litigation exposure regressions) we find that both the words per sentence and the use of litigious words increase. Overall, the results from Table 6 shed further light on how the readability of annual reports changes in response to litigation.

[Insert Table 6 About Here]

4.4   Extensions and additional tests

This section contains several additional tests and extensions that help to bolster our results. This includes examining how firms respond to various litigation flash points and how CEOs' perception

of litigation risk influences their behavior. We also examine the effects of a shock to report readability and a shock to firms' information environment.

4.4.1 Readability and potential SCA flash points

In this section we use several additional proxies of litigation risk to study the relation between litigation risk and readability. Each of these flash points can exhibit confounding effects. However, they support the foregoing results. We first explore the impact of SOX, which requires CEOs and CFOs to sign-off on annual reports and become personally liable for misleading information. It also increased scrutiny on management by requiring greater board and committee independence. We then explore how abnormally high compensation, SEOs and bond downgrades, each of which potentially increases litigation risk, impacts readability.

The passage of SOX: We expect firms to reduce readability following the passage of SOX in 2002 and the contemporaneous amendments to the NYSE/NASDAQ listing rules. These changes imposed additional obligations on firms, including the requirement to rotate auditors and have CEOs sign-off on financial reports. The changes also required firms to have a majority independent board of directors and fully independent audit and nominating committees. Coates (2007) provides a useful summary. The additional scrutiny and oversight increased litigation risk or the costs borne by the CEO and CFO.

We restrict the sample to years 2000-2004 (excluding 2002) to prevent extraneous events too far removed from SOX's passage from driving the results. We present the results in Table 7. The SOX coefficient is positive and statistically significant at the 1% level, consistent with our expectations, across all specifications. That is, firms produce less readable 10-Ks following the passage of SOX. Depending on specification, SOX leads to a 15% to 50% standard deviation decrease in readability (i.e., 10-Ks becoming less readable).

[Insert Table 7 About Here]

Abnormal CEO compensation: We next analyze the impact of the CEO having abnormally high compensation. Peng and Roell (2007) find that executives with abnormally high compensation, particularly option compensation, excessively focus on the short-term share price and increase a firm's SCA likelihood. Higher paid CEOs also attract more scrutiny since more is expected from them. Thus, CEOs with relatively high compensation have incentive to reduce scrutiny of their

performance and reduce litigation risk. This would especially be the case for CEOs who receive higher 'abnormal' compensation, i.e., compensation above what would be expected at a firm of equivalent size, industry, and performance. We construct an "abnormal" compensation measure following Cai, Garner and Walkling (2009) and use the residual from a regression of the CEO's log compensation on the firm's log assets, prior year stock return, industry and year fixed effects. We report the results in Table 8, Panel A. We find that higher abnormal compensation is associated with worse readability (i.e., the *Abnormal Compensation* coefficient is positive and statistically significant using all three readability measures).

SEOs: SCAs can arise if a firm is accused of inaccurate disclosures around the time of the SEO. In some cases, this can reflect the well-documented tendency to manage earnings prior to SEOs (Friedlan, 1994; DuCharme, 1995; Teoh, Welch, and Wong, 1998; Shivakumar, 2000; DuCharme, Malatesta, and Sefcik, 2004). We hypothesize that managers might make reports more detailed and complex to mitigate litigation risk, while sacrificing report readability. We report the results in Table 8, Panel B. We find that SEOs (whether in the SEO year or up to three years post the SEO) are associated with significantly worse readability.[6]

Corporate debt downgrades: Bond downgrades potentially expose firms to higher bankruptcy and litigation risk. Firms experience corporate bond downgrades when the rating agency believes there are changes in the firm's credit worthiness. That is, a downgrade implies that the firm's financial prospects have worsened, usually reflecting updated information about the firm's financial state. This could precipitate shareholders suing on grounds that the firm might, heretofore, have failed to disclose relevant negative information in a timely manner. Moreover, firms seem to manage earnings around bond issuances, seemingly in an attempt to obtain better ratings, even if ratings agencies seem to penalize such actions (Caton et al., 2011). Firms might tend to produce detailed and complex reports around bond downgrades – reports that are technically accurate, though less readable – in an effort to reduce litigation risk. We thus test whether bond downgrades are associated with worsening readability. Panel C of Table 8 contains the regression results. We include all firms with S&P long-term issuer credit ratings in Compustat and exclude firm-year observations with bond upgrades. We find that corporate bond downgrades are associated with worsening readability.

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[6] In untabulated results, we also explore bond issues and find qualitatively similar results. That is, readability also worsens around bond issues.

4.4.2   CEO overconfidence and readability

We explore the impact of factors that reduce a CEO's cognition of litigation risk. One key factor is CEO overconfidence. Overconfident CEOs are associated with higher SCA likelihood (Banerjee et al., 2018). Overconfident CEOs generally tend to overestimate returns and underestimate risks. One manifestation of this is that they potentially underestimate litigation risk and are thus, less cognizant of litigation risk. Therefore, we expect overconfident CEOs to produce more readable 10-Ks.

We start by using an option-based measure of overconfidence, as is standard in the literature. We compute a *Holder67* and a *Holder100* measure following the approach in Malmendier et al (2011). *Holder67* (*Holder100*) is an indicator variable that takes the one if the *CEO* has vested but unexercised options that are at least 67% (100%) in-the-money in two or more years during our sample period. We report the results in Panel's A and B of Table 9. We find that the coefficients on both *Holder67* and *Holder100* are negative across all specifications and generally statistically significantly so, especially when looking at higher levels of overconfidence (i.e., Holder100). That is, overconfident CEOs are associated with more readable reports.

In Panel C, as an alternative overconfidence measure we use a "news-based" measure. We follow Hirshleifer et al. (2012) and look at news reports to obtain an estimate of how confident the CEO is as depicted in the news media. We calculate *NetNews* as the number of articles that depict the CEO as overconfident less the number of articles that depict the CEO as not overconfident, scaled by the sum of overconfident and non-overconfident articles. This measure helps to support the option-based measure by alleviating any concern that the CEO's option exercise behavior might otherwise be correlated with the events leading to the class action. The *NetNews* coefficient across all specifications that use the composite readability measures (i.e., Fog, PC and Bog) is significantly negative. This indicates that overconfident CEOs write more readable 10-Ks.

4.4.3   1998 Plain English Rule and litigation risk

Effective Oct 1, 1998, the SEC enacted the Plain English Rule which requires firms to use plain English in prospectus documents, i.e., to make these documents more readable. The SEC also encouraged firms to make all other disclosures more readable. Thus, the impact of the Plain English

Rule spanned more than the readability of the prospectus and, as Loughran and McDonald (2014) document, 10-Ks also became more readable after the rule was enacted. We thus use the Plain English rule as an instrumental variable for readability in the first stage of a two-stage regression to test how readability impacts litigation risk. That is, in the first stage we regress each of our readability measures on *Plain English*, an indicator variable that takes the value one for the years 1999 and 2000. In the second stage, we use the predicted values for readability from the first stage as an explanatory variable in the second stage. We restrict the sample to 1996-2000, i.e., two years on either side of 1998 and we exclude 1998, the year the rule is enacted.

We report the results in Table 10. The first stage regression results appear in Columns (1), (3) and (5) where the dependent variable is one of our three readability measures, the *Fog*, *PC* or *Bog* index, respectively. As expected, the *Plain English* coefficient is significantly negative in each of the first stage regressions, indicating that firms produce more readable 10-Ks after adoption of the Plain English Rule. The second stage regression results appear in columns (2), (4) and (6) where we regress *Litigation* on each of the predicted readability measures calculated from the first stage. The coefficient on the instrumented readability measures are all significantly negative, indicating that firms are less likely to be litigated when disclosure polices result in more complex reports with worse readability. Moreover, the economic significance of the coefficients is relatively large given that the unconditional likelihood of a firm being litigated in any given year is 1.5% (see Table 1). Thus, it appears that changing readability is an effective way for firms to reduce litigation risk.

[Insert Table 10 About Here]

4.4.4 Brokerage house mergers and readability

Stock analysts play an important role in financial markets as they can help reduce information asymmetry between shareholders and managers (Clement, 1999; Ramnath, 2002; Piostroski and Roulstone, 2004) and decrease a firm's cost of capital (Botosan, 1997; Botosan and Plumlee, 2002; Boehme, Danielsen, Kumar, and Sorescu, 2009). Thus, it is possible that firms make their reports more investor accessible and readable in response to an exogenous reduction in analyst following.

We use brokerage house mergers as an exogenous shock to analyst coverage (Hong and Kacperczyk, 2010). We follow the method and use the data in Hong and Kacperczyk (2010) to define the brokerage house merger year. *Merge* is an indicator variable that takes the value one if a firm's analyst coverage decreases in a given year due to a brokerage house merger. As their data

spans 1997-2005, we restrict the sample to this period. Moreover, we restrict the sample to firms with a December fiscal year-end so that the analyst forecasts are for the same period.

We present the brokerage house merger results in Table 11. The *Merge* coefficient is statistically negative across all specifications that use the composite readability measures (i.e., Fog, PC and Bog). That is, firms improve 10-K readability following an exogenous reduction in analyst coverage. Moreover, the impact is economically significant. For example, an exogenous reduction in analyst coverage leads to the *Fog* index reducing by 12%-13% of a standard deviation. We thus find evidence suggesting that managers improve 10-K readability to compensate for an exogenous reduction in analyst coverage.

[Insert Table 11 About Here]

4.4.5   Additional Tests

We perform additional tests not tabulated in the paper. We investigate whether CEOs with law degrees write less readable 10-Ks. We find some evidence that this is the case but controlling for lawyer CEOs does not affect our results in any discernible way.

5   Conclusion

Firms' reports can become less readable for several reasons. They might increase verbal and syntactical complexity, potentially to make reports more difficult to parse and to create additional vagueness. They might take an excessively cautious approach, qualifying statements so as to avoid the appearance of excess precision and to give firms an out when accused of being misleading. They might increase the use of jargon and technical terms, thereby making their reports more impenetrable.

We analyze whether firms' attempts to manage litigation risk worsen report readability. We start with the premise that firms generally lose from securities class actions. One way to avoid SCAs is to increase disclosure volume and complexity. This can result in greater syntactical complexity, longer reports, the use of more complex words and the increased use of hedging words and qualifiers, thereby making sentences more difficult to analyze while giving the firm greater scope to claim the report is not misleading.

We hypothesize and find that litigation risk encourages firms to take steps that ultimately reduce financial report readability, that is, firms' report readability worsens after they experience an SCA. We provide additional support for our hypotheses – and ameliorate identification concerns –

by showing that managers and directors who are currently exposed to litigation at other firms are associated with reports becoming less readable at the focal firm. Similarly, CEOs who previously worked at a firm while it was subject to litigation are associated with less readable reports at their current firm. Since such litigation experience is exogenous to the subject firm, this reduces endogeneity and identification concerns. These results are also consistent with the literature that managers and directors tend to learn from prior experience in other related contexts.

We cross-validate these results by finding that report readability reduces around potential litigation flashpoints. For example, report readability tends to decrease following seasoned equity offerings and around bond downgrades, which can be precipitators of class actions. Using the SEC Plain English Rule as an exogenous shock to readability, we show that altering readability is an effective way for firms to reduce litigation risk. We find that firms respond to exogenous shifts in the information environment, such as the reduction in analyst following on account of brokerage mergers, by increasing or decreasing report readability as circumstances warrant.

We add to both the strategic reporting and the litigation literatures by showing that firms face a trade-off in terms of providing financial reports that are longer and more complex – but less accessible to many investors – against the risk of shareholder lawsuits. We provide evidence that 10-K readability worsens when firms face relatively high litigation risk. We also highlight that CEOs and directors learn from prior experience at other firms and that they produce reports that tend to be less readable around common flashpoints for litigation. These results help to explain why firms continue to produce opaque annual reports despite continued calls for increased disclosure clarity.

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Appendix: Variable Definitions

Variable Name	Definition
Readability or Tone Related Measures	
Fog	0.4*(words/sentences+100*number of words with at least 3 syllables/number of words)
Bog	sentence bog+word bog-pep (Bonsall, Leone, Miller, and Rennekamp, 2017)
	sentence bog=(average sentence length)^2/long sentence limit (see Bonsall, Leone, Miller, and Rennekamp, 2017 for further details)
	word bog=(style problems+heavy words+abbreviations+specialist)*250/number of words (see Bonsall, Leone, Miller, and Rennekamp, 2017 for further details)
	pep=((names+interest words+conversational)*25/number of words)+sentence variety (see Bonsall, Leone, Miller, and Rennekamp, 2017 for further details)
PC	the first principal component derived from the following six measures: Flesch-Kincaid readability, LIX readability, RIX readability, Gunning Fog readability, ARI readability, and SMOG readability
ln(File Size)	the natural logarithm of the file size in megabytes of the SEC EDGAR "complete submission text file" for the 10-K filing
ln(Word Count)	the natural logarithm of the total number of words
Words per Sentence	the average number of words per sentence
Complex Word Ratio	the number of words with three or more syllables scaled by the number of words as defined in Loughran and McDonald (2011)
Litigious Word Ratio	the number of litigious words scaled by the number of words as defined in Loughran and McDonald (2011)
Uncertain Word Ratio	the number of uncertain words scaled by the number of words as defined in Loughran and McDonald (2011)
Positive	the number of positive words scaled by the number of words as defined in Loughran and McDonald (2011)
Firm Characteristics	
Log(MV)	log(market value)
Loss	a binary variable equal to one if net income is negative
M/B	(market price at the end of fiscal year*number of shares outstanding+ total liability)/ total assets
Firm Age	current year minus first year the firm appears in CRSP
Special Item/Total Assets	special items/total assets
Monthly Ret Volatility	return volatility using 12 monthly returns in a fiscal year
Num of Geographic Seg.	number of geographic segments
Num of Business Seg.	number of business segments
Institutional Ownership	institutional ownership percentage
Tangible Ratio	net property, plant and equipment/total assets
Incorp DE	a binary variable equal to one if firm is incorporated in Delaware
Num analysts	number of analysts following
SCA Variables	
Litigation	a binary variable equal to one if a firm has at least one SCA filed during the year
Resolved	a binary variable equal to one if a firm has at least one SCA settled or dismissed during the year
Above Median SUE	a binary variable equal to one if a firm's predicted litigation probability, SUE, in that year is higher than its industry median. SUE is computed from the following regression following Kim and Skinner (2012): $Litigation=\beta_0+\beta_1 FPS_t+\beta_2(LnAssets_{t-1})+\beta_3(SalesGrowth_{t-1})+\beta_4(Return_t)+\beta_5(RetSkewness_t)+\beta_6(RetStdDev_t)+\beta_7(Turnover_t)+\varepsilon_t.$ See Kim and Skinner (2012) for further details.
Abnormal Compensation	the residual from a regression where the dependent variable is the natural logarithm of total CEO compensation and the independent variables include log assets, prior-year stock return, industry and year dummies following Cai, Garner and Walkling (2009)
SEO	a binary variable equal to one if a firm's number of shares outstanding increases by more than five

	percent during the year
Downgrade	a binary variable equal to one if a firm's S&P long term issuer credit rating is downgraded

Variables Used in Litigation Probability Regression

Adj Mkt Ret Before Litigation	adjusted market return 12 months prior to the litigation date. If there is no litigation, then it is 12 months prior to the fiscal year-end
Skewness Before Litigation	return skewness calculated using 12 monthly returns prior to the litigation date. If there is no litigation, then we use the 12 monthly returns prior to the fiscal year-end
Volatility Before Litigation	return volatility calculated using 12 monthly returns prior to the litigation date. If there is no litigation, then we use the 12 monthly returns prior to the fiscal year-end
Sales Growth	(sales-last year's sales)/last year total assets
R&D/Sales	research and development expenses/sales. If R&D is missing then it is set to 0

SCA Experience Variables

Connected	a binary variable equal to one if the firm is not litigated but is linked to at least one litigated firm through an individual serving at both firms as an executive director, non-executive director, or senior manager at SCA filing date.
SCA Experience	a binary variable equal to one if the CEO has worked as a director, executive, or senior manager at a firm that was subject to an SCA while she was there
SCA Experience Diff Firm	a binary variable equal to one if the CEO's SCA experience is at a different firm to the current one

CEO Overconfidence Variables

Holder67	a binary variable equal to one for all CEO-years after the CEO fails to exercise a vested option that is at least 67% in-the-money, provided that she subsequently does it again at least once
Holder100	a binary variable equal to one for all CEO-years after the CEO fails to exercise a vested option that is at least 100% in-the-money, provided that she subsequently does it again at least once
NetNews	(Overconfident articles − Non-overconfident articles)/(Overconfident articles + Non-overconfident articles)

Other Variables

Merge	a binary variable equal to one if a firm's analyst coverage reduces due to a brokerage house merger

6 Tables

Table 1: Summary Statistics

This table presents descriptive statistics for the variables used in our analysis. Variable definitions are in the Appendix.

	N	Mean	Median	Std. Dev
Readability Measures				
Fog	96,028	19.862	19.820	1.198
Bog	91,188	82.317	82.000	7.775
PC	96,028	0.000	-0.104	2.372
File Size (in bytes)	96,028	3,105,190	739,242	7,591,189
Word Count	96,028	32,130	27,550	22,767
Words per Sentence	96,028	24.249	23.924	2.879
Complex Word Ratio	96,028	0.284	0.283	0.018
Litigious Word Ratio	96,028	0.011	0.009	0.006
Uncertain Word Ratio	96,028	0.013	0.013	0.004
Positive	96,028	0.008	0.008	0.002
Firm Characteristics				
Log(MV)	94,954	5.579	5.512	2.065
Loss	94,809	0.303	0.000	0.459
M/B	94,592	1.905	1.298	1.684
Firm Age	95,111	14.450	10.000	14.979
Special Item/Total Assets	95,111	-0.015	0.000	0.055
Monthly Ret Volatility	95,062	0.137	0.112	0.096
Num of Geographic Seg.	95,111	1.829	2.000	1.879
Num of Business Seg.	95,111	1.641	1.000	1.477
Institutional Ownership	91,255	0.437	0.417	0.302
Tangible Ratio	91,612	0.225	0.134	0.238
Incorp DE	95,111	0.549	1.000	0.498
Num analysts	96,028	6.647	4	8.298
SCA Variables				
Litigation	89,332	0.015	0.000	0.120
Resolved	89,310	0.010	0.000	0.101
SUE	76,239	0.014	0.007	0.024
Abn. Total Compensation	31,948	-0.001	0.036	0.950
SEO	89,289	0.170	0.000	0.376
Downgrade	21,841	0.123	0.000	0.328
Variables Used in Litigation Probability Regression				
Adj Mkt Ret Before Litigation	95,974	0.048	-0.058	0.834
Skewness Before Litigation	94,168	0.322	0.274	0.874
Volatility Before Litigation	95,062	0.138	0.112	0.096
Sales Growth	89,050	0.104	0.036	0.305
R&D/Sales	93,676	0.183	0.000	0.902
SCA Experience Variables				

Connected	62,870	0.104	0.000	0.305
SCA Experience	45,515	0.167	0.000	0.373
SCA Experience Diff Firm	45,515	0.077	0.000	0.267
CEO Overconfidence Variables				
Holder67	30,314	0.676	1.000	0.468
Holder100	30,314	0.543	1.000	0.498
Netnews	3,863	3.110	2.900	2.260

Table 2: Readability and Ex-Post Litigation

The dependent variable in each regression is one of five readability measures: *Fog*, *PC*, *Bog, ln(File Size)* or *ln(Word Count)*. In Panel A, we regress readability on litigation while in Panel B, we regress readability on whether the litigation has been resolved or not. *Litigation* is a binary variable equal to one if a firm is the subject of an SCA in that year. *Lag1to3 Litigation* is a binary variable equal to one if a firm is the subject of an SCA filed in the prior three years. *Resolved* is a binary variable equal to one if a firm has at least one SCA settled or dismissed in that year. *Lag1to3 Resolved* is a binary variable equal to one if a firm has at least one SCA settled or dismissed in the prior three years. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

Panel A: Readability and Litigation

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Litigation	0.082**	0.222***	0.236	0.033	0.071***
	(2.39)	(3.21)	(1.08)	(1.49)	(4.53)
Lag1to3 Litigation	0.065**	0.197***	0.372**	0.089***	0.096***
	(2.40)	(3.65)	(2.18)	(5.14)	(7.94)
Log(MV)	0.110***	0.243***	0.645***	0.178***	0.113***
	(11.70)	(12.89)	(10.75)	(33.14)	(26.14)
Loss	0.196***	0.403***	1.846***	0.166***	0.171***
	(11.69)	(12.07)	(17.58)	(16.77)	(25.43)
M/B	-0.046***	-0.088***	-0.254***	-0.082***	-0.052***
	(-6.71)	(-6.26)	(-5.32)	(-17.99)	(-18.99)
Firm Age	-0.001	-0.001	-0.031***	-0.001*	-0.002***
	(-1.07)	(-0.83)	(-5.49)	(-1.88)	(-5.96)
Special Item/Total Assets	-0.118	-0.407**	-1.381**	-0.401***	-0.256***
	(-1.27)	(-2.20)	(-2.42)	(-6.76)	(-7.08)
Monthly Ret Volatility	0.237***	0.609***	6.803***	0.651***	0.731***
	(2.92)	(3.75)	(13.02)	(13.11)	(21.97)
Num of Geographic Seg.	-0.007	-0.006	-0.016	0.016***	0.011***
	(-1.38)	(-0.65)	(-0.52)	(5.71)	(5.30)
Num of Business Seg.	0.012*	0.050***	0.374***	0.026***	0.026***
	(1.73)	(3.46)	(8.29)	(6.89)	(8.25)
Institutional Ownership	0.200***	0.452***	1.667***	0.052**	0.041**
	(4.53)	(5.08)	(5.79)	(2.16)	(2.02)
Tangible Ratio	-0.388***	-0.911***	-3.420***	-0.030	-0.069**
	(-5.62)	(-6.73)	(-7.97)	(-0.80)	(-2.48)
Incorp DE	0.062***	0.162***	0.777***	0.032***	0.058***
	(2.77)	(3.66)	(5.53)	(2.67)	(5.96)
Num Analysts	-0.002	-0.003	-0.024**	0.002**	-0.001
	(-1.34)	(-0.79)	(-2.24)	(2.01)	(-1.35)
Positive	-20.229***	-7.413	-25.240	12.913***	19.368***
	(-3.53)	(-0.69)	(-0.70)	(4.31)	(7.28)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	52,470	52,470	51,036	52,470	52,470
R-squared	0.156	0.155	0.396	0.788	0.465

Panel B: Readability and Resolved Litigation

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Resolved	0.082***	0.221***	0.423**	0.077***	0.088***
	(2.73)	(3.67)	(2.19)	(3.47)	(6.32)
Lag1to3 Resolved	0.096***	0.244***	0.461**	0.030	0.070***
	(3.15)	(3.96)	(2.38)	(1.45)	(4.72)
Log(MV)	0.110***	0.243***	0.645***	0.178***	0.113***
	(11.68)	(12.90)	(10.75)	(33.22)	(26.18)
Loss	0.196***	0.404***	1.851***	0.167***	0.173***
	(11.67)	(12.09)	(17.60)	(16.87)	(25.64)
M/B	-0.047***	-0.089***	-0.253***	-0.082***	-0.052***
	(-6.75)	(-6.30)	(-5.29)	(-18.05)	(-19.11)
Firm Age	-0.001	-0.001	-0.031***	-0.001*	-0.002***
	(-1.09)	(-0.85)	(-5.50)	(-1.91)	(-5.99)
Special Item/Total Assets	-0.148	-0.480**	-1.471**	-0.414***	-0.272***
	(-1.59)	(-2.57)	(-2.57)	(-6.90)	(-7.46)
Monthly Ret Volatility	0.259***	0.663***	6.899***	0.668***	0.749***
	(3.18)	(4.08)	(13.15)	(13.39)	(22.28)
Num of Geographic Seg.	-0.007	-0.007	-0.017	0.016***	0.011***
	(-1.42)	(-0.69)	(-0.53)	(5.70)	(5.22)
Num of Business Seg.	0.012*	0.050***	0.374***	0.026***	0.026***
	(1.73)	(3.46)	(8.28)	(6.93)	(8.30)
Institutional Ownership	0.200***	0.450***	1.658***	0.051**	0.040**
	(4.50)	(5.04)	(5.74)	(2.10)	(1.96)
Tangible Ratio	-0.391***	-0.918***	-3.443***	-0.031	-0.070**
	(-5.65)	(-6.76)	(-8.01)	(-0.80)	(-2.52)
Incorp DE	0.063***	0.164***	0.780***	0.033***	0.058***
	(2.80)	(3.69)	(5.54)	(2.72)	(5.96)
Num Analysts	-0.002	-0.002	-0.023**	0.002**	-0.001
	(-1.22)	(-0.63)	(-2.15)	(2.28)	(-1.06)
Positive	-20.548***	-8.169	-26.630	12.667***	19.194***
	(-3.57)	(-0.76)	(-0.74)	(4.21)	(7.20)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	52,230	52,230	50,800	52,230	52,230
R-squared	0.157	0.156	0.397	0.788	0.464

Table 3: Readability and Litigation Risk

The dependent variable in each regression is one of five readability measures: *Fog, PC, Bog, ln(File Size)* or *ln(Word Count)*. *Above Median SUE* is a binary variable equal to one if a firm's predicted litigation probability in that year is higher than its industry median. Following Kim and Skinner (2012), *SUE* is the predicted litigation probability from the following regression:

Litigation=β_0+β_1FPS$_t$+β_2(LnAssets$_{t-1}$)+β_3(SalesGrowth$_{t-1}$)+β_4(Return$_t$)+β_5(RetSkewness$_t$)+β_6(RetStdDev$_t$)+β_7(Turnover$_t$)+ ε_t

See Kim and Skinner (2012) and the Appendix for variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Above Median SUE	0.096***	0.212***	0.547***	0.093***	0.077***
	(8.13)	(9.05)	(7.78)	(13.91)	(15.52)
Log(MV)	0.117***	0.252***	0.643***	0.156***	0.100***
	(13.88)	(14.99)	(11.94)	(34.57)	(25.75)
Loss	0.229***	0.462***	2.047***	0.167***	0.175***
	(14.96)	(15.28)	(21.21)	(20.33)	(28.90)
M/B	-0.037***	-0.069***	-0.182***	-0.068***	-0.044***
	(-5.99)	(-5.53)	(-4.25)	(-18.18)	(-17.36)
Firm Age	-0.002***	-0.004**	-0.043***	-0.002***	-0.003***
	(-2.59)	(-2.33)	(-7.98)	(-3.77)	(-6.79)
Special Item/Total Assets	-0.137*	-0.457***	-1.307**	-0.368***	-0.211***
	(-1.71)	(-2.86)	(-2.57)	(-7.47)	(-6.66)
Monthly Ret Volatility	0.046	0.211	5.497***	0.509***	0.589***
	(0.60)	(1.39)	(11.33)	(11.64)	(18.43)
Num of Geographic Seg.	-0.008*	-0.009	-0.009	0.017***	0.012***
	(-1.84)	(-0.95)	(-0.31)	(6.74)	(5.77)
Num of Business Seg.	0.010	0.044***	0.378***	0.027***	0.028***
	(1.41)	(3.29)	(8.94)	(7.90)	(9.49)
Institutional Ownership	0.220***	0.463***	1.621***	0.069***	0.028
	(5.45)	(5.75)	(6.11)	(3.40)	(1.50)
Tangible Ratio	-0.342***	-0.824***	-3.351***	-0.045	-0.068***
	(-5.57)	(-6.88)	(-8.79)	(-1.43)	(-2.72)
Incorp DE	0.081***	0.199***	0.914***	0.039***	0.063***
	(4.02)	(4.98)	(7.11)	(3.89)	(7.14)
Num Analysts	-0.004**	-0.005*	-0.042***	0.001	-0.001*
	(-2.27)	(-1.74)	(-4.13)	(1.25)	(-1.86)
Positive	-24.895***	-12.910	-17.287	6.579***	22.600***
	(-5.13)	(-1.41)	(-0.57)	(2.75)	(9.34)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	70,381	70,381	68,357	70,381	70,381
R-squared	0.154	0.156	0.401	0.813	0.484

Table 4: Readability and Current Litigation Exposure at other firms

The dependent variable in each regression is one of five readability measures: *Fog*, *PC* or *Bog, ln(File Size)* or *ln(Word Count)*. *Connected* is a binary variable equal to one if the firm is not litigated but is linked to at least one litigated firm through an individual serving at both firms as an executive director, non-executive director, or senior manager as of the SCA filing date. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Connected	0.050***	0.116***	0.289***	0.028***	0.020***
	(2.77)	(3.19)	(2.78)	(2.69)	(2.66)
Log(MV)	0.105***	0.233***	0.653***	0.181***	0.118***
	(11.73)	(12.95)	(11.45)	(34.59)	(28.94)
Loss	0.197***	0.406***	1.817***	0.166***	0.172***
	(12.39)	(12.81)	(17.78)	(17.18)	(26.76)
M/B	-0.041***	-0.076***	-0.277***	-0.080***	-0.051***
	(-6.33)	(-5.75)	(-5.92)	(-18.05)	(-20.11)
Firm Age	-0.001	-0.002	-0.029***	-0.001**	-0.003***
	(-1.60)	(-1.21)	(-5.36)	(-1.98)	(-8.06)
Special Item/Total Assets	-0.047	-0.264*	-1.049**	-0.473***	-0.275***
	(-0.59)	(-1.65)	(-2.04)	(-8.37)	(-8.49)
Monthly Ret Volatility	0.046	0.265*	5.894***	0.701***	0.737***
	(0.61)	(1.76)	(11.97)	(14.62)	(23.48)
Num of Geographic Seg.	-0.008*	-0.008	-0.017	0.015***	0.010***
	(-1.75)	(-0.90)	(-0.54)	(5.63)	(4.93)
Num of Business Seg.	0.010	0.046***	0.372***	0.026***	0.025***
	(1.48)	(3.28)	(8.40)	(6.82)	(8.19)
Institutional Ownership	0.180***	0.418***	1.606***	0.041*	0.018
	(4.39)	(5.08)	(5.94)	(1.79)	(0.98)
Tangible Ratio	-0.361***	-0.839***	-3.057***	-0.006	-0.050*
	(-5.61)	(-6.64)	(-7.49)	(-0.17)	(-1.91)
Incorp DE	0.071***	0.185***	0.799***	0.037***	0.062***
	(3.29)	(4.33)	(5.88)	(3.06)	(6.59)
Num Analysts	-0.002	-0.002	-0.026**	0.002**	-0.001
	(-1.40)	(-0.72)	(-2.52)	(1.99)	(-1.15)
Positive	-19.221***	-8.761	-17.166	13.432***	16.529***
	(-3.64)	(-0.86)	(-0.49)	(4.53)	(6.57)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	54,691	54,691	53,024	54,691	54,691
R-squared	0.159	0.156	0.393	0.769	0.451

Table 5: Readability and Past Litigation Exposure

The dependent variable in each regression is one of five readability measures: *Fog, PC, Bog, ln(File Size)* or *ln(Word Count)*. *SCA Experience* is a binary variable equal to one if the CEO has worked as a director, executive, or senior manager at a firm that was subject to an SCA while she was there. *SCA Experience Diff Firm* is a binary variable equal to one if the CEO's SCA experience was away from the current firm. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

Panel A: Experience at any firm

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
SCA Experience	0.090***	0.211***	0.397**	0.034**	0.040***
	(3.64)	(4.25)	(2.43)	(2.43)	(3.61)
Log(MV)	0.103***	0.235***	0.709***	0.179***	0.125***
	(10.24)	(11.61)	(10.82)	(30.27)	(27.22)
Loss	0.191***	0.399***	1.719***	0.141***	0.173***
	(10.92)	(11.47)	(15.20)	(12.92)	(24.22)
M/B	-0.041***	-0.083***	-0.386***	-0.073***	-0.051***
	(-6.54)	(-6.54)	(-8.61)	(-18.11)	(-20.11)
Firm Age	-0.001	-0.002	-0.029***	0.000	-0.003***
	(-1.61)	(-1.25)	(-5.12)	(0.21)	(-7.33)
Special Item/Total Assets	-0.112	-0.411**	-1.981***	-0.366***	-0.165***
	(-1.11)	(-2.04)	(-3.02)	(-5.27)	(-4.06)
Monthly Ret Volatility	-0.027	0.201	6.732***	0.606***	0.746***
	(-0.29)	(1.10)	(11.23)	(10.06)	(19.35)
Num of Geographic Seg.	-0.013***	-0.019**	-0.039	0.015***	0.007***
	(-2.67)	(-1.99)	(-1.25)	(4.98)	(3.40)
Num of Business Seg.	0.006	0.038**	0.363***	0.023***	0.021***
	(0.83)	(2.45)	(7.30)	(5.61)	(6.19)
Institutional Ownership	0.130***	0.320***	1.449***	0.040	0.021
	(3.00)	(3.67)	(4.93)	(1.64)	(1.03)
Tangible Ratio	-0.419***	-0.972***	-3.163***	-0.051	-0.065**
	(-5.78)	(-6.80)	(-6.79)	(-1.27)	(-2.17)
Incorp DE	0.063***	0.179***	0.704***	0.038***	0.069***
	(2.59)	(3.70)	(4.60)	(2.84)	(6.32)
Num Analysts	-0.002	-0.002	-0.029**	0.002**	-0.002**
	(-1.17)	(-0.69)	(-2.56)	(2.03)	(-2.46)
Positive	-21.607***	-12.954	-31.688	7.424**	14.215***
	(-3.63)	(-1.10)	(-0.78)	(2.29)	(4.73)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	42,386	42,386	41,123	42,386	42,386
R-squared	0.145	0.142	0.391	0.743	0.394

Panel B: Experience at a different firm

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
SCA Experience at Prior Firm	0.100***	0.206***	0.592***	0.005	0.010
	(3.10)	(3.13)	(2.77)	(0.29)	(0.70)
Log(MV)	0.104***	0.237***	0.709***	0.180***	0.126***
	(10.30)	(11.72)	(10.83)	(30.35)	(27.35)
Loss	0.192***	0.402***	1.720***	0.143***	0.175***
	(11.02)	(11.61)	(15.20)	(13.05)	(24.39)
M/B	-0.042***	-0.085***	-0.388***	-0.073***	-0.051***
	(-6.68)	(-6.70)	(-8.68)	(-18.24)	(-20.27)
Firm Age	-0.001	-0.002	-0.029***	0.000	-0.003***
	(-1.58)	(-1.22)	(-5.10)	(0.22)	(-7.31)
Special Item/Total Assets	-0.118	-0.428**	-2.004***	-0.370***	-0.169***
	(-1.17)	(-2.11)	(-3.06)	(-5.33)	(-4.18)
Monthly Ret Volatility	0.000	0.265	6.847***	0.617***	0.759***
	(0.00)	(1.45)	(11.36)	(10.23)	(19.57)
Num of Geographic Seg.	-0.012**	-0.017*	-0.037	0.015***	0.008***
	(-2.52)	(-1.81)	(-1.18)	(5.06)	(3.55)
Num of Business Seg.	0.006	0.037**	0.360***	0.023***	0.021***
	(0.77)	(2.39)	(7.24)	(5.60)	(6.16)
Institutional Ownership	0.132***	0.324***	1.461***	0.040	0.021
	(3.04)	(3.72)	(4.98)	(1.64)	(1.03)
Tangible Ratio	-0.420***	-0.976***	-3.159***	-0.053	-0.067**
	(-5.80)	(-6.84)	(-6.79)	(-1.33)	(-2.25)
Incorp DE	0.062**	0.179***	0.700***	0.039***	0.069***
	(2.57)	(3.69)	(4.57)	(2.88)	(6.37)
Num Analysts	-0.002	-0.002	-0.028**	0.002**	-0.002**
	(-0.96)	(-0.43)	(-2.43)	(2.21)	(-2.21)
Positive	0.100***	0.206***	0.592***	0.005	0.010
	(3.10)	(3.13)	(2.77)	(0.29)	(0.70)
Constant	18.830***	-2.600***	68.965***	11.553***	8.958***
	(83.26)	(-5.94)	(70.17)	(97.83)	(119.89)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	42,386	42,386	41,123	42,386	42,386
R-squared	0.145	0.142	0.391	0.743	0.393

Table 6: Readability Attributes and Litigation

The dependent variable in each regression is one of four readability attributes: *Words per Sentence*, *Complex Word Ratio, Litigious Word Ratio* or *Uncertain Word Ratio*. We multiple each of these attributes by 1,000 for expositional purposes. In Panel A, we repeat the analysis from Table 2 and regress readability on ex-post litigation. In Panel B, we repeat the analysis from Table 3 and regress readability on litigation risk. In Panel C, we repeat the analysis from Table 4 and regress readability on current litigation exposure at another firm. In Panel D, we repeat the analysis from Table 5 and regress readability on prior litigation exposure. We use the same control variables as those in the previous tables. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

Panel A: Readability and Ex-Post Litigation

	Words per Sentence	Complex Word Ratio	Litigious Word Ratio	Uncertain Word Ratio	Words per Sentence	Complex Word Ratio	Litigious Word Ratio	Uncertain Word Ratio
Litigation	0.228***	-0.219	1.512***	0.280***				
	(2.68)	(-0.52)	(8.90)	(3.01)				
Lag1to3 Litigation	0.199***	-0.359	1.546***	0.503***				
	(3.21)	(-0.93)	(11.54)	(6.22)				
Resolved					0.229***	-0.249	1.419***	0.290***
					(3.22)	(-0.64)	(8.40)	(3.29)
Lag1to3 Resolved					0.272***	-0.311	0.604***	0.200**
					(3.81)	(-0.73)	(4.23)	(2.19)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	52,470	52,470	52,470	52,470	52,230	52,230	52,230	52,230
R-squared	0.079	0.181	0.220	0.384	0.079	0.181	0.216	0.383

Panel B: <u>Readability and Litigation Risk</u>

	Words per Sentence	Complex Word Ratio	Litigious Word Ratio	Uncertain Word Ratio
Above Median SUE	0.192***	0.471***	0.147**	0.019
	(6.57)	(2.98)	(2.57)	(0.62)
Control Variables	Yes	Yes	Yes	Yes
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes
Observations	70,381	70,381	70,381	70,381
R-squared	0.079	0.178	0.209	0.459

Panel C: <u>Readability and Litigation Exposure at other firms</u>

	Words per Sentence	Complex Word Ratio	Litigious Word Ratio	Uncertain Word Ratio
Connected	0.066	0.589***	0.370***	-0.037
	(1.45)	(2.68)	(4.32)	(-0.80)
Control Variables	Yes	Yes	Yes	Yes
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes
Observations	54,691	54,691	54,691	54,691
R-squared	0.083	0.186	0.214	0.358

Panel D: <u>Readability and Past Litigation Exposure</u>

	Words per Sentence	Complex Word Ratio	Litigious Word Ratio	Uncertain Word Ratio	Words per Sentence	Complex Word Ratio	Litigious Word Ratio	Uncertain Word Ratio
SCA Experience	0.210***	0.150	0.928***	0.096				
	(3.78)	(0.43)	(7.90)	(1.28)				
SCA Experience at Prior Firm					0.180**	0.729	0.414***	-0.087
					(2.39)	(1.52)	(2.81)	(-0.94)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year & Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	42,386	42,386	42,386	42,386	42,386	42,386	42,386	42,386
R-squared	0.077	0.186	0.253	0.315	0.076	0.169	0.249	0.315

Table 7: Readability and SOX

The dependent variable in each regression is one of five readability measures: *Fog*, *PC, Bog, Ln(File Size)* or *Ln(Word Count)*. The sample spans 2000-2004 excluding the year 2002. *SOX* is a binary variable equal to one if a firm-year is after SOX (i.e., 2003 or 2004) and zero otherwise. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
SOX	0.205***	0.373***	3.181***	1.052***	0.363***
	(9.46)	(8.53)	(29.74)	(75.84)	(42.74)
Log(MV)	0.105***	0.225***	0.607***	0.165***	0.108***
	(9.51)	(10.19)	(9.44)	(26.41)	(22.28)
Loss	0.198***	0.388***	1.885***	0.201***	0.191***
	(7.82)	(7.71)	(12.99)	(14.15)	(19.77)
M/B	-0.045***	-0.085***	-0.206***	-0.062***	-0.041***
	(-6.60)	(-6.15)	(-4.41)	(-15.05)	(-14.02)
Firm Age	0.002	0.005**	-0.033***	-0.004***	-0.002***
	(1.60)	(1.96)	(-4.97)	(-6.21)	(-4.66)
Special Item/Total Assets	-0.041	-0.266	0.044	-0.560***	-0.404***
	(-0.33)	(-1.07)	(0.06)	(-6.76)	(-8.03)
Monthly Ret Volatility	0.082	0.293	4.919***	0.388***	0.521***
	(0.82)	(1.48)	(8.01)	(6.32)	(13.07)
Num of Geographic Seg.	0.006	0.019	0.076*	0.016***	0.015***
	(0.85)	(1.35)	(1.86)	(3.98)	(5.10)
Num of Business Seg.	0.020**	0.065***	0.461***	0.026***	0.030***
	(2.08)	(3.42)	(8.48)	(5.26)	(7.59)
Institutional Ownership	0.274***	0.568***	1.688***	0.136***	0.013
	(4.86)	(5.05)	(5.28)	(4.40)	(0.55)
Tangible Ratio	-0.208**	-0.534***	-3.070***	0.002	-0.057*
	(-2.52)	(-3.28)	(-6.42)	(0.04)	(-1.75)
Incorp DE	0.066**	0.156***	0.982***	0.061***	0.067***
	(2.46)	(2.91)	(6.58)	(4.14)	(6.15)
Num Analysts	-0.003	-0.003	-0.021*	-0.001	-0.001
	(-1.25)	(-0.63)	(-1.70)	(-0.84)	(-0.97)
Positive	-38.457***	-39.595***	-7.102	11.792***	21.331***
	(-5.28)	(-2.98)	(-0.19)	(3.16)	(7.37)
Constant	18.737***	-2.547***	68.833***	11.558***	9.029***
	(54.56)	(-3.88)	(76.58)	(83.97)	(98.92)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	19,131	19,131	18,539	19,131	19,131
R-squared	0.113	0.106	0.354	0.444	0.330

Table 8: Readability, Compensation, SEOs and Bond Downgrades

The dependent variable in each regression is one of five readability measures: *Fog*, *PC*, *Bog, Ln(File Size)* or *Ln(Word Count)*. *Abnormal Compensation* is the residual from a compensation regression where the dependent variable is the natural logarithm of total CEO compensation and the independent variables include log assets, prior-year stock return, industry and year dummies following Cai, Garner and Walkling (2009). *SEO* is a binary variable equal to one if a firm's number of shares outstanding increases more than five percent compared to the prior year. *Lag1to3_SEO* is a binary variable equal to one if a firm was engaged in an SEO in the prior three years. *Downgrade* is a binary variable equal to one if a firm's S&P long-term issuer credit rating is downgraded during the year. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

Panel A: Readability and Compensation

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Abnormal Compensation	0.044***	0.082***	0.312***	0.016***	0.001
	(3.10)	(2.81)	(4.67)	(3.06)	(0.13)
Log(MV)	0.092***	0.200***	0.532***	0.173***	0.092***
	(5.58)	(6.15)	(5.24)	(23.41)	(12.60)
Loss	0.201***	0.407***	1.611***	0.164***	0.156***
	(6.62)	(6.78)	(9.84)	(11.74)	(13.88)
M/B	-0.062***	-0.133***	-0.446***	-0.093***	-0.067***
	(-6.08)	(-6.62)	(-6.15)	(-16.99)	(-14.27)
Firm Age	0.001	0.003	-0.030***	0.001	0.000
	(1.24)	(1.33)	(-4.32)	(1.11)	(0.51)
Special Item/Total Assets	-0.133	-0.555	-2.502**	-0.327***	-0.197***
	(-0.77)	(-1.61)	(-2.50)	(-3.66)	(-2.87)
Monthly Ret Volatility	0.476***	1.159***	10.789***	0.956***	1.108***
	(2.73)	(3.38)	(10.72)	(10.72)	(15.10)
Num of Geographic Seg.	-0.005	-0.005	0.034	0.013***	0.008***
	(-0.76)	(-0.40)	(0.86)	(3.78)	(2.68)
Num of Business Seg.	-0.002	0.021	0.281***	0.013***	0.014***
	(-0.23)	(1.13)	(4.82)	(2.89)	(3.60)
Institutional Ownership	0.126*	0.236	1.797***	0.055	0.054
	(1.68)	(1.57)	(3.73)	(1.58)	(1.54)
Tangible Ratio	-0.539***	-1.245***	-4.566***	-0.145***	-0.084*
	(-4.59)	(-5.42)	(-6.34)	(-2.99)	(-1.77)
Incorp DE	0.015	0.066	0.143	0.032**	0.055***
	(0.43)	(0.95)	(0.67)	(2.03)	(3.48)
Num Analysts	0.000	0.002	-0.021	0.000	0.000
	(0.02)	(0.49)	(-1.62)	(0.39)	(0.52)
Positive	0.044***	0.082***	0.312***	0.016***	0.001
	(3.10)	(2.81)	(4.67)	(3.06)	(0.13)
Constant	19.220***	-1.751***	69.427***	11.312***	8.942***
	(56.91)	(-2.64)	(41.83)	(117.09)	(97.37)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	29,787	29,787	27,900	29,787	29,787
R-squared	0.114	0.110	0.412	0.837	0.451

Panel B: Readability and SEOs

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
SEO	0.029**	0.053**	0.613***	0.072***	0.082***
	(2.15)	(1.98)	(7.53)	(9.61)	(15.56)
Lag1to3_SEO	0.088***	0.183***	1.169***	0.110***	0.116***
	(6.46)	(6.75)	(14.05)	(15.04)	(19.84)
Log(MV)	0.132***	0.280***	0.653***	0.160***	0.101***
	(14.83)	(15.90)	(11.70)	(35.56)	(24.91)
Loss	0.239***	0.483***	1.887***	0.153***	0.161***
	(14.91)	(15.24)	(19.71)	(18.40)	(25.89)
M/B	-0.047***	-0.092***	-0.217***	-0.076***	-0.051***
	(-7.53)	(-7.13)	(-4.93)	(-20.88)	(-18.76)
Firm Age	-0.001	-0.002	-0.036***	-0.001**	-0.001***
	(-1.38)	(-1.12)	(-6.42)	(-2.01)	(-3.38)
Special Item/Total Assets	-0.167*	-0.536***	-1.027**	-0.383***	-0.230***
	(-1.95)	(-3.16)	(-1.98)	(-7.73)	(-6.97)
Monthly Ret Volatility	0.265***	0.674***	5.970***	0.541***	0.602***
	(3.42)	(4.38)	(11.94)	(12.50)	(18.82)
Num of Geographic Seg.	-0.005	-0.002	0.011	0.021***	0.014***
	(-1.07)	(-0.20)	(0.38)	(7.93)	(7.04)
Num of Business Seg.	0.010	0.046***	0.376***	0.028***	0.029***
	(1.41)	(3.36)	(8.79)	(7.96)	(9.81)
Institutional Ownership	0.267***	0.555***	1.881***	0.095***	0.051***
	(6.28)	(6.56)	(6.92)	(4.59)	(2.67)
Tangible Ratio	-0.337***	-0.816***	-3.376***	-0.048	-0.056**
	(-5.28)	(-6.57)	(-8.68)	(-1.53)	(-2.17)
Incorp DE	0.086***	0.209***	0.864***	0.036***	0.062***
	(4.10)	(5.05)	(6.57)	(3.60)	(6.73)
Num Analysts	-0.003**	-0.005	-0.038***	0.001	-0.001
	(-2.03)	(-1.47)	(-3.76)	(1.42)	(-0.89)
Positive	-34.639***	-28.677***	-62.091**	3.308	24.203***
	(-6.79)	(-3.02)	(-2.00)	(1.38)	(9.86)
Constant	18.298***	-3.546***	67.089***	11.348***	8.900***
	(82.13)	(-8.37)	(62.17)	(153.71)	(137.51)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	71,125	71,125	67,428	71,125	71,125
R-squared	0.158	0.160	0.415	0.816	0.486

Panel C: Readability and Bond Downgrades

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Downgrade	0.129***	0.257***	0.237*	0.047***	0.068***
	(4.20)	(4.24)	(1.66)	(3.29)	(5.66)
Lag(Downgrade)	0.109***	0.221***	0.408***	0.034**	0.067***
	(3.80)	(3.85)	(2.96)	(2.33)	(5.65)
Log(MV)	0.103***	0.224***	0.609***	0.135***	0.093***
	(5.29)	(5.74)	(4.83)	(14.92)	(10.12)
Loss	0.130***	0.283***	1.271***	0.117***	0.127***
	(3.44)	(3.76)	(6.35)	(6.81)	(8.89)
M/B	-0.080***	-0.170***	-0.602***	-0.115***	-0.101***
	(-3.42)	(-3.77)	(-3.78)	(-10.93)	(-10.21)
Firm Age	0.001	0.002	-0.035***	0.000	-0.000
	(0.69)	(0.87)	(-4.71)	(0.80)	(-0.03)
Special Item/Total Assets	-0.201	-0.651	-2.585*	-0.075	-0.067
	(-0.82)	(-1.32)	(-1.77)	(-0.56)	(-0.66)
Monthly Ret Volatility	0.357	0.900*	7.751***	0.515***	0.955***
	(1.54)	(1.94)	(5.55)	(4.30)	(9.28)
Num of Geographic Seg.	-0.014*	-0.021	0.003	0.014***	0.004
	(-1.75)	(-1.36)	(0.06)	(3.19)	(1.15)
Num of Business Seg.	-0.005	0.013	0.199***	0.010*	0.012***
	(-0.43)	(0.62)	(3.13)	(1.89)	(2.67)
Institutional Ownership	0.178*	0.315*	0.781	0.040	-0.060
	(1.92)	(1.69)	(1.26)	(1.01)	(-1.41)
Tangible Ratio	-0.703***	-1.555***	-4.661***	-0.138**	-0.104*
	(-5.35)	(-6.01)	(-5.47)	(-2.53)	(-1.83)
Incorp DE	0.080*	0.221**	0.242	-0.007	0.049**
	(1.72)	(2.40)	(0.89)	(-0.38)	(2.45)
Num Analysts	-0.004	-0.007	-0.051***	-0.000	-0.002
	(-1.53)	(-1.30)	(-3.14)	(-0.14)	(-1.61)
Positive	-72.001***	-92.690***	-258.686***	-5.986	27.401***
	(-5.77)	(-4.16)	(-3.59)	(-1.13)	(4.73)
Constant	19.523***	-1.233*	71.542***	11.712***	9.113***
	(54.73)	(-1.74)	(39.06)	(108.59)	(88.40)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	18,202	18,202	16,726	18,202	18,202
R-squared	0.105	0.098	0.382	0.842	0.411

Table 9: Readability and CEO Overconfidence

The dependent variable in each regression is one of five readability measures: *Fog*, *PC, Bog, Ln(File Size)* or *Ln(Word Count)*. In Panel A we use option-based measures of overconfidence (*Holder67* and *Holder100*) while in Panel B we use a news-based measure of overconfidence (*NetNews*). *Holder67* is a binary variable equal to one for all CEO-years after the CEO fails to exercise a vested option that is at least 67% in-the-money, provided that she subsequently does it again at least once. *Holder100* is a binary variable equal to one for all CEO-years after the CEO fails to exercise a vested option that is at least 100% in-the-money, provided that she subsequently does it again at least once. *NetNews* is the difference between the number of articles that depict the CEO as overconfident versus the number of articles that depict the CEO as non-overconfident scaled by the sum of overconfident and non-overconfident articles. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

Panel A: Readability and Option-Based Overconfidence (holder67) Measures

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Holder67	-0.056*	-0.085	-0.274	-0.063***	-0.052***
	(-1.85)	(-1.41)	(-1.57)	(-4.52)	(-4.16)
Log(MV)	0.095***	0.203***	0.574***	0.173***	0.095***
	(5.64)	(6.12)	(5.47)	(22.08)	(12.76)
Loss	0.169***	0.350***	1.473***	0.151***	0.150***
	(5.43)	(5.70)	(8.68)	(10.00)	(12.95)
M/B	-0.056***	-0.118***	-0.417***	-0.082***	-0.060***
	(-5.33)	(-5.69)	(-5.80)	(-14.22)	(-12.66)
Firm Age	0.001	0.002	-0.032***	0.001	0.000
	(0.95)	(1.10)	(-4.43)	(1.37)	(0.50)
Special Item/Total Assets	-0.155	-0.532	-3.236***	-0.299***	-0.123*
	(-0.89)	(-1.54)	(-3.07)	(-3.22)	(-1.76)
Monthly Ret Volatility	0.331*	0.870**	10.577***	0.906***	1.082***
	(1.86)	(2.48)	(10.10)	(9.80)	(14.39)
Num of Geographic Seg.	-0.007	-0.009	0.035	0.012***	0.007**
	(-1.07)	(-0.68)	(0.86)	(3.33)	(2.26)
Num of Business Seg.	-0.002	0.021	0.277***	0.009*	0.012***
	(-0.23)	(1.10)	(4.57)	(1.95)	(2.84)
Institutional Ownership	0.102	0.194	1.688***	0.066*	0.053
	(1.31)	(1.24)	(3.33)	(1.79)	(1.43)
Tangible Ratio	-0.547***	-1.280***	-4.634***	-0.137***	-0.083*
	(-4.50)	(-5.36)	(-6.00)	(-2.67)	(-1.69)
Incorp DE	-0.027	-0.022	0.048	0.029*	0.047***
	(-0.73)	(-0.30)	(0.21)	(1.74)	(2.89)
Num Analysts	-0.000	0.001	-0.023*	0.002	0.000
	(-0.19)	(0.29)	(-1.70)	(1.49)	(0.37)
Positive	-62.804***	-79.888***	-161.772***	2.130	28.065***
	(-7.11)	(-4.61)	(-3.12)	(0.61)	(5.90)
Constant	19.594***	-1.066*	71.695***	11.351***	8.900***
	(66.92)	(-1.86)	(47.01)	(110.12)	(96.08)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	25,172	25,172	24,340	25,172	25,172
R-squared	0.104	0.098	0.392	0.825	0.436

Panel B: Readability and Option-Based Overconfidence (holder100) Measures

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Holder100	-0.082***	-0.144**	-0.315*	-0.055***	-0.047***
	(-2.74)	(-2.43)	(-1.78)	(-3.82)	(-3.72)
Log(MV)	0.095***	0.204***	0.572***	0.172***	0.094***
	(5.66)	(6.15)	(5.46)	(22.02)	(12.69)
Loss	0.168***	0.347***	1.476***	0.153***	0.152***
	(5.38)	(5.63)	(8.70)	(10.14)	(13.03)
M/B	-0.054***	-0.114***	-0.411***	-0.081***	-0.060***
	(-5.10)	(-5.45)	(-5.69)	(-14.05)	(-12.49)
Firm Age	0.001	0.002	-0.032***	0.001	0.000
	(0.85)	(0.99)	(-4.45)	(1.33)	(0.47)
Special Item/Total Assets	-0.145	-0.513	-3.203***	-0.294***	-0.119*
	(-0.84)	(-1.49)	(-3.04)	(-3.17)	(-1.69)
Monthly Ret Volatility	0.351**	0.910***	10.633***	0.910***	1.085***
	(1.97)	(2.60)	(10.19)	(9.84)	(14.52)
Num of Geographic Seg.	-0.007	-0.009	0.036	0.012***	0.007**
	(-1.06)	(-0.67)	(0.87)	(3.36)	(2.29)
Num of Business Seg.	-0.002	0.021	0.277***	0.009**	0.012***
	(-0.24)	(1.09)	(4.58)	(2.00)	(2.88)
Institutional Ownership	0.107	0.204	1.698***	0.065*	0.052
	(1.37)	(1.30)	(3.35)	(1.78)	(1.42)
Tangible Ratio	-0.546***	-1.278***	-4.634***	-0.137***	-0.083*
	(-4.50)	(-5.36)	(-6.01)	(-2.66)	(-1.68)
Incorp DE	-0.028	-0.024	0.046	0.029*	0.047***
	(-0.76)	(-0.33)	(0.20)	(1.74)	(2.89)
Num Analysts	-0.000	0.001	-0.023*	0.002	0.000
	(-0.15)	(0.33)	(-1.68)	(1.52)	(0.40)
Positive	-62.950***	-80.223***	-161.967***	2.167	28.090***
	(-7.12)	(-4.63)	(-3.12)	(0.62)	(5.89)
Constant	19.586***	-1.076*	71.641***	11.337***	8.889***
	(66.32)	(-1.88)	(46.41)	(105.60)	(94.92)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	25,172	25,172	24,340	25,172	25,172
R-squared	0.105	0.099	0.392	0.825	0.436

Panel C: <u>Readability and a News-Based Overconfidence Measure</u>

	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Netnews	-0.029***	-0.059***	-0.173***	-0.008	-0.007
	(-2.67)	(-2.72)	(-3.07)	(-1.43)	(-1.54)
Log(MV)	0.096***	0.192***	0.539***	0.120***	0.091***
	(3.72)	(3.72)	(3.68)	(8.84)	(8.35)
Loss	0.082	0.131	1.626***	0.175***	0.123***
	(1.05)	(0.85)	(4.24)	(4.65)	(4.29)
M/B	-0.037**	-0.075**	-0.206*	-0.072***	-0.063***
	(-2.05)	(-2.10)	(-1.86)	(-6.15)	(-8.05)
Firm Age	0.001	0.003	-0.028***	0.000	0.001
	(0.84)	(0.88)	(-3.08)	(0.24)	(0.97)
Special Item/Total Assets	-0.782	-2.063*	0.660	-0.104	-0.714***
	(-1.30)	(-1.72)	(0.20)	(-0.35)	(-2.90)
Monthly Ret Volatility	-0.152	-0.139	7.699***	0.604***	1.196***
	(-0.41)	(-0.19)	(4.03)	(2.93)	(7.95)
Num of Geographic Seg.	0.006	0.019	0.029	0.013**	0.009*
	(0.53)	(0.87)	(0.50)	(2.05)	(1.95)
Num of Business Seg.	-0.005	0.012	0.319***	0.012	0.012*
	(-0.37)	(0.41)	(3.93)	(1.55)	(1.92)
Institutional Ownership	0.112	0.204	1.620**	0.138**	0.057
	(0.97)	(0.88)	(2.30)	(2.21)	(1.07)
Tangible Ratio	-0.697***	-1.577***	-5.441***	-0.073	-0.124*
	(-3.95)	(-4.46)	(-5.09)	(-0.85)	(-1.70)
Incorp DE	-0.054	-0.060	0.026	0.076***	0.037*
	(-1.08)	(-0.60)	(0.09)	(2.87)	(1.76)
Num Analysts	0.002	0.007	-0.019	0.003	0.002
	(0.59)	(0.99)	(-0.91)	(1.54)	(1.41)
Positive	-80.756***	-117.871***	-197.456***	10.227	28.342***
	(-6.20)	(-4.47)	(-2.78)	(1.63)	(4.31)
Constant	19.650***	-0.802	71.680***	11.501***	8.925***
	(67.03)	(-1.57)	(34.02)	(50.43)	(76.06)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	3,626	3,626	3,516	3,626	3,626
R-squared	0.123	0.112	0.382	0.562	0.401

Table 10: Litigation Risk and Instrumented Readability

This table contains 2-stage regression results examining the impact of readability on litigation likelihood using the 1998 Plain English Rule as an instrumental variable. The sample spans the years 1996-2000, excluding 1998. The dependent variable in the first stage regression is one of three readability measures: *Fog* (Model 1), *PC* (Model 3) or *Bog* (Model 5). The predicted values from these regressions (*Instrumented Fog, Instrumented PC and Instrumented Bog*) are used in the second stage regressions. The dependent variable in the second stage regressions is *Litigation*, a binary variable equal to one if a firm is subject to an SCA during the year. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

Dependent Variable	Fog (1)	Litigation (2)	PC (3)	Litigation (4)	Bog (5)	Litigation (6)
Plain English	-0.134***		-0.225***		-0.586***	
	(-7.08)		(-6.09)		(-6.01)	
Instrumented Fog		-0.033**				
		(-2.42)				
Instrumented PC				-0.019**		
				(-2.37)		
Instrumented Bog						-0.007**
						(-2.31)
Log(MV)	0.179***	0.014***	0.373***	0.016***	0.635***	0.013***
	(23.66)	(5.59)	(25.32)	(4.94)	(14.60)	(5.98)
Sales Growth	-0.006	0.020***	-0.023	0.019***	-0.221	0.018***
	(-0.21)	(6.02)	(-0.44)	(5.87)	(-1.46)	(5.16)
R&D/Sales	0.077***	0.002	0.142***	0.003	0.932***	0.007*
	(6.60)	(1.13)	(6.13)	(1.20)	(10.07)	(1.93)
Tangible Ratio	-0.377***	-0.026***	-0.916***	-0.032***	-4.069***	-0.044***
	(-4.55)	(-3.30)	(-5.70)	(-3.21)	(-8.39)	(-2.96)
M/B	-0.053***	0.002*	-0.101***	0.002	-0.128***	0.003***
	(-7.74)	(1.75)	(-7.54)	(1.46)	(-2.83)	(2.60)
Adj Mkt Ret Before Litigation	-0.070***	-0.019***	-0.150***	-0.020***	-0.319***	-0.019***
	(-7.90)	(-10.58)	(-8.54)	(-9.81)	(-6.31)	(-10.19)
Skewness Before Litigation	-0.029**	-0.003***	-0.069	-0.004***	-0.197***	-0.003***
	(-2.53)	(-2.58)	(-3.10)	(-2.79)	(-3.19)	(-2.59)
Volatility Before Litigation	0.553***	0.200***	1.412***	0.210***	8.758***	0.248***
	(4.51)	(11.28)	(5.88)	(10.85)	(12.07)	(8.07)
Num of Geographic Seg.	0.002	0.000	0.015	0.001	0.144***	0.001
	(0.22)	(0.39)	(0.85)	(0.59)	(2.83)	(1.17)
Num of Business Seg.	0.032***	0.000	0.088***	0.001	0.520***	0.003*
	(2.79)	(0.41)	(3.92)	(1.03)	(8.43)	(1.89)
Firm Age	-0.008***	-0.000***	-0.016***	-0.000***	-0.098***	-0.001***
	(-6.42)	(-3.00)	(-6.41)	(-2.92)	(-13.56)	(-2.74)
Constant	18.307***	0.529**	-3.165***	-0.132***	71.785***	0.464**
	(83.89)	(2.14)	(-8.14)	(-4.66)	(60.70)	(2.01)
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21,736	21,736	21,736	21,736	21,185	21,185
Centered R-squared		-0.050		-0.087		-0.103

Table 11: Readability and Brokerage House Mergers

The dependent variable in each regression is one of five readability measures: *Fog*, *PC, Bog, Ln(File Size)* or *Ln(Word Count)*. The sample spans 1997-2005 and is restricted to firms with analyst coverage in I/B/E/S and December fiscal year-ends. *Merge* is a binary variable equal to one if a firm has reduced analyst coverage due to a brokerage house merger during the year. See the Appendix for all variable definitions. *t*-statistics, computed with standard errors clustered at the firm level, are reported in parentheses below the coefficient. Superscripts ***, ** and *denote significance at 1%, 5% and 10%, respectively.

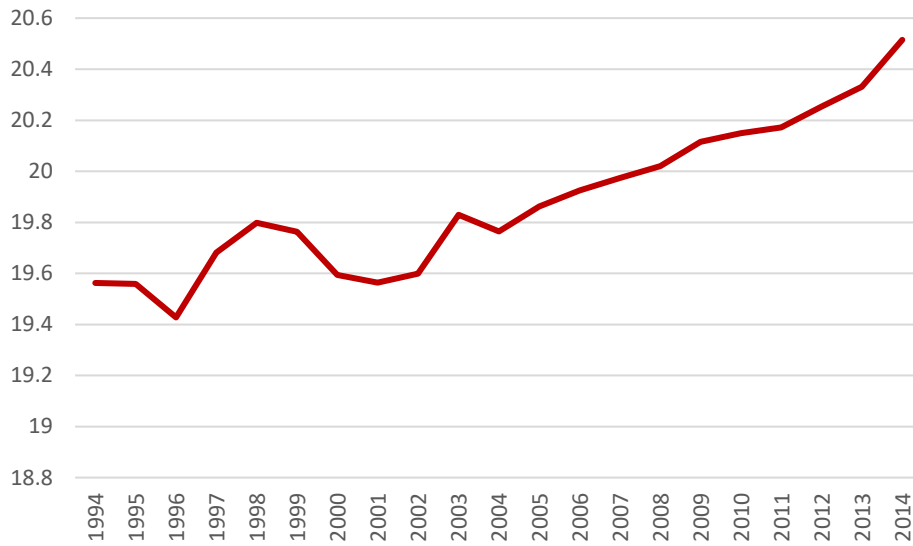|	Fog	PC	Bog	ln(File Size)	ln(Word Count)
Merge	-0.153**	-0.324**	-1.353***	0.005	-0.022
	(-2.29)	(-2.49)	(-3.92)	(0.16)	(-0.78)
Log(MV)	0.077***	0.177***	0.507***	0.128***	0.088***
	(5.75)	(6.70)	(6.31)	(18.90)	(14.12)
Loss	0.160***	0.315***	1.965***	0.187***	0.185***
	(6.07)	(6.06)	(12.34)	(13.87)	(18.26)
M/B	-0.048***	-0.099***	-0.319***	-0.059***	-0.039***
	(-7.41)	(-7.91)	(-6.84)	(-16.70)	(-14.06)
Firm Age	0.002*	0.006**	-0.042***	-0.001**	-0.001
	(1.92)	(2.27)	(-5.21)	(-2.32)	(-1.02)
Special Item/Total Assets	-0.016	-0.268	-1.363	-0.284***	-0.197***
	(-0.12)	(-1.00)	(-1.57)	(-3.49)	(-3.75)
Monthly Ret Volatility	-0.112	0.035	4.713***	0.520***	0.554***
	(-0.93)	(0.15)	(6.54)	(8.00)	(11.66)
Num of Geographic Seg.	-0.002	0.003	0.052	0.012***	0.009***
	(-0.24)	(0.22)	(1.07)	(2.74)	(2.81)
Num of Business Seg.	0.021**	0.072***	0.390***	0.014***	0.024***
	(2.01)	(3.41)	(6.21)	(2.72)	(5.32)
Institutional Ownership	0.120**	0.229*	1.059***	0.074**	-0.028
	(1.98)	(1.90)	(2.82)	(2.48)	(-1.04)
Tangible Ratio	-0.420***	-0.950***	-3.916***	-0.061	-0.061
	(-4.26)	(-4.95)	(-6.47)	(-1.35)	(-1.49)
Incorp DE	0.078**	0.176***	0.845***	0.080***	0.068***
	(2.55)	(2.89)	(4.49)	(5.26)	(5.09)
Num Analysts	0.002	0.006	-0.003	0.003**	0.002
	(0.92)	(1.36)	(-0.22)	(2.52)	(1.42)
Positive	-36.710***	-38.885***	11.171	5.328	23.940***
	(-4.35)	(-2.62)	(0.26)	(1.46)	(6.70)
Constant	19.703***	-0.879	73.437***	11.725***	9.046***
	(48.70)	(-1.17)	(55.92)	(108.63)	(85.84)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Firm Cluster	Yes	Yes	Yes	Yes	Yes
Observations	22,256	22,256	21,702	22,256	22,256
R-squared	0.088	0.082	0.384	0.535	0.338

7 Figures

This figure plots the average fog index over time

This figure plots the average bog index over time