

## SEC Regulation and the Strategic Disclosure of Accounting Restatements

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**Abstract:** This paper investigates whether firms strategically disclose accounting restatements by coordinating restatement announcements with earnings releases, delaying the announcement of income-decreasing restatements, or choosing not to disclose news of a restatement on a Form 8-K filing. I examine restatements announced after a Securities and Exchange Commission rule (effective August 24, 2004) that requires a unique 8-K filing for restatements. I find that income-decreasing restatements are more likely than other restatements to be disclosed on the same day as earnings news, and firms delay the announcement of income-decreasing restatements longer than neutral or positive restatements. I also find that firms with weak corporate governance or less external monitoring are less likely to alert investors of a restatement with a Form 8-K filing. Collectively, these results suggest that even in the presence of strict disclosure requirements, some firms continue to strategically disclose accounting restatements.

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# SEC Regulation and the Strategic Disclosure of Accounting Restatements

## 1. Introduction

This paper investigates whether firms strategically disclose accounting restatements by coordinating restatement announcements with earnings releases, delaying the announcement of income-decreasing restatements relative to other restatements, or failing to alert investors of a restatement with a required Form 8-K filing. I examine whether corporate governance, external monitoring, and restatement direction influence firms' choices about how to disclose restatements. While conventional wisdom and evidence from management earnings forecasts suggest firms may promptly disclose bad news to reduce litigation risk, managers may choose to strategically delay or obscure the public disclosure of a restatement because of career or reputation concerns (Skinner 1994, Kasznik and Lev 1995, Desai *et al.* 2006, Kothari *et al.* 2005).

The surge in accounting restatements in recent years raised concerns about disparities in firms' restatement disclosure practices. Consequently, the Securities and Exchange Commission (SEC) revised restatement disclosure requirements in 2004. The new rule created a Form 8-K category specifically for alerting investors and regulators of a restatement. The rule also shortened the 8-K filing deadline for restatements to within four business days of concluding that investors should not rely on previously issued financial statements. However, in spite of the SEC's attempt to make disclosures of accounting restatements more timely and visible to outsiders, a number of firms appear to be circumventing the new rule by disclosing restatements in periodic SEC filings without having filed the required Form 8-K.<sup>1</sup> Restatements provide a

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<sup>1</sup> The SEC staff is currently investigating this issue and has sent comment letters to companies that restated without 8-K filings. David Reilly, "No More 'Stealth Restating,'" *Wall Street Journal*, September 21, 2006.

unique research setting for examining how the motivation to strategically disclose bad news interacts with SEC regulation that requires a transparent and timely disclosure.

Restatement disclosure choices are important because delaying the public disclosure of a restatement slows the market's ability to impound the restatement information into the value of a company's securities. Additionally, obscure restatement announcements are difficult for outsiders to monitor. Restatements often result in significant stock price declines or management turnover, and restatement volume has increased considerably in recent years (Palmrose *et al.* 2004, Desai *et al.* 2006, and Glass Lewis 2006). The disclosure literature demonstrates that managers may strategically time the release of negative earnings news (Patell and Wolfson 1982, DellaVigna and Pollet 2005, Bagnoli *et al.* 2006), delay the release of bad news relative to good news (Hong *et al.* 2000, Kothari *et al.* 2005), and coordinate the timing of good and bad news disclosures (Aboody and Kasznik 2000, Lansford 2006). Although the accounting literature has explored the causes and consequences of restatements (Burns and Kedia 2006, Desai *et al.* 2006, Palmrose *et al.* 2004, Gleason *et al.* 2004, Srinivasan 2005), the literature has not investigated whether firms strategically disclose restatements. This research is timely because it addresses the impact of the new restatement disclosure rule and it provides insights on whether strategic disclosure explains the degree of compliance with SEC regulation.

My main sample consists of 282 restatements announced between the effective date of the new SEC rule (August 24, 2004) and December 31, 2005. All restatements in my sample correct accounting errors in previously issued financial statements. Using a logit model to predict the decision to announce a restatement on the same day as an earnings release, I find that income-decreasing restatements are more than twice as likely as other restatements to be announced on the same day as an earnings release. Results of estimating a hazard model reveal

that announcements of income-decreasing restatements are delayed significantly longer than other restatement announcements. Logistic regression indicates that firms whose board chair also functions as CEO (a proxy for weak corporate governance) are less likely than other firms to openly disclose a restatement on an 8-K. Finally, external monitoring by financial analysts is positively related to the probability of announcing restatement news on a Form 8-K.

This paper extends the prior literature on accounting restatements by providing empirical evidence that the direction of a restatement influences restatement disclosure strategy. My results also add to the body of evidence in the literature about the influence of external monitoring and corporate governance on disclosure quality. While it appears that many restating firms circumvented the disclosure requirements by failing to file a Form 8-K, firms that complied with the 8-K filing requirement made significantly more timely disclosures of restatements than firms that restated without an 8-K. The collective evidence in this paper suggests that strategic disclosure can affect the degree of compliance with mandatory reporting requirements, and strong corporate governance and external monitoring are associated with more timely and transparent restatement disclosures..

The rest of the paper is organized as follows: Section 2 presents the background and hypothesis development. Section 3 describes the sample selection and univariate results. Section 4 presents the research design, and Section 5 provides results of multivariate analysis. Section 6 concludes.

## **2. Background and Hypothesis Development**

### ***Restatement Disclosure Practices***

Restatement disclosure practices have varied widely for many years, but this fact has received only cursory attention in the academic literature. Palmrose *et al.* (2004) note that

restatements may be disclosed in a press release, on a Form 8-K filing with the SEC, or by the filing of amended financial statements. Regulatory indifference to the disparity in disclosure practices was surprising because accounting restatement announcements often resulted in a significantly negative market reaction. More recently, a number of high-profile accounting scandals and an increasing volume of restatements resulted in new regulation governing accounting restatement disclosures.<sup>2</sup>

Section 409 of the Sarbanes-Oxley Act of 2002 (“Real Time Issuer Disclosures”) requires that public companies disclose “on a rapid and current basis . . . information concerning material changes in the financial condition or operations of the issuer.” The SEC implemented this requirement in the Final Rule on Additional 8-K Disclosure Requirements, which created a new 8-K filing specifically for disclosing restatements that correct errors in previously issued financial statements and shortened the 8-K filing deadline for restatements to within four business days of determining the need to restate. The rule requires firms to alert investors of a forthcoming restatement on an 8-K even if the precise impact of the restatement has not yet been determined. The SEC explained that the new rule would “benefit markets” by providing investors with “better and more timely disclosure of important corporate events.”<sup>3</sup>

While the SEC’s Final Rule on 8-K Disclosures was intended to bring news of accounting errors to the market in a more timely and transparent way, the regulation has not been entirely effective. Between August 24, 2004, and the end of 2005, more than one-third of restatements by public companies to correct errors in the primary financial statements were

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<sup>2</sup> Glass Lewis & Co (2006) estimates that average restatement volume in the U.S. between 1997 and 2002 was 220 restatements per year. In 2004, there were 613 restatements, and in 2005 restatement volume rose to 1,195.

<sup>3</sup> SEC “Final Rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date” (2004).

performed with no accompanying Item 4.02 Form 8-K filing.<sup>4</sup> Beyond noncompliance with SEC regulation, failure to announce a restatement on an 8-K report is important to investors because a majority of companies that restated without an 8-K report also failed to issue a press release or amend the misstated financial statements. Consequently, outsiders have no opportunity to learn about the restatement unless they find the disclosure in the footnotes of a regularly scheduled 10-Q or 10-K filing.<sup>5</sup>

### ***Academic Research on Disclosure***

While information asymmetry and agency conflicts between managers and outside investors drive the demand for external financial reporting, they also provide the opportunity for managers to withhold and strategically disclose bad news (see Healy and Palepu 2001, and Fields *et al.* 2001). Managers face a tradeoff between the costs and the benefits of making disclosures that reveal their superior knowledge about firm prospects. Kothari *et al.* (2005) document patterns of stock-price reactions to good and bad news that are consistent with the idea that managers steadily release good news but withhold bad news until they reach a “bad news threshold” after which it becomes too costly to delay bad news further. The authors suggest that the asymmetric payoff to managers for disclosing good vs. bad news may motivate the systematic delaying of bad news releases. While good news may help ensure continued employment or wealth increases, bad news can lead to abrupt consequences such as termination, even if the manager is not directly responsible for the problem disclosed. Kothari *et al.* (2005)

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<sup>4</sup> See Glass, Lewis & Co report “Getting It Wrong the First Time,” March 2006. Some managers have attempted to explain the failure to file a 4.02 8-K by advocating that some restatements were “immaterial”; however, only material errors require a restatement in the first place. Furthermore, the SEC’s Final Rule on Additional 8-K Disclosures holds that restatements are “unquestionably or presumptively material.” (SEC 2004)

<sup>5</sup> Glass, Lewis & Co. reported that 14 percent of restatements in 2005 were disclosed only in the footnotes of regular SEC filings, and Audit Analytics reports that 32 percent of restatements in the first half of 2006 were similarly obscurely disclosed (Audit Analytics 2006).

conclude that managers may attempt to use disclosures as a means of offsetting conservative accounting standards that accelerate the recognition of bad news.

Several additional papers in the academic literature provide potential motivations for managers' attempts to bury restatement news in financial statement footnotes. The "incomplete revelation hypothesis" (IRH) in Bloomfield (2002) predicts that managers will attempt to temporarily boost or maintain stock prices by disclosing bad news in financial statement footnotes because information in the footnotes may be more difficult for some investors to extract. Experimental evidence in the accounting literature has demonstrated that information's prominence or placement in the financial statements can influence the cost of extracting the information or affect the weight investors place on the information (e.g., Hirst and Hopkins 1998 and Maines and McDaniel 2000). Hirshleifer and Teoh (2003) provide a theoretical framework that describes the financial-reporting implications of the "limited attention" of investors. Since time and attention are costly, the prominence with which information is presented in the financial statements may affect investors' interpretations and perceptions of the information—even for otherwise identical disclosures. Hirshleifer and Teoh explain that the salience of accounting information may also affect users' judgments about causality or the importance of the information, and they give the example of a footnote disclosure as one that some investors may fail to process because of a lack of salience. Collectively, the evidence in these papers supports the idea that managers may attempt to temporarily delay or limit the negative reaction to an accounting restatement by burying restatement disclosures in financial statements footnotes.

### ***Hypotheses***

Managers may be able to affect the market reaction to news of an income-decreasing restatement by strategically "mixing" news of the restatement with earnings news. Lansford

(2006) provides empirical evidence that managers strategically coordinate the timing of good and bad news disclosures. He finds that the probability of disclosing good news related to patents in the period immediately before a negative earnings announcement increases in the magnitude of the negative earnings surprise. Additionally, more than one-third of the CFOs surveyed by Graham *et al.* (2005) agreed with the strategy of mixing or “packaging” bad news with other disclosures. Mixing restatement news with a positive earnings surprise may help to reduce the negative market reaction to the restatement, or mixing restatement news with a negative earnings surprise may allow some firms to take a “big bath.” This evidence leads to my first hypothesis:

H1: Income-decreasing restatements are more likely than neutral or income-increasing restatements to be disclosed on the same day as an earnings announcement.

Conventional wisdom and evidence from the management earnings forecast literature suggests that managers will be motivated to promptly disclose bad news in some settings for at least two reasons: litigation risk may increase if investors perceive a firm excessively delayed releasing bad news (Skinner 1994, Kasznik and Lev 1995, and Field *et al.* 2005); and firms may be able to lower their cost of capital by reducing information asymmetry (e.g., Botosan 1997 and Botosan and Plumlee 2002). However, after managers conclude they must restate previously issued financial statements, career or reputation concerns may motivate managers to delay public disclosure of a restatement (Desai *et al.* 2006, Kothari *et al.* 2005). Managers may wait for the opportunity to coordinate a restatement announcement with other events such as: corporate events that directly affect the wealth of the manager (e.g., Aboody and Kasznik 2000 and Ertimur *et al.* 2006), the announcement of a restatement by an industry peer (Tse and Tucker, 2006), or positive news to mix with the news of the restatement (Lansford 2006).

Evidence that firms strategically time the disclosure of information such as earnings releases has also existed in the literature for many years. Patell and Wolfson (1982) investigate the intraday timing of earnings and dividend announcements and find that managers release good news during trading hours but withhold bad news until after trading hours. More recently, DellaVigna and Pollet (2005) show that earnings news released on Fridays is more negative than news released during the week and Bagnoli *et al.* (2006) find that a vast majority of earnings news is now announced outside of trading hours. Aboody and Kasznik (2000) find that firms time the release of good news and bad news around stock option award dates in order to maximize stock-option compensation, and Ertimur *et al.* (2006) find evidence that managers issue optimistically biased forecasts and tend to withhold bad news before IPO lockup expirations in order to maximize their personal profit upon selling IPO shares. Finally, in a survey of chief financial officers, Graham *et al.* (2005) report that 66 percent of CFOs agree or strongly agree with the idea of delaying bad news to allow more analysis or interpretation or in hopes that the firm's status will improve before the next required information announcement. Since the stock price reaction to income-decreasing restatements is significantly more negative than the reaction to neutral or income-increasing restatements (Palmrose *et al.* 2004), I expect managers to strategically delay the release of negative restatements incrementally longer than neutral or positive restatements:

H2: Announcements of income-decreasing restatements are delayed longer than announcements of neutral or income-increasing restatements.

Evidence in the accounting literature suggests that strong corporate governance is associated with increased quality of disclosure. Karamanou and Vafeas (2005) find that firms with more effective board and audit committee structures are more likely to issue and update accurate management earnings forecasts and conclude that effective corporate governance is

associated with higher financial disclosure quality. Similarly, Ajinkya *et al.* (2005) find that firms with more outside directors issue management forecasts more frequently, and their forecasts are more specific and accurate. Consistent with this evidence, I expect board structure and independence to affect restatement disclosure strategy.<sup>6</sup> Firms with more independent boards should be more likely to disclose restatement news on a Form 8-K.

H3: Firms with a board chair who is not the CEO and firms with a higher proportion of outside board members are more likely to restate openly with an 8-K filing.

If sophisticated investors are more likely to monitor financial statement footnotes or if they are more likely to use valuation models to process the economic implications of a restatement irrespective of the form of the disclosure, then managers of firms monitored by sophisticated investors should be less likely to attempt to obscure bad news by disclosing it in financial statement footnotes. More specifically, financial analysts may affect managers' decisions about how to disclose a restatement for at least three reasons: (1) analysts are external monitors of managerial performance (Moyer *et al.* 1989); (2) analysts are sophisticated market participants who are less likely to overlook or underweight a restatement disclosure because of its placement in the footnotes (Frederickson and Miller 2004); and (3) analysts reduce information asymmetry between managers and investors (Roulstone 2003). Alternatively, firms followed by financial analysts may try to please analysts by providing more timely or transparent disclosures, or analysts may initially choose to cover firms that provide high quality disclosures.<sup>7</sup> This leads to my final hypothesis concerning the effect of financial analyst coverage on restatement disclosure choice:

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<sup>6</sup> Since the Sarbanes-Oxley Act of 2002 mandates an independent audit committee, I do not examine the influence of audit committee structure or independence on restatement disclosure behavior.

<sup>7</sup>A 2005 Thomson Financial estimate concluded that over 60 percent of publicly traded firms in the U.S. are not covered by a single analyst. Additionally, of the roughly 6,000 firms that are covered by an analyst, more than half are covered by only one analyst. (John Coffee, "Fixing Wall Street Research," *Wall Street Journal* November 10, 2006).

H4: Firms with no financial analyst following are more likely than firms monitored by analysts to restate without a Form 8-K filing.

### **3. Sample Selection and Descriptive Statistics**

My sample of restatement observations comes from an extensive database of accounting restatements created and maintained by Glass, Lewis & Co, LLC. During 2005 alone, research analysts at Glass Lewis reviewed nearly 25,000 company filings to track restatement activity (Glass Lewis 2006). The database includes only restatements filed to correct accounting errors and excludes restatements for changes in accounting principle, GAAP-to-GAAP changes, changes in estimates, or minor changes in wording or typographical errors. If a company used multiple filings to correct the same underlying error, the database classifies it as a single restatement observation.

Between the effective date of the Final Rule on 8-K disclosures (August 24, 2004) and December 31, 2005, Glass Lewis identified 1,512 restatements filed by public companies in the U.S. Many of the 1,512 restatements originate from very small companies, with 386 (26 percent) of the restatements filed by firms with \$10 million or less in total assets. Of the 1,512 restatements, 591 (39 percent) were performed without an Item 4.02 Form 8-K filing. When I combine the Glass Lewis restatement sample with the financial statement data from the Compustat database needed for my empirical tests, the restatement sample is reduced to 841 restatement observations, 209 (25 percent) of which have no Form 8-K filing. I obtain information concerning the financial analyst following of the restating firms from the IBES database. The intersection of the full sample of 841 restatements with the Board Analyst database produces a sample of 282 restatement observations. I obtain data on the structure and independence of restating firms' boards of directors from Board Analyst, and I hand collect

detailed information from SEC filings about the direction and impact of the restatement on retained earnings for this sample of 282 observations.<sup>8</sup>

Table 1 shows the distribution of the full sample of 841 restatement observations by calendar quarter of the restatement announcement, industry affiliation, restatement category, and stock exchange. Panel A shows that, with the exception of an unusually small number of observations in the third quarter of 2004, the restatement announcement dates are relatively evenly distributed throughout the sample period. Since my sample period begins with the effective date of the Final Rule on 8-K Disclosures in the middle of the third quarter of 2004, restatement observations are smallest for that calendar quarter. The large increase in restatement volume in the first quarter of 2005 corresponds with a February 2005 letter from the SEC's Chief Accountant, Donald Nicolaisen, that explained the SEC staff's view that many firms had incorrectly applied existing lease accounting rules. In response to the letter, many companies filed restatements in early 2005 to correct errors in lease accounting. Panel A also reveals that the percentage of restatements announced on Form 8-K filings peaked in the first full calendar quarter after the effective date of the SEC's rule on restatement disclosures. Thus restatements disclosed without 8-K filings during my sample period do not appear related to a "learning curve" firms experienced before becoming familiar with the new rule.

Panel B breaks the sample into industry categories based on the major divisions of the Standard Industrial Classification (SIC) codes. Professional services firms make up the smallest proportion of the restatement sample (4%), and industrial manufacturing firms represent the largest industry group in the sample (23%). In Panel C, the restatement observations are

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<sup>8</sup> The Board Analyst database contains information on approximately 2,000 large companies. Glass-Lewis did not collect information on the magnitude or impact of the restatement. See the Appendix for a list of data items taken from Glass-Lewis, IBES, Compustat, Board Analyst, and data hand collected from SEC filings.

classified according to the primary error corrected by the restatement.<sup>9</sup> Expense recognition, misclassification, and revenue recognition make up the three largest categories of errors in my restatement sample, representing 30 percent, 16 percent, and 12 percent of the observations, respectively.<sup>10</sup> Finally, Panel D reveals that nearly 90 percent of the restating firms in my sample are listed on either the NASDAQ exchange or the NYSE, and the remaining observations are AMEX or OTC firms.

Table 2 presents descriptive statistics for the primary variables of interest in my full sample. As shown in Panel A, the average number of days between the end of the final period misstated and the initial public disclosure of the restatement (HORIZON) is 249 days (median 168 days). Average total assets (ASSETS) for the firms in my sample is \$6.1 billion (median \$452 million), and average market value of equity (MVE) is \$2.7 billion (median \$374 million). The average restatement involves errors in between one and two (1.6) categories of accounting misstatements (PERVASIVE), the average market-to-book ratio (M/B) is 2.86, average financial leverage (LEV) is 0.25, the mean earnings variability measure (EARN\_VAR) is 107, and mean ROA is -0.03 (median 0.01). Table 2 Panel B divides the sample based on the decision to restate with or without a Form 8-K filing and compares the means and medians of key variables in the two samples. Panel B shows that 75 percent (632 of 841) of the restatements in my full sample were disclosed on an Item 4.02 Form 8-K. The tests of HORIZON reveal that restatements disclosed on a Form 8-K filing are announced significantly closer to last period misstated (median of 154 days compared to median of 400 days), and tests of PERVASIVE indicate that restatements disclosed on an 8-K affect a significantly higher number of categories of accounting

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<sup>9</sup> Many restatements involve the correction of errors in more than one category. The variable PERVASIVE used later in the regression models corresponds to how many categories the restated errors affected. The categorization of errors is defined by Glass Lewis & Co.

<sup>10</sup> The expense recognition category includes errors related to accounting for leases.

errors. The mean and median tests find no significant differences across the 8-K and no 8-K samples for market value of equity (MVE), total assets (ASSETS), earnings variability (EARN\_VAR), market-to-book ratio (M/B), return on assets (ROA), and financial leverage (LEV).

Panel C compares the distribution of categorical variables between the 8-K and no 8-K samples. While 41 percent of the restatements announced on a Form 8-K were never completed with amended financial statements (NO\_AMEND), a significantly higher proportion (58 percent) of the restatements announced without an 8-K were never completed with amended financial statements (i.e., 10-K/A or 10-Q/A).<sup>11</sup> Restatements performed with no 8-K filing and no amended financial statements represent the least transparently disclosed restatements. Twenty-six percent of the restatements announced with 8-K filings came from firms with no financial analyst following in the IBES database (NO\_IBES), and a significantly higher proportion (37 percent) of the firms that failed to file an 8-K have no analyst following. Firms that restated without an 8-K filing were marginally less likely to be audited by a Big 4 auditor (BIG4), and disclosures of a material weakness in internal controls (IC\_WEAK) were significantly more likely for restatements that occurred with an 8-K filing.<sup>12</sup> Restatements disclosed on an 8-K were also significantly more likely to be related to lease accounting, but there is no significant difference in the proportion of restatements that correct annual periods (i.e., as opposed to only

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<sup>11</sup> Although firms are not required to file amended 10-Qs or 10-Ks when they restate, until recently almost all firms used amended filings to alert investors that a restatement has been performed. In 2003, over 95 percent of restatements included amended filings, but by 2005 only 55 percent of restatements included amended filings (Glass-Lewis 2006).

<sup>12</sup> Although the descriptive results indicate that restatements disclosed without an 8-K filing have significantly lower measures of restatement pervasiveness and significantly lower incidences of a disclosure of a material weakness in internal controls, these measures alone do not determine the necessity of an 8-K filing. The Final Rule on 8-K Disclosures requires an 8-K filing for *all* restatements that correct accounting errors in the primary financial statements.

interim periods) or the proportion of restatements that directly involved the SEC.<sup>13</sup> Panel D of Table 2 compares the industry composition of the two samples. While there is a marginally significant difference in the overall industry composition of the two samples, tests of the proportion of each sample from each industry group failed to find any significant differences for any of the industry groupings. Restatement disclosure strategy does not appear to be driven by industry-specific trends for disclosing restatements with or without a Form 8-K.

Tables 3 presents descriptive statistics for the subsample of 282 restatement observations for which I have information about board structure and independence and for which I hand collect information about the direction and magnitude of the restatement. The firms in this sample are larger and more stable than the average firm in the full sample of 841 restatements.<sup>14</sup> As shown in Panel A, restatements performed with no 8-K filing have a smaller impact on retained earnings (IMPACT\_RE) and they correct fewer misstated periods (NUM\_YRS). Restatements disclosed without an 8-K also have significantly longer restatement horizons (i.e., are less timely) than restatements disclosed on a 8-K. There are no significant differences between the two samples in any of the control variables or in the pervasiveness of the restatement (PERVASIVE) or the proportion of the board of directors that is comprised of outsiders (BOARD\_IND). Panel B of Table 3 examines differences in the distribution of categorical variables across the 8-K and no 8-K samples. Restatements not announced on an 8-K are marginally more likely to be completed without the filing of amended financial statements (NO\_AMEND) and are significantly less likely to negatively affect retained earnings

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<sup>13</sup> SEC involvement in the restatement can occur either before and after the restatement announcement. In some cases, an SEC investigation precedes the restatement, and in other instances the SEC decides to investigate after a restatement has been disclosed.

<sup>14</sup> For example, 93 percent of the 282 restating firms are covered by at least one analyst in the IBES database, compared with just 71 percent of the 841 restatement observations in the full sample.

(NEG\_IMPACT), to be associated with a disclosure of a material weakness in internal controls (IC\_WEAK), and to be related to errors in lease accounting (LEASES).

In summary, evidence from the descriptive statistics suggests that firm size, industry affiliation, leverage, recent accounting performance, growth expectations, and earnings variability are not significantly different across the samples of firms that restate with or without an 8-K filing. However, financial analyst following, the use of a Big 4 auditor, and the severity of the restatement all appear positively related to the decision to alert investors to a restatement with a Form 8-K filing. Descriptive evidence also indicates that restatements disclosed on an 8-K are announced significantly closer to the last period misstated, consistent with a more timely disclosure. The next section analyzes these relations in a more conclusive multivariate setting.

#### 4. Research Design

To investigate the timeliness and transparency of restatement disclosures, I use logistic regression and duration analysis. I test Hypothesis 1 concerning the choice to disclose news of a restatement on the same day as an earnings announcement with the logistic regression model in Equation 1. This analysis is motivated in part by evidence in Graham *et al.* (2005) that CFOs admit to “packaging” bad news with other information releases and evidence in Lansford (2006) that managers coordinate the release of good and bad news disclosures together.

$$\begin{aligned} \text{EARN\_ANNC}_{j,t} = & \beta_0 + \beta_1 \text{ABS\_IMPACT}_{j,t} + \beta_2 \text{NEG\_IMPACT}_{j,t} + \beta_3 \text{NUM\_YRS}_{j,t} + \\ & \beta_4 \text{PERVASIVE}_{j,t} + \beta_5 \text{SEC}_{j,t} + \beta_6 \text{IC\_WEAK}_{j,t} + \beta_7 \text{FILED\_8K}_{j,t} + \beta_8 \text{NO\_AMEND}_{j,t} \\ & + \beta_9 \text{CEO\_CHAIR}_{j,t} + \beta_{10} \text{BOARD\_IND}_{j,t} + \beta_{11} \text{LEV}_{j,t} + \beta_{12} \text{ROA}_{j,t} + \beta_{13} \text{M/B}_{j,t} + \\ & \beta_{14} \text{EARN\_VAR}_{j,t} + \beta_{15} \text{LOGTA}_{j,t} + \varepsilon_{j,t} \end{aligned} \quad (1)$$

The dependent variable, EARN\_ANNC, is an indicator variable that equals 1 if the firm announced the restatement on the same day as an earnings announcement, and 0 otherwise.<sup>15</sup>

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<sup>15</sup> About 20 percent of the 282 restatement observations in my sample were announced on the same day as an earnings announcement.

Since the market reaction to income-decreasing restatements is likely to be more negative than the reaction to neutral or income-increasing restatements (Palmrose *et al.* 2004), managers should be more likely to mix income-decreasing restatement announcements with earnings news. Consequently, I anticipate a significantly positive coefficient on NEG\_IMPACT, *ceteris paribus*. This model also assesses the impact of restatement disclosure method (FILED\_8K and NO\_AMEND), restatement materiality (ABS\_IMPACT, NUM\_YRS, PERVASIVE, SEC, IC\_WEAK), and governance (CEO\_CHAIR, BOARD\_IND) on the decision to mix restatement news and earnings news. PERVASIVE, the number of financial-statement categories that were misstated; SEC, an indicator variable signifying the direct involvement of the SEC in the restatement; and IC\_WEAK, an indicator variable that represents whether the firm disclosed a material weakness in internal controls in connection with the restatement. Finally, I control for leverage (LEV), operating performance (ROA), growth expectations (M/B), earnings variability (EARN\_VAR), and firm size (LOGTA) in all the regression models (Lougee and Marquardt 2004). The possibility of violating debt covenants may influence highly levered firms' disclosure behavior. Moreover, a desire to sustain recent firm performance, growth expectations, or earnings smoothness could motivate managers' choices about how openly to disclose a restatement.

I use duration analysis to test Hypothesis 2 concerning the impact of restatement direction on the timeliness of the restatement announcement. Duration or survival analysis has become an increasingly common statistical method in the economic literature for analyzing duration data such as the length of an unemployment spell (Kiefer 1988). The central concept in duration analysis is estimating the conditional probability of an event taking place at time  $t + \delta$ , given that the event has not yet taken place in time  $t$ . For example, the hazard model in this

paper estimates the probability that a restatement will be announced 120 days after the end of last period misstated, given that no announcement has been made by the 119<sup>th</sup> day. The results of the model are analogous to an “instantaneous rate of change” in restatement announcement probability. One commonly used method of duration analysis that examines the effects of multiple continuous or categorical predictors is a Cox proportional hazard model. The hazard rate at time  $t$  is defined as:

$$h(t) = \frac{\text{probability of failing between times } t \text{ and } t + \delta}{(\delta)(\text{probability of failing after time } t)}$$

I define the hazard rate as a function of the baseline hazard ( $h_0$ ) at time  $t$  and the effects of the following explanatory variables:

$$h(t) = h_0(t) \exp(\beta_1 \text{IMPACT\_RE}_{j,t} + \beta_2 \text{NEG\_IMPACT}_{j,t} + \beta_3 \text{NUM\_YRS}_{j,t} + \beta_4 \text{PERVASIVE}_{j,t} + \beta_5 \text{SEC}_{j,t} + \beta_6 \text{IC\_WEAK}_{j,t} + \beta_7 \text{LEASES}_{j,t} + \beta_8 \text{+FILED\_8K}_{j,t} + \beta_9 \text{NO\_AMEND}_{j,t} + \beta_{10} \text{CEO\_CHAIR}_{j,t} + \beta_{11} \text{BOARD\_IND}_{j,t} + \beta_{12} \text{LEV}_{j,t} + \beta_{13} \text{ROA}_{j,t} + \beta_{14} \text{M/B}_{j,t} + \beta_{15} \text{EARN\_VAR}_{j,t} + \beta_{16} \text{LOGTA}_{j,t}) \quad (2)$$

The Cox regression method uses nonparametric estimation to obtain maximum likelihood estimates of the  $\beta$  parameters in the model. An advantage of this method is its insensitivity to the specification of a functional form for the baseline hazard.<sup>16</sup> The resulting hazard ratios indicate the incremental change in the hazard rate relative to a baseline hazard rate. The hazard model in Equation 2 is derived from the HORIZON variable, which measures the number of days that elapse between the end of the final period misstated and the date of the initial public announcement of the restatement. One of the primary objectives of the SEC’s new rule on 8-K disclosures is to require firms to publicly alert investors of a pending restatement more rapidly than in the past. I expect the magnitude of the restatement ( $\text{ABS\_IMPACT}$ ) to be negatively

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<sup>16</sup> Specification tests are necessary to assure the appropriateness of a proportional hazards model. “Log-log” plots and Kaplan-Meier plots suggest a proportional hazards model is appropriate for this data. (Stata Press 2005)

related to the hazard rate (i.e., larger restatements are delayed longer), and I expect negative restatements (NEG\_IMPACT) and restatements connected to a disclosure of a material weakness in internal controls (IC\_WEAK) to also have longer restatement horizons. In addition, I expect NUM\_YRS and PERVASIVE to be negatively related to the hazard rate because firms may delay the disclosure of more complex restatements for longer periods of time to allow them to assess the impact of the restatement. I include FILED\_8K as an explanatory variable in the model to test whether restatements announced on the new 8-K form are more timely than restatements not announced on an 8-K, and I include NO\_AMEND to examine whether restatements that are less transparent are also less timely. The model also includes the indicator variable SEC and the corporate governance variables, CEO\_CHAIR and BOARD\_IND, but I do not make specific predictions for these variables.

The logit model in Equation 3 tests H3 and investigates the impact of board structure and independence on the choice to openly announce a restatement on a Form 8-K filing:

$$\begin{aligned} \text{FILED\_8K}_{j,t} = & \beta_0 + \beta_1 \text{CEO\_CHAIR}_{j,t} + \beta_2 \text{BOARD\_IND}_{j,t} + \beta_3 \text{ABS\_IMPACT}_{j,t} + \\ & \beta_4 \text{NEG\_IMPACT}_{j,t} + \beta_5 \text{NUM\_YRS}_{j,t} + \beta_6 \text{PERVASIVE}_{j,t} + \beta_7 \text{SEC}_{j,t} + \beta_8 \text{IC\_WEAK}_{j,t} + \\ & \beta_9 \text{LEASES}_{j,t} + \beta_{10} \text{NO\_AMEND}_{j,t} + \beta_{11} \text{LEV}_{j,t} + \beta_{12} \text{ROA}_{j,t} + \beta_{13} \text{M/B}_{j,t} + \\ & \beta_{14} \text{EARN\_VAR}_{j,t} + \beta_{15} \text{LOGTA}_{j,t} + \varepsilon_{j,t} \end{aligned} \quad (3)$$

The dependent variable (FILED\_8K) in Equation 3 is an indicator variable that equals 1 if the restatement was disclosed on an Item 4.02 Form 8-K, and 0 otherwise. Since all restatements in my sample correct accounting errors in the primary financial statements and are announced after the effective date of the SEC's Final Rule on 8-K Disclosures, each restatement should have been disclosed on an 8-K filing. An argument for the immateriality of a restatement that corrects errors in accounting is inconsistent because it indicates managers believed an accounting error was material enough to require a restatement yet immaterial enough to avoid the

need to alert investors to the restatement with a Form 8-K filing. Two variables represent the effect of corporate governance on restatement disclosure choice: CEO\_CHAIR is an indicator variable that equals 1 if the chair of the restating company's board of directors is also the CEO, a proxy for weak corporate governance or the influence of the CEO on the board of directors, and 0 otherwise; and BOARD\_IND is the proportion of the company's board of directors that is comprised of outsiders. I expect firms with weak corporate governance to be less likely to disclose a restatement on a Form 8-K. ABS\_IMPACT is the absolute value of the cumulative impact of the restatement as a percentage of retained earnings, and NEG\_IMPACT is an indicator variable that equals 1 if the cumulative effect of the restatement on retained earnings is negative, and 0 otherwise.

Several categorical variables also capture the materiality of the restatement in Equation 3: NUM\_YRS, the number of periods corrected by the restatement; PERVASIVE, the number of financial statement categories that were misstated; SEC, an indicator variable signifying the direct involvement of the SEC in the restatement; and IC\_WEAK, an indicator variable that represents whether the firm disclosed a material weakness in internal controls in connection with the restatement. All else equal, these proxies for restatement materiality should be positively related to the decision to disclose the restatement on an 8-K because failure to properly alert investors of a more material restatement is more likely to attract the scrutiny of investors and regulators. Since a large number of firms were required to restate due to errors in lease accounting in 2005, the potential costs of hiding a restatement disclosure related to lease accounting likely outweigh the benefits. However, since managers may believe lease-related restatements are benign, managers may have feared that investors have a greater chance of negatively misinterpreting these restatements, so I make no specific prediction for lease-related

restatements (LEASES). I also expect the decision to restate openly on a Form 8-K to be positively related to the decision to file amended financial statements with the SEC, so the variable NO\_AMEND (i.e., the absence of an amended filing) is expected to have a negative coefficient. Amended filings are a transparent means of indicating nonreliance on past filings due to the correction of prior errors, and companies that restate transparently will use both an 8-K filing and an amended 10-K/A or 10-Q/A filing.

Finally, I test hypothesis H4 concerning the impact of external monitoring on the choice to restate with or without an 8-K using the full sample of 841 restatements and the following logistic regression model:

$$\begin{aligned} \text{FILED\_8K}_{j,t} = & \beta_0 + \beta_1 \text{NO\_IBES}_{j,t} + \beta_2 \text{BIG4}_{j,t} + \beta_3 \text{NUM\_YRS}_{j,t} + \beta_4 \text{PERVASIVE}_{j,t} + \beta_5 \text{SEC}_{j,t} \\ & + \beta_6 \text{IC\_WEAK}_{j,t} + \beta_7 \text{LEASES}_{j,t} + \beta_8 \text{NO\_AMEND}_{j,t} + \beta_9 \text{LEV}_{j,t} + \beta_{10} \text{ROA}_{j,t} + \\ & \beta_{11} \text{M/B}_{j,t} + \beta_{12} \text{EARN\_VAR}_{j,t} + \beta_{13} \text{LOGTA}_{j,t} + \varepsilon_{j,t} \end{aligned} \quad (4)$$

As in Equation 3, the dependent variable in Equation 4 (FILED\_8K) is an indicator variable that equals 1 if the restatement was disclosed on an Item 4.02 Form 8-K, and 0 otherwise. For reasons discussed above, I expect firms with no analyst following (NO\_IBES) to be more likely to attempt to quietly disclose a restatement without an 8-K filing. I predict a positive association for BIG4 since the Big 4 auditors should be more likely to comply with the SEC rule, either because of superior understanding of SEC rules or because they may face a more serious reputational penalty for allowing clients to restate quietly. The predictions for the other variables in the model are the same as those for Equation 3. The next section discusses the results of each hypothesis test.

## 5. Multivariate Results

Table 4 presents the results of a logistic regression that predicts announcing an accounting restatement on the same day as an earnings announcement. The results are generally

consistent with Hypothesis H1. The significantly positive coefficient on NEG\_IMPACT indicates that announcements of restatements that negatively impact retained earnings are more likely to be mixed with earnings announcements than neutral or positive restatements. The odds ratio (2.34) indicates negative restatements are more than twice as likely as neutral and positive restatements to be mixed with earnings announcements.<sup>17</sup> This evidence is consistent with managers' believing they can either reduce the adverse impact of a negative restatement on their stock price or take a "big bath" by mixing restatement news with earnings news. Restatements that correct longer periods of time (NUM\_YRS) and restatements that involve multiple areas in the financial statements (PERVASIVE) are less likely to be announced on the same day as earnings, so the strategy of mixing earnings news with restatement news may primarily involve negative restatements that correct shorter periods of time. The results of this model also indicate that restatements announced on Form 8-Ks are significantly more likely to be mixed with earnings news than restatements announced without an 8-K. This result is consistent with most non-8-K restatements being disclosed on the date of a regular 10-Q or 10-K filing, which rarely coincides with an earnings announcement.

Table 5 presents the results of estimating a proportional hazard model to assess effect of the sign of the restatement on the restatement horizon. Consistent with Hypothesis 2, the results indicate that restatements that negatively impact retained earnings have a significantly longer restatement horizon than restatements with no impact or a positive impact on retained earnings. The 0.73 hazard ratio on NEG\_IMPACT indicates that conditional on not having been announced at time  $t$ , a negative restatement is only 73 percent as likely as a positive restatement to be disclosed at time  $t + \delta$ . A longer restatement horizon is consistent with a less timely public disclosure of the restatement, so this result is consistent with the idea that managers delay the

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<sup>17</sup> The median standardized earnings surprise of firms that mix restatement news and earnings news is positive.

public disclosure of negative restatements incrementally longer than the announcement of neutral or positive restatements. The results in Table 5 also reveal that restatements performed with no 8-K filing or no amended filing have significantly longer restatement horizons than restatements performed with 8-K and amended filings. One of the purposes of the SEC's Final Rule on Form 8-K Disclosures was to improve the timeliness of restatement announcements, and these results suggest that companies that comply with the Final Rule alert investors of restatements more rapidly than firms that do not file a Form 8-K.

The results in Table 6 Panel A generally confirm Hypothesis 3. As hypothesized, board independence is positively related to the decision to openly disclose a restatement on a Form 8-K. The significantly negative coefficient on CEO\_CHAIR suggests that firms whose board chair is also CEO are significantly less likely than firms that separate the board chair and CEO positions to disclose a restatement on a Form 8-K. The odds ratio on CEO\_CHAIR (0.47) indicates that these firms are less than half as likely to disclose a restatement on an 8-K. The proportion of the board that is comprised of outsiders (BOARD\_IND) is positively related to the decision to disclose a restatement on a Form 8-K, but the relation is not statistically significant in this model. The significantly positive coefficient on NEG\_IMPACT indicates that, all else equal, negative restatements are more than twice as likely as neutral or positive restatements to be disclosed on a Form 8-K, consistent with managers' believing that misstatements that overstate income are more material.

Restatements with no amended filings (NO\_AMEND) are less than one-third as likely to have been disclosed on a Form 8-K. The negative relation between NO\_AMEND and FILED\_8K confirms that beyond choosing not to file an 8-K, most companies that do not announce a restatement on an 8-K eventually disclose the restatement only in the footnotes of

regular SEC filings without filing amended financial statements. Restatements that impact more periods (NUM\_YRS), involve SEC intervention (SEC), are connected with a disclosure of a material weakness in internal controls (IC\_WEAK), or relate to errors in lease accounting (LEASES) are more likely to have been disclosed on an 8-K. Restatements involving errors in lease accounting are also nearly three times as likely as non-lease-related restatements to be disclosed openly on an 8-K, possibly because managers view lease-related restatements as “technical” restatements with a low likelihood of a negative investor reaction.

The results in Table 6 Panel B are consistent with the prediction in Hypothesis H4. The significantly negative coefficient on NO\_IBES indicates that firms with no external monitoring by financial analysts are more likely to obscure news of a restatement by choosing not to disclose the restatement on a Form 8-K. Disclosure choices of firms with no analyst following may be influenced by the absence of analysts’ demand for high-quality disclosures or by managers’ beliefs that their disclosures are less likely to be scrutinized by sophisticated investors. Specifically, the odds ratio indicates that firms with no analyst following are just 54 percent as likely to disclose a restatement on an 8-K as those firms that are covered by financial analysts. Similar to the results in Table 6 Panel A, these results indicate that restatements with no amended filings (NO\_AMEND) are less likely to have been disclosed on a Form 8-K. Similar to Table 6 Panel A, restatements correcting more periods (NUM\_YRS), restatements associated with a disclosure of a material weakness in internal controls (IC\_WEAK), and restatements correcting errors in lease accounting (LEASES) are all more likely to be disclosed on a Form 8-K. Together, the results in Table 6 suggest that strong corporate governance and external monitoring by financial analysts increase the transparency and timeliness of restatement disclosures.

## 6. Conclusion

This paper provides new evidence concerning the strategic disclosure of accounting restatements. My sample is comprised of restatements that correct accounting errors in previously issued financial statements and these restatements were announced after a new SEC rule (effective August 24, 2004) intended to make restatement disclosures more timely and transparent to outsiders. I find that income-decreasing restatements are more than twice as likely as neutral or income-increasing restatements to be announced on the same day as an earnings announcement. Using the number of days that elapse between the end of the last period misstated and the date of the initial public disclosure of the restatement, I estimate a hazard model to investigate the determinants of the timeliness of restatement disclosures. After controlling for other determinants of disclosure timeliness, I find that announcements of restatements that negatively impact retained earnings are delayed longer than announcements of restatements that either do not affect or positively affect retained earnings. Also, restatements disclosed on an 8-K are announced significantly closer to the last period misstated, consistent with the SEC's objective to improve the timeliness of restatement announcements. If the chair of the board of directors is also the CEO, then a firm is less than half as likely to openly disclose a restatement on an 8-K as a firm with the board chair and CEO duties filled separately. Finally, firms monitored by financial analysts are significantly more likely to openly disclose a restatement with an 8-K. This finding is consistent with the idea that external monitoring by analysts makes firms less likely to attempt to obscure bad news.

This paper extends the prior literatures on strategic disclosure and accounting restatements by providing empirical evidence that external monitoring, corporate governance, and the direction of a restatement all influence restatement disclosure strategy. Holding

materiality of the restatement constant, I document significant differences between firms that do or do not disclose accounting restatements in a transparent and timely manner. I also provide evidence on the impact of the new SEC rule governing restatement disclosure practices. While it appears that many firms circumvented the disclosure requirements by failing to file an Item 4.02 8-K, firms that complied with the 8-K filing requirement made significantly more timely disclosures of restatements than firms that restated without an 8-K. Strong corporate governance and external monitoring are associated with greater compliance with the SEC disclosure rule, resulting in more timely and transparent restatement disclosures. Future research may investigate the impact of restatement disclosure choices on the market reaction to restatement news.

## References

- Aboody, D. and R. Kasznik. 2000. CEO stock option awards and the timing of corporate voluntary disclosures. *Journal of Accounting and Economics* 29: 73-100.
- Ajinkya, B., Bhojraj, S., and Sengupta, P. 2005. The association between outside directors, institutional investors, and the properties of management earnings forecasts. *Journal of Accounting Research* Vol. 43 No.3 (June): 343-375.
- Audit Analytics. 2006. Financial restatements dashboard: annual results for 2001-2005, analysis of first 6 months of 2006. p. 5
- Bagnoli, M., Clement, M., and Watts, S.G. 2006. Around-the-clock media coverage and the timing of earnings announcements. Working paper. The University of Texas at Austin.
- Bloomfield, R.J. 2002. The “incomplete revelation hypothesis” and financial reporting. *Accounting Horizons*. Vol. 16 No. 3 (September): 233-243.
- Botosan, C.A. 1997. Disclosure level and the cost of equity capital. *The Accounting Review* Vol. 72, No. 3 (July): 323-349.
- Botosan, C.A. and M.A. Plumlee. 2002. A re-examination of disclosure level and expected cost of equity capital. *Journal of Accounting Research* Vol. 40, No. 1 (March): 21-40.
- Burns, Natasha and Simi Kedia. 2006. The impact of performance-based compensation on misreporting. *Journal of Financial Economics* 79: 35-67.
- DellaVigna, S. and J. Pollet. 2005. Investor inattention, firm reaction, and Friday earnings announcements. Working paper. UC Berkeley and NBER.
- Desai, H., Hogan, C.E., and Wilkins, M.S. 2006. The reputational penalty for aggressive accounting: earnings restatements and management turnover. *The Accounting Review* Vol. 81 Issue 1 (January): 83-112.
- Eng, L.L. and Y.T. Mak. 2003. Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy* 22: 325-345.
- Ertimur, Y., Sletten, E., and Sunder, J. 2006. Voluntary disclosure strategy around IPO lockup expirations. Working paper. Northwestern University, Kellogg School of Management.
- Field, L., Lowry, M., and Shu, S. 2005. Does disclosure deter or trigger litigation? *Journal of Accounting and Economics* 39: 487-507.
- Fields, T.D., Lys, T.Z., and Vincent, L. 2001. Empirical research on accounting choice. *Journal of Accounting and Economics* 31: 255-307.

- Frederickson, J.R. and J.S. Miller. 2004. The effects of pro forma earnings disclosures on analysts' and nonprofessional investors' equity valuation judgments. *The Accounting Review* Vol. 79 No.3: 667-686.
- Glass, Lewis & Co. Restatements trend alert: getting it wrong the first time. March 2, 2006.
- Gleason, C.A., Jenkins, N.T., and Johnson, W.B. 2004. Financial statement credibility: the contagion effects of accounting restatements. Working paper. University of Iowa.
- Graham, J.R., Harvey, C.R., and Rajgopal, S. 2005. The economic implications of corporate financial reporting. *Journal of Accounting and Economics* 40: 3-73.
- Healy, P.M. and K.G. Palepu. 2001. Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature. *Journal of Accounting and Economics* 31, pp. 405-440.
- Hirshleifer, D. and S.H. Teoh. 2003. Limited attention, information disclosure, and financial reporting. *Journal of Accounting and Economics* 36, pp. 337-386.
- Hirst, D.E. and P.E. Hopkins. 1998. Comprehensive income reporting and analysts' valuation judgments. *Journal of Accounting Research* 36 (Supplement): 47-75.
- Hong, H., Lim, T., and Stein, J.C. 2000. Bad news travels slowly: size, analyst coverage, and the profitability of momentum strategies. *The Journal of Finance* Vol. LV, No.1 (February): 265-295.
- Huber, P. J. 1967. The behavior of maximum likelihood estimates under nonstandard conditions. *Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability* 1: 221-223.
- Karamanou, I. and N. Vafeas. 2005. The association between corporate boards, audit committees, and management earnings forecasts: an empirical analysis. *Journal of Accounting Research* Vol. 43 No.3 (June): 453-486.
- Kasznik, R. and B. Lev. 1995. To warn or not to warn: management disclosures in the face of an earnings surprise. *The Accounting Review* Vol. 70 No.1 (January): 113-134.
- Kiefer, N.M. 1988. Economic duration data and hazard functions. *Journal of Economic Literature* Vol. XXVI (June): 646-679.
- Kothari, S.P., Shu, S., and Wysocki, P. 2005. Do managers withhold bad news? Working paper. MIT Sloan School of Management.
- Lansford, B.N. 2006. Strategic coordination of good and bad news disclosures: the case of voluntary patent disclosures and negative earnings surprises. Working paper. Northwestern University.

- Lougee, B.A. and C.A. Marquardt. 2004. Earnings informativeness and strategic disclosure: an empirical examination of “pro forma” earnings. *The Accounting Review* Vol. 79 No.3: 769-795.
- Maines, L.A. and L.S. McDaniel. 2000. Effects of comprehensive-income characteristics on nonprofessional investors’ judgments: the role of financial-statement presentation format. *The Accounting Review*. Vol. 75 No. 2 (April): 179-207.
- Moyer, R.C., Chatfield, R.E, and Sisneros, P.M. 1989. Security analyst monitoring activity: agency costs and information demands. *Journal of Financial and Quantitative Analysis* Vol. 24 No.4 (December): 503-512.
- Palmrose, Z.V., Richardson, V.J., and Scholz, S. 2004. Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics* 37: 59-89.
- Patell, J.M. and M.A. Wolfson. 1982. Good news, bad news, and the intraday timing of corporate disclosures. *The Accounting Review* Vol. LVII No.3 (July): 509-527.
- Rogers, W. H. 1993. Regression standard errors in clustered samples. *Stata Technical Bulletin* 13: 19-23.
- Roulstone, D.T. 2003. Analyst following and market liquidity. *Contemporary Accounting Research* Vol. 20 No. 3 (Fall): 551-578.
- Securities and Exchange Commission. 2004. *Final Rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date*. Washington, DC: Government Printing Office.
- Skinner, D.J. 1994. Why firms voluntarily disclose bad news. *Journal of Accounting Research* Vol. 32 No. 1 (Spring): 38-60.
- Srinivasan, S. 2005. Consequences of financial reporting failure for outside directors: evidence from accounting restatements and audit committee members. *Journal of Accounting Research* Vol. 43 No. 2 (May): 291-334.
- Stata Press. 2005. Stata survival analysis and epidemiological tables. Reference manual, copyright 2005 by StataCorp LP: 120-163.
- Tse, S., and J.W. Tucker. 2006. Industry-wide dynamics in earnings warnings. Working paper. Texas A&M University.
- White, H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* (May): 817-838.

**APPENDIX**  
Variable Definitions (alphabetical)

- ABS\_IMPACT** is the absolute value of the cumulative impact of the restatement, as a proportion of retained earnings. The author hand-collected this information from SEC filings pertaining to the restatement.
- ANNUAL** is an indicator variable that equals 1 if the restatement corrects at least one annual (10-K) filing, and 0 if the restatement corrects only interim (10-Q) filings.
- ASSETS** is the dollar value (in millions) of total assets (Compustat item 6) as reported in the last 10-K filing prior to the restatement announcement.
- BIG4** is an indicator variable that equals 1 if the restating firm was audited by a Big 4 auditor in the year prior to the restatement announcement and 0 otherwise.
- BOARD\_IND** is the proportion of the board of directors that were outside members in the year prior to the restatement announcement, as defined by Board Analyst.
- CEO\_CHAIR** is an indicator variable that equals 1 if Board Analyst reports that the CEO of the restating company is also the chair of the board of directors and 0 otherwise.
- EARN\_ANNC** is an indicator variable that equals 1 if news of a restatement was publicly disclosed on the same day as an earnings announcement and 0 otherwise.
- EARN\_VAR** is the standard deviation of income before extraordinary items (Compustat item 18) for the three years prior to the year of the restatement announcement. In the regression models, this variable is rank transformed to lie between 0 and 1.
- FILED\_8K** is an indicator variable that equals 1 if the restatement was disclosed on an Item 4.02 Form 8-K (as required by the SEC's Final Rule on 8-K Disclosures for all material restatements) and 0 otherwise.
- HORIZON** is the number of days elapsed between the last day of the final period misstated and the date of the initial public disclosure of the restatement.
- IC\_WEAK** is an indicator variable that equals 1 if the restating company disclosed a material weakness in internal controls in connection with the restatement and 0 otherwise.
- IMPACT\_RE** is the cumulative impact of the restatement, as a proportion of retained earnings. The author hand-collected this information from SEC filings pertaining to the restatement.
- LEASES** is an indicator variable that equals 1 if the restatement was related to errors in accounting for leases and 0 otherwise.
- LEV** is long-term debt (Compustat item 9) plus debt in current liabilities (Compustat item 34) scaled by total assets (Compustat item 6), as reported on the last annual filing before the restatement announcement.
- LOGTA** is the natural log of total assets (Compustat item 6), as reported on the last annual filing before the restatement announcement.
- M/B** is the market-to-book ratio, defined as the market value of equity (Compustat item 25 multiplied by item 199) divided by the book value of equity (Compustat item 60), as reported in the last annual filing before the restatement announcement.
- MVE** is the market value of equity (Compustat item 25 multiplied by item 199), as reported in the last annual filing before the restatement announcement.
- NEG\_IMPACT** is an indicator variable that equals 1 if the cumulative impact of the restatement on retained earnings is negative and 0 if the restatement does not impact retained earnings or has a positive cumulative impact on retained earnings.

**NO\_AMEND** is an indicator variable that equals 1 if the restatement was performed without filing any amended forms (e.g., 10-K/A or 10-Q/A) and 0 otherwise. Companies that restate previously issued financial statements without amended forms make their corrections in regularly scheduled 10-Q or 10-K filings.

**NO\_IBES** is an indicator variable that equals 1 if no analyst in the IBES database was following the restating firm in the month prior to the restatement announcement and 0 otherwise.

**NUM\_YRS** is the cumulative number of misstated periods corrected by the restatement. Each annual period restated is a value of 1 and each additional interim period restated is 0.25.

**PERVASIVE** is the number of financial statement categories affected by the restatement (e.g., expense recognition, inventory, revenue recognition, etc.). See Table 1 Panel C for a full list of restatement categories.

**ROA** is return on assets, defined as income before extraordinary items (Compustat item 18) scaled by total assets (Compustat item 6), as reported on the last annual filing before the restatement announcement.

**SEC** is an indicator variable that equals 1 if the Securities and Exchange Commission (SEC) was directly involved in the restatement (informal inquiry or formal investigation) and 0 otherwise.

**TABLE 1**  
*Distribution of Restatement Sample*

**Panel A: Distribution of restatement announcements by calendar quarter**

<b>Calendar Quarter</b>	<b>Restatement Observations</b>	<b>Percent Announced on Form 8-K Filings</b>
2004 Q3	32	75%
2004 Q4	115	82%
2005 Q1	301	77%
2005 Q2	177	72%
2005 Q3	104	65%
2005 Q4	112	78%
Total	841	

**Panel B: Distribution of restatements by industry**

<b>Industry<sup>a</sup></b>	<b>Restatement Observations</b>	<b>Percent of Sample</b>
Agriculture, Mining, and Construction	42	5%
Manufacturing Consumer	83	10%
Manufacturing Industrial	195	23%
Transportation, Communication, Electric, Gas, Sanitary Services	89	11%
Wholesale and Retail Trade	184	22%
Finance, Insurance, Real Estate	112	13%
Miscellaneous Services	102	12%
Professional Services	34	4%
Total	841	100%

**Panel C: Distribution of restatements by restatement category**

<b>Restatement Category<sup>b</sup></b>	<b>Restatement Observations</b>	<b>Percent of Sample</b>
Expense Recognition	255	30%
Misclassification	135	16%
Revenue Recognition	97	12%
Equity	89	11%
Tax Accounting	70	8%
Equity - Other Comp. Income	52	6%
Acquisitions / Investments	38	5%
Capital Assets	34	4%
Inventory	24	3%
Liabilities / Contingencies	13	2%
Other	20	2%
Reserves / Allowances	14	2%
Total	841	100%

Table 1 continued

**Panel D: Distribution of restatements by stock exchange**

<b>Stock Exchange</b>	<b>Restatement Observations</b>	<b>Percent of Sample</b>
AMEX	91	11%
NASDAQ	418	50%
NYSE	309	37%
OTC	23	3%
Total	841	100%

<sup>a</sup> Industry categorizations are based on descriptions of major divisions of Standard Industrial Classification (SIC) codes.

<sup>b</sup> Restatement categories are defined by Glass, Lewis & Co.

**TABLE 2**  
*Descriptive Statistics for Full Restatement Sample*

**Panel A: Univariate statistics for continuous variables**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Q1</b>	<b>Q3</b>	<b>Stdev</b>
HORIZON	841	249	168	131	393	172
NUM_YRS	841	2.07	2.00	1.00	3.00	1.32
PERVASIVE	841	1.61	1.00	1.00	2.00	1.09
LEV	841	0.25	0.19	0.03	0.38	0.24
ROA	841	-0.03	0.01	-0.03	0.05	0.23
M/B	841	2.86	2.00	1.29	3.31	10.50
EARN_VAR	841	107.17	10.51	3.46	39.79	436.24
ASSETS (\$mm)	841	6,116	452	109	1,802	43,628
MVE (\$mm)	841	2,688	374	102	1,362	15,893

**Panel B: Mean and median tests for continuous variables**

<b>Variable</b>	<b>Restatement Disclosure Choice</b>		<b>Mean Test</b>	<b>Median Test</b>
	<b>Yes 8-K (n=632)</b>	<b>No 8-K (n=209)</b>		
Restatement Horizon (HORIZON)				
Mean	208	372	10.92***	
Median	154	400		11.41***
Number of Periods Restated (NUM_YRS)				
Mean	2.17	1.75	-4.56***	
Median	2.00	2.00		-3.67***
Number of Areas Restated (PERVASIVE)				
Mean	1.66	1.44	-2.67***	
Median	1.00	1.00		-3.00***
Financial Leverage (LEV)				
Mean	0.25	0.24	-0.24	
Median	0.18	0.22		0.27
Return on Assets (ROA)				
Mean	-0.03	-0.04	-0.72	
Median	0.02	0.01		-1.31
Market-to-Book (M/B)				
Mean	2.84	2.94	0.13	
Median	2.05	1.91		-0.46
Ranked Earnings Variability (EARN_VAR)				
Mean	0.48	0.51	1.35	
Median	0.47	0.52		1.32
Total Assets \$mm (ASSETS)				
Mean	6,368	5,356	-0.42	
Median	448	480		0.19
Market Value of Equity (MVE)				
Mean	2,705	2,637	-0.08	
Median	387	321		0.09

Table 2 continued

**Panel C: Test of differences in the distribution of discrete variables by 8-K disclosure choice**

Variable	Restatement Disclosure Choice		Chi-Square Test
	Yes 8-K (n=632)	No 8-K (n=209)	
Did Not File an Amended 10-K or 10-Q (NO_AMEND=1)			
Observations	258	121	
Percentage of sample	0.41	0.58	p < 0.01
No Analyst Following (NO_IBES=1)			
Observations	166	78	
Percentage of sample	0.26	0.37	p < 0.01
Big 4 Auditor (BIG4=1)			
Observations	533	165	
Percentage of sample	0.84	0.79	p < 0.10
Restatement of Annual Period (ANNUAL=1)			
Observations	494	162	
Percentage of sample	0.78	0.78	ns
SEC Involvement (SEC=1)			
Observations	42	10	
Percentage of sample	0.07	0.05	ns
Internal Control Weakness (IC_WEAK=1)			
Observations	459	75	
Percentage of sample	0.73	0.36	p < 0.01
Lease Accounting Related (LEASES=1)			
Observations	175	35	
Percentage of sample	0.28	0.17	p < 0.01

**Panel D: Comparison of industry composition by 8-K disclosure choice**

Industry <sup>a</sup>	Restatement Disclosure Choice		Z-stat
	Yes 8-K (n=632)	No 8-K (n=209)	
Agriculture, Mining, and Construction			
Percentage of total observations in industry	3.96%	7.18%	0.46
Number of observations	25	15	
Manufacturing Consumer			
Percentage of total observations in industry	9.81%	10.05%	0.03
Number of observations	62	21	
Manufacturing Industrial			
Percentage of total observations in industry	21.68%	27.75%	0.92
Number of observations	137	21	

Table 2 continued

<b>Industry<sup>a</sup></b>	<b>Restatement Disclosure Choice</b>		<b>Z-stat</b>
	<b>Yes 8-K (n=632)</b>	<b>No 8-K (n=209)</b>	
<b>Transportation, Communication, Electric, Gas, Sanitary</b>			
Percentage of total observations in industry	9.49%	13.88%	0.63
Number of observations	60	29	
<b>Wholesale and Retail Trade</b>			
Percentage of total observations in industry	23.73%	16.27%	-0.95
Number of observations	150	34	
<b>Finance, Insurance, Real Estate</b>			
Percentage of total observations in industry	14.24%	10.53%	-0.46
Number of observations	90	22	
<b>Miscellaneous Services</b>			
Percentage of total observations in industry	12.82%	10.05%	-0.35
Number of observations	81	21	
<b>Professional Services</b>			
Percentage of total observations in industry	3.96%	3.83%	-0.02
Number of observations	25	8	
Chi-square test of differences in overall distribution (9 degrees of freedom) = 16.42*			

\*\*\*, \*\*, \* indicate statistical significance at the 0.01, 0.05, and 0.10 levels respectively.

<sup>a</sup> Industry categorizations are based on descriptions of major divisions of Standard Industrial Classification (SIC) codes.

See Appendix for definitions of all variables.

**TABLE 3**

*Descriptive Statistics for Subsample of Restatement Observations that Includes the Direction and Impact of the Restatement and Corporate Governance*

**Panel A: Comparison of means and medians of continuous variables**

<b>Variable</b>	<b>Yes 8-K (n=229)</b>		<b>No 8-K (n=53)</b>		<b>Mean Test</b>	<b>Median Test</b>
	<b>Mean</b>	<b>Median</b>	<b>Mean</b>	<b>Median</b>		
IMPACT_RE (%)	-0.07	-0.01	-0.02	-0.001	2.31**	2.35***
NUM_YRS	2.51	2.75	1.88	2.00	-3.09***	-3.07***
HORIZON	221	159	353	312	4.08***	4.76***
PERVASIVE	1.72	1.00	1.66	1.00	-0.35	-0.45
BOARD_IND	0.67	0.67	0.66	0.67	-0.33	-0.15
LEV	0.24	0.21	0.23	0.20	-0.09	-0.51
ROA	0.03	0.03	0.02	0.02	-0.19	0.33
M/B	2.42	2.06	3.23	2.19	1.08	1.36
EARN_VAR	0.63	0.66	0.67	0.72	1.18	1.41
ASSETS (\$mm)	15,064	1,778	12,211	1,548	-0.39	0.03
MVE (\$mm)	5,994	1,378	4,733	1,666	-0.57	1.04

**Panel B: Test of differences in the distribution of discrete variables by 8-K disclosure choice**

<b>Variable</b>	<b>Restatement Disclosure Choice</b>		<b>Chi-Square Test</b>
	<b>Yes 8-K (n=229)</b>	<b>No 8-K (n=53)</b>	
Did Not File an Amended 10-K or 10-Q (NO_AMEND=1)			
Observations	109	32	
Percentage of sample	0.48	0.60	p < 0.10
No Analyst Following (NO_IBES=1)			
Observations	16	3	
Percentage of sample	0.07	0.06	ns
Big 4 Auditor (BIG4=1)			
Observations	223	51	
Percentage of sample	0.97	0.96	ns
Income decreasing restatemet (NEG_IMPACT=1)			
Observations	163	27	
Percentage of sample	0.71	0.51	p < 0.01
Restatement of Annual Period (ANNUAL=1)			
Observations	191	39	
Percentage of sample	0.83	0.74	ns
SEC Involvement (SEC=1)			
Observations	25	3	
Percentage of sample	0.11	0.06	ns
Internal Control Weakness (IC_WEAK=1)			
Observations	161	25	
Percentage of sample	0.70	0.47	p < 0.01

Table 3 continued

Variable	Restatement Disclosure Choice		
	Yes 8-K (n=229)	No 8-K (n=53)	Yes 8-K (n=229)
Lease Accounting Related (LEASES=1)			
Observations	94	13	
Percentage of sample	0.41	0.25	p < 0.05
CEO Duality (CEO_CHAIR=1)			
Observations	143	39	
Percentage of sample	0.62	0.74	ns

\*\*\*, \*\*, \* indicate statistical significance at the 0.01, 0.05, and 0.10 levels respectively.

These descriptive statistics are for a subsample of 282 restatement observations for which I hand collect detailed information about the magnitude and direction of the restatement. This sample also includes data on corporate governance from Board Analyst.

See Appendix for all definitions of variables.

**TABLE 4***Predicting Mixing Restatement News with Earnings News*

$$\text{EARN\_ANNC}_{j,t} = \beta_0 + \beta_1 \text{ABS\_IMPACT}_{j,t} + \beta_2 \text{NEG\_IMPACT}_{j,t} + \beta_3 \text{NUM\_YRS}_{j,t} + \beta_4 \text{PERVASIVE}_{j,t} + \beta_5 \text{SEC}_{j,t} + \beta_6 \text{IC\_WEAK}_{j,t} + \beta_7 \text{FILED\_8K}_{j,t} + \beta_8 \text{NO\_AMEND}_{j,t} + \beta_9 \text{CEO\_CHAIR}_{j,t} + \beta_{10} \text{BOARD\_IND}_{j,t} + \beta_{11} \text{LEV}_{j,t} + \beta_{12} \text{ROA}_{j,t} + \beta_{13} \text{M/B}_{j,t} + \beta_{14} \text{EARN\_VAR}_{j,t} + \beta_{15} \text{LOGTA}_{j,t} + \varepsilon_{j,t}$$

<b>Independent Variable</b>	<b>Predicted Sign</b>	<b>Odds Ratio</b>	<b>Estimate</b>	<b>Std Error</b>
<b><i>Restatement Attributes</i></b>				
ABS_IMPACT	+	1.61	0.47	0.40
NEG_IMPACT	+	2.34	0.85**	0.41
NUM_YRS	?	0.75	-0.28**	0.14
PERVASIVE	?	0.70	-0.35*	0.19
SEC	?	1.39	0.33	0.57
IC_WEAK	?	0.69	-0.37	0.35
<b><i>Restatement Disclosure Choice</i></b>				
FILED_8K	+	5.53	1.71***	0.62
NO_AMEND	-	0.80	-0.23	0.37
<b><i>Governance</i></b>				
CEO_CHAIR	?	0.82	-0.19	0.33
BOARD_IND	?	0.59	-0.53	0.94
<b><i>Control Variables</i></b>				
LEV	?	1.99	0.69	1.02
ROA	?	1.66	0.51	2.64
M/B		0.99	-0.01	0.01
EARN_VAR	?	0.31	-1.18	0.90
LOGTA	?	1.22	0.20	0.14
Sample Size	282			
Pseudo R-Square	0.11			

The logistic regression model in Table 4 examines the relation between the choice to mix the public announcement of a restatement with an earnings announcement and restatement direction. In all regressions, robust standard errors are estimated using the Huber (1967) / White (1980) procedure, with firm-level clustering (Rogers 1993). The results of this regression show that restatements that negatively affect retained earnings are more than twice as likely as zero- or positive-impact restatements to be publicly disclosed on the same day as an earnings announcement.

\*\*\*, \*\*, \* indicate statistical significance at the 0.01, 0.05, and 0.10 levels respectively.

See Appendix for definitions of variables.

**TABLE 5**  
*Hazard Model Estimating Restatement Disclosure Timeliness*

$$h(t) = h_0(t) \exp(\beta_1 \text{IMPACT\_RE}_{j,t} + \beta_2 \text{NEG\_IMPACT}_{j,t} + \beta_3 \text{NUM\_YRS}_{j,t} + \beta_4 \text{PERVASIVE}_{j,t} + \beta_5 \text{SEC}_{j,t} + \beta_6 \text{IC\_WEAK}_{j,t} + \beta_7 \text{LEASES}_{j,t} + \beta_8 \text{FILED\_8K}_{j,t} + \beta_9 \text{NO\_AMEND}_{j,t} + \beta_{10} \text{CEO\_CHAIR}_{j,t} + \beta_{11} \text{BOARD\_IND}_{j,t} + \beta_{12} \text{LEV}_{j,t} + \beta_{13} \text{ROA}_{j,t} + \beta_{14} \text{M/B}_{j,t} + \beta_{15} \text{EARN\_VAR}_{j,t} + \beta_{16} \text{LOGTA}_{j,t})$$

Independent Variable	Predicted Sign	Hazard Ratio	Estimate	Std Error
<b><i>Restatement Attributes</i></b>				
ABS_IMPACT	-	1.09	0.08	0.19
NEG_IMPACT	-	0.73	-0.32**	0.15
NUM_YRS	-	0.97	-0.03	0.05
PERVASIVE	-	0.99	-0.01	0.05
SEC	?	0.86	-0.15	0.22
IC_WEAK	-	0.94	-0.06	0.13
<b><i>Restatement Disclosure Choice</i></b>				
FILED_8K	+	2.40	0.87***	0.16
NO_AMEND	-	0.69	-0.37***	0.13
<b><i>Governance</i></b>				
CEO_CHAIR	-	1.20	0.18	0.15
BOARD_IND	+	1.49	0.40	0.40
<b><i>Control Variables</i></b>				
LEV	?	2.13	-0.75**	0.35
ROA	?	1.30	0.26	0.92
M/B	?	0.99	-0.01	0.03
EARN_VAR	?	0.86	-0.15	0.40
LOGTA	?	1.04	0.04	0.06
Sample Size	282			
LR (chi-sq 16)	56.00			
Prob > chi-sq	0.000			

The hazard model in Table 5 examines the relation between the timeliness of restatement disclosures (i.e., restatement horizon) and restatement direction and disclosure strategy. The results of this hazard model show that announcements of restatements that negatively impact retained earnings are delayed significantly longer than restatements with no impact or a positive impact on retained earnings. Additionally, restatements announced on an 8-K filing are significantly more timely (i.e., shorter restatement horizon) than restatements performed without an 8-K filing, and restatements performed without an amended filing are less timely than those performed with an amended filing.

\*\*\*, \*\*, \* indicate statistical significance at the 0.01, 0.05, and 0.10 levels respectively.

See Appendix for definitions of variables.

**TABLE 6**  
*Logistic Regression Predicting Restatement Disclosure Transparency*

**Panel A: The Impact of Corporate Governance on Disclosure Transparency**

$$\text{FILED\_8K}_{j,t} = \beta_0 + \beta_1 \text{CEO\_CHAIR}_{j,t} + \beta_2 \text{BOARD\_IND}_{j,t} + \beta_3 \text{ABS\_IMPACT}_{j,t} + \beta_4 \text{NEG\_IMPACT}_{j,t} + \beta_5 \text{NUM\_YRS}_{j,t} + \beta_6 \text{PERVASIVE}_{j,t} + \beta_7 \text{SEC}_{j,t} + \beta_8 \text{IC\_WEAK}_{j,t} + \beta_9 \text{LEASES}_{j,t} + \beta_{10} \text{NO\_AMEND}_{j,t} + \beta_{11} \text{LEV}_{j,t} + \beta_{12} \text{ROA}_{j,t} + \beta_{13} \text{M/B}_{j,t} + \beta_{14} \text{EARN\_VAR}_{j,t} + \beta_{15} \text{LOGTA}_{j,t} + \varepsilon_{j,t}$$

Independent Variable	Predicted Sign	Odds Ratio	Estimate	Std Error
<i><b>Governance</b></i>				
CEO_CHAIR	-	0.46	-0.77**	0.39
BOARD_IND	+	3.43	1.23	1.16
<i><b>Restatement Attributes</b></i>				
ABS_IMPACT	+	2.61	0.96	1.13
NEG_IMPACT	+	2.44	0.89**	0.39
NUM_YRS	+	1.24	0.22*	0.13
PERVASIVE	+	0.88	-0.13	0.15
SEC	+	3.03	1.11*	0.61
IC_WEAK	+	3.57	1.27***	0.42
LEASES	?	2.91	1.07**	0.48
<i><b>Restatement Disclosure Choice</b></i>				
NO_AMEND	-	0.29	-1.25***	0.44
<i><b>Control Variables</b></i>				
LEV	?	0.85	-0.16	1.14
ROA	?	2.87	1.05	2.86
M/B	?	1.00	0.002	0.01
EARN_VAR	?	0.26	-1.34	0.98
LOGTA	?	1.11	0.11	0.14
Sample Size	282			
Pseudo R-Square	0.17			

The logistic regression model in Table 6 Panel A examines the relation between corporate governance and restatement disclosure strategy. In all regressions, robust standard errors are estimated using the Huber (1967) / White (1980) procedure, with firm-level clustering (Rogers 1993). The results of this regression show that firms at which the chair of the board of directors also functions as the CEO are less than half as likely to transparently announce a restatement on a Form 8-K filing. Firms that restate without filing an amended 10-K or 10-Q are also less likely to alert investors of the restatement on an 8-K filing. Restatements that negatively affect retained earnings are more likely to be disclosed on a Form 8-K.

\*\*\*, \*\*, \* indicate statistical significance at the 0.01, 0.05, and 0.10 levels respectively.

See Appendix for definitions of all variables.

Table 6 continued

**Panel B: The Impact of External Monitoring on Disclosure Transparency**

$$\text{FILED\_8K}_{j,t} = \beta_0 + \beta_1 \text{NO\_IBES}_{j,t} + \beta_2 \text{BIG4}_{j,t} + \beta_3 \text{NUM\_YRS} + \beta_4 \text{PERVASIVE}_{j,t} + \beta_5 \text{SEC}_{j,t} + \beta_6 \text{IC\_WEAK}_{j,t} + \beta_7 \text{LEASES}_{j,t} + \beta_8 \text{NO\_AMEND}_{j,t} + \beta_9 \text{LEV}_{j,t} + \beta_{10} \text{ROA}_{j,t} + \beta_{11} \text{M/B}_{j,t} + \beta_{12} \text{EARN\_VAR}_{j,t} + \beta_{13} \text{LOGTA}_{j,t} + \varepsilon_{j,t}$$

<u>Independent Variable</u>	<u>Predicted Sign</u>	<u>Odds Ratio</u>	<u>Estimate</u>	<u>Std Error</u>
<i>External Monitoring</i>				
NO_IBES	-	0.54	-0.62***	0.23
BIG4	?	0.95	-0.05	0.26
<i>Restatement Attributes</i>				
NUM_YRS	+	1.23	0.21***	0.08
PERVASIVE	+	1.03	0.03	0.09
SEC	+	1.76	0.57	0.38
IC_WEAK	+	4.96	1.60***	0.19
LEASES	?	2.40	0.88***	0.27
<i>Restatement Disclosure Choice</i>				
NO_AMEND	-	0.32	-1.15***	0.20
<i>Control Variables</i>				
LEV	?	1.34	0.29	0.37
ROA	?	0.93	-0.09	0.35
M/B	?	1.00	-0.001	0.01
EARN_VAR	?	0.30	-1.21***	0.48
LOGTA	?	1.04	0.04	0.07
Sample Size	841			
Pseudo R-Square	0.17			

The logistic regression model in Table 6 Panel B examines the relation between external monitoring and restatement disclosure strategy using the full sample of 841 restatement observations. In all regressions, robust standard errors are estimated using the Huber (1967) / White (1980) procedure, with firm-level clustering (Rogers 1993). The results of this regression indicate that firms with no analyst following are only 54 percent as likely to openly disclose a restatement on a Form 8-K as firms with an analyst following. Additionally, firms that do not file amended 10-Ks or 10-Qs when they restate (i.e., less transparent) are also more likely to choose *not* to file a Form 8-K.

\*\*\*, \*\*, \* indicate statistical significance at the 0.01, 0.05, and 0.10 levels respectively.

See Appendix for definitions of all variables.