

The New Form 8-K Disclosures

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Abstract

The Securities and Exchange Commission (SEC) has mandated new disclosure requirements in Form 8-K, which became effective on August 23, 2004. The SEC expanded the list of items that have to be reported and accelerated the timeliness of these reports. This study examines the market reactions to 8-Ks filed under the new SEC regime and investigates whether periodic reports (10-K/Qs) are less informative under the new 8-K disclosure rules than previously. We observe that the newly required 8-K items constitute over half of all filings and that most firms disclose the required items within the new shortened period (four business days). We find that all disclosed items (old and new) are associated with abnormal volume and return volatility around both the event and the SEC filing dates, but also that some items have significant return drifts after the SEC filings. We find that the information content of periodic reports is not diminished by the more expansive and timely 8-K disclosures under the new guidance, suggesting that investors still use them to interpret the possible effects of material events that occurred earlier. We also find that good news reported in Forms 8-K generate greater market reactions on the event date than bad news, likely because of earlier public disclosure of good news by management.

1. Introduction

The SEC requires public companies to file, in a timely fashion, reports of material events. These Form 8-K filings alert shareholders to potentially significant events such as an initiation of bankruptcy proceedings, a change in the certifying accountant, or a significant acquisition of assets. The SEC has recently promulgated a new guidance expanding the scope of events which may trigger the filing of a Form 8-K, and significantly reducing the delay in the filing of such reports (SEC, 2004). The new SEC rule “Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date” introduced or significantly amended twelve items that the commission deemed relevant to the public. It also reorganized all disclosure items into topical categories and shortened the filing deadline for all mandatory items to four business days (from the prior deadlines of between five and fifteen days depending on the item). This study (i) investigates the timeliness of and the market reactions to 8-K reports filed under the new regime, (ii) examines the change in the information content of periodic reports as a result of the expanded disclosure of material events prior to the periodic reports, and (iii) explores the difference in market reactions to good and bad news released in 8-Ks.

We first document the content and timeliness of and the market reactions to Forms 8-K filed under the new SEC regime. Using a large sample of 8-Ks filed in 2005 and 2006 we document that new or largely expanded items (henceforth, referred to together as “new” items) are present in over half of all filings made during this period. We show that the new items have significant information content as measured by the abnormal trading volume and abnormal return volatility around both the event date (the day on which the event occurred, when information may be disclosed to the market through a press release) and the Form 8-K filing date. The majority of the new items also exhibit significant abnormal *signed* stock price reaction around

the event date, the filing date or both (of appropriate direction where the sign could be hypothesized). Additionally, some of the items exhibit significant return drift in the expected direction for up to 90 days after the SEC filings. Similar results are obtained for items which have been previously disclosed in Forms 8-K, indicating that both the new events and those previously disclosed are informative to the market after 2004.

Examining the timeliness of filings under the new guidance, we observe that voluntary and semi-voluntary events are reported in the timeliest manner (consistent with prior literature's results regarding filings made under the old guidance). We find that nearly 95 percent of filings are made within the new four business day deadline, with a third of the timely filings for mandatory items made on the last allowed day. Overall, we conclude that the new SEC guidance has been successful in providing the investing public with relevant information on a timelier basis.

Many of the items disclosed in 8-K filings under the new guidance were previously revealed to the market in periodic 10-K and 10-Q reports. Thus, it is feasible that expanded timely reporting of material items after 2004 reduces the information content of periodic reports. We examine a sample of all 8-Ks, 10-Ks and 10-Qs filed from 1994 through 2007. We observe that the information content of periodic reports, as measured by the abnormal trading volume and the abnormal return volatility around their filing dates, increases over time. The increase is statistically significant around the promulgation of the SEC 8-K guidance in 2004. We conclude that the additional disclosure of material developments via 8-K reports did not reduce the information content of periodic reports, and actually increased it, possibly because investors assess the effects of previously disclosed material events (in 8-Ks) on financial results announced in periodic reports.

Lastly, we examine the signed and unsigned market reactions to events disclosed in 8-K filings separately for good and bad news. In accordance with prior literature we hypothesize that management is more forthcoming in the disclosure of positive news, releasing them to the market earlier. Correspondingly, we find that good news are released to the market faster and generate a greater market reaction at the event date than bad news. This implies that management engages in some voluntary disclosures of good news via press releases or other measures, even prior to the filing of the 8-K (which itself occurs earlier for good news).

Our study contributes to the current literature on Form 8-K filings along several dimensions. First, it examines the information content of the new items that have been added recently to the list of mandatory items. Second, it examines the market reactions not only by signed returns, but also by investigating the association of the new information with contemporaneous return volatility and trading volume, as well as investigating whether there is a drift in returns beyond the SEC filing date, similar to the well documented post earnings announcement drift. Lastly, we examine whether greater event-time disclosure is associated with a decrease in information content of periodic reports, and whether the pattern of market reaction differs between good and bad news. Our study is several orders of magnitude larger than prior studies, encompassing all 8-K filings since 1994, and providing a comprehensive overview of the 120,000 Form 8-K filings from 2005-2006.

The rest of this paper is organized as follows. The next section provides detail on the new SEC Form 8-K guidance, reviews the relevant literature and formulates the research questions for the study. The third section defines our variables and describes our sample. The fourth section presents and discusses our empirical results and the final section concludes.

2. Background and Research Questions

2.1 SEC Guidance

Among the purposes of the Securities Exchange Act of 1934 was the promotion of full public disclosure of relevant company information. The Exchange Act requires firms to disclose information to the public about their financial and managerial conditions that is considered to be ‘material’. Since that time, Form 8-K, the “current report”, has been used by firms to disclose timely information on important changes in its operations or financial condition between periodic reports. Originally, the form had to be filed with the SEC within ten days of the end of any month during which certain significant events occurred. These events included a change in control of the registrant, an acquisition or disposal of assets, bankruptcy or receivership, change in registrant's certifying accountants, resignation of registrant's directors, a change in fiscal year end and other unspecified events deemed important, as well as any related exhibits and financial statements. Two more events were subsequently defined: amendments to or waivers of the company’s code of ethics and a temporary suspension of trading under the company’s employee benefit plans. In the late 1980s, the deadline for filing Forms 8-K for non-voluntary events was shortened to five through fifteen days after the occurrence of the event.¹

In June of 2002, the SEC proposed a rule to increase the number of events reportable on a Form 8-K to twenty two and to shorten the filing deadline for most items to two business days.² The guidance discussion was further influenced by the Sarbanes-Oxley Act [SOX] enacted by Congress in July of 2002. Section 409 of SOX mandates the public disclosure in plain English and “on a rapid and current basis” of all material changes to financial conditions or operations of the firm. Correspondingly, the SEC felt that the proposed amendments for Form 8-K were

¹ SEC Financial Reporting Release No. 34 (1989)

² Proposed Rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date, Release No. 33-8106, Release No. 34-46084 (June 17, 2002)

responsive to the real time issuer disclosure mandated in SOX Section 409. The final rule was issued on March 16, 2004 in an SEC Release 33-8400 with compliance required by August 23, 2004.

The final rule “Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date” (SEC, 2004) made three main amendments to prior guidance. It expanded the scope of the events subject to Form 8-K disclosure, created a new topical format, and shortened the deadline for these filings. As in the proposed rule, the number of reportable events was increased to twenty two. There were eight new mandatory items added to Form 8-K: entry into or termination of a material agreement, creation or increase of an off-balance sheet obligation, exit or disposal activities, material impairments, notice of delisting, and non-reliance on a previously issued reports. In addition, two items were transferred from the periodic 10-Q and 10-K reports to continuous and timely disclosure in the 8-K: unregistered sale of securities and modifications to the rights of security holders, and two more items were expanded to the point of essentially becoming new items: departure of directors and amendments to bylaws. Lastly, several items either remained or were introduced on a voluntary or a semi-voluntary basis: results of operations, Regulation FD disclosure (primarily governed by Regulation FD itself) and other material events. The new set of covered events was further reorganized and renumbered into topical categories (see Appendix 1 for a detailed list of categories and items). The last drastic change introduced by Rule 33-8400 was the shortened filing deadline for Forms 8-K. Although the proposed rule suggested that filings be made within two business days of the event, many of the 85 comment letters received by the SEC expressed apprehension at such a short period. Consequently, the SEC shortened the deadline for all non-voluntary items to four business days following the occurrence of the event. All public domestic companies are required to make their

SEC filings available on EDGAR (the Electronic Data Gathering, Analysis, and Retrieval system), which ensures that the reports are generally available to the public within, at most, one business day of the filing. Thus, the new Form 8-K guidance enables the public to receive information regarding material events within five business days of their occurrence.

2.2 Prior Studies

The majority of prior studies related to Form 8-K examine either auditor related filings or earnings announcements. The auditor related literature examines questions such as whether disclosures of auditor changes are made promptly (Schwartz and Soo [1996], Ettredge et al [2001]) and whether such disclosures have information content (Whisenant et al [2003]). The earnings announcement literature is extensive and addresses issues including the timing of the announcements (Chambers and Penman [1984], Begley and Fischer [1998]), the persistent drift of stock prices subsequent to the announcements (Bernard and Thomas [1989,1990], Collins and Hribar [2000]), and, of course, the market reaction around the earnings announcements. The studies of immediate reaction to earnings announcements examine stock prices (Easton and Zmijewski [1987], Ball and Kothari [1991]), volume and volatility of trading (Beaver [1968], Bamber and Cheon [1995], Landsman and Maydew [2002]), and behavior of sophisticated investors and analysts (Cornell and Landsman [1989], El-Gazzar [1998]). These studies conclude that earnings announcements are valuation relevant and are heavily relied on by market participants. They use the preliminary earnings report date which is available in the Compustat database. This date may or may not be the same date on which a Form 8-K disclosing the new earnings information is filed. In fact, many of the firms have not filed a Form 8-K to disclose their new quarterly or annual earnings prior to 2005, so the earnings-related findings are difficult to generalize to other events disclosed by firms in their Forms 8-K.

A few papers examine all events included in Form 8-K disclosure. Carter and Soo [1999] investigate the timeliness of and the stock price reaction to a sample of 5,736 8-Ks from 1993. They find that a quarter of the sample 8-Ks are filed later than the deadline of five to fifteen days, and that bad (good) news are on average disclosed later (earlier) and with greater instances of deadline non-compliance. Carter and Soo [1999] also observe a strong price reaction around the event date but find that only relatively timely filings (within seven calendar days of the event) exhibit significant price reaction at the filing date. They conclude that the timeliness of a filing determines its informativeness. McLelland [2004] works with the same 1993 sample as Carter and Soo, further amending it with several data requirements, and examines separately three dates relevant for an event warranting a Form 8-K disclosure: the event date, the filing date and the press release date. Examining the trading by small and large investors across these settings he concludes that trading behavior of large vs. small investors differs more for settings where a press release was made and for filings dealings with acquisition and disposal of assets. The last in this group of papers is Pinsker [2006], a descriptive follow up to Carter and Soo's timeliness study in the post SOX era. Using a sample of 462 reportable events from the last three months of 2004 the author finds an improvement in timeliness, with 95% of the Forms 8-K filed within four business days of the event.

Several law journal articles have contrasted the potential costs and benefits of new Form 8-K requirements. For example, Bernstein [2004] points out the complexity of certain transactions and the time it would take to analyze them, determine the necessity of an 8-K, draft the document for SEC submission, review with relevant parties, and file. He hypothesizes that the shortened period will lead to lower quality reports and the sheer increase in Form 8-K filings will reduce the information content of the 8-K filings.

The literature on Forms 8-K is sparse and leaves a lot of room for further investigation. For example, we do not know whether the new disclosure requirements of the SEC beginning in August of 2004 actually improved the information set for investors, or whether the new requirements for timeliness actually make the new Form 8-K disclosures less informative. The literature to date has focused on signed returns to infer whether investors used the information in Forms 8-K. However, in many cases, the direction of the market reaction to the new information is unclear. For example, is the CEO resignation a good or bad signal for investors? It may be a good signal if the CEO's prior performance had been inferior, but a bad signal if the CEO's performance was superior and the CEO is moving to manage a larger competitor. Also, previous studies examine the market reactions to the information disclosed in the Form 8-K, but not whether subsequent market returns tend to drift in the same direction, i.e., whether the reaction to the information is complete at the time of its disclosure. Given the documented evidence of under-reaction to preliminary earnings announcements, it is only natural to ask whether such under-reaction also exists for other Form 8-K events. Similarly, several interesting phenomenon have been observed in periodic reports but have not been examined in the context of 8-K filings. McNichols and Manegold [1983] find that the mandated introduction of quarterly 10-Q filings reduced the information content of annual 10-K reports. This posits a question whether expanded disclosures under Form 8-K filings are also likely to reduce the information content of periodic reports. Furthermore, many papers have examined the manager's incentives to release good news earlier to the market than bad news (e.g. Givoly and Palmon [1982], Begley and Fischer [1998], Graham et al [2005], Kothari et al [2008]), but little is known about differential market reactions to good and bad news reported in Form 8-K. Lastly, prior studies of 8-K filings necessarily used small samples since the required disclosures were hand-collected. Fortunately, we are able to use

a new database that contains all SEC Form 8-K filings, making the process of constructing a large sample to investigate these questions feasible at a low cost.

2.3 Research Questions

Research Question 1a: Are Forms 8-K filed under the new SEC guidance informative to the market?

As discussed previously, the SEC added new Form 8-K items and simultaneously shortened the filing period for these and for the existing items. It is unclear a priori if these additional items are value-relevant to investors, given that they are required to be filed for the first time after 2004. If they were deemed important, these events could have been disclosed prior to 2005 on a voluntary basis. Furthermore, the shorter filing period (to within four business days) may mean more firms are likely to err in their initial filings of both new and existing 8-K items. To address this question, we examine the price and volume reactions to the newly disclosed items, as well the price and volume reactions to the old 8-K items in 2005 and 2006 when the filing period was shortened.³ Furthermore, we examine the delayed stock price reaction to the events reported in Form 8-K, whether these items are newly required or previously disclosed.

Research Question 1b: Are Forms 8-K filed in accordance with the new shortened SEC deadline? Does the timeliness of the filing affect information content?

We extend the prior literature by examining the timeliness of Form 8-K filings given the shortened disclosure period, and the impact of timeliness on the market reaction to filings under the new guidelines. In addition to general tests of compliance with the shortened disclosure period, we examine whether market reactions differ by how timely the disclosure is.

³ Focusing only on the post 2004 period enables us to examine the reaction to various reported events separately. While we do have the data on the filing dates and events dates of 8-K filings prior to August of 2004, the current database does not reliably separate these earlier filings by the event being reported.

Research Question 2: Is the expanded Form 8-K disclosure after 2004 associated with a decrease in information content of periodic reports?

It is possible that the earlier disclosure of material events in Form 8-K filings reduces the information content of periodic reports, especially given the expanded disclosure after 2004. However, it is difficult to appraise the extent and quality of information disclosed in 8-Ks, specifically as compared to what would have been disclosed in periodic reports. First, several of the items newly reported on Forms 8-K after 2004 could have been voluntarily disclosed in earlier years. It is also possible that early disclosure of an event via Form 8-K alerts the market to the presence of a significant material development, but does not provide sufficient detail to accurately evaluate the event's impact. Investors may actually need to pay closer attention to future periodic reports to adequately assess the effects of the event on financial results. In that case, one would expect the reaction to the periodic reports to be even greater than before the expanded Form 8-K disclosures.

Research Question 3: Are "good news" 8-Ks filed sooner after the occurrence of the event and is the market reaction stronger for them on the event date than for "bad news"?

Building upon prior literature on periodic reports, we hypothesize that management files Forms 8-K which report good news sooner after the event date than Forms 8-K which report bad news. We also hypothesize that management is more likely to disclose good news to the market via other channels, such as press releases, while they only disclose the bad news in SEC filings. This management behavior would lead us to observe stronger market reactions on the event date for good news filings than for bad news.

3. Sample Selection and Variables

3.1 Sample Selection

We obtain the initial filings of Forms 8-K, 10-K and 10-Q from the SEC EDGAR database for the years 1994 through 2007.⁴ Unfortunately, the SEC EDGAR database identifies firms according to CIK codes, which are not well-mapped into other databases used in practice and in academe such as Compustat or CRSP. The Standard & Poors' (S&P) Filing Dates database seeks to fill this void⁵. It contains a match between all companies on the Compustat database (identified by GVKEY) with the CIK identifiers on the SEC EDGAR database⁶. The S&P Filing Dates database matches all Compustat firms (by GVKEY) to CIK codes on the SEC EDGAR database as they were known on the Compustat database at the time through the Charter Oak Point-In-Time database, whether those companies are still active or have become inactive due to such events as mergers, acquisitions, going private or bankruptcies.⁷ Thus, it is useful in constructing a universe of firms that professional investors could have actually been using at the time without survivorship bias. The S&P Filing Dates Database includes all EDGAR filings for a firm identified by GVKEY, as well as some information retrieved from these filings. For example, for 10-Q or 10-K forms, the database includes the report date, which is the end of the fiscal period for which the form is filed. For 8-K Forms, the database contains the report date, which is the date on which the disclosed event had occurred, the filing date, and for filings made after August of 2004 the SEC category (or categories, but no more than five categories) of events

⁴ We do not examine amended disclosures by Forms 8-K/A, 10-K/A, 10-Q/A.

⁵ The database is available through WRDS or directly from S&P.

⁶ The database includes all GVKEYs where the market value of the firm's equity at quarter-end exceeded \$1 million.

⁷ The Charter Oak PIT database is a monthly snapshot of what Compustat users would have access to in the Compustat database during that month. It is available through WRDS. For a description of the database see Livnat and Mendenhall [2006].

which were reported by the Form 8-K⁸. We eliminated all filings with missing report dates (end of period dates for 10-Ks and 10-Qs and event dates for 8-Ks) and to exclude late periodic filers we eliminated the 10-Ks (10-Qs) that were filed more than 100 (55) days after the fiscal period end. We matched each GVKEY on Compustat that had a Form 8-K, 10-K or 10-Q filing after 1993 with a PERMNO on CRSP, and retained only identifiable unique observations with valid returns and shares trading data from 1 day before the event date to 1 day after the SEC filing date (where event and filing dates are the same for periodic reports). The description of market reaction variables below provides further details on data validity requirements. Overall, we obtain 346,646 instances of 8-K filings and 275,822 instances of periodic report filings.

For the detailed analysis of the 8-K filings made under the new regime (Research Questions 1a and 1b) we impose an additional data restriction. This sample of 127,273 observations is fairly evenly distributed across the eight calendar quarter of 2005-2006.⁹ The SEC allows a firm to file a single Form 8-K to satisfy one or more disclosure items, provided that the company identifies by item number and caption all applicable items being satisfied and provides all of the substantive disclosure required by each of the items. However, in such a case only one date will be presented on the 8-K as the “Date of Report” which will represent the date of earliest event reported. Alternatively, a company may choose to report material events in separate 8-Ks even when the event date and/or the filing date are identical. Although less than 5% of the 8-Ks in our sample are filed on the same date as another 8-K of the same firm, we create two alternative samples to deal with these potential discrepancies. For analyses dealing with event dates, we create *Sample Event Date*, which merges all identical event dates reported

⁸ The category information for the earlier filings is present in the database but is not reliable.

⁹ The 2007 data were not yet available at the time of the initial analyses of this paper. When addressing questions 2 and 3 we were already able to utilize the 2007 data. We plan to update the analysis of questions 1a and 1b in subsequent drafts.

on multiple Forms 8-K of a given firm filed on the same date, as if the firm had filed a single Form 8-K. The resulting *Sample Event Date* has 125,468 observations. For analyses dealing with filing dates, we create a smaller *Sample Filing Date*, which merges all identical filing dates reported on multiple Forms 8-K of a given firm, as if the firm had filed a single Form 8-K, even if the original Forms 8-K had different event dates. In effect, we merge the multiple contemporaneous Forms 8-K into one observation assigning the earliest “Date of Report” as the event date. The *Sample Filing Date* has 123,890 observations. The detailed 2005-2006 sample includes 5,457 firms, with 20% having fewer than 13 filing-days (days on which they filed at least one 8-K), 42% having 13 through 24 filing-days, 35% having 25 through 49 filings-days, and the remaining 5% having at least 50 and as much as 172 filing-days during the two-year period.

3.2 Measures of Market Reaction

We use abnormal buy and hold stock returns, abnormal trading volume and abnormal stock price volatility as our measures of market reactions to the information in Forms 8-K, and abnormal volume and volatility in Forms 10-K/Q analysis. For the 8-K analysis, we compute these measures on several windows of interest, including three days¹⁰ centered on the event date, three days centered on the filing date and the period from one day prior to the event date through one day after the filing date. For our drift analysis, we compute the abnormal buy and hold returns for the period starting one day after the filing date through 30/60/90 subsequent calendar days.

To estimate the abnormal buy and hold return, we compute the buy and hold return on the individual stock from the first trading day of the period through the last day, and then subtract the buy and hold return on value-weighted portfolio of companies with similar size and book-to-

¹⁰ All days specified in this section refer to business days unless noted otherwise.

market ratios. The cut-off points to determine the size and B/M matched portfolios and the daily portfolio returns were obtained from Professor Kenneth French's data library, based on a classification of the population into six (two size and three B/M) portfolios.¹¹ To avoid any delisting bias we use the delisting return from CRSP where appropriate. If the delisting is due to a forced delisting from an exchange and CRSP has a missing delisting return, we assume the return to be -100%. The firm is assumed to earn the benchmark return subsequent to a delisting.

We estimate abnormal trading volume as average daily share trading volume over the period of interest divided by the normal daily share volume during the non-event period. We consider three alternative periods of interest for Form 8-K analysis: days -1 through +1 relative to the event date, days -1 through +1 relative to the filing date, and from one day before the event date to one day after the filing date. The non-event period for Forms 8-K is taken to be days -63 through -8 relative to the event date. For 10-K and 10-Q filings the event period is days -1 through +1 and the non-event period is days -100 through -8 relative to the filing date of the report. Thus, we designate the abnormal volume for firm *i* filing *j* as :

$$ABVOLUME_{ij} = \frac{Avg_{d \in [event]} [VOL_{ij,d}]}{Avg_{d \in [non-event]} [VOL_{ij,d}]} - 1 \quad (1)$$

where periods are as indicated above and $VOL_{ij,d}$ is the daily trading volume in millions of shares on day *d* obtained from CRSP. The abnormal trading volume measures the percentage of changes in daily trading volume during the event period relative to the non-event period. We exclude observations where the average volume in the non-event period is equal to zero or where the number of days with non-zero trades in either the event or the non-event periods was too low or high.

¹¹ The library is at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

We estimate abnormal stock price return volatility as the average squared abnormal returns in the event period divided by the variance of abnormal returns in the non-event period (where periods for Forms 8-K, 10-K and 10-K are as described above). Thus, the abnormal volatility for firm i filing j is designated as:

$$ABVOLAT_{ij} = \frac{Avg_{d \in [event]} [RET_{ij,d} - RFF_{j,d}]^2}{[Std_{d \in [non-event]} [RET_{ij,d} - RFF_{j,d}]]^2} \quad (2)$$

where periods are indicated above, $RET_{ij,d}$ is the stock return on day d obtained from CRSP, and $RFF_{j,d}$ is the Fama-French value-weighted return on the portfolio with similar size and B/M (6-groups).

4. Results

4.1 Research Question 1 – Analysis of 8-Ks filed under the new guidance

As discussed above, all analyses in this section are done on a subsample of 8-Ks filed in 2005 and 2006. For convenience these observations are referred to in this section as the sample.

4.1.a Sample Characteristics

The majority of 8-Ks in this sample represent filings related to one event only: 22% of the *Sample Event Date* are filings relate to one item, with an additional 56% containing only one item plus exhibits (technically these filings contain two items, but the second item is 9.01 *Financial Statements and Exhibits*). Thus, nearly 80% of the sample Forms 8-K are single-event filings, with 16% covering two events and 4% cover three or more events. We present the distribution of the triggering events in our sample of 8-Ks in Panel A of Table 1. The most common filings are those triggered by the public disclosure regarding results of operations comprising 30% of the sample, followed by 8-Ks reporting the new item *Entry into a Material*

Agreement disclosed in 28% of the sample. *Departure and Election of Directors*, an item significantly expanded by the new regulation is discussed in 12% of the sample. Each of the other non-voluntary items is discussed in less than 4% of the sample (less than 5,000 filings). Overall, the new items which were not reported on Form 8-K before 2005 now account for more than 50% of the sample.

Panel B of Table 1 reports statistics about the distribution of market reactions and financial characteristics of the sample. Unless otherwise noted, we calculate all characteristics for the fiscal quarter in which the filing has occurred based on COMPUSTAT quarterly data. As can be seen in the table, both mean and median 3-day event and filing abnormal returns are very close to zero, which is expected if we do not know whether the information released is favorable or unfavorable. In contrast, both the event and the filing date have over 50% greater volume than “normal” period earlier, and the volatility of abnormal returns during both event and filing dates is more than twice as large as that in the “normal” earlier period. This indicates the importance of using unsigned measures of returns and volume to study the market reactions to the Form 8-K disclosures, which by definition can have favorable or unfavorable implications for investors.

The sample firms have a wide distribution of market values from \$110 million for the first quartile to \$1.5 billion for the third quartile. This is expected given our sample selection criteria, basically requiring membership in both Compustat and CRSP. Note that leverage is slightly lower than reported in prior studies, mean (median) of roughly 20% (15%), whereas prior studies report a median leverage ratio of around 50%. Similarly, the return on asset ratio has a negative mean, although its median is positive at 0.006. Thus, our sample is likely to be tilted towards companies that are slightly smaller, less profitable and less financially levered than those used in prior studies.

4.1.b Timeliness

The standard setters sought to both shorten and simplify Form 8-K filing deadlines in the new guidance. The new rule requires a report to be filed or furnished within four business days after occurrence of the event for all non-voluntary items. Item 8.01 *Other Events* does not have a deadline although prompt reporting is encouraged. For item 7.01 *Regulation FD Disclosure* (and Item 8.01 when filed solely to satisfy its obligations under Regulation FD), the deadline is in accordance with the requirements of Rule 100(a) of Regulation FD. For item 2.02 *Results of Operations and Financial Condition* the event date shall be considered the date of the public disclosure of relevant materials.

When examining the *Sample Event Date* we observe that nearly 95% of 8-Ks are filed within four business day of the event date. The timeliness of the filings categorized by the type of the event can be most clearly seen on a subsample of filings which report one section only (or two sections with the second one being Section 9 *Financial Statements and Exhibits*). This subsample contains 100,607 filings and thus represents 80% of the full sample. Table 2 Panel A contains the distribution of the filing lag by sections for this sub-sample. Consistent with earlier findings of Carter and Soo [1999], we observe that voluntary disclosures of Section 8 *Other Events* are very timely as are also the filings of Section 7 *Regulation FD Disclosures*. The highly timely Section 2 *Financial Information* is primarily driven by the semi-voluntary Item 2.02 *Results of Operations* filings, 61% of which are filed within one business day of the disclosure of this information to the public. The other five items within Section 2 exhibit similar timeliness to the mandatory items within other sections. We observe that nearly a third of the Forms 8-K disclosing non-voluntary items are filed on the last allowed business day. Finally, the patterns of

timeliness reported in Panel A of Table 2 remain the same when examining the full sample (including more than one event per Form 8-K).

Roughly 20% of our sample represents Forms 8-K filed within one calendar day of Form 10-Q or 10-K filing. Examining only the filings reporting one section within *Sample Event Date*, we observe that 8-Ks filed in proximity to the periodic (10-Q/10-K) reports are slightly more timely both overall and for each section (Table 2, Panel B). While the percentage of filers violating the four business day rule remains approximately equal at 5%, the distribution of timely filings among the business days is modified; more filings are made on the same business day as the event date or one to two days afterwards, and fewer filings are made on business days three and four subsequent to the event. We conjecture that when firms intend to file a Form 8-K around the time of the periodic filing they schedule the event triggering the filing to occur immediately preceding the deadline for the filing of the periodic report.

Overall, we conclude that for most disclosures Forms 8-K filed under the new SEC guidance represent a timely disclosure of material events.

4.1.c Distribution across Time

We examine the distribution of 8-K filing dates across the two calendar years to discern any patterns or clusters in the filings. Figure 1 depicts the distribution of both stand-alone Forms 8-K and those filed contemporaneously with periodic reports. We see six distinct spikes in the graph which represent periods approximately four weeks subsequent to the calendar quarter-ends for calendar quarters 1, 2 and 3 in each year (around dates 4/28/2005, 7/28/2005, 10/27/2005, 4/27/2006, 7/27/2006, 10/26/2006). This is expected since the largest single event reported in a Form 8-K in our sample is the disclosure of the results of operations. When we exclude this Item 2.02 from the sample (see Figure 2) we observe that the filings are fairly evenly distributed

across the entire period. Examining each section separately, we observe some clustering; Section 1 *Registrant's Business and Operations* features a small cluster in late December of 2005, Section 4 *Matters Related to Accountants and Financial Statements* is concentrated in the first calendar quarters of both 2005 and 2006, likely because changes in auditors tend to occur in the first quarter, as are restatements. Section 5 *Corporate Governance and Management* increases significantly in November and December of 2006, and Section 7 *Regulation FD Disclosure* exhibits spikes on the 1st of several months.

4.1.d Market Reactions

Abnormal Contemporaneous Returns

We examine the abnormal buy and hold stock returns for several periods of interest. We perform analysis of 3-day returns centered on the filing date on *Sample Filing Date*, where multiple 8-K filings were merged if they had the same filing date (regardless of the event date). The analyses of 3-day returns centered on the event date and of returns from the event date to the filing date are carried out on *Sample Event Date*, where multiple 8-K filings were merged only if they had the same filing and event date. The overall mean returns are 0.1% (0.2%) for the 3-day period around the event day (the period from the event to the filing date), and are insignificantly different from zero for the 3 days around the filing date. For all three periods, the returns are not significantly different between firms which filed one or more than one Form 8-K on the same date. There is some evidence that for the 20% of firms that filed an 8-K contemporaneously with an annual or quarterly report (10-Q or 10-K), the mean returns are lower than for the 80% of the firms that filed stand-alone 8-K reports. For the 3 days around the event (filing) date, the abnormal returns are -0.03% (-0.08%) and +0.15% (+0.03%) respectively for those filing with and without a contemporaneous periodic report. While these returns are small in magnitude they

are statistically significantly different from each other at the 1% (5%) level. There is also evidence that a greater number of events reported in the same Form 8-K is associated with greater abnormal returns (where number of events equals the number of items reported excluding item 9.01 *Financial Statements and Exhibits*). In the 3-day period centered on the event date the mean return for the filings reporting 1, 2, 3, 4 and 5 or more items are respectively 0.1%, 0.2%, 0.8%, 1.0%, and 3.8%, as can be seen in Table 3 Panel A. A similar pattern is observed for the period from event to filing, but not for the 3-day period around the filing date.

Table 3 Panel B contains the mean abnormal returns in the three periods of interest segregated by the event that triggered the filing. The mean returns are very much in line with expectations. Ten items have statistically significant mean positive returns either around the event date or the filing date. The highest statistically significant returns are observed for Item 3.03 *Material Modifications to the Rights of Security Holders* (in fact, in the period around the filing date it is the only item that exhibits a cumulative abnormal return greater than 2%). This item was previously disclosed in the periodic reports and may report events such as an increase in the number of authorized shares of common stock, changes in the expiration date of the preferred stock purchase rights, etc. Of the 967 filings which contain this item, 70% also contain item 1.01 *Entry into a Material Definitive Agreement*. Thus, these filings specify amendment to the rights of security holders which stem from a merger or purchase, a new credit facility, etc.¹² These observations which contain both 3.03 and 1.01 drive the positive return for this item - the 3-day abnormal return around the event (filing) date for these observations is +3.98% (+3.10%) significant at .01% level, while the mean abnormal return for the observations which contain item 3.03 but not item 1.01 is not significantly different from zero. Other items that exhibit

¹² In some instances a firm refers to the modification of securities holders rights as the material definitive agreement itself. In those cases, item 1.01 in the 8-K contains a lengthy discussion on the modification of rights and item 3.03 simply refers to discussion in item 1.01.

positive returns are *Unregistered Sales of Equity Securities* (previously disclosed in periodic reports) and *Completion of Acquisition or Disposition of Assets* (an old item).

Eight items have statistically significant mean negative returns either around the event date or the filing date. The event generating the strongest price impact of -12% (-3% in the median) around the filing date is *Bankruptcy or Receivership*, which has a very small number of observations (the returns for this item around the event date are positive but not statistically significant). Four newly disclosed items generate significant negative returns around both the event date and the filing date: *Costs Associated with Exit or Disposal Activities*, *Material Impairments*, *Notice of Delisting...Transfer of Listing*, and *Non-Reliance on Previously Issued Financial Statements*.

Drift Analysis

We now examine the buy and hold abnormal returns starting one day after the filing date and lasting through 30, 60 or 90 calendar days afterwards (using *Sample Filing Date*). As in the shorter windows, we observe that returns are not statistically significantly different between firms submitting one vs. multiple Forms 8-K on the same date, but that they are higher for firms submitting 8-Ks simultaneously with the filings of periodic reports. See Table 3 Panel C for details. We do not find strong evidence that the number of reported events impacts the magnitude of the drift. Examining the returns by the triggering event, we observe that *Bankruptcy or Receivership* leads to the strongest negative drift of -15%, -13% and -19% for the 30, 60 and 90 day periods respectively. The items *Changes in Control of Registrant* and *Increase/Acceleration of a Direct/Off-Balance Sheet Financial Obligation* also have significant negative drifts between -1.5% and -3.7% in those periods. Notably, we have not observed either of these items significantly negative at the shorter windows. Several other items have negative significant drift

returns of a smaller magnitude. Very few items have positive and statistically significant abnormal drift returns, the highest of which are *Material Modifications to Rights of Security Holders* and *Amendments to the Registrant's Code of Ethics*. See Table 3 Panel D for details.

To summarize the results of the signed market reactions, we find that some items have predominantly positive mean market effects that are significantly different from zero, whereas others have negative returns around the event and filing dates, all with expected directions where such could be hypothesized. We also see that the immediate market reactions are in several cases incomplete around the event or filing dates, with future abnormal returns continuing for a period of 30 to 90 days after the initial event. Still, we do find several categories that show no significant abnormal returns in any of the return periods. Thus, we need to examine unsigned market reactions as measured by trading volume and stock price volatility.

Abnormal Volume and Volatility Analyses

We now examine the abnormal trading volume and abnormal stock return volatility for the three periods of interest. The mean abnormal volume is 62%, 56%, and 60% respectively, for the periods around the event date, filing date and between the two (the mean volatility is 2.8, 2.5, and 2.7 respectively). Both volume and volatility are slightly higher around the event date for firms filing more than one 8-K. Not surprisingly, there is evidence that for the firms that filed an 8-K contemporaneously with a periodic report the mean volume and volatility in all windows of interest were higher than for those that filed stand-alone 8-K reports (significantly different at the 5% level for volume and 1% level for volatility). We also observe that a greater number of reported events leads to greater abnormal volume and volatility (where number of events equals the number of items reported excluding item 9.01 *Financial Statements and Exhibits*). In the 3-day period around the event date the mean abnormal volume for the filings reporting 1, 2, 3, 4,

and 5 or more items is respectively 61%, 62%, 82%, 92%, and 190% (with a similar monotonic pattern observed for volatility). In the 3 days around the filing date we observe this pattern in an even stronger fashion – see Table 4 Panel A and Table 5 Panel A for details.

Table 4 Panel B contains the mean abnormal volume in the three periods of interest segregated by the event that triggered the filing. We observe that the abnormal volume in every period for every item is significantly greater than zero. From this result alone, we may conclude that Forms 8-K filed under the new SEC regime are associated with significant abnormal market trading volume. The two items which exhibit the highest abnormal volume are *Bankruptcy or Receivership* and *Material Modifications to the Rights of Security Holders*. Recall that these two items exhibit respectively the lowest and highest signed abnormal returns in the periods examined. As expected, the filings reporting the results of operations also exhibit high abnormal volume. Other voluntary and semi-voluntary items such as regulation FD disclosures and Other Events also exhibit fairly high abnormal volume. The item which has the lowest abnormal volume in all three periods is the previously disclosed item *Suspension of Trading under Registrant's Employee Benefit Plans* (which is still statistically significant at the 10% level and with a magnitude of over 10% of abnormal volume).

The abnormal volatility means segregated by items are to a large degree similar to the abnormal volume results (see Table 5 Panel B). Again, we observe that the abnormal volatility in every period for almost every item is significantly greater than zero. The highest volatility is generated by the same three items: the “bad news” of *Bankruptcy or Receivership*, the “good news” of *Material Modifications to the Rights of Security Holders* and, as expected, the *Results of Operations and Financial Condition*. The low volatility items are for the most part the same as the low volume items.

4.1.e Impact of the Filing Lag

In the spirit of Carter and Soo [1999], we examine whether the 3 day return, volume and volatility around the filing date differ for filings of varying filing lags, i.e. whether timeliness impacts informativeness of Forms 8-K. However, since 95% of our sample represent filings within the four business days deadline, these tests are significantly less powerful than those of Carter and Soo who observed a large variation in filing lags. Table 6 Panel A contains the mean 3 day abnormal returns by business days elapsed between the event and the filing dates. Since we observe that returns vary by triggering events we tabulate the analysis across Sections as well as across filing lags. The abnormal returns for Sections 3 and 4 (Securities and Trading Markets and Matters Related to Accountants and Financial Statements, respectively) appear to be lower when the filing was not made in a timely manner (more than four business days elapsed). However, we do not observe any evidence that the returns vary by filing lag if the 8-K is filed within the deadline. Similarly, for all other Sections the returns appear fairly constant regardless of the filings' timeliness. Panels B and C of Table 6 contain respectively the mean volume and volatility tabulated across Sections and across filing lags. We first note that the 3-day volume around the filing date is greatest for all Sections when the filing is made on the next business day subsequent to the event. This is a result of the construction of a 3-day metric: if the filing is made on the same business day as the event date the 3 day average will include one day when the public could not have had any knowledge of the event, thus lowering the average volume; if the filing is made on the next business day the 3 day average will include both the event date (when some information is already available to the market) and the filing date (when all information becomes available); if the filing is made on the second business day or subsequently the 3-day period again does not include the event date, lowering the average volume. We also note that for

Section 3 and to a lesser degree for Section 2 (Securities and Trading Markets and Financial Information respectively) the abnormal volume is larger when the filing is not made within the new deadline. Further analysis shows that the high abnormal volume and the low abnormal return we observe for tardy filers of Section 3 are driven by results for both Item 3.01 *Notice of Delisting ... Transfer of Listing* and Item 3.03 *Material Modifications to the Rights of Security Holders*. More specifically, for disclosure of delisting the average 3-day return (volume) around the filing date is -2.81% (48.8%) if the form is filed within the deadline and -4.30% (178.8%) if the form is filed subsequently. Similarly, for disclosure of material modifications of rights, the average 3-day return (volume) around the filing date is +2.27% (119.3%) if the form is filed within the deadline and -1.72% (196.7%) if the form is filed subsequently. The reason behind stronger reaction to tardy filings of these items may be due to some systematic difference between the content of timely and tardy disclosures. When examining abnormal volatility we see similar results to those of abnormal volume (see Panel C of Table 6).

Overall, our results do not indicate a significant association between filing lags and market reactions, likely because most filers adhered to the shorter filing period promulgated by the SEC.

4.2 Research Question 2 – Change in the information content of periodic reports

The analyses in this section and in the following section 4.3 uses the full sample of 8-Ks (and 10-K/Qs for this section) filed in 1994 through 2007. The limitation of this sample is that for periods before August of 2004 the S&P Filing Dates Database does not contain reliable identification of events being reported.

We investigate whether the 8-K guidance promulgated by the SEC in August of 2004 had an impact on the informativeness of periodic reports (10-Ks and 10-Qs) as measured by

abnormal volume and volatility around their filing date. As discussed above, additional real-time disclosure may lead to a decrease in the information content of periodic reports (if this information was previously disclosed in Form 8-K reports) or it may not do so (if the 8-K reporting simply alerts investors to the presence of material developments, but does not substitute for the extensive reporting of the events and their consequences in the periodic reports). Panel A of Table 7 presents the distribution of 8-K and periodic filings for each calendar year in the sample. We observe that for years 1994 through 2000 there are at least twice as many periodic reports filed as Forms 8-K. In 2001 and 2002 there is an annual increase in 8-Ks filed of about 20% while the number of periodic reports decreases slightly. This may correspond with Regulation Fair Disclosure, implemented in October of 2002, which mandated greater disclosure of material information to all investors of the firm. In 2003, we see the number of 8-Ks nearly doubling, which likely corresponds with the enactment and implementation of the Sarbanes-Oxley Act and related SEC guidance in late 2002 and early 2003. Lastly, in 2004 the number of 8-Ks filed increases by a third, as it does further in 2005, henceforth remaining constant. This increase is likely to be attributable to the new SEC 8-K guidance which is the subject of this study.

Panel B of Table 7 presents the means of abnormal volume and volatility around the filings of both 8-K and periodic reports.¹³ We observe that for 8-Ks the abnormal volume is fairly constant from 1995 through 2007 with one spike in 2003 and the abnormal volatility is slowly increasing over the entire period. Of main interest to us is the volume and volatility of the periodic reports which indicate their information content. Volume exhibits several spikes and dips with the biggest year-over-year dip in 2000 and significant spikes in 2001, 2003 and 2007

¹³ We imposed an additional data validity requirement on this sample, deleting 1% of observations with extreme excess returns, abnormal volume or abnormal volatility (on the filing date or the event date).

(the first two spikes may be attributed to Regulation FD and Sarbanes Oxley Act respectively). Volatility is fairly constant through 2001 after which it increases every year with the largest spike in 2007.

The first question we address in this section is whether the difference in the abnormal volume and volatility of periodic reports is statistically significant before and after the implementation of the new SEC 8-K guidance in 2004. Correspondingly, Panel C presents the difference between periodic reports filed before and after August 23, 2004. We find that both the volume and volatility of periodic reports are significantly larger for the post period. However, as we saw above, other factors such as Sarbanes Oxley implementation, likely impacted the change in informativeness of both periodic and real time reports. Thus, we consider the volume and volatility for Forms 10-K and 10-Q filed in just one calendar year before and after August 23, 2004 (when the effects of both Regulation FD and Sarbanes Oxley should have already been incorporated). We still observe a statistically significant increase after 2004, concluding that the new SEC 8-K guidance actually increased the information content of periodic reports.

4.3 Research Question 3 – Analysis of good and bad news in 8-Ks

Finally, we examine market reaction separately for good and bad news disclosed in 8-K filings, hypothesizing that management releases good news to the market earlier. All analyses in Table 8 define good (bad) news 8-Ks as filings which generated excess 3-day return around the filing date of above 5% (below -5%). Panel A of Table 8 examines whether management files Forms 8-K which report good news sooner after the event date than Forms 8-K which report bad news. In accordance with earlier findings by Carter and Soo, we observe that both before and after the promulgation of the new SEC 8-K guidance in August of 2004, goods news reports are filed sooner than bad news reports (for the purpose of this analysis the lag is winsorized at 16

calendar days). Next, we examine whether the market reaction is stronger at the event date to good news than to bad news. Panel B of Table 8 presents the average abnormal volume and volatility tabulated across good and bad news before and after August of 2004. We find that good news generate statistically significantly higher abnormal volume and volatility around the event date than do bad news. This holds for both periods before and after the new SEC 8-K guidance implementation in 2004. Analysis of average signed returns around the filing dates (not tabulated) shows that the returns for good and bad news are of similar magnitude for both time periods (+11% and -11% in the earlier period and +10% and -10% in the later period). Similarly, multivariate regressions (not tabulated) controlling for the magnitude of the return and the lag between the event date and the filing date confirm that good news experience higher abnormal volume and volatility around their event dates.

The analyses above do not differentiate 8-K filings by the reported event because accurate event type information is not available from the database prior to August of 2004. However, this information is available for subsequent periods and was discussed in detail in results of analyses related to Research Question 1a. Thus, we briefly return to the findings documented in Tables 3, 4 and 5 to provide further evidence on the timelier disclosure of good news. In Panel B of Table 3, we observe ten items with positive returns around the event date. All of these items exhibit a stronger return around the event date than around the filing date (even though the latter is for the most part statistically significant). On the other hand for all items with negative returns on the filing date we observe that the magnitude of returns around the filing date is larger than the magnitude of returns around the event date. In fact, some items which we expect to be associated with bad news (*Bankruptcy or Receivership* and *Changes in Registrant's Certifying Accountant*) exhibit returns insignificantly different from zero on the

event date but negative and significant on the filing date. This supports our hypothesis that management is less forthcoming in disclosing bad news. Considering the abnormal volume analysis in Panel B of Table 4, we note that seven of the twenty two items, including six new and one significantly expanded, have higher abnormal volume around the filing date than around the event date. All of these seven items exhibit negative abnormal returns around the filing date as indicated in Table 3 and thus may be classified as bad news. Similar conclusions are drawn from abnormal volatility analysis in Panel B of Table 5. This further supports our findings that bad news 8-K filings are more informative to the market at the time of filings, as the news they contain were less likely to be release to the market prior to the SEC filing.

Overall, we find that good news are released to the market faster and generate a greater market reaction at the event date than bad news. This implies that management engages in some voluntary disclosures of good news via press releases or other channels, even prior to the filing of the 8-K (which itself occurs earlier for good news).

4.4 Sensitivity Analyses

For robustness, we carry out all the abnormal returns, volume and volatility analyses on the subsample of firms which did not file contemporaneously with a periodic filings (80% of the full sample). All our findings remain qualitatively the same.

5. Conclusions

This study examines the market reactions associated with the new SEC disclosure rules regarding events that need to be reported in Form 8-K filings. The SEC has expanded the list of events that are now required to be disclosed in Form 8-K filings, and shortened the filing period considerably to four business days. We examine a large sample of Form 8-K filings in 2005 and

2006 to determine whether firms actually filed within the shortened mandatory period, and whether Form 8-K filings are associated with significant market reactions.

We find that contrary to prior findings of Carter and Soo [1999], most firms (about 95%) file their Forms 8-K within the required period, indicating a much better compliance with the new requirements. We also find that market reactions to the Form 8-K filings vary by category, with some disclosed events eliciting strong positive mean abnormal returns and others strong negative abnormal returns. We find that some items do not exhibit signed abnormal returns, although this can be interpreted as either absence of information content for these items, or that these items have favorable implications for some firms and unfavorable for others, with an average market reactions that is indistinguishable from zero. To address this issue, we also examine the market reactions to Forms 8-K filings in terms of both abnormal trading volume and abnormal stock return volatility. We find significant market reactions to all items using these measures, indicating that the failures of some items to yield mean signed abnormal returns is not due to lack of information content, but likely due to inconsistent implications across filers.

Similar to the post-earnings-announcement drift, we examine subsequent stock market reactions to determine whether the market reactions are complete around the Form 8-K filings, or whether market participants seem to under-react to the information in the Form 8-K filings. Our results seem to be consistent with incomplete initial market reactions, and with significant stock return drifts for several items.

We examine the market reaction to periodic reports before and after the promulgation of the SEC guidance and conclude that the information content of Forms 10-K and 10-Q is not diminished by the more expansive and timely 8-K disclosures. We also find that 8-K filings disclosing good news are filed sooner after the event date and that the information contained in

such filings is likely disclosed by management to the market even earlier via press releases or other channels.

Our results contribute to the existing literature along five main dimensions. First, we show that the new SEC disclosure requirements for Form 8-K were both complied with and yielded information that users reacted to. Second, we show that analysis of market reactions to items in the Form 8-K filings needs to incorporate unsigned abnormal returns and volume. Third, we document the existence of return drifts for events disclosed through Form 8-K filings. Fourth, we show that additional real-time disclosure of material events did not diminish the informativeness of periodic reports. Finally, we show that in the context of Forms 8-K filings, good news are likely released by management sooner than bad news.

REFERENCES

- Ball, R., Kothari, S.P., 1991. Security Returns around Earnings Announcements. *The Accounting Review* 66(4), 718-738.
- Bamber, L.S., Cheon, Y.S., 1995. Differential Price and Volume Reactions to Accounting Earnings Announcements. *The Accounting Review* 70(3), 417-441.
- Beaver, W., 1968. The Information Content of Annual Earnings Announcements. *Journal of Accounting Research* 6, 67-92.
- Begley, J., Fischer, P.E., 1998. Is there Information in an Earnings Announcement Delay? *Review of Accounting Studies* 3(4), 347-363.
- Bernard, V.L., Thomas, J.K., 1989. Post-earnings-announcement drift: Delayed price response or risk premium? *Journal of Accounting Research* 27(Supp), 1-48.
- Bernard, V.L., Thomas, J.K., 1990. Evidence that stock prices do not fully reflect the implications of current earnings for future earnings. *Journal of Accounting and Economics* 13, 305-340.
- Bernstein, D., 2004. Cost of 8-K rules could surpass Sarbanes-Oxley. *International Financial Law Review* 23(5), 20-24.
- Carter, M.E., Soo, B.S., 1999. The relevance of form 8-K reports. *Journal of Accounting Research* 37(Spring), 119-132.
- Chambers, A.E., Penman, S.H., 1984. Timeliness of Reporting and the Stock Price Reaction to Earnings Announcements. *Journal of Accounting Research* 22(1), 21-47.
- Collins, D.W., Hribar, P., 2000. Earnings-based and accrual-based market anomalies: one effect or two? *Journal of Accounting and Economics* 29, 101-123.
- Cornell, B., Landsman, W.R., 1989. Security Price Response to Quarterly Earnings Announcements and Analysts' Forecast Revisions. *The Accounting Review* 64(4), 680-692.
- Easton, P., Zmijewski, M.E., 1987. Cross-sectional Variation in the Stock Market Response to the Announcement of Accounting Earnings. Working paper (University of Chicago).
- El-Gazzar, S.M., 1998. Predisclosure Information and Institutional Ownership: A Cross-Sectional Examination of Market Revaluations during Earnings Announcement Periods. *The Accounting Review* 73(1), 119-129.
- Ettredge, M.L., Smith, D.B., Stone, M.S., 2001. How Effective Is Joint Public and Private Monitoring? The Case of the AICPA Auditor Change Notification Letter. *Auditing: A Journal of Practice & Theory* 20(1), 29-43.
- Givoly, D. and Palmon, D., 1982. Timeliness of Annual Earnings Announcements: Some Empirical Evidence. *The Accounting Review* 57(3), 486-508.
- Graham, J., Harvey, C., Rajgopal, S., 2005. The Economic Implications of Corporate Financial Reporting. *Journal of Accounting and Economics* 40, 3-73.

- Kothari, S.P., Shu, S., Wysocki, P., 2008. Do Managers Withhold Bad News? Working Paper.
- Landsman, W.R., Maydew, E.L., 2002. Has the Information Content of Quarterly Earnings Announcements Declined in the Past Three Decades? *Journal of Accounting Research* 40(3) , 797–808.
- Livnat, J., Mendenhall, R.R., 2006. Comparing the post-earnings announcement drift for surprises calculated from analyst and time series forecasts. *Journal of Accounting Research* 44, 177-205.
- McLelland, A.J., 2004. The Relative Use of Form 8-K Disclosures: A Trading Response Analysis. Working Paper (Texas A&M University).
- McNichols, M. and Manegold, J.G., 1983. The Effect of the Information Environment on the Relationship Between Financial Disclosure and Security Price Variability. *Journal of Accounting and Economics* 5(April), 49-74.
- Pinsker, R.E., 2006. Has Firms' Form 8-K Filing Behavior Changed Since Section 409 of the Sarbanes-Oxley Act Became Effective? Working Paper (Old Dominion University).
- Schwartz, K.B., Soo, B.S., 1996. Evidence of Regulatory Noncompliance with SEC Disclosure Rules on Auditor Changes. *The Accounting Review* 71(4), 555-572.
- Securities and Exchange Commission (SEC). 1989. Financial Reporting Release No. 34 (33-6822, 34-26587): Accelerations of the Timing for Filing Forms 8-K Related to Changes in Accountants and Resignations of Directors.
- Securities and Exchange Commission (SEC). 2002. Proposed Rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date. (June 17).
- Securities and Exchange Commission (SEC). 2004. Final Rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date. (August 23).
- Whisenant, J.S., Sankaraguruswamy, S., Raghunandan, K., 2003. Market Reactions to Disclosure of Reportable Events. *Auditing: A Journal of Practice & Theory* 22(1), 181-194.

Appendix 1

Reportable Events Under SEC Release No. 33-8400

Section	Item	Item Name	New Item*
1	Registrant's Business and Operations		
	1.01	Entry into a Material Definitive Agreement	Yes
	1.02	Termination of a Material Definitive Agreement	Yes
	1.03	Bankruptcy or Receivership	No
2	Financial Information		
	2.01	Completion of Acquisition or Disposition of Assets	No
	2.02	Results of Operations and Financial Condition	No (semi-voluntary)
	2.03	Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant	Yes
	2.04	Triggering Events That Accelerate or Increase a Direct Financial Obligation under an Off-Balance Sheet Arrangement	Yes
	2.05	Cost Associated with Exit or Disposal Activities	Yes
	2.06	Material Impairments	Yes
3	Securities and Trading Markets		
	3.01	Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing	Yes
	3.02	Unregistered Sales of Equity Securities	Yes (from periodic)
	3.03	Material Modifications to Rights of Security Holders	Yes (from periodic)
4	Matters Related to Accountants and Financial Statements		
	4.01	Changes in Registrant's Certifying Accountant	No
	4.02	Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review	Yes
5	Corporate Governance and Management		
	5.01	Changes in Control of Registrant	No
	5.02	Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers	No (expanded)
	5.03	Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year	No (expanded)
	5.04	Temporary Suspension of Trading Under Registrant's Employee Benefit Plans	No
	5.05	Amendments to the Registrant's Code of Ethics, or Waiver of a Provision of the Code of Ethics	No
7	Regulation FD Disclosure	7.01 Regulation FD Disclosure	Yes (semi-voluntary)
8	Other Events	8.01 Other Events	No (voluntary)
9	Financial Statements and Exhibits	9.01 Financial Statements and Exhibits	No

Notes :

- * Yes (from periodic) : indicates items which were transferred from periodic reporting in the 10-Q and the 10-K to continuous and timely reporting in the 8-K.
- * No (expanded) : indicates items which were expanded to the point of essentially becoming new items.
- * (semi-voluntary) : indicates items the requirements for which are triggered by the firm's disclosure of material events.
- * (voluntary) : indicates items stemming from material events whose reporting is encouraged but not required.

Table 1 : Descriptive Characteristics

Panel A : Form 8-K Content Distribution

ITEM	Frequency	Percent
1.01 Entry into a Material Definitive Agreement	34,997	27.9%
1.02 Termination of a Material Definitive Agreement	2,637	2.1%
1.03 Bankruptcy or Receivership	18	0.0%
2.01 Completion of Acquisition or Disposition of Assets	2,508	2.0%
2.02 Results of Operations and Financial Condition	37,704	30.1%
2.03 Creation of a Direct/Off-Balance Sheet Financial Obligation	4,747	3.8%
2.04 Increase/Acceleration of a Direct/Off-Balance Sheet Financial Obligation	361	0.3%
2.05 Cost Associated with Exit or Disposal Activities	907	0.7%
2.06 Material Impairments	532	0.4%
3.01 Notice of Delisting ... Transfer of Listing	2,137	1.7%
3.02 Unregistered Sales of Equity Securities	2,518	2.0%
3.03 Material Modifications to Rights of Security Holders	967	0.8%
4.01 Changes in Registrant's Certifying Accountant	1,148	0.9%
4.02 Non-Reliance on Previously Issued Financial Statements	1,124	0.9%
5.01 Changes in Control of Registrant	152	0.1%
5.02 Departure / Election of Directors or Principal Officers	15,056	12.0%
5.03 Amendments to Articles of Incorporation or Bylaws	2,720	2.2%
5.04 Suspension of Trading Under Registrant's Employee Benefit Plans	279	0.2%
5.05 Amendments to the Registrant's Code of Ethics	246	0.2%
7.01 Regulation FD Disclosure	19,332	15.4%
8.01 Other Events	28,467	22.7%
9.01 Financial Statements and Exhibits	94,153	75.0%

Panel B : Financial Characteristics

Variables	N	Mean	Std. Dev.	25th Perc.	50th Perc.	75th Perc.
Abnormal Return (3 day - event)	112,245	0.001	0.073	(0.023)	(0.001)	0.023
Abnormal Return (3 day - filing)	123,891	0.000	0.073	(0.024)	0.001	0.022
Abnormal Volume (3 day - event)	112,245	0.621	5.699	(0.305)	0.035	0.611
Abnormal Volume (3 day - filing)	112,245	0.555	4.755	(0.283)	0.045	0.582
Abnormal Volatility (3 day - event)	112,245	2.810	11.552	0.297	0.757	1.930
Abnormal Volatility (3 day - filing)	112,245	2.470	9.813	0.355	0.807	1.887
Market Value of Equity (t-1)	38,046	3,268.66	14,739.64	110.50	399.26	1,534.72
Book Value of Equity (t-1)	37,752	1,231.68	5,600.97	45.72	163.56	616.74
Stock Price (t)	38,195	43.14	1,324.10	7.47	18.15	32.55
Leverage (t)	34,674	0.202	0.232	0.015	0.148	0.301
ROA (t)	36,937	(0.004)	0.116	(0.001)	0.006	0.019

Notes :

In Panel A, the number of disclosures exceeds the sample size because a firm may disclose multiple events in an 8-K.

In Panel B when computing financial characteristics from COMPUSTAT we retained one firm-quarter observation regardless of how many 8-Ks were filed in that fiscal quarter by the firm. Abnormal Return is the buy and hold return on a stock minus the average return on a matched size-B/M portfolio in the three days around the event date (Date or Report on Form 8-K) or the filing date. Abnormal Volume is average shares traded in the three days around the event/filing date scaled by average shares traded in a preceding non-event period less one. Abnormal Volatility is the squared abnormal returns in the three days around the event/filing date scaled by the variance of abnormal returns in the non-event period. Market (Book) Value of Equity (in \$million) is as of quarter end. Price, Leverage (total debt divided by total assets), and ROA (Income before Extraordinary Items divided by lagged total assets) are as of quarter end.

Table 2 : Form 8-K Filing Lag by Section

Panel A : Subsample of Firms Reporting One Event Only (100,607 obs)

Section	Business Days Between Event and Filing (0=same day filing) : % of Observations					Total % in 4		Total # obs
	0	1	2	3	4	bus. days	>=5	
1 Registrant's Business and Operations	13.3	13.3	14.0	19.3	34.1	93.8	6.2	21,020
2 Financial Information	58.1	20.9	6.1	3.8	4.2	93.2	6.8	32,442
3 Securities and Trading Markets	15.5	15.9	15.7	18.5	28.3	93.9	6.2	2,178
4 Accountants and Financial Statements	16.1	13.4	11.9	18.4	33.0	92.8	7.2	1,492
5 Corporate Governance and Management	21.8	19.0	16.2	17.2	22.0	96.1	3.9	9,994
7 Regulation FD Disclosure	64.4	22.9	5.8	2.8	1.3	97.1	2.9	11,971
8 Other Events	45.6	27.5	10.5	6.4	5.2	95.1	4.9	20,534
9 Financial Statements and Exhibits	45.5	21.5	9.6	8.1	10.3	95.0	5.0	73,151

Panel B : Subsample of Firms Reporting One Event Only and Filed Within One Business Day of a 10-K or 10-Q Filing (21,094 obs)

Section	Business Days Between Event and Filing (0=same day filing) : % of Observations					Total % in 4		Total # obs
	0	1	2	3	4	bus. days	>=5	
1 Registrant's Business and Operations	13.2	14.2	15.9	17.4	32.5	93.2	6.9	3,447
2 Financial Information	61.6	22.4	4.3	2.5	2.4	93.2	6.8	8,774
3 Securities and Trading Markets	17.1	16.7	16.0	16.0	24.7	90.6	9.4	287
4 Accountants and Financial Statements	19.0	18.7	14.1	17.2	24.7	93.7	6.3	348
5 Corporate Governance and Management	22.8	20.1	17.5	15.4	19.7	95.5	4.5	1,524
7 Regulation FD Disclosure	63.9	24.6	5.0	2.6	1.3	97.3	2.7	2,436
8 Other Events	48.9	29.0	8.2	5.6	4.0	95.6	4.4	3,926
9 Financial Statements and Exhibits	50.9	23.1	7.9	6.0	7.1	94.9	5.1	16,042

Table 3 : Abnormal Buy and Hold Returns Analysis

Panel A : 3 Day Abnormal Returns Around the Event Date by Number of Items Reported

# of Events	N	Mean	Pr > t	t-test of diff
1	89,294	0.1%	0.004	
2	18,186	0.2%	0.001	
3	3,381	0.8%	<.0001	<.0001
4	556	1.0%	0.028	
>=5	30	3.8%	0.258	

Panel B : Abnormal Returns by Item

Item	New	Expected Sign	Abnormal Returns		
			3 Day ED	3 Day FD	ED to FD
1.01 Entry into a Material Definitive Agreement	Yes	? Or +	0.52% ***	0.41% ***	0.74% ***
1.02 Termination of a Material Definitive Agreement	Yes	? Or -	0.11%	-0.24%	-0.16%
1.03 Bankruptcy or Receivership	No	-	5.77%	-11.90% *	-8.86%
2.01 Completion of Acquisition or Disposition of Assets	No	?	0.91% ***	0.44% ***	1.13% ***
2.02 Results of Operations and Financial Condition	No (voluntary)	?	-0.15% ***	-0.24% ***	-0.12%
2.03 Creation of a Direct/Off-Balance Sheet Financial Obligation	Yes	?	0.25% ***	0.19% **	0.47% ***
2.04 Increase/Acceleration of a Direct/Off-Balance Sheet Financial Obligation	Yes	-	-0.04%	-1.05%	-2.00% **
2.05 Cost Associated with Exit or Disposal Activities	Yes	?	-0.58% **	-1.08% ***	-1.42% ***
2.06 Material Impairments	Yes	-	-1.13% ***	-1.65% ***	-2.31% ***
3.01 Notice of Delisting ... Transfer of Listing	Yes	-	-1.13% ***	-2.90% ***	-3.65% ***
3.02 Unregistered Sales of Equity Securities	Yes (from periodic)	+	0.97% ***	0.19%	1.23% ***
3.03 Material Modifications to Rights of Security Holders	Yes (from periodic)	?	2.84% ***	2.17% ***	3.73% ***
4.01 Changes in Registrant's Certifying Accountant	No	-	-0.14%	-0.59% ***	-0.84% ***
4.02 Non-Reliance on Previously Issued Financial Statements	Yes	-	-1.04% ***	-1.61% ***	-2.34% ***
5.01 Changes in Control of Registrant	No	?	1.62% **	0.40%	0.94%
5.02 Departure / Election of Directors or Principal Officers	No (expanded)	?	-0.04%	-0.11% **	-0.08%
5.03 Amendments to Articles of Incorporation or Bylaws	No (expanded)	?	0.14%	0.18%	0.29% *
5.04 Suspension of Trading Under Registrant's Employee Benefit Plans	No	-	0.47% **	0.05%	-0.04%
5.05 Amendments to the Registrant's Code of Ethics	No	?	0.34%	-0.27%	-0.08%
7.01 Regulation FD Disclosure	Yes (voluntary)	?	0.22% ***	0.16% ***	0.29% ***
8.01 Other Events	No (voluntary)	?	0.26% ***	0.06%	0.40% ***
9.01 Financial Statements and Exhibits	No	?	0.13% ***	0.02%	0.18% ***

Panel C : 30/60/90 Days Drift - Firms Filing Together with a Periodic Report vs. Those Filing Separately

	Periodic Filing	N	Mean	Pr > t	t-test of diff
30 days	No	98,227	-0.02%	0.601	
	Yes	24,531	0.28%	0.001	0.001
60 days	No	97,520	-0.01%	0.917	
	Yes	24,363	0.29%	0.010	0.016
90 days	No	96,876	0.05%	0.438	
	Yes	24,177	0.47%	0.001	0.007

Panel D : 30/60/90 Days Drift by Item

Item	New	Expected Sign	30 days Mean	60 days Mean	90 days Mean
1.01 Entry into a Material Definitive Agreement	Yes	? Or +	0.01%	0.10%	0.22% *
1.02 Termination of a Material Definitive Agreement	Yes	? Or -	-0.15%	0.00%	-0.42%
1.03 Bankruptcy or Receivership	No	-	-14.70% **	-13.32% **	-19.00% **
2.01 Completion of Acquisition or Disposition of Assets	No	?	-0.17%	0.13%	-0.06%
2.02 Results of Operations and Financial Condition	No (voluntary)	?	0.18% ***	0.19% **	0.29% ***
2.03 Creation of a Direct/Off-Balance Sheet Financial Obligation	Yes	?	-0.40% **	-0.59% **	-0.65% **
2.04 Increase/Acceleration of a Direct/Off-Balance Sheet Financial Obligation	Yes	-	-1.53% *	-2.50% **	-2.04% *
2.05 Cost Associated with Exit or Disposal Activities	Yes	?	-1.11% ***	-0.97% *	-1.14%
2.06 Material Impairments	Yes	-	-1.23% ***	-1.62% **	-1.95% **
3.01 Notice of Delisting ... Transfer of Listing	Yes	-	-0.54%	-0.44%	0.27%
3.02 Unregistered Sales of Equity Securities	Yes (from periodic)	+	0.37%	0.35%	0.31%
3.03 Material Modifications to Rights of Security Holders	Yes (from periodic)	?	0.71%	1.45% *	1.34%
4.01 Changes in Registrant's Certifying Accountant	No	-	-0.68%	-0.93%	-0.84%
4.02 Non-Reliance on Previously Issued Financial Statements	Yes	-	0.13%	0.52%	0.94%
5.01 Changes in Control of Registrant	No	?	-2.06% *	-3.69% **	-3.44% *
5.02 Departure / Election of Directors or Principal Officers	No (expanded)	?	-0.28% ***	-0.36% **	-0.45% **
5.03 Amendments to Articles of Incorporation or Bylaws	No (expanded)	?	-0.02%	0.17%	0.04%
5.04 Suspension of Trading Under Registrant's Employee Benefit Plans	No	-	-0.26%	-0.28%	-0.68%
5.05 Amendments to the Registrant's Code of Ethics	No	?	0.97%	1.14%	0.92%
7.01 Regulation FD Disclosure	Yes (voluntary)	?	0.29% ***	0.53% ***	0.69% ***
8.01 Other Events	No (voluntary)	?	-0.13% *	-0.35% ***	-0.45% ***
9.01 Financial Statements and Exhibits	No	?	0.08% **	0.07%	0.12% *

Notes :

* indicates significance at 10% level; ** indicates significance at 5% level; *** indicates significance at 1% level

Abnormal Return is the buy and hold return on a stock minus the average return on a matched size-B/M portfolio in the period of interest : the three days around the event date (Date or Report on Form 8-K), the three days around the filing date, the period from one day prior to the event date through one day after the filing date, and periods from one day after the filing date through 30/60/90 calendar days.

Table 4 : Abnormal Volume Analysis

Panel A : Abnormal Volume around Filing Date by Number of Items Reported

# of Events	N	Mean	Pr > t	t-test of diff
1	89,294	53%	<.0001	
2	18,186	62%	<.0001	
3	3,381	79%	<.0001	0.002
4	556	95%	<.0001	
>=5	30	119%	0.032	

Panel B : Abnormal Volume by Item

Item	New	Abnormal Volume		
		3 Day ED	3 Day FD	ED to FD
1.01 Entry into a Material Definitive Agreement	Yes	51% ***	51% ***	51% ***
1.02 Termination of a Material Definitive Agreement	Yes	48% ***	49% ***	49% ***
1.03 Bankruptcy or Receivership	No	400% **	578% **	464% **
2.01 Completion of Acquisition or Disposition of Assets	No	33% ***	33% ***	33% ***
2.02 Results of Operations and Financial Condition	No (voluntary)	88% ***	76% ***	87% ***
2.03 Creation of a Direct/Off-Balance Sheet Financial Obligation	Yes	31% ***	26% ***	28% ***
2.04 Increase/Acceleration of a Direct/Off-Balance Sheet Financial Obligation	Yes	83% ***	77% ***	78% ***
2.05 Cost Associated with Exit or Disposal Activities	Yes	41% ***	51% ***	50% ***
2.06 Material Impairments	Yes	27% ***	40% ***	36% ***
3.01 Notice of Delisting ... Transfer of Listing	Yes	43% ***	55% ***	49% ***
3.02 Unregistered Sales of Equity Securities	Yes (from periodic)	77% ***	70% ***	73% ***
3.03 Material Modifications to Rights of Security Holders	Yes (from periodic)	131% ***	121% ***	124% ***
4.01 Changes in Registrant's Certifying Accountant	No	28% **	21% **	23% **
4.02 Non-Reliance on Previously Issued Financial Statements	Yes	35% ***	45% ***	43% ***
5.01 Changes in Control of Registrant	No	71% **	61% **	54% **
5.02 Departure / Election of Directors or Principal Officers	No (expanded)	26% ***	29% ***	28% ***
5.03 Amendments to Articles of Incorporation or Bylaws	No (expanded)	37% ***	32% ***	34% ***
5.04 Suspension of Trading Under Registrant's Employee Benefit Plans	No	14% ***	11% *	11% **
5.05 Amendments to the Registrant's Code of Ethics	No	67% *	40% **	53% *
7.01 Regulation FD Disclosure	Yes (voluntary)	57% ***	52% ***	57% ***
8.01 Other Events	No (voluntary)	82% ***	73% ***	77% ***
9.01 Financial Statements and Exhibits	No	69% ***	61% ***	67% ***

Notes :

* indicates significance at 10% level; ** indicates significance at 5% level; *** indicates significance at 1% level

Abnormal Volume is average shares traded in the period of interest scaled by the average shares traded in a preceding non-event period less one. Periods of interest are: the three days around the event date (Date or Report on Form 8-K), the three days around the filing date, and the period from one day prior to the event date through one day after the filing date.

Table 5 : Abnormal Volatility Analysis

Panel A : Abnormal Volatility around Filing Date by Number of Items Reported

# of Events	N	Mean	Pr > t	t-test of diff
1	89,294	2.39	<.0001	
2	18,186	2.72	<.0001	
3	3,381	3.39	<.0001	<.0001
4	556	2.77	<.0001	
>=5	30	3.70	0.065	

Panel B : Abnormal Volatility by Item

Item	New	Abnormal Volatility		
		3 Day ED	3 Day FD	ED to FD
1.01 Entry into a Material Definitive Agreement	Yes	2.22 ***	2.04 ***	2.05 ***
1.02 Termination of a Material Definitive Agreement	Yes	2.24 ***	2.43 ***	2.35 ***
1.03 Bankruptcy or Receivership	No	3.17 **	8.73 *	6.57 *
2.01 Completion of Acquisition or Disposition of Assets	No	1.58 ***	1.46 ***	1.52 ***
2.02 Results of Operations and Financial Condition	No (voluntary)	4.37 ***	3.70 ***	4.17 ***
2.03 Creation of a Direct/Off-Balance Sheet Financial Obligation	Yes	1.33 ***	1.26 ***	1.27 ***
2.04 Increase/Acceleration of a Direct/Off-Balance Sheet Financial Obligation	Yes	3.25 **	2.98 ***	2.56 ***
2.05 Cost Associated with Exit or Disposal Activities	Yes	2.47 ***	2.42 ***	2.50 ***
2.06 Material Impairments	Yes	2.31 ***	2.79 ***	2.57 ***
3.01 Notice of Delisting ... Transfer of Listing	Yes	2.14 ***	1.98 ***	2.03 ***
3.02 Unregistered Sales of Equity Securities	Yes (from periodic)	2.30 ***	2.00 ***	2.21 ***
3.03 Material Modifications to Rights of Security Holders	Yes (from periodic)	7.80 ***	5.44 ***	5.73 ***
4.01 Changes in Registrant's Certifying Accountant	No	1.49 ***	1.24 ***	1.34 ***
4.02 Non-Reliance on Previously Issued Financial Statements	Yes	2.40 ***	3.83 ***	3.22 ***
5.01 Changes in Control of Registrant	No	2.16 ***	1.78 ***	1.81 ***
5.02 Departure / Election of Directors or Principal Officers	No (expanded)	1.62 ***	1.65 ***	1.62 ***
5.03 Amendments to Articles of Incorporation or Bylaws	No (expanded)	1.93 ***	1.75 ***	1.82 ***
5.04 Suspension of Trading Under Registrant's Employee Benefit Plans	No	1.25 ***	1.28 ***	1.29 ***
5.05 Amendments to the Registrant's Code of Ethics	No	1.18 ***	1.33 ***	1.27 ***
7.01 Regulation FD Disclosure	Yes (voluntary)	2.75 ***	2.46 ***	2.60 ***
8.01 Other Events	No (voluntary)	2.95 ***	2.60 ***	2.72 ***
9.01 Financial Statements and Exhibits	No	3.12 ***	2.69 ***	2.92 ***

Notes :

* indicates significance at 10% level; ** indicates significance at 5% level; *** indicates significance at 1% level

Abnormal Volatility is the squared abnormal returns in the period of interest scaled by the variance of abnormal returns in the non-event period. The periods of interest are : the three days around the event date (Date or Report on Form 8-K), the three days around the filing date, and the period from one day prior to the event date through one day after the filing date.

Table 6 : Information Content by Timeliness of Filing

Panel A : 3 Day Abnormal Buy and Hold Returns Around the Filing Date by Filing Lag

Business Days		Section 1	Section 2	Section 3	Section 4	Section 5	Section 7	Section 8	Section 9
0	Mean	0.008	-0.001	-0.006	-0.011	0.000	0.002	0.002	0.001
	Pr > t	<.0001	0.034	0.097	0.001	0.979	0.007	0.001	0.146
	N	5,079	23,241	831	399	3,602	10,931	11,743	39,180
1	Mean	0.009	-0.002	0.007	-0.011	-0.001	0.002	0.002	0.002
	Pr > t	<.0001	0.012	0.128	0.007	0.534	0.037	0.038	0.003
	N	5,253	9,199	983	344	3,067	4,453	7,325	19,805
2	Mean	0.004	-0.005	-0.007	-0.009	-0.003	-0.003	-0.001	-0.002
	Pr > t	0.000	<.0001	0.0723	0.1119	0.0172	0.0431	0.5652	0.0338
	N	5,118	3,455	808	294	2,741	1,441	3,177	9,676
3	Mean	0.001	-0.002	-0.009	-0.006	-0.001	0.003	-0.003	0.000
	Pr > t	0.089	0.185	0.001	0.052	0.207	0.116	0.016	0.583
	N	6,616	2,734	929	392	3,081	907	2,287	8,759
4	Mean	0.002	-0.002	-0.011	-0.012	0.000	0.003	-0.003	-0.001
	Pr > t	0.003	0.057	<.0001	0.000	0.689	0.332	0.051	0.274
	N	11,906	3,976	1,654	673	4,460	903	2,554	12,151
≥5	Mean	0.000	-0.002	-0.024	-0.024	-0.001	0.001	-0.004	-0.002
	Pr > t	0.931	0.247	0.001	0.001	0.644	0.649	0.030	0.083
	N	-1,912	2,856	267	164	720	697	1,381	4,582

Panel B : 3 Day Abnormal Volume around the Filing Date by Filing Lag

Business Days		Section 1	Section 2	Section 3	Section 4	Section 5	Section 7	Section 8	Section 9
0	Mean	66%	70%	72%	32%	27%	45%	57%	63%
	Pr > t	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	N	4,744	21,530	780	366	3,358	10,069	10,731	36,157
1	Mean	97%	81%	113%	70%	36%	69%	109%	81%
	Pr > t	<.0001	<.0001	<.0001	0.022	<.0001	<.0001	<.0001	<.0001
	N	4,694	8,381	907	315	2,737	3,929	6,446	17,721
2	Mean	49%	67%	75%	43%	30%	60%	84%	62%
	Pr > t	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	N	4,556	3,115	740	257	2,454	1,288	2,853	8,642
3	Mean	44%	59%	77%	18%	29%	52%	75%	53%
	Pr > t	<.0001	<.0001	<.0001	0.006	<.0001	<.0001	<.0001	<.0001
	N	5,895	2,431	830	352	2,755	814	2,029	7,770
4	Mean	29%	36%	38%	21%	28%	56%	47%	34%
	Pr > t	<.0001	<.0001	<.0001	0.006	<.0001	<.0001	<.0001	<.0001
	N	10,605	3,516	1,479	616	4,054	793	2,288	10,859
≥5	Mean	28%	66%	137%	20%	34%	48%	23%	45%
	Pr > t	<.0001	<.0001	0.018	0.213	<.0001	<.0001	<.0001	<.0001
	N	1,279	2,073	186	80	470	451	937	3,112

Panel C : 3 Day Abnormal Volatility around the Filing Date by Filing Lag

Business Days		Section 1	Section 2	Section 3	Section 4	Section 5	Section 7	Section 8	Section 9
0	Mean	2.53	3.77	2.98	1.92	1.68	2.32	2.58	3.10
	Pr > t	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	N	4,744	21,530	780	366	3,358	10,069	10,731	36,157
1	Mean	3.25	3.50	4.62	2.42	1.73	2.83	2.94	3.04
	Pr > t	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	N	4,694	8,381	907	315	2,737	3,929	6,446	17,721
2	Mean	2.13	2.68	2.94	2.46	1.65	2.56	2.63	2.41
	Pr > t	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	N	4,556	3,115	740	257	2,454	1,288	2,853	8,642
3	Mean	1.57	2.02	1.69	2.22	1.53	1.96	1.88	1.73
	Pr > t	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
	N	5,895	2,431	830	352	2,755	814	2,029	7,770
4	Mean	1.62	1.62	1.48	3.06	1.58	2.77	2.60	1.76
	Pr > t	<.0001	<.0001	<.0001	0.060	<.0001	<.0001	<.0001	<.0001
	N	10,605	3,516	1,479	616	4,054	793	2,288	10,859
≥5	Mean	1.54	3.09	2.38	2.23	1.67	2.41	1.79	2.33
	Pr > t	<.0001	<.0001	<.0001	0.005	<.0001	<.0001	<.0001	<.0001
	N	1,279	2,073	186	80	470	451	937	3,112

Notes :

Abnormal Return is the buy and hold return on a stock minus the average return on a matched size-B/M portfolio in the three days around the filing date. Abnormal Volume is average shares traded in the three days around the filing date scaled by average shares traded in a preceding non-event period less one. Abnormal Volatility is the squared abnormal returns in the three days around the filing date scaled by the variance of abnormal returns in the non-event period.

Table 7 : Information Content of Periodic Reports

Panel A : Distribution of Form 8-K and 10-K, 10-Q Filings

Year	10-K & 10-Q	8-K
1994	6,163	2,370
1995	11,600	4,134
1996	21,679	8,208
1997	26,592	11,620
1998	26,333	13,033
1999	25,242	12,065
2000	24,394	12,473
2001	23,072	14,905
2002	21,458	18,258
2003	19,653	33,163
2004	18,771	44,632
2005	17,910	58,484
2006	16,826	57,566
2007	16,129	55,735
Total	275,822	346,646

Panel B : Abnormal Volume and Abnormal Volatility around 8-K, 10-K, 10-Q Filings

Year	Abnormal Volume		Abnormal Volatility	
	10-K & 10-Q	8-K	10-K & 10-Q	8-K
1994	2%	23%	1.02	1.25
1995	11%	34%	1.06	1.30
1996	13%	35%	1.05	1.23
1997	7%	40%	1.08	1.28
1998	11%	42%	1.11	1.54
1999	15%	46%	1.14	1.46
2000	5%	42%	1.12	1.54
2001	9%	44%	1.02	1.45
2002	12%	40%	1.18	1.70
2003	25%	68%	1.17	1.95
2004	22%	55%	1.33	2.11
2005	21%	39%	1.48	2.04
2006	27%	42%	1.55	2.03
2007	43%	42%	2.61	2.43

Panel C : Statistical Difference between Periodic Reports Made Before and After August 23, 2004

	N	Abnormal Volume		Abnormal Volatility	
		Mean	<i>t test of diff</i>	Mean	<i>t test of diff</i>
Before August 23, 20004	215,393	11%	<i><.0001</i>	1.114	<i><.0001</i>
After August 23, 20004	54,849	31%		1.818	
Before August 23, 20004 (1 year)	18,623	18%	<i><.0001</i>	1.290	<i><.0001</i>
After August 23, 20004 (1 year)	17,632	26%		1.437	

Notes :

Abnormal Volume is average shares traded in the three days around the filing date scaled by average shares traded in a preceding non-event period less one. Abnormal Volatility is the squared abnormal returns in the three days around the filing date scaled by the variance of abnormal returns in the non-event period. In Panel C the Wilcoxon 2 sided z statistics show similar order of significance as the t tests presented above.

Table 8 : Analysis of Good and Bad News in Forms 8-K

Panel A : Average Filing Lag Before and After Promulgation of SEC 8-K Guidance

		Before 8/23/2004	After 8/23/2004	All
Bad News	Mean	4.0	2.3	3.2
	N	25,167	21,756	46,923
	Prob>t	<.0001	<.0001	<.0001
Good News	Mean	3.8	2.2	3.0
	N	23,294	21,949	45,243
	Prob>t	<.0001	<.0001	<.0001
Both	Mean	3.9	2.3	3.1
	N	48,461	43,705	92,166
	Prob>t	<.0001	<.0001	<.0001
<i>t test of diff for Good vs Bad</i>		<.0001	<.0001	<.0001

Panel B : Average Abnormal Volume / Volatility Before and After Promulgation of SEC 8-K Guidance

		Before 8/23/2004	After 8/23/2004	All
Bad News	Mean Volume	86%	105%	95%
	N	25,167	21,756	46,923
	Prob>t	<.0001	<.0001	<.0001
Good News	Mean Volume	117%	122%	120%
	N	23,294	21,949	45,243
	Prob>t	<.0001	<.0001	<.0001
Both	Mean Volume	101%	114%	107%
	N	48,461	43,705	92,166
	Prob>t	<.0001	<.0001	<.0001
<i>t test of diff for Good vs Bad</i>		<.0001	<.0001	<.0001

		Before 8/23/2004	After 8/23/2004	All
Bad News	Mean Volatility	3.07	5.16	4.04
	N	25,167	21,756	46,923
	Prob>t	<.0001	<.0001	<.0001
Good News	Mean Volatility	3.58	5.83	4.67
	N	23,294	21,949	45,243
	Prob>t	<.0001	<.0001	<.0001
Both	Mean Volatility	3.31	5.50	4.35
	N	48,461	43,705	92,166
	Prob>t	<.0001	<.0001	<.0001
<i>t test of diff for Good vs Bad</i>		<.0001	<.0001	<.0001

Notes :

Filing lag is the number of calendar days between the event date and the filing date winsorized at 16. Abnormal Volume is average shares traded in the three days around the event date scaled by average shares traded in a preceding non-event period less one. Abnormal Volatility is the squared abnormal returns in the three days around the event date scaled by the variance of abnormal returns in the non-event period.

Figure 1 : Form 8-K Filing Date Distribution across 2005-2006

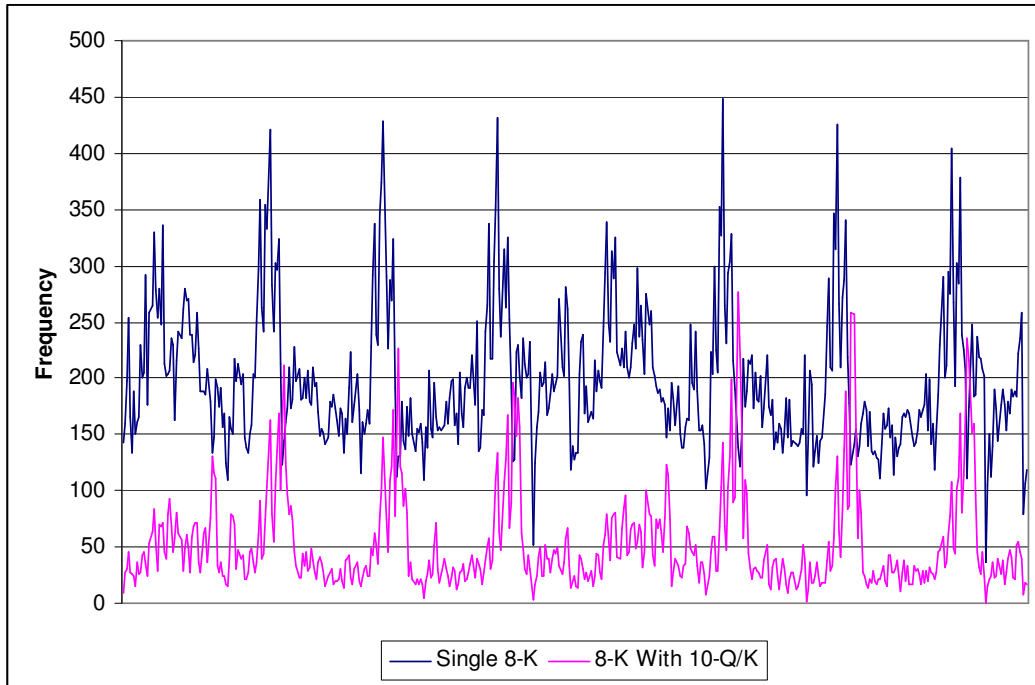


Figure 2 : Form 8-K Filing Date Distribution across 2005-2006 excluding Item 2.02 *Results of Operations and Financial Condition*

