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Capital Market Consequences of Filing Late 10-Qs and 10-Ks[†]

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Abstract. Timely disclosure of financial information is critical for well functioning capital markets, and a recent surge in late SEC filings has led to increased interest in their consequences. We find that the market reacts negatively to announcements of late filings, even to potentially benign announcements that indicate management intends to file within the SEC's allowed grace period. We also find that the reaction is more negative for late 10-Qs than late 10-Ks when accounting reasons are cited for the delay and that the market anticipates which late 10-Q filers will subsequently fail to file within the SEC's allowed grace period, but only when accounting reasons cause the delay. In addition, we show that abnormal returns continue to decline during the months following the late filing announcement but that the decline is less pronounced when accounting reasons explain the delay. Finally, we find that operating performance also declines during the months following the delay announcement. Our study contributes to the literature by being the first to examine the short-window market reaction to managers' announcements that they will file late 10-Qs and 10-Ks. Our findings also indicate that the announcement of late 10-Qs has distinct valuation implications from the announcement of late 10-Ks, and suggests that market participants are relatively better at understanding the valuation implications of late filings when accounting reasons explain the delay.

Keywords: asset pricing; accounting problems; late filing; financial statements; market efficiency; drift

JEL Classification: G12; G14; M41

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Capital Market Consequences of Filing Late 10-Qs and 10-Ks

1. Introduction

Timely disclosure of financial statement information is a critical requirement for well functioning capital markets. Late voluntary disclosure of financial statement information potentially harms shareholders by delaying the release of information that is important in making investment decisions (Chambers and Penman, 1984; Bagnoli et al., 2002). However, prior research on late mandatory filings is scarce (Alford et al., 1994), and prior research on the capital market consequences of the information reported in late filing announcements is nonexistent. Recently, however, a surge in late filings of Forms 10-Q and 10-K has led to a renewed interest in untimely filings and their consequences (e.g., Aguilar, 2007). Thus, the primary objective of our paper is to fill a void in the literature by examining the capital market consequences of the announcement of late 10-Q and 10-K filings and the information they contain.

Companies that fail to timely file their 10-Q or 10-K are required by SEC Rule 12b-25 to file a Form NT (for "Non-Timely") no later than one day after the due date. Timely filing of Form NT (also known as Form 12b-25) results in an automatic one-time grace period of 5 days for 10-Qs and 15 days for 10-Ks. Form NT also requires management to provide a narrative explanation of the reason for the late filing and declare whether it expects to subsequently file the late 10-Q or 10-K within the allowed grace period. Companies that file Form NT on a timely basis and subsequently file their late 10-Q or 10-K within the allowed grace period are considered by the SEC to have filed on a timely basis, and are treated as if they had met the original filing deadline.[1]

[1] However, during the grace period companies are not allowed to register securities that rely upon the late statements until they are ultimately filed.

We expect market participants to react negatively to Form NT filings when they expect the late 10-K or 10-Q to be filed after the grace period has passed. This is because companies that fail to file within the allowed grace period are subject to a variety of penalties that impose significant costs on shareholders. These include de-registration by the SEC, de-listing by national stock exchanges, and the inability to raise capital through issuance of public securities.[2] However, it is possible that the market does not react negatively to NT filers, even when the market expects them to miss the grace period deadline, for two reasons. First, market participants may be able to anticipate the information conveyed by the filings. If this is the case, the information conveyed by the NT filing will be impounded in the stock price prior to the filing. Second, there may be no immediate market reaction to NT filings if the information they convey is difficult for shareholders to calibrate. Calibration might be difficult because NT filings are unusual events and the narrative explanation in NTs is open-ended and often vague. If this is the case, we may find an incomplete reaction around the NT filing and may observe a post-filing stock price drift.

NT filers that subsequently file their late 10-K or 10-Q within the SEC's allowed grace period are considered by the SEC to have filed on a timely basis, and thus these NT filers are not subject to many of the costs that are otherwise imposed on late filers. Therefore, if the market expects the NT filer to ultimately file within the grace period, the NT filing is a potentially benign event that is not expected to result in a negative stock price reaction. However, even NT filers that ultimately file within the grace period deadline may impose costs on shareholders. In particular, they are delaying the dissemination of information that is useful to investors, and the inability to meet the original 10-K or 10-Q statutory filing deadline may signal deeper problems

[2] Other possible adverse consequences include debt covenant violations and the inability to hold the annual shareholder meeting until the 10-K is filed.

within the firm. Thus, even NT filers that ultimately file within the grace period may incur a negative stock price reaction.

In addition, shareholders may react differently to NT 10-Qs than to NT 10-Ks, because 10-Qs require less disclosure and are unaudited. On one hand, this suggests that the information in 10-Qs is less informative than in 10-Ks, and may lead to a smaller reaction to NT 10-Qs than to NT 10-Ks. On the other hand, since 10-Qs are much less onerous to produce than 10-Ks, late 10-Qs may signal more serious underlying problems than late 10-Ks, suggesting a stronger negative reaction to NT 10-Qs than to NT 10-Ks.

The above arguments suggest that several factors potentially impact the market's reaction to NT filings, leading us to ask the following six questions: (1) Does the market react negatively to NT filings? (2) Is the reaction to NT 10-Q filings more or less negative than to NT 10-K filings? (3) Does the reaction to the NT filing vary with the stated reason for the delay? (4) Is the reaction to NT filings more negative for firms that announce they will be unable to file within the grace period compared to firms that do not? (5) Is the market reaction around the NT filing complete? And (6) Does the NT filing conveys news about deeper problems within the firm, or merely that the company missed an SEC filing deadline?

We perform our analysis on a sample of 2,115 late filers with available data over the nine year period, 2000-2008. We begin our analysis by first documenting several regularities that are new to the literature. In particular, we find that after we classify management's self-reported reasons for the delay, accounting problems are the most frequently cited reason. Further, the average delay for both 10-Qs and 10-Ks is more than three times as long when an accounting reason is cited for the delay (41 days) compared to when the delay is attributed to corporate events (13 days) or uncertain reasons (11 days). Finally, we find that management is more than

twice as likely to miss the grace period filing deadline for late 10-Qs (51 percent of the time), than for late 10-Ks (25 percent of the time).

We address our first five research questions by examining short window stock price changes around NT filing dates and long window stock price changes following NT filings. We address our sixth question by examining the return on assets (ROA) of late filers around the late filing quarter. In answer to our first question we find a significantly negative stock price reaction to both NT 10-Q filings (–2.93 percent) and NT 10-K filings (–1.96 percent). In answer to our second research question, we find a significantly larger negative reaction to NT 10-Q filings than to NT 10-K filings.[3] In answer to our third question, we find that the larger negative reaction to NT 10-Q filings is due primarily to firms that report accounting reasons as the cause of the delay. This indicates that when accounting problems prevent the timely filing of 10-Qs, which require significantly less disclosure than 10-Ks and are unaudited, they are perceived as more severe than accounting problems that delay 10-Ks. Interestingly, the negative reaction to the NT filings is observed even in the subsample of late filers declaring they will file the 10-Q/10-K within the grace period. This finding is somewhat surprising because the SEC considers filings that are made within the grace period to be timely, and hence these late filings are potentially benign. One possible reason for this negative reaction (which we investigate below) is that some NT filers that declare they will file within the grace period deadline end up missing it. Thus, the market may not blithely react to management's declaration, but instead assesses independently the likelihood of filing within the grace period.

In answer to our fourth research question, we find a significantly more negative stock price reaction to NT filings for firms that subsequently fail to file within the grace period, compared to firms that meet the deadline. Importantly, we find this result regardless of whether

[3] Throughout the paper we define statistical significance as p-values less than 10 percent, two-tailed.

the NT filing includes management's declared intention to *subsequently* file within the grace period. This finding reveals that stock prices act as if investors are able to predict whether management will meet the grace period deadline even when it contradicts management's declared intention, and thus explains the surprising finding discussed above that the market responds negatively even to the subset of late filers declaring they will file the 10-Q/10-K within the grace period. We also find that the larger negative reaction to NT filers that miss the grace period deadline is driven by NT 10-Q filers that are delayed for accounting reasons. Consistent with this finding, we further document that when accounting reasons are cited for the delay, NT 10-Q filers are nearly twice as likely as NT 10-K filers to miss the grace period deadline, (i.e., 30 percent compared to 59 percent, respectively). This suggests that when accounting reasons are cited, investors recognize that NT 10-Q are likely to signal deeper underlying problems that ultimately prevent management from meeting the grace period deadline. Overall, these results are important because they demonstrate that investors do not take managements' announcements on face value; rather, investors appear to use other information to infer the integrity of managements' announcements.

In answer to our fifth research question, we investigate whether the immediate stock market response is complete by examining stock price changes during the year following the NT filings. This analysis finds that, on average, abnormal returns for both the NT 10-Q and NT 10-K filers continue to drift downward during the post-filing months, and that this drift is less pronounced when accounting reasons underlie the delay. Thus, importantly, the evidence reveals that investors are better able to interpret the valuation implications of late filings when the delay is due to accounting reasons.[4]

[4] For completeness, we also examine the stock market reaction to the subsequent actual filling of the late 10-Ks and 10-Qs. This analysis finds a significant negative market reaction to the subsequent filings.

In answer to our sixth and final question, we find that ROA is significantly negative for late 10-K and 10-Q filers during the NT filing period as well as during the following two quarters. This finding is consistent with the negative market response around the NT announcements being at least partially due to the NT filings conveying information about deeper problems within the firms, including negative future operating performance, and not simply indicating that the firm missed an SEC filing deadline.

Our study contributes to the literature by being the first to examine the short-window market reaction to a broad sample of NT filings. While Alford et al. (1994) examine stock returns for a sample of late 10-K filers, they do not examine the short-window market reaction to the NT filings. In fact, they do not even collect the NT filing dates, so such tests are not possible in the context of their analysis.[5] We find that the market reacts negatively to NT filings, even to potentially benign NT filings that indicate management intends to file within the SEC's allowed grace period. We also find that the reaction is more negative for late 10-Qs than late 10-Ks when accounting reasons are cited for the delay, and that the market anticipates which late 10-Q filers will subsequently fail to file within the SEC's allowed grace period, but again, only when accounting reasons cause the delay. In addition, we find that abnormal returns continue to decline during the months following the late filing announcement, but that the decline is less pronounced when accounting reasons underlie the delay. Finally, we find that operating performance also continues to decline during the months following the delay announcement.

The remainder of the paper is organized as follows. The next section describes the institutional background and prior research. Section 3 discusses the data and variables used in the

[5] As discussed later in detail, this is because the purpose of the analysis in Alford et al. (1994) "…is to document how frequently firms either extend or violate the 10-K filing requirements, and to describe the financial characteristics of these firms." As a result, Alford et al. (1994) design their stock price tests for the purpose of describing the financial characteristics of 10-K NT filers.

study. Section 4 outlines our tests and reports the results, and section 5 summarizes our findings and states our conclusions.

2. Institutional Background and Prior Research

2.1. Financial Statement Filing Requirements

In 1946 the SEC began requiring Form 10-K to be filed within 90 calendar days after year-end, and in 1970 began requiring Form 10-Q to be filed within 45 calendar days after quarter-end. In April 2002, in response to calls to shorten the deadlines, the SEC issued a proposal to reduce the filing deadlines for the largest public companies to 35 days for 10-Qs and 60 days for 10-Ks.[6] The SEC argued that modern technology allows companies to file timelier periodic reports and that market participants currently demand timelier information. The final rule (as amended) reduces the 10-Q filing deadline from 45 days to 40 days for both "accelerated" filers (with market capitalization greater than $75 million and less than $700 million) and "large accelerated" filers (with market capitalization greater than $700 million). The 10-K filing deadline is reduced from 90 days to 75 days for accelerated filers and to 60 days for large accelerated filers.[7] "Non-accelerated" filers (with market capitalization less than $75 million) experience no change in either 10-Q or 10-K deadlines.

2.2. Implications of Late Financial Statement Filings on Shareholder Value

While late filings are historically relatively infrequent, the financial press reports a recent increase in late filings, which it attributes to the shortening of the filing deadlines (that are phased in during 2004 through 2007), and more stringent reporting required under The Sarbanes-

[6] SEC Release No. 33-8089 (April 12, 2002). Former SEC Chairman Manuel Cohen is quoted as saying "…because companies need not file the [quarterly] report until 45 days after the end of the quarter, the information is often stale." (Brown, 1985).

[7] The new rules are codified in SEC Release No. 33-8128 (September 5, 2002), as modified in SEC Release Nos. 33-8507 (November 17, 2004), and 33-8644 (December 21, 2005).

Oxley Act of 2002 (SOX) (Durfee, 2004; Taub and Cook, 2005; Aguilar, 2007).[8] For example, compliance with the internal control requirements under Section 404 and the CEO's and CFO's certification under oath on the accuracy of the financial statements are commonly cited in the press as reasons for delayed filings. Importantly, many of the new SOX requirements impact quarterly filings as well as annual filings (Durfee, 2004). For example, disclosures formerly included only in the annual report, such as pension and business segment information, must be reported quarterly under SOX. Other factors that may adversely impact timely periodic reporting are the increased frequency of restatements and the adoption of complex new accounting standards, such as the expensing of stock options. Thus, several recent changes in the financial reporting environment contribute to the increased likelihood of late 10-Q and 10-K filings.

Untimely filing of Forms 10-Q and 10-K delays disclosures that help investors make informed investment decisions, and increases trading costs due to increased information asymmetry. In addition, there are possible legal consequences to violating the SEC's 10-Q and 10-K filing deadlines, some of which are severe (Hartlin, 2008).[9] For example, the SEC can revoke companies' registration under the SEC Acts, and late filers may be delisted by their national stock exchange. Indeed, in the two years after the late filing announcement 16.2 percent of our sample firms stopped trading on the stock exchange for reasons other than mergers as opposed to only 6.9 percent in the Compustat universe not in our sample. Late filers also are prevented from issuing securities using the short form shelf registration statement (Form S-3) for the next year.[10] Other possible adverse consequences include debt covenant violations and the

[8] Ettredge et al. (2006) also present evidence of audit delays as a result of SOX Section 404; and Ettredge et al. (2000) report the effect of quarterly reviews on the timing of adjustments in quarterly earnings reports.
[9] The SEC requirement to file annual and quarterly reports originates in Section 13 or 15(d) of the Exchange Act, and the rules promulgated there-under (see Rule 13a-1 and Rule 13a-13).
[10] Late filing also prevents a company from using Form S-8 for employee benefit plans and from selling restricted securities under Rule 144, at least until the issuer has remedied the late filing (Hartlin, 2008).

inability to hold the annual shareholder meeting until the 10-K is filed. In addition, untimely filing may signal underlying problems that impose costs on shareholders, such as issues related to accounting and corporate events. Thus, there are several reasons why filing Form NT may be associated with a negative stock price reaction.

If a company is unable to file its 10-Q or 10-K on time, it is required to file a Form NT (also known as Form 12b-25) no later than one day after the original due date of the 10-Q or 10-K. Timely filing of Form NT results in a one-time grace period (or extension of time) of 5 days for 10-Qs and 15 days for 10-Ks. (See Appendix 1 for the text of Rule 12b-25.) While Rule 12b-25 states that extensions are granted only when filing on time would incur "unreasonable effort or expense," the SEC does not formally decide whether the reasons for the late filing provided in Form NT are justifiable (Morse et al., 2009). Rather, if the form is complete and timely filed, the extension is automatic. Part II of Form NT requires registrants to explicitly declare whether they expect to file within the 5/15 day grace period by checking a box, and Part III of Form NT includes management's narrative explanation of the reason why the 10-Q or the 10-K will be filed late. If the late 10-Q or 10-K is then filed within the grace period, it is considered timely filed by the SEC and no penalties are imposed.[11] This suggests that late filings that are ultimately made within the SEC's grace period are potentially benign events that may not result in a negative stock price reaction.

2.3. Prior Research

Alford et al. (1994) examine stock returns for a sample of late 10-K filers. However, they do not collect the NT filing dates, and therefore do not perform short-window market reaction

[11] The one exception is that the company is not allowed to issue securities that are predicated on the timely filing of the reports until the late reports are actually filed.

tests of the NT filings. This is because the purpose of the analysis in Alford et al. (1994) is fundamentally different than ours. Specifically, as stated in Alford et al. (1994):

> ”The purpose of this study is to document how frequently firms either extend or violate the 10-K filing requirements, and to describe the financial characteristics of these firms.”

As a result, Alford et al. (1994) design their stock price tests for the purpose of describing the financial characteristics of 10-K NT filers, and not to measure the capital market consequences of the NT filing. They conclude that 20 percent of the 10-Ks filed during their sample period are late, and that the majority of late filers are financially distressed.

As part of their analysis of the financial characteristics of late filers, Alford et al. (1994) examine abnormal stock returns over various holding periods for firms filing Form NT (which they refer to as 12b-25 filers). This analysis is presented in Table 5, Panel C of their study. One of the holding periods examined, which they refer to as the “delay period,” begins the day after the 10-K due date and ends on the day the late 10-K is actually filed. The stock returns during this delay period have implications for our study because the NT due date is the day after the 10-K is due, and falls within the delay period. In particular, they find insignificant returns for all but the firms that are late by more than 17 days. Table 2 in Alford et al. (1994) indicates that 62 percent of their NT filings file within 17 days.[12] Thus, the majority of the NT filers in their sample during the delay period do not appear to experience negative returns during a holding period that includes the NT due date. This finding is consistent with NT 10-K filings not informing market participants around the NT filing date. NT filings may be uninformative around the filing date for several reasons. For example, market participants may anticipate the information contained in the NT, in which case the information contained in Form NT is already impounded in price. Alternatively, the open-ended nature of the information reported in the NT

[12] Specifically, from their Table 2, 62 percent equals the number of NT filers that file within 17 days (131+1,420) divided by the total number of NT filers with 10-K filing information, 2,518.

may be difficult for shareholders to calibrate, in which case the reaction may be incomplete around the NT filing, and we may observe a downward drift in prices during the period following the NT filing.[13]

3. Data and Variable Definitions

We obtain our sample of NT filers from the Audit Analytics, Non-Timely Module Feed (NT) dataset, for all 10-Q and 10-K late filings with fiscal period ends between 2000 and 2008, and with NT filing data on or prior to September 1, 2009. We obtain accounting data from the quarterly and annual Compustat databases. Because Alford et al. (1994) find that two-thirds of their sample includes late filers that fail to file the required Form NT, we also attempted to identify the non-late filers during our sample period. Using the filing dates in the Compustat database we identified several thousand firms that appeared to be non-NT late filers. However, when we compared a sample of 100 filing dates in the Compustat database to the actual filing dates reported on the Form 10-Ks in SEC's EDGAR database, we found that the filing dates in the Compustat database are unreliable. That is, while the Compustat database indicates that a large number of firms file late without filing a Form NT, this is not actually the case, and these apparent non-NT filers actually filed on time. To further investigate this issue we contacted Compustat personnel and they acknowledged that the filing dates in their database are unreliable and contain numerous errors.[14] We also communicated with Wayne Carnall, Chief Accountant of Corporation Finance at the SEC, who suggested that it is very rare for late filers not to file Form NT, and that he would be very interested in knowing of any non-NT late filers we are able to identify. Thus, unlike Alford et al. (1994), there are not enough non-NT late filers during our

[13] In contemporaneous working papers, Gao et al. (2010) investigates the market reaction to a subset of NT filings to investigate how bondholder activists respond to late filings; and Cao et al. (2010) investigates the market reaction to a subset of NT filings that are mainly due to information system failures.
[14] They also indicated they are working to resolve the problem.

sample period to merit analysis. One explanation for the larger number of non-NT filers found in Alford et al. (1994) when compared to our study, is that compliance has improved during our sample period. Another possible explanation is that the non-NT late filers in that study consist of on-time filers that are misclassified. Such a misclassification would explain why stock prices in Alford et al. (1994) do not decline during the delay period for any of the late filers that *fail* to file Form NT (in their Table 5, Panel B), while they do find that stock prices decline during some delay periods for the late filers that file Form NT (in their Table 5, Panel C).

We retrieve the fiscal quarter/year end date and the actual filing date of the corresponding financial statements directly from the SEC's Electronic Data Gathering Analysis and Retrieval (EDGAR) database. We obtain the risk-free rate and the Fama-French and momentum factors from the Fama-French Portfolios and Factors dataset available through the Wharton Research Data Services (WRDS). We retrieve data on stock prices, number of shares outstanding, and stock returns from the Center for Research in Security Prices (CRSP) Daily Stock File. We calculate the market value of equity by multiplying number of shares by stock prices, adjusted for stock splits and stock dividends, and the six-month trailing return by compounding each firm's CRSP raw daily returns over the period.

As in Alford et al. (1994), we calculate the 10-Q or 10-K filing delay, *DelayDays*, as the number of calendar days between the estimated statutory deadline and the actual 10-Q or 10-K filing date, i.e., *DelayDays* = filing date minus the statutory filing deadline. To obtain the statutory filing deadline, we program an algorithm that calculates *DeadlineDays*, i.e., the number of days between fiscal quarter/year end and the filing deadline. To find the filing deadline we use the SEC's filing requirements and acceleration rules that were effective during our sample

period.[15] To ensure accuracy, we use a sophisticated crawler program that extracts two variables directly from EDGAR in calculating *DelayDays*: "Filing Date" and "Period of Report".[16] We use EDGAR's "Period of Report" (which is the fiscal quarter/year end) because the fiscal quarter/year end in Compustat rounds the fiscal quarter/year end to the nearest month.

We measure buy-and-hold abnormal returns over the n trading days for firm i as follows:

$$\Pi_{t=1,n}(1 + R_{i,t}) - \Pi_{t=1,n}(1 + \mathrm{E}(R_{i,t})), \tag{1}$$

where: Π is the product operator; $R_{i,t}$ is firm i's daily return on day t, inclusive of dividends and other distributions; and $\mathrm{E}(R_{i,t})$ is firm i's expected return on day t. We adjust stock returns for the effect of delisting by using a two step procedure (following Beaver et al., 2007; Balakrishnan et al., 2010; and Konchitchki, 2011). In the first step, if a security delists during the return accumulation window and the reason for the delisting return is coded by CRSP as mostly poor-performance-related reason (delisting codes equal to 500 or between 520 and 584, e.g., bankruptcy or insolvency), we correct for the delisting bias identified in Shumway (1997) by using as the delisting return a single replacement value of –100 percent (see also Sloan, 1996). In the second step, the raw return is the delisting return if the raw return is missing, or the compounded raw return with the delisting return if the raw return is not missing.[17]

[15] Specifically, we first use the SEC's regulations to classify observations as non-accelerated, accelerated, or large accelerated filers, using the market value of equity based on the last business day of the issuer's most recently completed second fiscal quarter. Next, the algorithm uses the following deadline dates after the fiscal year or quarter end: (1) for fiscal years ending before December 15, 2003, all filers must file the 10-K within 90 days and the 10-Q within 45 days; (2) all accelerated filers (both large accelerated and accelerated) with fiscal years ending on or after December 15, 2003 must file the 10-K within 75 days, with no change to the 10-Q; (3) all accelerated filers (both types) with fiscal years ending on or after December 15, 2004 must file the 10-Q within 40 days; and (4) all large accelerated filers with fiscal years ending on or after December 15, 2006 must file the 10-K within 60 days. If the deadline date falls on a non-business day, the algorithm uses the first following business day as the deadline day. See also http://www.sec.gov/rules/final/33-8128.htm and http://www.sec.gov/rules/final/33-8644.pdf.

[16] See, e.g., http://www.sec.gov/Archives/edgar/data/1288776/000119312510241317/0001193125-10-241317-index.htm.

[17] Overall, the portion of delisting firms in our sample is very small (0.08 percent) and our inferences from the returns tests throughout the paper are unchanged when we replicate our analysis after excluding delisting returns.

To measure expected returns, we use the three Fama and French (1993) factors, *MKTRF*, *SMB*, and *HML*, augmented by a momentum factor, *UMD*, following Carhart (1997). Following prior research (e.g., Balakrishnan et al., 2010), we first estimate the following model using a 40-trading-day hold-out period which begins 55 trading days prior to the NT filing date:

$$R_{i,t} - R_{f,t} = \alpha_i + \beta_{MKTRF,i} \cdot MKTRF_t + \beta_{SMB,i} \cdot SMB_t + \beta_{HML,i} \cdot HML_t + \beta_{UMD,i} \cdot UMD_t + \varepsilon_{i,t}, \qquad (2)$$

where: $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; $R_{f,t}$ is the one-month Treasury bill daily return on day *t*; and *MKTRF*, *SMB*, *HML*, and UMD are the Fama-French and momentum daily factors returns, where $MKTRF_t$ is the daily excess return on a value-weighted aggregate equity market portfolio, SMB_t is the return on a zero-investment factor mimicking portfolio for size (market value of equity), HML_t is the return on a zero-investment factor mimicking portfolio for book-to-market value of equity, and UMD_t is the return on a zero-investment factor mimicking portfolio for momentum factor. We then use firm *i*'s estimated betas from equation (2) to compute the expected return for firm *i* on day *t*, as follows:

$$\mathrm{E}\left(R_{i,t}\right) = R_{f,t} + \hat{\beta}_{MKTRF,i} \cdot MKTRF_t + \hat{\beta}_{SMB,i} \cdot SMB_t + \hat{\beta}_{HML,i} \cdot HML_t + \hat{\beta}_{UMD,i} \cdot UMD_t . \qquad (3)$$

Table 1 reports our sample selection procedure and its effects on the sample size. Our sample spans the nine-year period, 2000-2008, because the coverage by Audit Analytics, our source of the initial sample, begins in 2000 and because our post-event return tests require one year of future data. Our initial sample of NT filers consists of 49,233 observations (30,920 NT 10-Qs and 18,313 NT 10-Ks). We delete 41,932 observations (26,857 NT 10-Qs and 15,075 NT 10-Ks) due to missing data on Compustat, CRSP, Audit Analytics, or EDGAR. To increase the likelihood that the NT Form contains news, we restrict our sample to first-time NT 10-Q and 10-K filings. This restriction further reduces the sample size by 4,656 observations (2,793 NT 10-Qs and 1,863 NT 10-Ks). We then eliminate 509 observations (206 NT 10-Qs and 303 NT 10-Ks)

with missing short-window abnormal returns, with prices lower than one dollar, or with market values of equity lower than 10 million dollars, because estimating abnormal stock returns of penny stocks and firms with insignificant market capitalization is unreliable. We next exclude 21 NT filings (16 NT 10-Qs and 5 NT 10-Ks) that primarily delay for technical reasons, since they are unlikely to convey news.[18] This procedure yields a final sample of 2,115 NT filers, 1,048 NT 10-Qs and 1,067 NT 10-Ks. It is notable that, while 10-Qs require fewer disclosures and are unaudited, which implies there are fewer reasons for delay, companies also file at least as many 10-Qs as 10-Ks.

Table 2 presents descriptive statistics about our sample firms. Panel A of Table 2 shows that the average delay in filing is 28.61 days (labeled *DelayDays*), and that it is nearly identical for both 10-Qs and 10-Ks, while the median delay in filing is only 6 days for 10-Qs and 15 days for 10-Ks. This indicates that most late 10-Qs are filed after the 5-day grace period, while most 10-Ks are filed within the 15-day grace period, and that both distributions are positively skewed indicating that some late filings, particularly 10-Qs, can be very late. The second row of Panel A reports the number of days from the fiscal-period-end to the actual filing date, and indicates, not surprisingly, that the 10-Ks take much longer to file than the 10-Qs. The next row in Panel A shows that 87 percent of the NT filers explicitly declare on their Form NT that they intend to subsequently file their 10-Q or 10-K within the allowed grace period. Other statistics reported in Panel A include the following: 44 percent of the NT filers report losses, they average 1.7 losses out of the prior five quarters, average raw stock returns are –3 percent over the prior six months, average cash flows from operation are positive in the prior quarter, 33 percent report a sharp

[18] These include primarily reasons related to computer problems with the EDGAR on-line filing system. For example, Bridgford Foods Corporation explains on their NT 10-Q filing dated June 3, 2003, "Bridgford Foods Corporation planned to submit its 10-Q within 45 days after the quarter end. Due to an inadvertent miscommunication, final notice was not given to the Edgarization service to release the submission until Tuesday, June 3rd, rather than the file deadline date of Monday, June 2nd."

decline in cash flows during the prior quarter, average total assets are approximately $2.3 billion, 21 percent are listed on the NYSE, 48 percent are listed on the NASDAQ, 68 percent have Big N auditors, 53 percent are accelerated filers, average market value is $1.1 billion, average book-to-market is 0.75, and the average change in market value over the past quarter is zero percent.

Panel B of Table 2 presents the distribution of observations by Form type (i.e., NT 10-Q versus NT 10-K), and delay reason, over the period of our analysis. The pattern of NT filers is relatively consistent with the events during this period that are likely to cause delays. For example, there is a relatively large jump in NT filers from 165 in 2003 to 378 in 2004, the first year in which the shorter filing deadlines are phased in and the year in which SOX 404 reviews are required for the first time. Panel B also shows that the accounting reasons for the delays jumped from 78 in 2003 to 261 in 2004, consistent with the large number of restatements that followed from SOX 404 and the initial implementation of auditor inspections by the Public Company Accounting Oversight Board (PCAOB). By 2007, SOX 404 procedures and PCAOB inspections had been in effect for two years, and the total number of NT filers declined from 233 in 2006 to 137 in 2007.

Panel C of Table 2 reports the distribution by stock exchange and shows that the majority of our sample observations are from the three major national exchanges, AMEX, NYSE, and NASDAQ National Market. Panel D of Table 2 reports the frequency of NT filers that declare on the NT form that they will file within the grace period along with the frequency with which they actually do so. Overall, this analysis shows that 51 percent (534/1,048) of the NT 10-Qs ultimately fail to file within the grace period, compared with only 25 percent (269/1,067) of NT 10-Ks. This panel also indicates that while 86 percent (900/1,048) of the NT 10-Qs indicate they will subsequently file within the grace period, 50 percent (446/900) of that group actually fail to

do so. Likewise, while 87 percent (933/1,067) of the NT 10-Ks indicate they will subsequently file within the grace period, 23 percent (218/933) of that group fail to actually do so. Thus, a fairly large percentage of NT filers who declare their intention to file within the grace period fail to do so, and the failure rate is substantially higher for NT 10-Qs. Further, in untabulated analysis, we find that when accounting reasons are cited for the delay, 59% of NT 10-Q filers miss the grace period deadline, compared with only 30% of NT 10-K filers missing the grace period deadline. This is consistent with NT 10-Q filings signaling deeper underlying problems that lead to management missing the grace period deadline. In subsequent analysis we investigate the capital market consequences to firms that declare they will file within the grace period, but subsequently fail to do so.

Table 3 presents the industry distribution of our sample firms using the 15 industries as in Barth et al. (2011), and compares it with that of the Compustat universe. Our sample firms span all 15 industries, clearly representing a broad cross section of firms. However, not all industries are equally represented. The durable industry is the most highly represented in our sample (20.0 percent of the observations), and the food and other industries are the least represented industries (1.5 and 1.3 percent of the observations, respectively). Comparing the distribution of the NT filers with that of the Compustat population reveals that the NT filers appear to be a fairly representative subset of the Compustat population, with no particular industry or subset of industries appearing to be over or under represented.

Table 4 presents the distribution of the delay days by Form type, management's declaration of whether it intends to file within the grace period, and the reason for the delay. Panel A of Table 4 reports the delay days partitioned on whether management declares its intention to file within the 5-day grace period for 10-Qs or the 15-day grace period for 10-Ks. As

may be expected, the comparison indicates that the number of delay days is significantly shorter when management declares it will file within the grace period. Specifically, for the 10-Qs and 10-Ks combined, the mean number of delay days is 50.97 when management does not indicate it intends to file within the grace period (i.e., Part2_Check = 0), and significantly less than a half of that number, 25.17 days, when management indicates it intends to file within the grace period (i.e., Part2_Check = 1). Appendix 2 presents a copy of Form 12b-25.

Table 4 also categorizes each firm's reason for the filing delay into one of four categories: Uncertain, Accounting, Corporate Events, and Multiple (i.e., both Accounting and Corporate Events reasons) based on management's explanation of the reason for the delay reported in Part II of Form NT. Appendix 3 presents the grouping we use to categorize the Audit Analytics codes interpreting the reasons for the late filings from the NT narratives. Appendix 4 presents the definition of the codes.[19] Panel B of Table 4 reports the delay days by the reason for the delay, and shows that for the NT 10-Qs and NT 10-Ks combined, 49 percent (1,029/2,115) report accounting as the reason for the delay, followed by 25 percent citing uncertain reasons (521/2,115), 14 percent reporting corporate events (302/2,115), and 12 percent reporting multiple reasons (263/2,115). In addition, the average delay for 10-Qs and 10-Ks that report accounting reasons for the delay is 41.45 days, compared to 13.08 days for corporate events, 10.92 days for uncertain, and 31.26 days for multiple reasons. Thus, accounting issues are responsible for the majority of the delayed filings, and are also responsible for substantially longer delays when compared to the other commonly reported reasons.

[19] Thus, we obtain the delay reason directly from Audit Analytics. An alternative approach is to use a computerized retrieval and classification approach as in Feldman et al. (2006).

4. Tests and Results

4.1. Stock Price Response to Late 10-Q and 10-K Filing Announcements

Table 5 addresses the first two research questions we pose in the introduction. Our first research question is: Does the market react negatively to NT filings? The analysis in Panel A of Table 5 addresses this question by examining the stock-price response to NT filings during the five-day window around the NT filing date, [–2, +2], where day 0 is the filing day. The results answer this question in the affirmative by indicating that when Forms NT 10-Q and NT 10-K are pooled, the stock market response is significantly negative (–2.44 percent).

Our second research question asks: Is the reaction to NT 10-Q filings more or less negative than to NT 10-K filings? Panel A of Table 5 addresses this question by comparing the market response of the NT 10-Qs with the market response to the NT 10-Ks. The results find that the response to NT 10-Qs (–2.93 percent) is significantly more negative than the response to NT 10-Ks (–1.96 percent). The stronger negative reaction to news of late 10-Q filings is consistent with the market interpreting management's inability to comply with Form 10-Q filing requirements, which are significantly less onerous than Form 10-K requirements, as a signal of more serious underlying problems. It is also consistent with our untabulated results discussed in conjunction with the analysis in Table 2, which finds that NT 10-Q filers are nearly twice as likely as NT 10-K filers to miss the grace period filing deadline. The greater relative frequency of missing the grace period deadline suggests that NT 10-Qs signal deeper underlying problems when compared with NT 10-Ks.

While our full sample results find a significant immediate market reaction to late 10-K filing disclosures around the NT filing date, Alford et al. (1994, Table 5, Panel C) generally fail to find an immediate reaction during event windows that include the NT filing due date. Instead,

Alford et al. (1994) only find negative returns during long windows following the statutory due date of 17 days or more (which comprise only 38 percent of their sample).[20] To reconcile our findings with the mixed results of Alford et al. (1994), we examine the stock market reaction to late filings with delay days of 5 days or less and 6 to 17 days separately (to correspond with the partitions used in the analysis performed in Table 5 of Alford et al., 1994). Unlike Alford et al., Panel B of Table 5 reports a significantly negative stock price response in both subsamples for the 10-Ks as well as the 10-Qs. However, there are several reasons why our results may appear to differ from those reported in Alford et al. (1994). One is that during the sample period covered in Alford et al. (1994) firms mailed the Form NT to the SEC, which means that the NT filing was not publicly available during the event period examined. In our sample period, the Form NT is filed electronically and thus becomes publicly available immediately; hence we can very precisely identify the period in which the filing information becomes publicly available.

Table 5, Panel C, examines the stock price response to NT filings after partitioning the sample on whether management declares its intention to file the 10-Q or 10-K within the allowed grace period (by checking the box in Part II of Form NT). The results show that when the NT 10-Q and NT 10-K filings are pooled, the stock market reaction is significantly negative whether management checks the box (Part2_Check = 1) thereby declaring its intention to file within the grace period (–2.37 percent) or does not check the box (Part2_Check = 0) thereby not declaring its intention to file within the grace period (–2.89 percent), and the difference between the two is not significant. While the negative response in the subsample declaring inability to file within the grace period may be expected, the negative response in the subsample declaring its intention to file within the grace period is puzzling because the SEC considers filing within the grace period a timely filing. One possible explanation is that this negative reaction follows because the market

[20] See Alford et al. (1994) Table 2 for the number of late filers by number of days.

suspects some of these firms will fail to file within the grace period. In answering our fourth research question below we revisit this issue.

When the NT 10-Q and NT 10-K are considered separately, we find that the market reacts significantly more negatively when management declares that the 10-K will not be filed within the grace period (–3.77 percent) compared to when management declares the 10-K will be filed within the grace period (–1.69 percent). The difference in market reaction between 10-Qs that will not be filed within the grace period (–2.09 percent) and those that will be filed within the grace period (–3.06) is insignificant. However, our analysis in Table 6 below considers whether the market further conditions the reaction to management's declaration to file within the grace period on whether it expects the firm to subsequently actually do so.

The results in Panel D of Table 5 answer our third research question, the one that asks whether the market reaction to the NT filings varies with the stated reason for the delay. To that end, the sample of NT filers is further partitioned into four subsamples based on the stated reason for the late filing (in Part III of Form NT). Three observations from Panel D are noteworthy. First, when all NT filers are considered together (regardless of whether management intends to file within the grace period or the reason for the delay), both NT 10-Qs and NT 10-Ks tend to have a significantly negative response.[21] Second, the significantly more negative response to NT 10-Qs than to NT 10-Ks documented in Panel A is concentrated exclusively among the accounting reasons. For uncertain, multiple, and corporate event reasons the difference in reaction between NT 10-Q and 10-K filings is insignificant.[22] Thus, the overall stronger negative

[21] The only exception is NT 10k filers citing corporate events as the reason for the delay. A closer examination reveals that this result follows because this subset consists predominantly of firms declaring they will file within the grace period (86 percent), and as the results in Table 6 below show they largely do so.

[22] We find a stronger reaction to 10-Qs compared to 10-Ks only among NTs that report accounting reasons for all filers and for those with Part2_Check = 1. For subsamples with Part2_Check = 0, the small sample size renders the results unreliable.

reaction to NT 10-Qs than to NT 10-Ks is driven by the 1,029 observations that report accounting reasons as the cause of the delay. Third, companies citing multiple reasons for delay, perhaps not surprisingly, fared the worst, exhibiting -5.48 percent return for 10-Qs and -4.73 percent return for 10-Ks.

In summary, Table 5 answers our first three research questions by finding that the market reacts negatively to both NT 10-Q and NT 10-K filers, but that the reaction to NT 10-Q filers is significantly stronger. Furthermore, the market considers the stated reason for the delay when reacting, as evidenced by the substantially stronger reaction when multiple reasons are cited as the reason for the delay compared to other reasons, and by the stronger negative reaction to NT 10-Q filers compared to NT 10-K filers that is concentrated among firms that cite accounting reasons for the delay. This last finding suggests that the accounting problems signaled by management's inability to file a timely 10-Q are likely to be significantly more serious than the accounting problems signaled by management's inability to file a timely 10-K. In other words, if management has accounting problems that prevents it from timely filing its 10-Q, which requires much less disclosure than a 10-K and is unaudited, then the market seems to infer that the accounting problems are relatively more serious.

Table 6 addresses the fourth research question we pose in the introduction, which asks: Is the reaction to NT filings more negative for firms that fail to file within the grace period compared to firms that do not? The analysis in Panel A of Table 6 addresses this question by examining the market reaction to NT filers after partitioning jointly on whether management subsequently files the 10-Q or 10-K within the SEC allowed grace period, and whether management declares their intention to file within the grace period or not. Management declares its intention to file within the grace period by checking the box in Part 2 (Part2_Check = 1) or

not (Part2_Check = 0). The top part of Panel A (Part2_Check = 0) reports the results for the 13 percent ([139+143]/2,115) of our sample firms that do not explicitly declare that they intend to subsequently file their 10-Q or 10-K within the grace period. Interestingly, this analysis shows that 51 percent (143/[139+143]) of the NT filers that do not declare they will file within the grace period actually subsequently make the deadline. However, the top of Panel A also shows that the market reacts negatively to NT 10-Ks whether or not the firm subsequently files within the grace period, but insignificantly so if the 10-Qs are filed within the grace period. The top of Table 6, Panel A, also shows that the difference in the reaction across the two groups is insignificant for 10-Qs and significant for 10-Ks and the combined sample.[23]

The bottom part of Panel A of Table 6 (Part2_Check = 1) reports the results for the 87 percent of our sample firms that declare on Part 2 of Form NT that they do intend to subsequently file within the grace period. Descriptively, this analysis shows that 36 percent (664/[664+1,169]) of the NT filers that declare they will file within the grace period subsequently fail to do so. However, the "failure rate" is 50 percent (446/[446+454]) for NT 10-Qs and 23 percent (218/[218+715]) for NT 10-Ks. Thus, NT 10-Q filers are much more likely to overstate their expected ability to file within the SEC allowed grace period, perhaps because the grace period for late 10-Qs is shorter than the grace period for late 10-Ks.

As with the top of Panel A, the results reported in the bottom of Panel A indicate that the stock market reacts negatively to both NT 10-Qs and 10-Ks whether or not the firm subsequently files within the grace period. However, unlike the top of Panel A, the reaction is significantly more negative among the 664 NT 10-Q and NT 10-K filers that subsequently do not file within the grace period (–3.51 percent) compared to the 1,169 that do (–1.72 percent). This is

[23] We acknowledge, however, that low statistical power due to small sample size may partially explain these weak statistical results.

interesting because the market reactions reported in Panel A are around the NT filing date, before the market knows when the late 10-Q or 10-K is ultimately filed. Thus, the results from answering our fourth research question shed additional light on our findings in Panel C of Table 5 (discussed previously), which indicate a negative response in the subsample of late filers declaring their intention to file within the grace period. Specifically, the findings in Panel A of Table 6 are consistent with the market, on average, correctly anticipating which firms will subsequently fail to file their 10-Q or 10-K within the grace period, even when doing so is contrary to management's declared intention. In other words, it suggests that the market does not blithely react to management's declaration, but instead correctly infers, on average, when management will ultimately fail to comply with its "promise" to file within the grace period.

Panel B of Table 6 further partitions the 87 percent of our sample that indicates they intend to file within the deadline by the reason for the delay.[24] This analysis finds that there is generally a significantly negative reaction for all reasons for both NT 10-Qs and NT 10-Ks, except in partitions where the sample size is relatively small. The glaring exception is the accounting reason, which is the most popular reason and has a relatively large sample size in all cells. Specifically, when accounting reasons are cited for the delay, the market reaction is insignificant when the firm subsequently files within the grace period, but is significantly negative when the firm subsequently does not file within the grace period. This suggests that the market anticipates whether management will meet the grace period filing deadline; and that accounting problems that result in relatively short delays do not signal problems that impact firm value, while delays that result in missing the grace period deadline signal problems that impair value. Panel B also shows that the only significant difference between the reaction to NT filers

[24] We do not further examine the 13 percent of our sample that do not declare they will file within the grace period because after partitioning on whether they actually filed within the deadline, Form type, and delay reason, the sample sizes become too small for reliable statistical inferences.

that do and do not file within the grace period is for NT 10-Q filers that cite accounting reasons for the delay. This means that the negative reaction to the NT 10-Q filers that indicate they will file on time (reported in the bottom of Panel A of Table 6) is explained by the filers who cite accounting reasons for the delay.

In summary, the results in Table 6 answer our third research question by finding a significantly larger negative stock price reaction to NT filings for firms that subsequently fail to file within the grace period, compared to firms that meet the deadline. Further, the results suggest that the market is able to anticipate in advance which firms will miss the grace period filing deadline, regardless of management's declared intention on Form NT, but only for 10-Qs that cite accounting reasons for the delay. This finding is consistent with late 10-Qs being perceived by the market as signaling relatively worse news than late 10-Ks, and with accounting reasons for late filings being relatively more informative about management's ability to file within the grace period. Table 6 also provides evidence that the market does not react negatively to late filers that subsequently file within the grace period when accounting reasons are cited as the reason for the delay.

4.2. Late Filers' Performance in the Year following the Statutory Filing Deadline

The analysis in Table 7 addresses the fifth research question we pose in the introduction, which asks: Is the market reaction around the NT filing complete? We answer this question by examining the stock price behavior of late filers during the year following the filing of the NT 10-Q or NT 10-K. Evidence from the psychology literature suggests that behavioral biases are larger when uncertainty is greater (see, e.g., Daniel et al., 1998, 2001; Hirshleifer, 2001). Since late filings are unusual and in many cases hard to interpret, they may create considerable price uncertainty and thus opportunities for potential mispricing. Table 7 reports the stock price

performance of our sample firms over the 240 trading days following the NT filing, in four 60-trading-day intervals. Panel A reports the results by Form type and indicates that the abnormal returns for both the NT 10-Q and 10-K filers remain significant during each of the first three 60-day windows, but generally diminish over this period, and are insignificant in our fourth 60-day window. Thus, in answer to our fifth research question, we find that the market does not fully impound the negative implications of the NT filings around the filing day. Rather, stock prices for the NT filers continue to decline for several months following the NT filing date, as well as for several months following the delayed 10-Q or 10-K filing. This is consistent with the late filing not marking the end of the late filers' problems. Interestingly, the delayed response (approximately 13 percent) is substantially higher than the immediate response of approximately 2.5 percent, reported in Table 5, and spans the delayed response.[25] One way to interpret this finding is that the initial NT release sugarcoats the true reason for the filing delay. This interpretation is consistent with the view in the accounting literature that management delays the release of bad news to investors (see, e.g., Kothari, Shu, and Wysocki, 2009).

Table 7, Panel B, further partitions the analysis in Panel A on the reason for the late filing. This analysis indicates that, generally speaking, the drift tends to be less negative when accounting reasons are given. For example, in the first post-event period, [3, 62], the returns for uncertain, corporate events, and multiple subsamples are, respectively, −8.63 percent, −7.30 percent, and −9.90 percent, whereas the returns for the accounting sample is markedly less negative, −1.11 percent, and statistically insignificant. These findings imply that the accounting reasons for a delay are more informative and allow the market to respond relatively more fully to the late filing news on the NT filing date. As in Panel A, for all four reasons the abnormal returns

[25] We obtain 13 percent by adding the subsequent abnormal returns in Panel A of Table 7 for both 10-Ks and 10-Qs across the first three windows (-4.93% + -4.61% + -3.75%), which are all statistically significant. We exclude the return in the fourth window (-0.61%) because it is not statistically significant at conventional levels.

become insignificant in the fourth post-ever period, [183, 242].

In Table 8, we validate the long window return results by examining the immediate market response to the actual filing of the late 10-K and 10-Q. This examination follows because short abnormal return windows attenuate or perhaps even eliminate the criticism of the "bad model" problem that may be leveled against long abnormal return windows (see, e.g., Brown and Warner, 1985; Fama, 1991). Table 8 reports the abnormal returns in a five day window around the 10-Q and 10-K filing dates, [–2, +2], where day zero is the filing date. This analysis indicates that the return patterns observed for the long post-event windows also hold for the short windows around the 10-Q and 10-K actual filings. Specifically, the results in Panel A show that the market response to the actual filing of the late 10-Qs and 10-Ks is significantly negative (–1.17 percent). The results in Panel B show that this statistically significant negative return is observed only in the uncertain, corporate events, and multiple subsamples. By comparison, the return for the accounting subsample is much smaller and statistically insignificant. This consistency between the long and short window return results increases confidence that our long window results are not due to mismeasured abnormal returns (the "bad model" problem).

Finally, we consider late filers' operating performance to address our sixth and final research question, which asks: Is the negative stock price performance around the NT filing associated with the late filing conveying news about deeper problems within the firm, or merely with the company missing an SEC filing deadline? We investigate this question by examining the return on assets (ROA) of NT filers during the five quarters surrounding the late filing (quarter 0). Three salient points emerge from the results reported in Table 9. First, Panel A reports that ROA during the NT filing quarter and future quarters, is significantly negative for both late 10-K filers and 10-Q filers, This is consistent with the negative market response to the

NT filings being at least partially explained by the NT filing conveying news about deeper underlying problems, including poor future operating performance, and not merely indicating that the firm missed an SEC filing deadline. Second, the operating performance of NT 10-Q filers is significantly more negative than that of NT 10-K filers, which is again consistent with the stock return results. Third, Panel B indicates that ROA for the NT filers citing non-accounting reasons is more negative than ROA for the NT filers citing accounting reasons in every window. Again, this finding is consistent with the returns results discussed above.

5. Conclusions

Motivated by the importance of timely information in well-functioning capital markets, by a recent interest in untimely mandatory filings (see, e.g., Aguilar 2007), and by a scarcity of research on late mandatory filings, we examine the capital market consequences of firms' announcements that they are late in filing their 10-Qs or 10-Ks. We address six research questions by examining short window stock price changes around NT filing dates, long window stock price changes following NT filing dates, and operating performance around the NT filing quarter. Our findings can be summarized as follows. First, we find that the market reacts negatively to announcements that firms will file late 10-Qs or 10-Ks. Second, we find that the reaction is more negative for late 10-Qs than late 10-Ks, and third that the larger reaction to late 10-Qs is attributable to firms that are delayed for accounting reasons. Fourth, we find that the market anticipates which late 10-Q filers will subsequently fail to file within the SEC's allowed grace period as evidenced by stronger immediate market reaction, but only when accounting reasons explain the delay. Fifth, we find that abnormal returns continue to be negative during the months following the late filing announcement, but are les pronounced when accounting reasons explain the delay. Sixth, the negative stock returns around the NT filings are at least partially

explained by the NT filing conveying news about poor future operating performance, and not merely indicating that the firm missed an SEC filing deadline

Our study contributes to the literature in several ways. One is that we are the first to examine the short-window market reaction to a broad sample of NT filings. A second contribution of our study is that we report that late 10-Q filings have distinct valuation implications compared with late 10-K filings. This is an important finding because *ex-ante* it is unclear that late 10-Qs convey more negative information than late 10-Ks, given that 10-Qs contain fewer disclosure requirements and are unaudited. It thus demonstrates the importance of timely release of accounting information, even when it is unaudited. A third contribution is that we find that the accounting information included in Form NT plays a critical role in how market participants interpret the valuation implications of late filings. This is important to accounting researchers because it suggests that the value implications of accounting-related delays are more salient to market participants as compared to other reasons commonly given for delays.

A fourth contribution is that we find investors condition their immediate reaction to NT fillings on an assessment of the integrity of management's announcement regarding its ability to file within the grace period, rather than taking these announcements at face value. This is important because it indicates that market participants do not simply react mechanically to the information included in the regulatory filing, but instead are able to more precisely gauge its impact on firm value. This finding is important to researchers because it contributes to the literature on how sophisticated investors are in mapping information into stock prices, and to investors and regulators because it opens up the possibility that company executives misinform the market (intentionally or otherwise) about the expected late filing date.

A fifth contribution is that we find that the immediate market reaction to NT filings is incomplete for all NT filers but less so for those that report accounting reasons for the delay. This finding is important because it suggests that market participants generally have difficulty in interpreting the valuation implications of the NTs and that this difficulty leads to underreaction. Sixth, our findings indicate that NT filings provide information to market participants about deeper problems within the firms, including current and future poor operating performance.

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Appendix 1

Regulation 12b-25, Securities and Exchange Commission

SEC-REG, FSLR ¶23,047, Reg. §240.12b-25., **Notification of inability to timely file all or any required portion of a Form 10-K, 20-F, 11-K, N-SAR, N-CSR, 10-Q, or 10-D**

Reg. §240.12b-25. (a) If all or any required portion of an annual or transition report on Form 10-K, 20-F or 11-K (17 CFR 249.310, 249.220f or 249.311), a quarterly or transition report on Form 10-Q (17 CFR 249.308a), or a distribution report on Form 10-D (17 CFR 249.312) required to be filed pursuant to Section 13 or 15(d) of the Act (15 U.S.C. 78m or 78o(d)) and rules thereunder, or if all or any required portion of a semi-annual, annual or transition report on Form N-CSR (17 CFR 249.331; 17 CFR 274.128) or Form N-SAR (17 CFR 249.330; 17 CFR 274.101) required to be filed pursuant to Section 13 or 15(d) of the Act or section 30 of the Investment Company Act of 1940 (15 U.S.C. 80a-29) and the rules thereunder, is not filed within the time period prescribed for such report, the registrant, no later than one business day after the due date for such report, shall file a Form 12b-25 (17 CFR 249.322) with the Commission which shall contain disclosure of its inability to file the report timely and the reasons therefore in reasonable detail.

(b) With respect to any report or portion of any report described in paragraph (a) of this section which is not timely filed because the registrant is unable to do so without unreasonable effort or expense, such report shall be deemed to be filed on the prescribed due date for such report if:

(1) The registrant files the Form 12b-25 in compliance with paragraph (a) of this section and, when applicable, furnishes the exhibit required by paragraph (c) of this section;

(2) The registrant represents in the Form 12b-25 that:

(i) The reason(s) causing the inability to file timely could not be eliminated by the registrant without unreasonable effort or expense; and

(ii) The subject annual report, semi-annual report or transition report on Form 10-K, 20-F, 11-K, N-SAR, or N-CSR, or portion thereof, will be filed no later than the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q or distribution report on Form 10-D, or portion thereof, will be filed no later than the fifth calendar day following the prescribed due date; and

(3) The report/portion thereof is actually filed within the period specified by paragraph (b)(2)(ii) of this section.

(c) If paragraph (b) of this section is applicable and the reason the subject report/portion thereof cannot be filed timely without unreasonable effort or expense relates to the inability of any person, other than the registrant, to furnish any required opinion, report or certification, the Form 12b-25 shall have attached as an exhibit a statement signed by such person stating the specific reasons why such person is unable to furnish the required opinion, report or certification on or before the date such report must be filed.

(d) Notwithstanding paragraph (b) of this section, a registrant will not be eligible to use any registration statement form under the Securities Act of 1933 the use of which is predicated on timely filed reports until the subject report is actually filed pursuant to paragraph (b)(3) of this section.

(e) If a Form 12b-25 filed pursuant to paragraph (a) of this section relates only to a portion of a subject report, the registrant shall:

(1) File the balance of such report and indicate on the cover page thereof which disclosure items are omitted; and

(2) Include, on the upper right corner of the amendment to the report which includes the previously omitted information, the following statement:

The following items were the subject of a Form 12b-25 and are included herein: *(List Item Numbers)*

(f) The provisions of this section shall not apply to financial statements to be filed by amendment to a form 10-K and 10-KSB as provided for by paragraph (a) of §210.3-09 or schedules to be filed by amendment in accordance with General Instruction A to form 10-K and 10-KSB.

(g) *Electronic filings*. The provisions of this section shall not apply to reports required to be filed in electronic format if the sole reason the report is not filed within the time period prescribed is that the filer is unable to file the report in electronic format. Filers unable to submit a report in electronic format within the time period prescribed solely due to difficulties with electronic filing should comply with either Rule 201 or 202 of Regulation S-T (§232.201 and §232.202 of this chapter), or apply for an adjustment of filing date pursuant to Rule 13(c) of Regulation S-T (232.13(c) of this chapter).

Amendment

(h) *Interactive data submissions.* The provisions of this section shall not apply to the submission or posting of an Interactive Data File (§232.11 of this chapter). Filers unable to submit or post an Interactive Data File within the time period prescribed should comply with either Rule 201 or 202 of Regulation S-T (§232.201 and §232.202 of this chapter).

End of Amendment

[Adopted in Release No. 34-4194, January 17, 1949, 13 F. R. 9323; amended by Release No. 34-9048, (¶77,944), effective February 4, 1971, 36 F. R. 1889; Release No. 34-10707 (¶79,728), effective June 3, 1974, 39 F. R. 12861; Release No. 34-16718 (¶82,487), effective May 8, 1980, 45 F. R. 23651; Release No. 34-17291 (¶72,306), effective November 21, 1980, 45 F. R. 76974; Release No. 34-21633 (¶83,725), effective April 30, 1985, 50 F. R. 1442; Release No. 34-26589 (¶72,435), effective April 12, 1989, 54 F.R. 10306; Release No. 34-30968 (¶72,439), effective August 13, 1992, 57 F.R. 36442; Release No. 34-31905 (¶85,111), effective April 26, 1993, 58 F.R. 14628; Release No. 34-35113 (¶85,475), effective January 30, 1995, 59 F.R. 67752; Release No. 34-47262 (¶86,820), effective March 1, 2003, 68 F.R. 5348; Release No. 33-8518 (¶87,323), effective March 8, 2005, 70 F.R. 1506; Release No. 33-8876 (¶88,029), effective February 4, 2008, 73 F.R. 934; Release No. 33-9002 (¶88,435), effective April 13, 2009, 74 F.R. 6776.]

Appendix 2

Form 12b-25, Securities and Exchange Commission

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL	
OMB Number:	3235-0058
Expires:	April 30, 2009
Estimated average burden hours per response	2.50

SEC FILE NUMBER

CUSIP NUMBER

FORM 12b-25

NOTIFICATION OF LATE FILING

(Check one): ☐ Form 10-K ☐ Form 20-F ☐ Form 11-K ☐ Form 10-Q ☐ Form 10-D ☐ Form N-SAR ☐ Form N-CSR

For Period Ended: _____

☐ Transition Report on Form 10-K
☐ Transition Report on Form 20-F
☐ Transition Report on Form 11-K
☐ Transition Report on Form 10-Q
☐ Transition Report on Form N-SAR

For the Transition Period Ended: _____

Read Instruction (on back page) Before Preparing Form. Please Print or Type.
Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates:

_____

PART I — REGISTRANT INFORMATION

_____
Full Name of Registrant

_____
Former Name if Applicable

_____
Address of Principal Executive Office *(Street and Number)*

_____
City, State and Zip Code

PART II — RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate)

☐
(a) The reason described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense
(b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Qorsubject distribution reporton Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
(c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III — NARRATIVE

State below in reasonable detail why Forms 10-K, 20-F, 11-K, 10-Q,10-D, N-SAR, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

SEC 1344 (05-06)

Persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

(Attach extra Sheets if Needed)

PART IV — OTHER INFORMATION

(1) Name and telephone number of person to contact in regard to this notification

_____	_____	_____
(Name)	(Area Code)	(Telephone Number)

(2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed ? If answer is no, identify report(s). Yes ☐ No ☐

_____

(3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof ?

Yes ☐ No ☐

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

_____

(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Date _____ By _____

INSTRUCTION: The form may be signed by an executive officer of the registrant or by any other duly authorized representative. The name and title of the person signing the form shall be typed or printed beneath the signature. If the statement is signed on behalf of the registrant by an authorized representative (other than an executive officer), evidence of the representative's authority to sign on behalf of the registrant shall be filed with the form.

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).

GENERAL INSTRUCTIONS

1. This form is required by Rule 12b-25 (17 CFR 240.12b-25) of the General Rules and Regulations under the Securities Exchange Act of 1934.

2. One signed original and four conformed copies of this form and amendments thereto must be completed and filed with the Securities and Exchange Commission, Washington, D.C. 20549, in accordance with Rule 0-3 of the General Rules and Regulations under the Act. The information contained in or filed with the form will be made a matter of public record in the Commission files.

3. A manually signed copy of the form and amendments thereto shall be filed with each national securities exchange on which any class of securities of the registrant is registered.

4. Amendments to the notifications must also be filed on Form 12b-25 but need not restate information that has been correctly furnished. The form shall be clearly identified as an amended notification.

5. *Electronic Filers:* This form shall not be used by electronic filers unable to timely file a report solely due to electronic difficulties. Filers unable to submit reports within the time period prescribed due to difficulties in electronic filing should comply with either Rule 201 or Rule 202 of Regulation S-T (§232.201 or §232.202 of this chapter) or apply for an adjustment in filing date pursuant to Rule 13(b) of Regulation S-T (§232.13(b) of this chapter).

Appendix 3
Grouping Late Filings by NT Reason

Reason Group Description	*The Group Includes the following NT Reasons that Appear in Our Sample*
Unspecified (e.g., insufficient time; unspecified reason)	13, 16, 23, 29, 33, 34
Accounting (e.g., need to review accounting-related calculations; auditing or internal control issues; Errors; Irregularities; Investigation by SEC/other authority/committee; restatements)	2, 3, 4, 5, 6, 8, 9, 10, 11, 15, 18, 19, 20, 25, 27, 28, 30, 31, 37, 38, 39, 45, 48, 49, 50, 53, 54, 62, 63, 64, 65, 66, 67, 68, 69, 70
Corporate Events (e.g., de-registration; going private; restructuring; change in control; M&A; bankruptcy; debt/funding/refinancing problems)	21, 22, 24, 26, 36, 42, 61, 71, 73, 77, 78
Multiple (includes NT filings that state both Accounting and Corporate Events reasons. Note that NT filings with an Unspecified reason plus Accounting or Corporate reason is treated as Accounting or Corporate, respectively)	
Technical (e.g., change in fiscal year; relocation; technical problem with Edgar filing; software)	1, 14, 32, 35, 41, 42, 43, 44, 46, 47

The table describes our classification to reason groups based on the reasons for the late filing stated by management when filing Form NT. NT Reason numbers refer to the 78 reasons classified by the coding system of Audit Analytics—Non-Timely Module Feed (NT) dataset (variable name is NT_REAS_KEYS). There are several NT filings where an NT filing contains numerous reasons. Thus, we follow the following procedure to re-classify reasons with same content. First, we sort all 78 NT reasons into four groups based on the NT Reason numbers in the table (Unspecified, Accounting, Corporate Events, and Technical). Second, we treat cases with multiple same-four-group-reason as one reason (i.e., an NT filing with two different reasons based on the 78 original reasons, but the two are within one of our four groups, e.g., Accounting, is considered as this group, e.g., Accounting). Third, we re-classify the groups into final four groups using the following rules: (1) we delete cases with purely Technical reason (i.e., only one reason which is Technical). If the case includes Technical plus any of the other three groups, we treat the case as a purely other group, i.e., the Technical is passive and does not influence the content of the classification; (2) Uncertain group refers to situations where the reason is purely uncertain only, i.e., Uncertain plus another non-Uncertain group is not considered a Multiple group observation; (3) Because the appearance of Uncertain plus non-Uncertain groups effectively means that there is no uncertainty about the reason, the remaining non-Uncertain groups (Accounting and Corporate Events) refer to cases with either a pure non-Uncertain reason or multiple reason groups of non-Uncertain plus Uncertain; (4) The Multiple reason group includes NT filings that is classified as both Accounting and Corporate Events reasons. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.

Appendix 4

Original Late Filing Reasons in Our Sample (NT Reason)

NT_REAS_KEYS	*NT_REAS_TITLES*
1	Act of God (Extreme weather, War, Illness, Even Death, etc)
2	Z - Inventory, vendor, purchasing or cost of sales matters
3	Auditor (external) retained, changed or resigned
4	Change in accounting principle or methodology, new adoption
5	Internal Control / Sarbanes Oxley (404 or 302) implementation issues
6	Auditor unable to finish review or audit not complete
8	Consultation/correspondence/comment letter with SEC about accounting matters
9	Z - Revenue recognition
10	Material Weakness issues with ICFR or DC preparation
11	Z - Tax expense/benefit/deferral/other (FAS 109) issues
13	Insufficient time without undue hardship, expense
14	Auditor in process of PCAOB registration
15	Z - Assets: PPE (Short/Long Term, Goodwill, Impairments)
16	Insufficient time to prepare report
18	Discrepancies or errors discovered
19	Z - Accounts/loans receivable/billing, investments & cash issues
20	Investigation underway, special committee (internal, external or SEC)
21	Reorganizations, restructurings and/or disposals, change or dissolution of business
22	Acquisition, merger, reverse merger, joint venture
23	Other - miscellaneous, no category, etc.
24	Change, newly hired, turnover, reduction or resignation of personnel, management, board, legal staff
25	In negotiations: SEC, regulators, tax authorities, creditors etc.
26	Bankruptcy, litigation, contingency, non-compliance of credit agreement
27	Going concern or financial difficulty matters
28	Restatement of financials pending
29	NO REASON GIVEN
30	Z - Intercompany accounting issues
31	Z - Liabilities, payables, or reserves
32	Change in fiscal year
33	Waiting on key information - Inability to obtain
34	Review underway
35	Technical problems with Edgar Filing
36	Going private, de-registering
37	Z - Financial derivatives/hedging accounting issues (FAS 133)
38	Z - Consolidation, translation issues: foreign and currency (FAS 46r), foreign GAAP vs. US GAAP
39	Z - Deferred or executive equity/options comp issues (123R)
41	Liquidation or sale of assets
42	Insufficient personnel
43	Software Problem or Telecommunications Problem
44	Change in filing classification, new filer, first report
45	Z - Lease, leasehold & FAS 13 (98) (subcategory) issues
46	Security issuance issues

47	Relocation of office/place of business
49	Z - Cash flow statement classification issues (FAS 95)
50	Z - Debt, warrants, equity, and security accounting issues
53	Z - Disclosures: Lease Contingency & Commitment Issues (FAS 5)
54	Z - Balance sheet classification
61	Z - Acquisition, merger, disposal, or discontinued operations issues
62	Z - Capitalization of expenditures issues
63	Z - Debt or equity classification issues
64	Z - Depreciation, depletion or amortization issues
65	Z - Expense recording issues
66	Z - Footnote or segment disclosure issues
67	Z - Foreign/Affiliate/Subsidiary Accounting Issues
68	Z - Gain or loss recognition issues
70	Z - Unspecified accounting issues
71	In the midst of Startup or IPO in progress
73	Change in control
77	Funding/re-financing, administer/extend/amend credit agreement, capital restructuring, obtain waiver
78	Information system implementation

The table presents the reasons for the late filing stated by management when filing Form NT. The reasons include all the applicable reasons that appear in our sample while classifying into reason groups. NT Reason numbers are from total of the 78 reasons classified by the coding system of Audit Analytics—Non-Timely Module Feed (NT) dataset (variable name is *NT_REAS_KEYS*). There are several NT filings where an NT filing contains numerous reasons. Thus, we follow a procedure to re-classify reasons with same content, as described in Appendix 3. The variable *NT_REAS_TITLES* provides the late filing reason. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.

TABLE 1
Sample Selection

		Total	10-Q	10-K
Total number of NT 10-Q and NT 10-K filings in Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, and NT filing on or before September 1, 2009		49,233	30,920	18,313
Delete:				
	Observations without available and consistent data from Compustat, CRSP, Audit Analytics, and EDGAR financial statements filing and fiscal period end dates data required for the analyses	(41,932)	(26,857)	(15,075)
		7,301	4,063	3,238
	Non-first time NT filings in the Audit Analytics database	(4,656)	(2,793)	(1,863)
		2,645	1,270	1,375
	Firms with stock price lower than $1, market value of equity lower than $10 million, or missing [–2, +2] abnormal return	(509)	(206)	(303)
		2,136	1,064	1,072
	Deletions related to reclassification into four reason groups (including deletion of technical late filings)	(21)	(16)	(5)
Final sample for the analyses		2,115	1,048	1,067

The table provides the sample selection for the sample used in the analysis. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.

TABLE 2
Descriptive Statistics

Panel A: Form NT Filings Sample and Variables used in the Analyses

Variable	Variable Definition		Mean	Med	StdDev	25 Pc.	75 Pc.	N
DelayDays	# calendar days from 10-Q / 10-K statutory filing deadline to actual filing of 10-Q / 10-K	10-Q	28.75	6.00	76.30	4.00	8.00	1,048
		10-K	28.48	15.00	62.99	9.00	16.00	1,067
		Total	28.61	8.00	69.88	5.00	15.00	2,115
DaysFiscalEndTo FSFiling	# calendar days from fiscal period end to actual filing of 10-Q / 10-K	10-Q	71.90	50.00	75.67	46.00	52.00	1,048
		10-K	109.90	94.00	62.72	89.00	106.00	1,067
		Total	91.07	83.00	71.97	50.00	104.00	2,115
Part2_Check	Management declaration of whether it intends (=1; box in Part2 of NT Form is checked) or it does not intend (=0; box in Part 2 of NT Form is unchecked) to file within grace period		0.87	1.00	0.34	1.00	1.00	2,115
LOSS	=1 if income before extraordinary items is negative; =0 otherwise		0.44	0.00	0.50	0.00	1.00	2,070
LOSSINTENSITY	Sum of LOSS over past 5 quarters		1.70	1.00	1.79	0.00	3.00	2,054
PastSixMnthRet	Raw Return over past six months		-0.03	-0.06	0.50	-0.30	0.15	2,036
CFO	Cash Flows from Operations, $MM		54.15	3.10	599.31	-4.32	24.21	2,011
SHARP_CFO_ DECLINE	=1 if CFO drops by more than 30% during the period; =0 otherwise		0.33	0.00	0.47	0.00	1.00	1,986
TotalAssets	Total Assets, $MM		2,324	277	20,880	85	930	2,078
NYSEdum	=1 if listed in NYSE; =0 otherwise		0.21	0.00	0.41	0.00	0.00	2,078
NASDAQdum	=1 if listed in NASDAQ; =0 otherwise		0.48	0.00	0.50	0.00	1.00	2,078
BIG4AUDITOR	=1 if the firm's auditor is one of the Big 4; =0 otherwise		0.68	1.00	0.46	0.00	1.00	1,507
ACCELERATED	=1 if an accelerated/large accelerated filer; =0 otherwise		0.53	1.00	0.50	0.00	1.00	2,115
MVE	Market Value of Equity, $MM		1,067	183	5,225	63	617	2,075
BTM	Book-to-Market		0.75	0.55	0.81	0.30	0.91	2,074
MVE_CHANGE	Period change in MVE		0.00	-0.03	0.34	-0.19	0.11	2,052
FormType10-K dum	=1 if the NT filing is related to 10-K; =0 otherwise		0.50	1.00	0.50	0.00	1.00	2,115

TABLE 2 (CONT'D)
Descriptive Statistics

Panel B: Distribution by Year, NT Form Type, and Reason for Delay

		NT Form Type		Reason Group			
Year	Total	10-Q	10-K	Uncertain	Accounting	Corporate Events	Multiple
2000	425	255	170	181	65	111	68
2001	189	95	94	57	60	42	30
2002	175	92	83	41	95	23	16
2003	165	79	86	47	78	19	21
2004	378	122	256	45	261	26	46
2005	313	153	160	60	196	29	28
2006	233	132	101	28	162	16	27
2007	137	74	63	35	72	16	14
2008	100	46	54	27	40	20	13
Total	2,115	1,048	1,067	521	1,029	302	263
10-Q				298	474	178	98
10-K				223	555	124	165

Panel C: Distribution by Stock Exchange

	N	%
American Stock Exchange	92	4.4%
New York Stock Exchange	445	21.4%
NASDAQ	990	47.6%
Over-The-Counter Stock Exchange	531	25.6%
Other	20	1.0%
	2,078	100.0%
Missing data	37	
Total	2,115	

Panel D: Distribution by Form Type and Management Declaration to File within Grace Period and Whether Filed within Grace Period

	Filed within grace period?		
Management declared will file within grace period? (Part2_Check)	NO	YES	Total
	NT 10-Q Filings		
NO	88	60	148
YES	446	454	900
Total	534	514	1048
	NT 10-K Filings		
NO	51	83	134
YES	218	715	933
Total	269	798	1067

The table provides descriptive statistics and variable definitions for the Form NT filings sample used in the study. The 10-Q or 10-K filing delay, *DelayDays*, is the number of calendar days between the 10-Q or 10-K financial statements filing date and the estimated statutory deadline. We retrieve the fiscal quarter/year end date and the actual filing date of the corresponding financial statements directly from EDGAR (the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval). Uncertain, Accounting, Corporate, and Multiple reason groups are based on the reason for the late filing, as stated by management on the NT Form and is classified as described in Appendix 3. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study.

TABLE 3
NT Form Filers and Compustat Population Distribution across Industries, by Form Type

	Compustat Population						Form NT Filers					
			Form Type						Form Type			
	Total		10-Q		10-K		Total		10-Q		10-K	
	N	%	N	%	N	%	N	%	N	%	N	%
Chemicals	4,756	2.0%	3,825	2.0%	931	2.0%	36	1.7%	17	1.6%	19	1.8%
Computers	34,251	14.4%	27,600	14.4%	6,651	14.4%	355	16.8%	182	17.4%	173	16.2%
Durable	44,102	18.5%	35,502	18.5%	8,600	18.6%	423	20.0%	199	19.0%	224	21.0%
Extractive Industries	7,271	3.1%	5,844	3.0%	1,427	3.1%	43	2.0%	18	1.7%	25	2.3%
Financial Institutions	41,541	17.4%	33,377	17.4%	8,164	17.7%	265	12.5%	145	13.8%	120	11.2%
Food	4,430	1.9%	3,562	1.9%	868	1.9%	31	1.5%	21	2.0%	10	0.9%
Insurance and real estate	12,685	5.3%	10,230	5.3%	2,455	5.3%	114	5.4%	56	5.3%	58	5.4%
Mining and construction	3,704	1.6%	3,000	1.6%	704	1.5%	34	1.6%	21	2.0%	13	1.2%
Other	2,003	0.8%	1,681	0.9%	322	0.7%	27	1.3%	16	1.5%	11	1.0%
Pharmaceuticals	14,338	6.0%	11,723	6.1%	2,615	5.7%	107	5.1%	57	5.4%	50	4.7%
Retail	21,251	8.9%	17,109	8.9%	4,142	9.0%	225	10.6%	99	9.4%	126	11.8%
Services	20,422	8.6%	16,449	8.6%	3,973	8.6%	199	9.4%	99	9.4%	100	9.4%
Textiles, printing, publishing	8,589	3.6%	6,924	3.6%	1,665	3.6%	73	3.5%	33	3.1%	40	3.7%
Transportation	12,035	5.1%	9,704	5.1%	2,331	5.0%	126	6.0%	62	5.9%	64	6.0%
Utilities	6,831	2.9%	5,489	2.9%	1,342	2.9%	57	2.7%	23	2.2%	34	3.2%
Total	238,209	100%	192,019	100%	46,190	100%	2,115	100%	1,048	100%	1,067	100%

The table provides distribution by industry and by form type (10-Q and 10-K) of the Compustat and NT Form filers samples. Industry classification is based on the 15 industries following Barth, Konchitchki, and Landsman (2011). The Compustat Population sample includes all non-duplicate observations in the Compustat North America, Annual and Quarterly Fundamentals datasets (XPF Tables, quarterly updates) with available CRSP data and with fiscal year-end between 2000 and 2008. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study.

TABLE 4
Mean and Median Number of Delay Days (*DelayDays*) by NT Form Type and Reason for Delay

Panel A: DelayDays by Form Type and Management Declaration to File within Grace Period

	Part2_Check = 0			Part2_Check = 1			Diff (0–1)	
	N	Mean	Median	N	Mean	Median	Mean	Median
							p-value	p-value
10-Q and 10-K	282	50.97	13.50	1,833	25.17	8.00	<.0001	0.0008
10-Q	148	46.22	7.00	900	25.88	5.00	0.0064	0.0171
10-K	134	56.22	15.00	933	24.50	15.00	<.0001	0.0733
Diff (Q-K)		-9.99	-8.00		1.38	-10.00		
p-value		0.3640	<.0001		0.6513	<.0001		

Panel B: DelayDays by Form Type, Reason for Delay, and Management Declaration to File within Grace Period

		All NT Filers			Part2_Check = 0			Part2_Check = 1			Diff (0–1)	
		N	Mean	Median	N	Mean	Median	N	Mean	Median	Mean	Median
Reason group:											p-value	p-value
Uncertain	10-Q and 10-K	521	10.92	5.00	53	26.51	4.00	468	9.16	5.00	0.0004	0.2034
	10-Q	298	7.18	4.00	30	17.77	3.50	268	6.00	5.00	0.0013	0.2599
	10-K	223	15.91	12.00	23	37.91	4.00	200	13.39	12.00	0.0176	0.8418
	Diff (Q-K)		-8.73	-8.00		-20.15	-0.50		-7.39	-7.00		
	p-value		0.0095	<.0001		0.4630	0.7918		<.0001	<.0001		
Accounting	10-Q and 10-K	1,029	41.45	14.00	151	69.97	15.00	878	36.55	14.00	0.0001	0.0046
	10-Q	474	47.33	6.00	76	71.04	12.50	398	42.80	6.00	0.0208	<.0001
	10-K	555	36.44	15.00	75	68.88	15.00	480	31.37	15.00	<.0001	0.0254
	Diff (Q-K)		10.89	-9.00		2.16	-2.50		11.43	-9.00		
	p-value		0.0482	<.0001		0.8949	0.2050		0.0420	<.0001		
Corporate Events	10-Q and 10-K	302	13.08	7.00	48	12.67	5.00	254	13.16	7.00	0.8967	0.1808
	10-Q	178	11.47	5.00	31	11.48	5.00	147	11.46	6.00	0.9970	0.1086
	10-K	124	15.40	15.00	17	14.82	14.00	107	15.49	15.00	0.8868	0.3628
	Diff (Q-K)		-3.93	-10.00		-3.34	-9.00		-4.02	-9.00		
	p-value		0.2915	<.0001		0.5866	0.0299		0.3560	<.0001		
Multiple	10-Q and 10-K	263	31.26	14.00	30	59.87	14.00	233	27.58	13.00	0.1042	0.3319
	10-Q	98	35.88	6.00	11	50.27	7.00	87	34.06	6.00	0.6969	0.2393
	10-K	165	28.52	15.00	19	65.42	48.00	146	23.72	15.00	0.0536	0.1999
	Diff (Q-K)		7.36	-9.00		-15.15	-41.00		10.34	-9.00		
	p-value		0.4567	<.0001		0.7059	0.0060		0.2843	<.0001		

The table provides analysis of delay days by NT Form Type, i.e., NT 10-Q and NT 10-K, and the reason for the delay. The 10-Q or 10K filing delay, DelayDays, is the number of calendar days between the 10-Q or 10-K financial statements filing date and the estimated statutory deadline. We retrieve the fiscal quarter/year end date and the actual filing date of the corresponding financial statements directly from the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database (EDGAR). Part2_Check refers to management's declaration of whether it intends (=1; box in Part2 of NT Form is checked) or it does not intend (=0; box in Part 2 of NT Form is unchecked) to file its financial statements within the grace period, which is 5 days for 10-Q and 15 days for 10-K. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study.

TABLE 5

Abnormal Stock Returns around Form NT Filing by Form Type and Reason for Delay. Fama-French-Momentum Adjusted Returns. Window = [–2, +2]

Panel A: Abnormal Return by Form Type

	All NT Filers		
	N	%	p-value
10-Q and 10-K	2,115	-2.44	<.0001
10-Q	1,048	-2.93	<.0001
10-K	1,067	-1.96	<.0001
Diff (Q–K)		-0.97	
p-value		0.0527	

Panel B: Abnormal Return by Form Type, Subsample Partitioned by Alford et al. (1994)'s Calendar Delay Days

	0 < *DelayDays* ≤ 5			5 < *DelayDays* ≤ 17		
	N	%	p-value	N	%	p-value
10-Q and 10-K	661	-1.83	0.0002	1,015	-2.70	<.0001
10-Q	488	-2.00	0.0010	355	-4.28	<.0001
10-K	173	-1.37	0.0575	660	-1.86	0.0017

Panel C: Abnormal Return by Form Type and Management Declaration to File within Grace Period

	Part2_Check = 0			Part2_Check = 1			Diff (0–1)	
	N	%	p-value	N	%	p-value	%	p-value
10-Q and 10-K	282	-2.89	<.0001	1,833	-2.37	<.0001	-0.52	0.4542
10-Q	148	-2.09	0.0073	900	-3.06	<.0001	0.98	0.2790
10-K	134	-3.77	0.0002	933	-1.69	0.0004	-2.08	0.0549
Diff (Q–K)		1.68			-1.37			
p-value		0.1736			0.0400			

TABLE 5 (CONT'D)

Abnormal Stock Returns around Form NT Filing by Form Type and Reason for Delay. Fama-French-Momentum Adjusted Returns. Window = [–2, +2]

Panel D: Abnormal Return by Form Type, Reason for Delay, and Management Declaration to File within Grace Period

		All NT Filers			Part2_Check = 0			Part2_Check = 1			Diff (0–1)	
		N	%	p-value	N	%	p-value	N	%	p-value	%	p-value
Reason group:												
Uncertain	10-Q and 10-K	521	-2.36	0.0002	53	-2.84	0.1341	468	-2.31	0.0007	-0.53	0.8006
	10-Q	298	-2.27	0.0068	30	-1.08	0.5745	268	-2.41	0.0081	1.32	0.5347
	10-K	223	-2.48	0.0122	23	-5.12	0.1572	200	-2.17	0.0341	-2.95	0.3610
	Diff (Q–K)		0.20			4.04			-0.24			
	p-value		0.8749			0.3179			0.8632			
Accounting	10-Q and 10-K	1,029	-1.89	<.0001	151	-2.53	0.0005	878	-1.78	<.0001	-0.74	0.3667
	10-Q	474	-2.83	<.0001	76	-2.50	0.0059	398	-2.89	<.0001	0.39	0.7177
	10-K	555	-1.09	0.0352	75	-2.55	0.0250	480	-0.86	0.1313	-1.68	0.1814
	Diff (Q–K)		-1.74			0.04			-2.03			
	p-value		0.0193			0.9760			0.0154			
Corporate Events	10-Q and 10-K	302	-2.18	0.0162	48	-2.65	0.0368	254	-2.09	0.0469	-0.57	0.7274
	10-Q	178	-2.87	0.0150	31	-0.89	0.5585	147	-3.29	0.0184	2.39	0.2445
	10-K	124	-1.19	0.4034	17	-5.87	0.0088	107	-0.44	0.7825	-5.42	0.0385
	Diff (Q–K)		-1.68			4.97			-2.84			
	p-value		0.3590			0.0531			0.1801			
Multiple	10-Q and 10-K	263	-5.01	<.0001	30	-5.18	0.0424	233	-4.99	<.0001	-0.20	0.9521
	10-Q	98	-5.48	0.0006	11	-5.32	0.3246	87	-5.50	0.0011	0.18	0.9708
	10-K	165	-4.73	0.0007	19	-5.10	0.0638	146	-4.68	0.0023	-0.42	0.8888
	Diff (Q–K)		-0.75			-0.21			-0.82			
	p-value		0.7271			0.9674			0.7139			

The table presents abnormal event returns surrounding the filing of NT Form. Panel A presents the event returns for the entire sample and by NT Form type. Panel B provides the event returns for two subgroups following Alford et al. (1994), where the 10-Q or 10K filing delay (*DelayDays*) is the number of calendar days between the 10-Q or 10-K financial statements filing date and the estimated statutory deadline. Panel C further partitions the full NT filers sample event returns by Part2_Check and the reason for the delay. Abnormal returns, $\Pi_{t=1,n}(1 + R_{i,t}) - \Pi_{t=1,n}(1 + E(R_{i,t}))$, are calculated using the CRSP Daily Stock File as the buy-and-hold returns for firm *i* over the *n* trading days in the window (window is from day –2 through day +2, where day 0 is the NT filing date), where Π is the product operator; $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; and $E(R_{i,t})$ is firm *i*'s expected return on day *t*. Expected returns, $E(R_{i,t})$, are measured using the three Fama and French (1993) factors, *MKTRF*, *SMB*, and *HML*, augmented by a momentum factor, *UMD*, following Carhart (1997). Specifically, we first estimate the following model using a 40-trading-day hold-out period which begins 55 trading days prior to the NT filing date: $R_{i,t} - R_{f,t} = \alpha_i + \beta_{MKTRF,i} \cdot MKTRF_t + \beta_{SMB,i} \cdot SMB_t + \beta_{HML,i} \cdot HML_t + \beta_{UMD,i} \cdot UMD_t + \varepsilon_{i,t}$, where: $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; $R_{f,t}$ is the one-month Treasury bill daily return on day *t*. We then use firm *i*'s estimated betas from the first step to compute the expected return for firm *i* on day *t*, as $R_{f,t}$ plus the product of the estimated betas and the related factors. $MKTRF_t$ is the daily excess return on a value-weighted aggregate equity market portfolio, SMB_t is the return on a zero-investment factor mimicking portfolio for size (market value of equity), HML_t is the return on a zero-investment factor mimicking portfolio for book-to-market value of equity, and UMD_t is the return on a zero-investment factor mimicking portfolio for momentum. Part2_Check refers to management's declaration of whether it intends (=1; box in Part2 of NT Form is checked) or it does not intend (=0; box in Part 2 of NT Form is unchecked) to file its financial statements within the grace period, which is 5 days for 10-Q and 15 days for 10-K. The reason groups for the delay, Uncertain, Accounting, Corporate Events, and Multiple are based on the reason for the late filing as stated by management on the NT Form and is classified as described in Appendix 3. We obtain the risk-free rate and the Fama-French and Momentum factors from the Fama-French dataset. Stock returns are adjusted for the effect of delisting returns. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.

TABLE 6

Abnormal Stock Returns around Form NT Filing by Form Type, Management Declaration to File within Grace Period, Whether Filed within Grace Period, and Reason for Delay. Fama-French-Momentum Adjusted Returns. Window = [–2, +2]

Panel A: Abnormal Return by Form Type, Management Declaration to File within Grace Period, and Whether Filed within Grace Period

		File after Grace Period			File within 5/15 Days			Diff	
		N	%	p-value	N	%	p-value	%	p-value
Part2_Check = 0	10-Q and 10-K	139	-4.05	<.0001	143	-1.76	0.0381	-2.30	0.0607
	10-Q	88	-2.93	0.0077	60	-0.86	0.4152	-2.07	0.1684
	10-K	51	-5.99	0.0002	83	-2.41	0.0545	-3.59	0.0697
	Diff (Q–K)		3.07			1.55			
	p-value		0.1026			0.3632			
Part2_Check = 1	10-Q and 10-K	664	-3.51	<.0001	1,169	-1.72	<.0001	-1.80	0.0095
	10-Q	446	-4.12	<.0001	454	-2.02	0.0016	-2.10	0.0246
	10-K	218	-2.26	0.0224	715	-1.52	0.0051	-0.74	0.5095
	Diff (Q–K)		-1.86			-0.50			
	p-value		0.1205			0.5551			

Panel B: For Part2_Check = 1 only, Abnormal Return by Form Type, Delay Reason, and Whether Filed within Grace Period

		File after Grace Period			File within 5/15 Days			Diff	
		N	%	p-value	N	%	p-value	%	p-value
Reason group:									
Uncertain	10-Q and 10-K	128	-3.44	0.0230	340	-1.88	0.0115	-1.57	0.3485
	10-Q	97	-3.72	0.0480	171	-1.66	0.0802	-2.07	0.3231
	10-K	31	-2.57	0.2346	169	-2.10	0.0679	-0.47	0.8675
	Diff (Q–K)		-1.16			0.44			
	p-value		0.7421			0.7664			
Accounting	10-Q and 10-K	355	-3.69	<.0001	523	-0.49	0.3242	-3.21	0.0002
	10-Q	223	-4.75	<.0001	175	-0.53	0.4832	-4.22	0.0003
	10-K	132	-1.92	0.1189	348	-0.47	0.4660	-1.45	0.2939
	Diff (Q–K)		-2.83			-0.06			
	p-value		0.0613			0.9493			
Corporate Events	10-Q and 10-K	96	-0.47	0.7560	158	-3.07	0.0309	2.61	0.2070
	10-Q	76	-1.49	0.3794	71	-5.21	0.0206	3.71	0.1824
	10-K	20	3.43	0.2984	87	-1.33	0.4660	4.76	0.2482
	Diff (Q–K)		-4.92			-3.87			
	p-value		0.1843			0.1728			
Multiple	10-Q and 10-K	85	-6.30	0.0001	148	-4.23	0.0072	-2.07	0.3341
	10-Q	50	-6.13	0.0001	37	-4.65	0.1764	-1.48	0.6866
	10-K	35	-6.55	0.0354	111	-4.10	0.0210	-2.45	0.4893
	Diff (Q–K)		0.42			-0.55			
	p-value		0.8990			0.8781			

The table presents abnormal event returns surrounding the filing of NT Form, by actual filing, management's expectation to file within the grace period, form type, and the reason for the delay. Abnormal returns, $\Pi_{t=1,n}(1 + R_{i,t}) - \Pi_{t=1,n}(1 + E(R_{i,t}))$, are calculated using the CRSP Daily Stock File as the buy-and-hold returns for firm *i* over the *n* trading days in the window (window is from day –2 through day +2, where day 0 is the NT filing date), where Π is the product operator; $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; and $E(R_{i,t})$ is firm *i*'s expected return on day *t*. Expected returns, $E(R_{i,t})$, are measured using the three Fama and French (1993) factors, MKTRF, SMB, and HML, augmented by a momentum factor, UMD, following Carhart (1997). Specifically, we first estimate the following model using a 40-trading-day hold-out period which begins 55 trading days prior to the NT filing date: $R_{i,t} - R_{f,t} = \alpha_i + \beta_{MKTRF,i} \cdot MKTRF_t + \beta_{SMB,i} \cdot SMB_t + \beta_{HML,i} \cdot HML_t + \beta_{UMD,i} \cdot UMD_t + \varepsilon_{i,t}$, where: $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; $R_{f,t}$ is the one-month Treasury bill daily return on day *t*. We then use firm *i*'s estimated betas from the first step to compute the expected return for firm *i* on day *t*, as $R_{f,t}$ plus the product of the estimated betas and the related factors. $MKTRF_t$ is the daily excess return on a value-weighted aggregate equity market portfolio, SMB_t is the return on a zero-investment factor mimicking portfolio for size (market value of equity), HML_t is the return on a zero-investment factor mimicking portfolio for book-to-market value of equity, and UMD_t is the return on a zero-investment factor mimicking portfolio for momentum. Part2_Check refers to management's declaration of whether it intends (=1; box in Part2 of NT Form is checked) or it does not intend (=0; box in Part 2 of NT Form is unchecked) to file its financial statements within the grace period, which is 5 days for 10-Q and 15 days for 10-K. File Late (File within 5/15 Days) refers to whether the financial statements are filed after (within) the grace period of respectively 5 and 15 days for 10-Q and 10-K. The reason groups for the delay, Uncertain, Accounting, Corporate Events, and Multiple are based on the reason for the late filing as stated by management on the NT Form and is classified as described in Appendix 3. We obtain the risk-free rate and the Fama-French and Momentum factors from the Fama-French dataset. Stock returns are adjusted for the effect of delisting returns. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.

TABLE 7

Post Form NT Filing Drift by Form NT Type and Reason for Delay. Fama-French-Momentum Adjusted Returns

Panel A: Drift by Form NT Type

	Window = [3, 62]				Window = [63, 122]				Window = [123, 182]				Window = [183, 242]			
	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff
%	-4.93	-4.96	-4.89	-0.07	-4.61	-4.93	-4.29	-0.64	-3.75	-4.01	-3.49	-0.51	-0.61	-1.20	-0.04	-1.16
p	<.0001	0.0001	0.0025	0.9724	<.0001	<.0001	0.0011	0.7177	0.0002	0.0014	0.0240	0.7974	0.5174	0.3469	0.9795	0.5365
N	2,100	1,039	1,061		2,010	993	1,017		1,915	943	972		1,832	903	929	

Panel B: Drift by Form Type and Reason for Delay

		Window = [3, 62]				Window = [63, 122]				Window = [123, 182]				Window = [183, 242]			
		Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff
Uncertain	%	-8.63	-7.34	-10.35	3.01	-3.43	-4.70	-1.78	-2.92	-5.42	-4.17	-7.04	2.87	-1.25	-0.80	-1.82	1.02
	p	0.0003	0.0050	0.0156	0.5457	0.0857	0.0699	0.5692	0.4719	0.0391	0.1340	0.1469	0.5877	0.5712	0.7804	0.5932	0.8195
	N	518	296	222		495	280	215		471	267	204		452	256	196	
Accounting	%	-1.11	-0.98	-1.22	0.24	-2.59	-2.91	-2.31	-0.60	-2.27	-1.69	-2.77	1.08	-1.01	-1.61	-0.50	-1.11
	p	0.3608	0.5836	0.4613	0.9219	0.0088	0.0290	0.1083	0.7599	0.0276	0.2558	0.0528	0.6020	0.3893	0.3101	0.7688	0.6345
	N	1,025	472	553		1,002	465	537		964	446	518		930	428	502	
Corporate Events	%	-7.30	-8.62	-5.45	-3.18	-9.51	-11.53	-6.65	-4.89	-6.48	-9.92	-1.68	-8.25	1.97	-1.27	6.74	-8.02
	p	0.0056	0.0123	0.1863	0.5508	0.0022	0.0048	0.1640	0.4341	0.0287	0.0049	0.7432	0.1675	0.4457	0.7021	0.1009	0.1278
	N	298	174	124		270	158	112		256	149	107		237	141	96	
Multiple	%	-9.90	-10.53	-9.53	-1.00	-9.86	-4.49	-13.03	8.54	-3.45	-5.30	-2.40	-2.90	-0.37	-0.10	-0.53	0.43
	p	0.0125	0.0019	0.1134	0.8838	0.0013	0.2219	0.0030	0.1320	0.3054	0.2256	0.6070	0.6494	0.9028	0.9814	0.8990	0.9413
	N	259	97	162		243	90	153		224	81	143		213	78	135	

The table presents post-NT-filing drift abnormal returns, accumulated over the period after the filing of NT Form. Panel A presents the abnormal returns over four post NT filing period for the entire sample with abnormal data available and by NT Form type. Panel B further breaks the post NT filing abnormal returns by the reason for the delay. Abnormal returns, $\Pi_{t=1,n}(1 + R_{i,t}) - \Pi_{t=1,n}(1 + E(R_{i,t}))$, are calculated using the CRSP Daily Stock File as the buy-and-hold returns for firm *i* over the *n* trading days in the window (window is from day X through day Y, where day 0 is the NT filing date), where Π is the product operator; $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; and $E(R_{i,t})$ is firm *i*'s expected return on day *t*. Expected returns, $E(R_{i,t})$, are measured using the three Fama and French (1993) factors, MKTRF, SMB, and HML, augmented by a momentum factor, UMD, following Carhart (1997). Specifically, we first estimate the following model using a 40-trading-day hold-out period which begins 55 trading days prior to the NT filing date: $R_{i,t} - R_{f,t} = \alpha_i + \beta_{MKTRF,i} \cdot MKTRF_t + \beta_{SMB,i} \cdot SMB_t + \beta_{HML,i} \cdot HML_t + \beta_{UMD,i} \cdot UMD_t + \varepsilon_{i,t}$, where: $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; $R_{f,t}$ is the one-month Treasury bill daily return on day *t*. We then use firm *i*'s estimated betas from the first step to compute the expected return for firm *i* on day *t*, as $R_{f,t}$ plus the product of the estimated betas and the related factors. $MKTRF_t$ is the daily excess return on a value-weighted aggregate equity market portfolio, SMB_t is the return on a zero-investment factor mimicking portfolio for size (market value of equity), HML_t is the return on a zero-investment factor mimicking portfolio for book-to-market value of equity, and UMD_t is the return on a zero-investment factor mimicking portfolio for momentum. Part2_Check refers to management's declaration of whether it intends (=1; box in Part2 of NT Form is checked) or it does not intend (=0; box in Part 2 of NT Form is unchecked) to file its financial statements within the grace period, which is 5 days for 10-Q and 15 days for 10-K. The reason groups for the delay, Uncertain, Accounting, Corporate Events, and Multiple are based on the reason for the late filing as stated by management on the NT Form and is classified as described in Appendix 3. We obtain the risk-free rate and the Fama-French and Momentum factors from the Fama-French dataset. Stock returns are adjusted for the effect of delisting returns. The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.

TABLE 8

Stock Market Reaction to the Actual Filing of 10-Q and 10-K Subsequent to NT Filing. Fama-French-Momentum Adjusted Returns. Window = [–2, +2]

Panel A: By Form Type

	N	%	p-value
10-Q and 10-K	2,074	-1.17	0.0002
10-Q	1,033	-1.58	0.0003
10-K	1,041	-0.77	0.0839
Diff (Q–K)		-0.81	
p-value		0.1949	

Panel B: By Management Declaration to File within Grace Period and Reason for Delay

		All NT Filers		
		N	%	p-value
Reason group:				
Uncertain	10-Q and 10-K	516	-2.35	0.0003
	10-Q	297	-2.82	0.0015
	10-K	219	-1.71	0.0771
	Diff (Q–K)		-1.11	
	p-value		0.3942	
Accounting	10-Q and 10-K	1,006	-0.01	0.9750
	10-Q	467	-0.56	0.2774
	10-K	539	0.46	0.3723
	Diff (Q–K)		-1.02	
	p-value		0.1643	
Corporate Events	10-Q and 10-K	297	-2.35	0.0181
	10-Q	174	-2.07	0.1426
	10-K	123	-2.73	0.0399
	Diff (Q–K)		0.66	
	p-value		0.7328	
Multiple	10-Q and 10-K	255	-2.03	0.0682
	10-Q	95	-1.81	0.1339
	10-K	160	-2.15	0.1847
	Diff (Q–K)		0.34	
	p-value		0.8658	

The table presents abnormal event returns surrounding the actual filing of the financial statements associated with the pre filing of NT Form. Panel A presents the event returns for the entire sample and by NT Form type, and Panel B further includes information about the reason for the delay. Abnormal returns, $\Pi_{t=1,n}(1 + R_{i,t}) - \Pi_{t=1,n}(1 + E(R_{i,t}))$, are calculated using the CRSP Daily Stock File as the buy-and-hold returns for firm *i* over the *n* trading days in the window (window is from day –2 through day +2, where day 0 is the NT filing date), where Π is the product operator; $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; and $E(R_{i,t})$ is firm *i*'s expected return on day *t*. Expected returns, $E(R_{i,t})$, are measured using the three Fama and French (1993) factors, MKTRF, SMB, and HML, augmented by a momentum factor, UMD, following Carhart (1997). Specifically, we first estimate the following model using a 40-trading-day hold-out period which begins 55 trading days prior to the NT filing date: $R_{i,t} - R_{f,t} = \alpha_i + \beta_{MKTRF,i} \cdot MKTRF_t + \beta_{SMB,i} \cdot SMB_t + \beta_{HML,i} \cdot HML_t + \beta_{UMD,i} \cdot UMD_t + \varepsilon_{i,t}$, where: $R_{i,t}$ is firm *i*'s daily return on day *t*, inclusive of dividends and other distributions; $R_{f,t}$ is the one-month Treasury bill daily return on day *t*. We then use firm *i*'s estimated betas from the first step to compute the expected return for firm *i* on day *t*, as $R_{f,t}$ plus the product of the estimated betas and the related factors. $MKTRF_t$ is the daily excess return on a value-weighted aggregate equity market portfolio, SMB_t is the return on a zero-investment factor mimicking portfolio for size (market value of equity), HML_t is the return on a zero-investment factor mimicking portfolio for book-to-market value of equity, and UMD_t is the return on a zero-investment factor mimicking portfolio for momentum. The reason groups for the delay, Uncertain, Accounting, Corporate Events, and Multiple are based on the reason for the late filing as stated by management on the NT Form and is classified as described in Appendix 3. We obtain the risk-free rate and the Fama-French and Momentum factors from the Fama-French dataset. Stock returns are adjusted for the effect of delisting returns. To obtain the actual filing date related to a fiscal period end, we retrieve the fiscal quarter/year end date and the actual filing date of the corresponding financial statements directly from the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database (EDGAR). The sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study.

TABLE 9
Operating Performance (ROA, in Percent) Surrounding Late Filing, by Form NT Type and Reason for Delay

Panel A: Operating Performance by Form Type

	Window = Q – 2				Window = Q – 1				Window = Q				Window = Q + 1				Window = Q + 2			
	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff
%	-2.84	-2.04	-3.60	1.56	-3.22	-2.90	-3.53	0.64	-2.55	-3.62	-1.52	-2.10	-3.18	-3.16	-3.20	0.04	-2.11	-1.89	-2.32	0.44
p	<.0001	<.0001	<.0001	0.0463	<.0001	<.0001	<.0001	0.2738	<.0001	<.0001	0.0059	0.0028	<.0001	<.0001	<.0001	0.9606	<.0001	<.0001	<.0001	0.4587
N	1,959	946	1,013		1,980	966	1,014		1,981	970	1,011		1,896	925	971		1,799	877	922	

Panel B: Operating Performance by Form Type and Reason for Delay

		Window = Q – 2				Window = Q – 1				Window = Q				Window = Q + 1				Window = Q + 2			
		Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff	Both	10-Q	10-K	Diff
Non-Accounting	%	-4.30	-2.94	-5.71	2.77	-4.61	-3.85	-5.43	1.58	-3.24	-4.63	-1.74	-2.89	-4.75	-3.98	-5.58	1.60	-3.17	-2.46	-3.93	1.47
	p	<.0001	<.0001	<.0001	0.0581	<.0001	<.0001	<.0001	0.1138	<.0001	<.0001	0.1241	0.0304	<.0001	<.0001	<.0001	0.3147	<.0001	0.0003	<.0001	0.1590
	N	977	496	481		984	509	475		986	511	475		937	487	450		879	454	425	
Accounting	%	-1.39	-1.04	-1.69	0.65	-1.85	-1.83	-1.86	0.03	-1.86	-2.50	-1.32	-1.18	-1.66	-2.25	-1.15	-1.10	-1.10	-1.27	-0.95	-0.32
	p	<.0001	0.0048	<.0001	0.2397	<.0001	<.0001	<.0001	0.9600	<.0001	<.0001	<.0001	0.0276	<.0001	0.0005	0.0002	0.1230	0.0002	0.0096	0.0063	0.5951
	N	982	450	532		996	457	539		995	459	536		959	438	521		920	423	497	

The table presents operating performance surrounding NT filing. The operating performance measure is ROA (in percent), defined as earnings (Income Before Extraordinary Items, Compustat: IBQ) divided by total assets (Compustat: ATQ). Quarter Q refers to the quarter in which the NT Form is filed. Panel A presents the operating performance over the pre NT filing quarter, the NT filing quarter, and the post NT filing quarters for the entire sample with data available and by NT Form type. Panel B further breaks the operating performance by the reason for the delay. To obtain operating performance for the quarters surrounding the late filing date, we use all data available in the Compustat quarterly dataset. When scaling operating performance by total assets, we treat as missing observations with total assets lower than ten million dollars. The reason groups for the delay are based on Non-Accounting or Accounting, where Uncertain, Corporate Events, and Multiple reasons are considered as Non-Accounting reasons. These reasons are based on the reason for the late filing as stated by management on the NT Form and is classified as described in Appendix 3. The NT filings sample includes all NT 10-Q and NT 10-K filings by U.S. firms in the Audit Analytics—Non-Timely Module Feed (NT) dataset, with fiscal period end between 2000 and 2008, non-missing date and reason for the late filing, non-duplicate observations, NT filing on or before September 1, 2009, with Compustat, CRSP, EDGAR data, and with sample selection criteria described in the study. EDGAR refers to the U.S. Securities and Exchange Commission website, Electronic Data Gathering Analysis and Retrieval database.