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Eli Bartov
New York University
Stern School of Business
ebartov@stern.nyu.edu

Yaniv Konchitchki
University of California at Berkeley
Haas School of Business
yaniv@haas.berkeley.edu

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SYNOPSIS: Timely disclosure of financial statement information is a critical requirement for firms and well-functioning capital markets. Yet, every quarter or year, a non-trivial number of firms are late in filing their financial statements. This paper identifies and probes various capital market consequences for late filings of quarterly and annual financial statements. It examines the short- and long-window reaction to late filings, as well as how equity investors process statements accompanying late filing announcements, such as managers declaring intentions to file within/outside SEC's allowed grace periods. This paper documents that delayed quarterly filings have distinctly different valuation implications than delayed annual filings over the short and long run, and that accounting problems play a unique role in signaling the seriousness of the delay. It also shows that investors do not accept managements' delay-related assertions at face value, and that delayed filing announcements signal continued poor performance that is not fully reflected in stock prices at the time the announcements are made. Overall, this paper sheds new light on important capital market consequences of filing financial statements late.

Keywords: asset pricing; accounting problems; SEC filings; financial statements; market efficiency.

INTRODUCTION

Timely disclosure of financial statement information is a critical requirement for firms and well-functioning capital markets. Late filings delay financial disclosures that help investors make informed investment decisions; therefore, late filings increase information asymmetry and thus trading costs (e.g., Glosten and Milgrom 1985). Late filings may also trigger regulatory penalties and covenant violations that impose large costs on shareholders.

Companies that fail to file a 10-Q or 10-K on a timely basis are required by U.S. Securities and Exchange Commission (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 five 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 within the allowed grace period. Companies that file Form NT on a timely basis and subsequently file within the allowed grace period are considered by the SEC to have filed on a timely basis, and they thereby avoid SEC-imposed penalties.[1] Conversely, companies that fail to file within the allowed grace period are subject to a variety of costly penalties, including deregistration by the SEC, delisting by stock exchanges, the inability to raise capital through issuance of public securities, and potential debt covenant violations.[2]

The purpose of this paper is to study the capital market consequences of late filings by examining and contrasting the immediate and future market consequences of late 10-Q and 10-K filing announcements. We examine three research questions. Our first question is designed to document the stock price reaction to the NT filings that announce the late filing of the 10-Q or 10-K. Based on the preceding discussion, we expect a negative market response to NT filings in which management declares the filing will occur beyond the grace period. It is less predictable, however, whether investors will respond negatively to NT filings in which management declares the filing will occur within the grace period. Because the SEC considers these filings to be timely,

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

[2] Other adverse consequences include the inability to hold an annual shareholder meeting until the 10-K is filed. We note, however, that the most costly penalties are typically imposed only in the most egregious cases. For example, SEC administrative proceedings are usually reserved for issuers who are excessively late; and stock exchange delisting procedures are typically not triggered until the company is at least six months late in its filing. However, some penalties are effectively imposed immediately upon expiration of the grace period. Specifically, companies who miss the grace period are not eligible to issue securities using Form S-3 (referred to as "shelf registration") until they have filed in a timely manner for at least 12 months. This imposes costs by limiting a company's ability to raise capital on a timely basis (Smith et al. 2013). Covenant violations are also a potential cost that would be immediately incurred.

they impose no obvious costs on shareholders and hence may generate no market response.[3] Nevertheless, it is possible that investors may infer negative news simply from the fact that the firm did not meet its original filing deadline, in which case investors may react negatively. Further, because our sample is dominated by NTs that declare that the firm will file within the grace period (86 percent of our sample), if there is no reaction to the filings, we may also observe no response for our sample as a whole.

The second research question asks whether investors react differently to late quarterly filings than to late annual filings. Shareholders may react differently to late quarterly than to late annual filings because quarterly financial statements require less disclosure and are unaudited. However, it is not clear whether the reaction to late quarterly filings is smaller or larger than the reaction to late annual filings. On one hand, less disclosure in quarterly financial statements may lead to a smaller reaction to NT 10-Qs than to NT 10-Ks because less information is being withheld from the market. On the other hand, because quarterly filings are much less onerous to produce than annual filings, late quarterly filings may signal more serious underlying problems than late annual filings, suggesting a stronger negative reaction to NT 10-Qs than to NT 10-Ks.

The third research question asks whether the immediate market reaction around the NT filing is complete and whether its completeness is a function of the reason for the delay. Given that late filings are relatively rare events and may occur for a variety of unusual reasons, market participants may have difficulty interpreting their valuation consequences on a timely basis and may be better at interpreting the consequences of some reasons better than others.

We perform our analysis on a sample of 2,115 first-time late filers over the 2000-2008 period using returns data through 2010. We begin by first documenting several regularities that

[3] We acknowledge, however, that late filings, even when filed within the grace period, extend the duration of the information asymmetry between managers and shareholders. However, because the grace period only extends the duration by five to 15 days, we do not expect such delays to be very costly.

are new to the literature. Specifically, we document that accounting problems are the most frequently cited reason for filing delays. Furthermore, the average delay for both 10-Qs and 10-Ks is more than three times longer when accounting reasons are cited (41 days) than when corporate events (such as employee turnover) explain the delay (13 days) or when managers provide reasons that are uncertain (11 days). Finally, we find that management is more than twice as likely to miss the grace period deadline for late 10-Qs (51 percent of the time) than for late 10-Ks (25 percent of the time).

We address the first research question by examining short-window stock price changes around the NT filing dates. Our analysis of the entire sample finds a significantly negative stock price reaction to both NT 10-Q filings (–2.93 percent) and NT 10-K filings (–1.96 percent). Our analysis of the subsample of NT filers that declare their intentions to ultimately file within the grace period also finds a significantly negative stock price reaction. We also find a significantly larger negative reaction to NT filers that subsequently failed to file within the grace period when compared to firms that meet the deadline. Critically, we find this result regardless of whether the NT filing includes management's declared intention to *subsequently* file within the grace period. This explains why investors respond negatively even to the subset of late filers declaring they will file within the grace period and suggests that investors are able to "see through" management assertions that turn out to be false. We further find evidence suggesting that when accounting reasons are cited for the delay, investors infer that quarterly filings signal deeper underlying problems that ultimately prevent management from meeting the grace period deadline. Overall, the results from answering our first question suggest that investors do not take managements' announcements at face value and instead appear to use other information to infer the accuracy of managements' announcements.

In answer to our second research question, we find a significantly larger negative reaction to filing an NT 10-Q (i.e., filing the form indicating a late 10-Q) than to filing an NT 10-K (i.e., filing the form indicating a late 10-K). In addition, we find that firms reporting accounting reasons for the delay drive the larger negative reaction to the NT 10-Q filings. This indicates that accounting problems that prevent timely 10-Q filings are perceived as more costly than accounting problems that delay 10-Ks, perhaps because they are unaudited and less burdensome to prepare (e.g., require significantly less disclosure).

In answer to our third question, we investigate whether the immediate stock market response is complete by examining stock price changes during the year following the NT filings. We find that, on average, abnormal returns for both NT 10-Q and NT 10-K filers continue to drift downward during the post-filing months. However, this drift is less pronounced when accounting reasons underlie the delay, suggesting that investors are better able to interpret the valuation implications of accounting-related late filings.[4] In addition, we find that return on assets (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. Together, these findings are consistent with the negative market response to the NT announcements being at least partially due to the NT filings conveying information about deeper problems, including poor future operating performance, and not simply due to the firm missing an SEC filing deadline.

This paper contributes to the capital markets literature regarding the consequences of untimely quarterly and annual financial reporting, as well as the stock market's interpretation of management communications. Our first contribution lies in the finding that market participants do not naively accept management's declarations included in late filing announcements. In

[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, consistent with an incomplete reaction during the NT filing event window.

particular, investors are generally able to predict which firms will miss the filing deadline within the SEC's allowed grace period, irrespective of management's stated intentions. Our finding that investors are able to "see through" management's incorrect assertions suggests that investors in this setting are relatively sophisticated in mapping financial information into stock prices. Accordingly, our analyses have implications for late filers because they question the wisdom of management's disclosing incorrectly the expected filing date of Form 10-Q/K.

A second contribution is that this paper adds to the prior literature that examines late filings. With the exception of Griffin (2003), prior research examines annual filings (e.g., Alford et al. 1994; Dee et al. 2010; Impink et al. 2012). We add to this literature by investigating and contrasting both the long- and short-window market reaction to 10-K and 10-Q NT filings. Specifically, we examine how equity investors process different statements provided by managers when they file late, the unique role played by accounting problems in signaling the seriousness of the delay, and the post-announcement returns.

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 paper. Section 4 outlines our tests and reports the results. Section 5 summarizes the findings and states our conclusions.

INSTITUTIONAL BACKGROUND AND PRIOR RESEARCH

Financial Statement Filing Requirements

In 1946, the SEC first began requiring annual Form 10-K to be filed within 90 calendar days after year end. In 1970, the SEC began requiring quarterly 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.[5] 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 public float greater than $75 million and less than $700 million) and "large accelerated" filers (with public float greater than $700 million); the final rule also reduces the 10-K filing deadline from 90 days to 75 days for accelerated filers and to 60 days for large accelerated filers.[6] "Non-accelerated" filers (with public float less than $75 million) experience no change in either 10-Q or 10-K deadlines.

Implications of Late Financial Statement Filings for Shareholder Value

Late filing of Forms 10-Q and 10-K delays disclosures that help investors make informed investment decisions, and it 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).[7] 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

[5] 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).

[6] 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 27, 2005). Also, we note that the SEC refers to the "public float," defined as the market value of voting and nonvoting common equity held by non-affiliates (e.g., SEC 2005; Impink et al. 2012), that is, the part of equity that is not held by management or large shareholders. However, there is legal uncertainty regarding the definition of an "affiliate" and hence the definition of a firm's public float (e.g., Iliev 2010). We validate our use of market value of equity in our filing status classification procedure by calculating Pearson and Spearman correlations between a firm's current filing status in Audit Analytics, when available, and our classification. We find that both these correlations are positive, high, and significant, at the 1 percent level. Given that historical market values change over time relative to current market values, which determine the current filing status, our findings provide reasonable assurance about the filing status classification procedure. We also note that our use of total market capitalization is consistent with the literature (e.g., Impink et al. 2012, who use total market classification to classify their sample firms).

[7] 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).

sample firms stopped trading on their stock exchanges for reasons other than mergers, as opposed to only 6.9 percent in the Compustat universe. Late filers also are prevented from issuing securities using the short-form shelf registration statement (Form S-3) for the next year.[8] Other possible adverse consequences include debt covenant violations and the inability to hold an 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 five days for 10-Qs and 15 days for 10-Ks. Although Rule 12b-25 states that extensions are granted only when a firm 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 filed in a timely manner, the extension is effectively treated as "automatic." Part II of Form NT requires registrants to explicitly declare whether they expect to file within the respective grace period by checking a box, and Part III of Form NT requires management to explain why the filing is delayed. If the late 10-Q or 10-K is then filed within the grace period, it is considered by the SEC to be filed in a timely manner, and no penalties are imposed.[9] This suggests that late filings that are ultimately made within the

[8] 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).

[9] 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.

SEC's grace period may be benign events that do not result in a negative stock price reaction.[10]

The frequency of late filings has fluctuated over time in response to a variety of changes in the financial reporting environment. For example, late filings increased after regulators shortened the filing deadlines during 2004 through 2007, as well as after the increased disclosures required by the Sarbanes-Oxley Act of 2002 (SOX) (Durfee 2004; Taub and Cook 2005; Aguilar 2007; Impink et al. 2012).[11] Other factors that are likely to adversely impact timely reporting are the increased frequency of restatements and the adoption of complex new accounting standards, such as the expensing of stock options. Thus, as financial market regulation evolves over time and financial reporting requirements become more complex, the incidence of late filings is likely to continue to fluctuate.

Prior Research

Alford et al. (1994) examine abnormal stock returns for a sample of Form NT filers but do not investigate the short-window reaction to NT 10-K filings, nor do they distinguish between filings that occur within or beyond the SEC grace period. This is because the objective of 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." They analyze stock returns in order to describe the financial characteristics of 10-K NT filers and to assess whether they are in financial distress. The primary conclusion in Alford et al. (1994) is that 20 percent of the 10-Ks filed during their sample period are late and that the majority of late filers is financially distressed.

Although Alford et al. (1994) do not examine the short-window reaction to NT 10-K

[10] For an example of Form 12b-25 see, https://www.sec.gov/files/form12b-25%2C0.pdf.

[11] 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.

filings, one of their analyses adds tension to the current paper. Specifically, one of the stock price holding periods they examine begins one day after the 10-K due date and ends on the day the late 10-K is actually filed. They refer to this as the "delay period" (see their Table 5, Panel C). This analysis has implications for the current paper because the NT due date is one day after the 10-K is due, which falls within this delay period. Somewhat surprisingly to those authors, Alford et al. (1994) find an insignificant market reaction for all but the firms that are late by more than 17 days. This is surprising because it is consistent with market participants not reacting negatively to any of the NT 10-K filings in their paper.[12] However, the absence of a market reaction to NT filings around the filing date may be due to several reasons not considered by Alford et al. (1994): The NT filings may inform investors that the ensuing 10-K late filing will be within the SEC grace period; market participants may anticipate the information contained in the NT (in which case the information contained in Form NT is already incorporated in price); and the open-ended nature of the information reported in the NT may be difficult for shareholders to calibrate, in which case the reaction may be incomplete around the NT filing.

In a more recent paper, Impink et al. (2012) examine whether the provisions in SOX resulted in increased delays in 10-K filings. They find that although the provisions in SOX did not lead to increased delays, firms with SOX Section 404 weaknesses were more likely to file late 10-Ks. Impink et al. (2012) differ from the current paper by restricting their analysis to NT 10-Ks and issues related to the effects of SOX-related delays. By comparison, the current paper examines a different set of research questions and a wider range of phenomena. In particular, we investigate and contrast the stock market reaction to late quarterly and annual financial statement

[12] Notably, 62 percent of the NT filings in their sample file within 17 days. 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. Thus, the majority of the NT filers in their sample during the "delay period" does not experience negative returns during a holding period that includes the NT due date.

filings, examine issues regarding management's declared intention to file within the SEC grace period, investigate post-announcement stock price returns, and examine the post-NT operating performance of firms that file late.[13]

VARIABLE DEFINITIONS AND DATA

Variable Definitions

As in Alford et al. (1994), we calculate the 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.[14] To ensure accuracy, we use a crawler program that extracts two variables directly from SEC's Electronic Data Gathering Analysis and Retrieval (EDGAR) database in calculating *DelayDays*:

[13] In other recent studies, Cao et al. (2010) investigate the market reaction to a subset of NT filings that are mainly due to information system failures; Gao et al. (2011) examine the market reaction to a subset of NT filings to investigate how bondholder activists respond to late filings; and Wang et al. (2013) examine the impact of non-timely filings on audit fees. We note that that 10-Qs and 10-Ks can include disclosures related to untimely Regulation Fair Disclosure (FD)—a less researched aspect of the general issue of untimely required SEC filings. Relatedly, Griffin et al. (2011) find that FD levies three kinds of enforcement and disclosure costs. In addition, a somewhat related study addresses late releases of preliminary earnings (Duarte-Silva et al. 2013), although it is distinct from late filings of 10-Q/K.

[14] Specifically, we first 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: (a) 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; (b) 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; (c) all accelerated filers (both types) with fiscal years ending on or after December 15, 2004, must file the 10-Q within 40 days; and (d) 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.

"Filing Date" and "Period of Report".[15] We use EDGAR's "Period of Report" (which is the end of the fiscal quarter or year) 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:

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

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 $E(R_{i,t})$ is firm i's expected return on day t. We adjust stock returns for the effect of delisting following the two-step procedure in Konchitchki (2011), as used in Beaver et al. (2007) and Balakrishnan et al. (2010).[16]

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., Konchitchki 2011, 2013), 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:

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

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

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

[16] 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 a 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. Overall, the portion of the delisting firm-daily observations is very small (0.08 percent), and inferences from the returns tests throughout the paper are unchanged when we replicate our analysis after excluding delisting returns.

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 (1) to compute the expected return for firm i on day t, as follows:

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

Data

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, NT filing data on or prior to September 1, 2009. We require return data through 2010. Our sample period begins in 2000 because the coverage by Audit Analytics, the source of the initial sample, begins in 2000. We obtain accounting data from the quarterly and annual Compustat databases.

Because Alford et al. (1994) found that two-thirds of their sample includes late filers that fail to file the required Form NT, we also attempted to identify the non-NT 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 the EDGAR database, we found that the filing dates in the Compustat database are unreliable. Specifically, 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, who

acknowledged that the filing dates in their database are unreliable and contain numerous errors.[17] Thus, unlike with Alford et al. (1994), there are not enough non-NT late filers during our 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 paper is that compliance has improved during our sample period. Another possible explanation is that the non-NT late filers in that paper 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), although 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 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. 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 the number of shares by the stock price, 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.

Table 1 reports our sample selection procedure. The 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

[17] They also indicated they are working to resolve the problem. We also communicated with Wayne Carnall, former chief accountant of corporation finance at the SEC, who indicated that it is very rare for late filers not to file Form NT.

Analytics, or EDGAR.[18] To increase the likelihood that the NT form contains news, we restrict our sample to first-time NT 10-Q and 10-K filings.[19] 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 because estimating abnormal stock returns of penny stocks and firms with immaterial 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, as they are unlikely to convey news.[20] 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, although 10-Qs require fewer disclosures and are unaudited, which implies there are fewer reasons for delay, companies also file at least as many NT 10-Qs as NT 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*), nearly identical for both 10-Qs and 10-Ks, whereas the median delay in filing is only six days for 10-Qs and 15 days for 10-Ks. This indicates that most late 10-Qs are filed after the five-day grace period, 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,

[18] A major reason for the reduction in sample size is that Audit Analytics is comprised of not only listed firms but also non-listed firms such as shell companies, non-operating entities, mining companies, trust funds, and pension funds, which choose to register with the SEC and file audit reports. Because these entities are not listed on a stock exchange, they are not covered by Compustat and CRSP (see, e.g., Lennox and Li 2014 for more details).

[19] To ensure a first-time filing, we pool all NT filings during the sample period to identify first-time NT filers. If in the first year a firm files both NT 10-Q and 10-K, the NT 10-K filing is excluded from the sample because the NT 10-K filing might have been anticipated and thus triggered less reaction. However, for the first sample year, 2000, we are unable to ascertain whether it is a first-time filing because data for 1999 is unavailable. To assess the effect of this limitation on our results, we replicate our tests after removing year 2000 from the sample and obtain very similar results.

[20] These include primarily reasons related to computer problems with the EDGAR online filing system.

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 the Form NT that they intend to subsequently file a 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 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 previous quarter is zero percent.

Panel B of Table 2 presents the distribution of observations by year, form type (i.e., NT 10-Q versus NT 10-K), and delay reason. The pattern of NT filers is relatively consistent with the events during that period that are likely to cause delays. For example, there is as 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 is 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 NT 10-Q filers ultimately fail to file within the grace period, compared with only 25 percent (269/1,067) of NT 10-K filers. This panel also indicates that although 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, whereas 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 that declare their intention to file within the grace period fail to do so, and the failure rate is substantially higher for NT 10-Q filers. Furthermore, in untabulated analysis, we find that when accounting reasons are cited for the delay, 59 percent of NT 10-Q filers miss the grace period deadline, compared with only 30 percent 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. (2013) and it compares it with that of the Compustat universe. The sample firms span all 15 industries, 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 late filing delay in days, *DelayDays*, 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 by whether management declares its intention to file within the five-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.[21] 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 half of that number, 25.17 days, when management indicates it intends to file within the grace period (i.e., *Part2_Check* = 1).

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.[22] 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

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

[22] We obtain the delay reason codes interpreting the late filings reasons from the NT narratives directly from Audit Analytics, and we sort these reasons into four categories. For brevity, we do not include this sorting procedure as well as the definition of the Audit Analytics codes, but this information is available upon request. An alternative approach is to use a computerized retrieval and classification approach as in Feldman et al. (2006).

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.

TESTS AND RESULTS

Stock Price Response to Late Filing Announcements

Table 5, Panel A, addresses our first research question, which investigates how investors react to NT filings. We answer 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 whether investors react differently to late quarterly filings than to late annual filings. Panel A of Table 5 also addresses this question; we 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 quarterly filings is consistent with stock market investors 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 the results in Table 2, which find 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.

Although results with the full sample 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).[23] 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 five days or less and six to 17 days separately (to correspond with the partitions used in the analysis performed in Table 5 of Alford et al. 1994). Unlike in 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, Form NT is filed electronically and thus becomes publicly available immediately; hence, we can very precisely identify when 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) that declares its intention to file within the grace period (–2.37 percent) or does not (*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. Although the negative response in the subsample that declares its 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 somewhat puzzling because the SEC considers filing within the grace

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

period a timely filing. One possible explanation is that investors suspect some of the firms will ultimately fail to file within the grace period. In answering our fourth research question below, we explore this explanation.

When the NT 10-Q and NT 10-K are considered separately, we find that investors react 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, the analysis in Table 6 below considers whether investors further condition the reaction to management's declaration to file within the grace period on whether they expect management to subsequently actually do so.

Table 5, Panel D, investigates whether the stock market reaction to the late filing announcement varies with the stated reason for the delay. Thus, we further partition the sample of NT filers 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.[24] Second, the significantly more negative response to NT 10-Qs than to NT 10-Ks documented in Panel A is concentrated among the accounting reasons. 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.

[24] The only exception is NT 10-K 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.

In summary, Table 5 reports that investors react negatively to both NT 10-Q and NT 10-K filings, but the reaction to NT 10-Q filings is significantly more negative. Furthermore, investors appear to consider the stated reason for the delay when reacting, as evidenced by a significantly stronger negative reaction to NT 10-Q filers compared to NT 10-K filers that cite accounting reasons for the delay. This last finding suggests that accounting problems signaled by management's inability to file a timely quarterly report are likely to be significantly more serious than the accounting problems signaled by management's inability to file a timely annual report.

Table 6 further investigates our second research question by testing whether the reaction to NT filings is 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 by examining the stock market reaction to late filers after partitioning jointly on whether management subsequently files the quarterly or annual financial statements 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 the 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 investors react 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 significant for 10-Ks and the combined sample, but not for 10-Qs. Thus, in contrast to some of

our analysis, Table 6 shows little evidence of a differential market response between the 10-Qs and the 10-Ks. However, the low statistical power of this test, due to small sample size, may partially explain these weak statistical results for the 10-Qs.

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 interesting because the stock market reactions reported in Panel A are around the NT filing date, before the stock market knows when the late 10-Q or 10-K is ultimately filed. Thus, these results 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 investors, 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 investors do not blithely react to management's declaration, but instead correctly infer, on average, when management will ultimately fail to comply with its "promise" to file within the grace period.

Table 6, Panel B, further partitions the 87 percent of our sample that indicates they intend to file within the deadline by the reason for the delay.[25] 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 investors anticipate 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, whereas 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 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 filers that cite accounting reasons for the delay explain 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).

In summary, the results in Table 6 reveal a significantly larger negative stock price reaction to late filings for firms that subsequently fail to file within the grace period compared to firms that meet the deadline. Further, the results suggest that investors are able to anticipate in

[25] 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.

advance which firms will miss the grace period filing deadline, regardless of management's declared intention on Form NT, and that this is driven by 10-Qs that cite accounting reasons for the delay. This finding is consistent with late 10-Qs being perceived by investors 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 investors do not react negatively to late filers that subsequently file within the grace period.[26]

Late Filers' Performance in the Year Following the Statutory Filing Deadline

The analysis in Table 7 addresses our third research question, which asks whether the stock market reaction around the late filing is complete. We answer this question by examining the stock price behavior of late filers during the year following the late filing announcements. 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). Because 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 the sample firms over the 240 trading days following the NT filing, in four 60-trading-day

[26] We conduct two additional analyses to evaluate the effects of specific years. First, we examine the effect of year 2004. Specifically, in 2004 there was a clustering of NT filings possibly related to changes in accounting-related regulations (i.e., the shorter filing deadline requirement and Section 404). Thus, we examine the extent to which the accounting-related results regarding NT filings for accounting reasons is driven by these filings. Specifically, we repeat the return analyses involving the by-reason breakdowns after excluding observations in 2004. We find similar inferences, consistent with the market's reaction to NT filings for accounting reasons being less incomplete compared to other types of NT filings because of the nature of accounting reasons in general rather than the nature of filers in 2004. Second, we examine whether the result that investors appear to process accounting NT filings more fully than other types of NT filings could be a result the initial implementation of SOX, where the market may have been more aware of the nature of the associated accounting delays. Accordingly, we test whether the accounting NT filing results hold in a sample not including the SOX period by repeating our return analyses after excluding observations in 2004-2006 (the years in which SOX was initially implemented). We find that this exclusion generally results in higher magnitudes of negative returns to late filings during the non-2004-2006 years. This strong negative reaction to late filings during the non-SOX implementation period indicates that equity investors appear to be less harsh with firms that did not file timely during the SOX implementation period.

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 that period, then are insignificant in the fourth 60-day window. Thus, we find that investors do not fully incorporate the negative implications of the late filings around the filing date. Rather, stock prices for the late 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.[27] 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 et al. 2009).

Table 7, Panel B, further expands the analysis in Panel A in order to explore 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 investors 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 become insignificant over the [183, 242] window.

[27] 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.

Table 7, Panels C and D, assess the drift over the period in which the drifts are found to be significant in Panels A and B, i.e., over the [3, 182] window; it also compares the magnitude of the drift for accounting versus non-accounting reasons. Panel C shows that, although there is a significant drift for accounting-based NTs, the magnitude of the drift for accounting-based NTs is smaller than that for NTs related to all other groups. Furthermore, Panel D provides a statistical test of the difference in the drift related to accounting reasons versus the drift related to non-accounting. The panel reveals that the post-NT-filing drift for non-accounting reasons is significantly larger than that for the accounting reasons.

We conduct two additional analyses, which are untabulated for brevity. In the first analysis we validate the long-window return results by examining the immediate market response to the actual filing of the late quarterly or annual financial statements. 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). The analysis reports the abnormal returns in a five-day window around the actual filing dates, [–2, +2], where day zero is the actual filing date. This analysis indicates that the return patterns observed for the long post-event windows also hold for the short windows around the actual filings.

Specifically, the results show that the stock market response to the actual filing of the late 10-Qs and 10-Ks is significantly negative (–1.17 percent). These results confirm the finding in Griffin (2003, p. 453) that investors respond negatively on the 10-K and 10-Q filing dates that follow an NT filing. In addition, the results 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).

In the second analysis we investigate whether the negative stock price performance around the NT filing stems from the late filing conveying news about deeper problems within the firm or merely from the company missing an SEC filing deadline. Accordingly, we examine the ROA of NT filers during the five quarters surrounding the late filing (quarter 0). Three salient points emerge from our results. First, the results reveal that both quarterly and annual late filers have poor operating performance, as measured by ROA, during the five fiscal quarters centered on the NT filing quarter. This is consistent with the late NT filings signaling that past poor performance is expected to continue into the future rather than revert toward the mean as documented in prior research (e.g., Lipe and Kormendi 1994). This suggests that the negative market response to the NT filings is due to the NT filing conveying news about deeper underlying problems. Interestingly, although the NT filing can identify firms with persistently poor operating performance, the evidence on post-NT returns drift in Table 7 shows that the subsequent performance is worse than investors anticipated at the filing date; again, with one exception—investors can anticipate the subsequent poor performance only when accounting reasons explain the delay. Second, during the late filing quarter (i.e., Window = Q), the operating performance of late quarterly filers is significantly more negative than that of late annual filers, which is again consistent with the stock return results. Third, our results indicate 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. This pattern in ROA is consistent with the larger long-term negative returns when non-accounting reasons explain the delay, as observed in Panel B of Table 7.

SUMMARY AND CONCLUSIONS

We investigate and contrast the immediate and future capital market consequences of announcements of late quarterly and annual filings. We address our 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. The findings can be summarized as follows.

The stock market reaction tests demonstrate a negative market response to late filing announcements for both quarterly and annual reports. This analysis also finds evidence suggesting that market participants "see through" management assertions that they will file within the SEC's allowed grace period when they subsequently fail to do so. A comparison of quarterly and annual late filers finds a stronger negative reaction to late quarterly filing announcements than to late annual filing announcements, especially when accounting reasons explain the delay. This finding suggests that accounting problems are perceived by investors to signal deeper problems when they delay quarterly filings than when they delay annual filings, perhaps because quarterly filings are unaudited and less costly/burdensome to prepare (e.g., require significantly less disclosure). An analysis of future performance finds that abnormal returns continue to decline during the months following late filing announcements, and that the decline is less pronounced when accounting reasons explain the delay.

Viewed as a whole, this paper contributes to capital markets research by providing theory and evidence focusing on situations when accounting financial statements are not filed within SEC's regulatory deadlines. Among other new insights to the literature, this paper documents that (a) delayed quarterly filings have distinctly different valuation implications than delayed annual filings, (b) investors do not naively accept managements' delay-related assertions at face

value, (c) accounting problems play a unique role in communicating the seriousness of the delay, and (d) delay announcements tend to be followed by continued poor operating performance.

In line with recent calls to increase the usefulness of accounting research (e.g., Merchant 2012; Konchitchki and Patatoukas 2014), the analyses and evidence in this paper also offer a communication channel between professionals and practitioners, including advice to chief financial officers (CFOs) and other parties involved in the filing of financial statements. For example, the evidence that investors are able to 'see through' management's incorrect assertions suggests that investors in this setting are relatively sophisticated in mapping financial information into stock prices. These findings have implications for late filers because they question the wisdom of management's disclosing incorrectly the expected filing date of quarterly and annual financial statements. As another example, this paper demonstrates the substantial negative effect on shareholders' value when financial statements are not filed in a timely manner, and especially when filing delays stem from accounting problems. This evidence highlights, for CFOs and others involved in the financial reporting process, the significant importance of being attuned to filing financial statements on time and being especially cautious when accounting problems emerge.

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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 (to allow future return data over 2010)	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-date 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 analyses.

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 five 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 (continued)
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	1,048
	NT 10-K Filings		
NO	51	83	134
YES	218	715	933
Total	269	798	1,067

The table provides descriptive statistics and variable definitions for the NT filing sample used in the paper. The late filing delay (*DelayDays*), is the number of calendar days between the 10-Q or 10-K financial statement filing date and the estimated statutory deadline. We retrieve the fiscal quarter/yearend and the actual filing dates directly from EDGAR. Uncertain, Accounting, Corporate, and Multiple reason groups are based on the reason for the late filing, as classified using management's statement on the NT form. Table 1 describes the sample.

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 filer samples. 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 over the NT Filers sample period. NT Filers sample is described in Table 1.

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	<0.0001	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	<0.0001	0.0733
Diff (Q-K)		–9.99	–8.00		1.38	–10.00		
p-value		0.3640	<0.0001		0.6513	<0.0001		

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
Uncertain: 10-Q	298	7.18	4.00	30	17.77	3.50	268	6.00	5.00	0.0013	0.2599
Uncertain: 10-K	223	15.91	12.00	23	37.91	4.00	200	13.39	12.00	0.0176	0.8418
Uncertain: Diff (Q-K)		–8.73	–8.00		–20.15	–0.50		–7.39	–7.00		
Uncertain: p-value		0.0095	<.0001		0.4630	0.7918		<0.0001	<0.0001		
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
Accounting: 10-Q	474	47.33	6.00	76	71.04	12.50	398	42.80	6.00	0.0208	<0.0001
Accounting: 10-K	555	36.44	15.00	75	68.88	15.00	480	31.37	15.00	<0.0001	0.0254
Accounting: Diff (Q-K)		10.89	–9.00		2.16	–2.50		11.43	–9.00		
Accounting: p-value		0.0482	<0.0001		0.8949	0.2050		0.0420	<0.0001		
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
Corporate Events: 10-Q	178	11.47	5.00	31	11.48	5.00	147	11.46	6.00	0.9970	0.1086
Corporate Events: 10-K	124	15.40	15.00	17	14.82	14.00	107	15.49	15.00	0.8868	0.3628
Corporate Events: Diff (Q-K)		–3.93	–10.00		–3.34	–9.00		–4.02	–9.00		
Corporate Events: p-value		0.2915	<0.0001		0.5866	0.0299		0.3560	<0.0001		
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
Multiple: 10-Q	98	35.88	6.00	11	50.27	7.00	87	34.06	6.00	0.6969	0.2393
Multiple: 10-K	165	28.52	15.00	19	65.42	48.00	146	23.72	15.00	0.0536	0.1999
Multiple: Diff (Q-K)		7.36	–9.00		–15.15	–41.00		10.34	–9.00		
Multiple: p-value		0.4567	<0.0001		0.7059	0.0060		0.2843	<0.0001		

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 late 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/yearend date and the actual filing date of the corresponding financial statements directly from 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 five days for 10-Q and 15 days for 10-K. Sample is described in Table 1.

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	<0.0001
10-Q	1,048	–2.93	<0.0001
10-K	1,067	–1.96	<0.0001
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	<0.0001
10-Q	488	–2.00	0.0010	355	–4.28	<0.0001
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	<0.0001	1,833	–2.37	<0.0001	–0.52	0.4542
10-Q	148	–2.09	0.0073	900	–3.06	<0.0001	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 (continued)

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	<0.0001	151	–2.53	0.0005	878	–1.78	<0.0001	–0.74	0.3667
	10-Q	474	–2.83	<0.0001	76	–2.50	0.0059	398	–2.89	<0.0001	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	<0.0001	30	–5.18	0.0424	233	–4.99	<0.0001	–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 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 a model using a 40-trading-day hold-out period which begins 55 trading days prior to obtain four betas, and then 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. *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 five 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 classified using management's statement on the NT form. Risk-free rate and Fama-French and Momentum factors are from the Fama-French dataset. Stock returns are adjusted for delisting returns. Sample is described in Table 1.

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	<0.0001	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	<0.0001	1,169	–1.72	<0.0001	–1.80	0.0095
	10-Q	446	–4.12	<0.0001	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	<0.0001	523	–0.49	0.3242	–3.21	0.0002
	10-Q	223	–4.75	<0.0001	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 a model using a 40-trading-day hold-out period which begins 55 trading days prior to obtain four betas, and then 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 five 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 five and 15 days for 10-Q and 10-K, respectively. The reason groups for the delay, Uncertain, Accounting, Corporate Events, and Multiple, are based on the reason for the late filing as classified by management's statement on the NT form. 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. Sample is described in Table 1.

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	<0.0001	0.0001	0.0025	0.9724	<0.0001	<0.0001	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	

Table 7 (continued)
Post Form NT Filing Drift by Form NT Type and Reason for Delay. Fama-French-Momentum

Panel C: Drift Over Period Where We Found Significant Returns (i.e., [3, 182]), for the Following Groups: All, by Reason, and Non-Accounting Only

		Window = [3, 182]			
		Both	10-Q	10-K	Diff
All	%	–10.34	–11.30	–9.41	–1.89
	p	<0.0001	<0.0001	0.0004	0.6039
	N	1,914	942	972	
Uncertain	%	–13.52	–13.92	–13.01	–0.90
	p	0.0023	0.0136	0.0681	0.9204
	N	470	266	204	
Accounting	%	–4.47	–4.28	–4.64	0.36
	p	0.0256	0.1469	0.0899	0.9281
	N	964	446	518	
Corporate Events	%	–21.05	–27.15	–12.57	–14.58
	p	0.0003	0.0006	0.1498	0.2162
	N	256	149	107	
Multiple	%	–16.65	–12.23	–19.16	6.93
	p	0.0075	0.1028	0.0297	0.5455
	N	224	81	143	
Non-Accounting Only	%	–16.29	–17.62	–14.84	–2.77
	p	<0.0001	<0.0001	0.0016	0.6523
	N	950	496	454	

Panel D: Comparing Drift Over [3, 182] for Accounting Versus Non-Accounting Reasons

		Window = [3, 182]		
		Both	10-Q	10-K
Accounting	%	–4.47	–4.28	–4.64
	p	0.0256	0.1469	0.0899
	N	964	446	518
Non-Accounting	%	–16.29	–17.62	–14.84
	p	<0.0001	<0.0001	0.0016
	N	950	496	454

Accounting Minus Non-Accounting

		Both	10-Q	10-K
	%	11.82	13.34	10.21
	p	0.0012	0.0085	0.0524

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 periods 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. Panels C and D report abnormal returns for a summary window where significant drifts are observed, i.e., over the [3, 182] window, including testing the drift for accounting versus non-accounting reasons. 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 a model using a 40-trading-day hold-out period which begins 55 trading days prior to obtain four betas, and then 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 five 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 classified by management's statement on the NT form. 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. Sample is described in Table 1.