Unintended Consequences of Accelerated Filings: Are Mandatory Reductions in Audit Delay Associated with Reductions in Earnings Quality?

Tamara A. Lambert
University of Massachusetts Amherst
Isenberg School of Management
Department of Accounting and Information Systems
121 Presidents Drive
Amherst, MA 01003
413-545-5653
tlambert@som.umass.edu

Keith L. Jones
George Mason University
Department of Accounting
Enterprise Hall, MSN 5F4
Fairfax, VA 22030-4444
703-993-4819
kjonesm@gmu.edu

Joseph F. Brazel*
North Carolina State University
Department of Accounting
Poole College of Management
Campus Box 8113
Nelson Hall
Raleigh, NC 27695
919-513-1772
joe_brazel@ncsu.edu

August 2011

We would like to thank Philip Berger, Scott Bronson, Randy Elder, Pieter Elgers, Barbara Grein, Michelle Hanlon, Linda Hughen, Brad Lail, Kevin Melendrez, Roger Meuwissen, Gary Peters, Ray Pfeiffer, Roger Silvers, and workshop participants at the University of Illinois, University of Massachusetts, Virginia Tech University, North Carolina State University, Northern Illinois University, University of Wisconsin-Milwaukee, Texas Tech University, Drexel University, the 2007 International Symposium on Audit Research, the 2007 AAA Annual Meeting, and the 2008 Auditing Mid-Year Conference for their helpful comments.

*Corresponding author.

Unintended Consequences of Accelerated Filings: Are Mandatory Reductions in Audit Delay Associated with Reductions in Earnings Quality?

ABSTRACT: SEC rules 33-8128 and 33-8644 substantially reduce the 10-K filing period for large accelerated filers and accelerated filers from 90 days after fiscal year-end to 60 and 75 days, respectively. Large accelerated filers are firms with a market value of equity greater than $700M, and accelerated filers have a market value of equity between $75M and $700M. The SEC has twice reduced filing deadlines by 15 days. For many firms and their auditors, these rules have led to mandatory reductions in audit delay (i.e., the length of time from a company's fiscal year-end to the date of the auditor's report). We investigate the effects of this regulation by examining under what contexts these mandatory reductions have been associated with lower earnings quality. We use both discretionary accruals and meeting or just beating the consensus analyst forecast to proxy for earnings quality. We find that larger mandatory reductions in audit delay (≥ 15 days) negatively impact earnings quality. This result suggests an unintended consequence of the SEC's two separate 15-day reductions in filing deadlines (i.e., lower earnings quality). The aforementioned relation between audit delay reductions and earnings quality also appears to be attributable to smaller accelerated filers (vs. large accelerated filers). We provide initial evidence that caution should be taken before considering a further reduction for accelerated filers (e.g., from 75 to 60 days) or expanding accelerations to even smaller non-accelerated filers (who currently still face a 90-day filing deadline). Moreover, our empirical evidence should inform non-U.S. regulatory bodies considering filing deadline accelerations in the future. Overall, our findings support claims by auditors and preparers that accelerated filings have the capacity to reduce the quality of financial information supplied to external users.

Keywords: *accelerated SEC filings, audit delay, discretionary accruals, earnings quality*

Data availability: *The data used in this study are publicly available from the sources indicated in the text.*

1. Introduction

Securities and Exchange Commission (SEC) rules 33-8128 and 33-8644 substantially reduce the 10-K filing period for large accelerated filers and accelerated filers from 90 days after fiscal year-end to 60 and 75 days, respectively (SEC 2002, 2005).[1] For many firms and their auditors, meeting these deadlines has led to a mandatory reduction in audit delay. Audit delay is defined as the length of time from a company's fiscal year-end to the date of the auditor's report (Ashton et al. 1987). Concurrently, the audit failures of the early 2000s led to the passage of the Sarbanes-Oxley Act of 2002 and to the issuance of new auditing standards which are intended to improve audit quality by substantially increasing the scope of the external audit (e.g., PCAOB 2004, 2007). This paper explores under what contexts requiring auditors to do more work in less time might hinder audit quality. If SEC-mandated reductions in audit delay have led to lower audit quality, this effect should manifest itself in the dissemination of lower quality earnings to financial statement users.

The SEC has implemented accelerated reporting deadlines largely over the objections of auditors and preparers. Many suggest that the SEC did not sufficiently consider the negative consequences.[2] Auditors facing shorter audit windows at year-end are forced to work less hours after year-end and/or perform a larger percentage of their testing prior to year-end. Caramanis and Lennox (2008) find that lower audit hours increase the extent to which managers are able to

[1] According to rule 33-8128 (SEC 2002), an accelerated filer (AF) is a firm that meets the following conditions at the end of its fiscal year: 1) Its common equity public float (the part of equity not held by management or large shareholders) was $75M or more as of the last business day of its most recently completed second fiscal quarter; 2) The company has been subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act for a period of at least 12 calendar months; 3) The company has previously filed at least one annual report pursuant to Section 13(a) or 15(d) of the Exchange Act; and the company is not eligible to use Forms 10-KSB and 10-QSB. A large accelerated filer (LAF) is defined as an AF with a worldwide market value of outstanding voting and non-voting common equity held by non-affiliates of $700M or more (SEC 2005). A non-accelerated filer (NAF) is a firm that does not meet the definition of an AF.

[2] See, for example, http://www.bloomberg.com/apps/news?pid=10000103&sid=atKZoxTtzuUY&refer=us, http://www.sec.gov/rules/proposed/s70802/deloittetouche.htm, http://www.sec.gov/rules/proposed/s70805/deloitte103105.pdf, and http://www.sec.gov/rules/proposed/s70802/bdoseidman1.htm.

report aggressively higher earnings. Similarly, audit standards suggest that reducing the amount of testing performed after year-end increases the risk that auditors will fail to detect a material misstatement. Audit procedures performed after year-end (vs. procedures performed prior to year-end) typically provide more reliable evidence and are generally more effective (AICPA 1983). For example, confirmations, inspections, and recalculations of balance sheet accounts are more reliable if performed after year-end (Arens et al. 2010). Testing fair value estimates at year-end (i.e., the same time as the estimate) is more effective as well. Indeed, fraud experts propose extending post-fiscal year-end tests (e.g., examining subsequent cash receipts to validate year-end accounts receivable balances) substantially beyond the typical 45-day period to enhance fraud detection (Hoffman and Zimbelman 2009). Accelerated filings that lead to substantial reductions in audit delay could impair or curb such testing and consequently reduce audit/earnings quality.

The SEC twice reduced 10-K filing deadlines by 15 days (SEC 2002, 2005). In the text of Rule 33-8128, the SEC disclosed that those who objected to the proposal "raised several common concerns over the *extent* of acceleration" and "The most common concern was that the proposed deadlines would negatively affect the *quality* and accuracy of reports" (emphasis added, SEC 2002). To study the effects of these regulatory changes, we examine whether firms with large, regulatory mandated reductions in audit delay (≥ 15 days) exhibit lower earnings quality (vs. firms with either small reductions or increases in audit delay during the years of 10-K filing accelerations). We also explore whether large, regulatory mandated reductions in audit delay differentially impact the audits of accelerated filers vs. large accelerated filers. We focus on the years of SEC mandated accelerations as this setting provides a natural experiment to evaluate the impact of audit delay reductions imposed from an exogenous source on earnings

quality. We describe how large, mandated reductions will substantially impact the audit approach and limit year-end testing of account balances. Conversely, we do not expect small reductions (or increases in audit delay) to significantly affect the performance of the audit and consequently expect them to have no effect on earnings quality.

Previous research has established a link between audit quality and discretionary accrual levels and has used discretionary accruals to proxy for earnings quality (e.g., Myers et al. 2003; Larcker and Richardson 2004). Researchers have also investigated the variables that affect audit delay (e.g., Ashton et al. 1987). Our study is the first to examine changes in audit delay as an independent variable affecting changes in discretionary accruals and, in turn, we contribute important empirical evidence to the debate over the acceleration of financial reporting. In addition, we examine the effects of large, regulatory mandated reductions in audit delay on the likelihood of a firm meeting or just beating the consensus analyst forecast.

Our results provide evidence that there is a positive association between large, mandatory reductions in audit delay and changes in discretionary accruals (i.e., lower earnings quality). This result is robust to various other cut-off points in addition to 15 days and to using the probability of meeting or just beating the consensus analyst forecast as an alternative measure of earnings/financial reporting quality. Also, the relation between audit delay reductions and earnings quality appears to be attributable to accelerated filers (vs. large accelerated filers).

These findings illustrate the conditions under which the effects of accelerated filing deadlines on earnings quality may be more severe. While small accelerations may not impact earnings quality, larger accelerations ($\geq$ 15 days) can impair the quality of earnings. We also observe that the audit/earnings quality of the largest firms may be less sensitive to large accelerations. Our results related to accelerated filers provide initial evidence that caution should

be taken before considering a further reduction for these filers (e.g., from 75 to 60 days) or expanding accelerations to smaller, non-accelerated filers (who currently still face a 90-day filing deadline). Our results should also inform the SEC in their deliberations regarding a possible reduction in the filing deadline for foreign private issuers from 6 months to 90 days after fiscal year-end.[3]

Our empirical evidence should inform non-U.S. regulatory bodies considering filing deadline accelerations in the future. For example, the European Commission is currently contemplating a reduction in audit delay to improve the timeliness of communications between auditors and stakeholders.[4] In Canada, the filing deadline for publicly traded companies was reduced from 140 to 90 days in 2004. It is possible that, over time, Canada will consider emulating the current 10-K filing deadlines imposed by the SEC. The results of our study should inform such deliberations.

The remainder of the paper is organized as follows. Section 2 provides background and discusses previous literature. Section 3 develops our hypotheses. Section 4 describes the sample selection and research method. Section 5 displays the results. Section 6 provides a conclusion.

2. Background

SEC Regulation

Shortly after the passage of the Sarbanes-Oxley Act (SOX), the SEC issued rule 33-8128, *Acceleration of Periodic Report Filing Dates and Disclosure Concerning Website Access to Reports* (SEC, 2002). This rule was originally intended to substantially shorten the Form 10-K

[3] See, for example, http://www.sec.gov/rules/proposed/2008/33-8900.pdf. While we are not suggesting that *any* reduction from a six-month filing deadline for foreign private issues will necessarily lead to a reduction in earnings quality, we do point out that a reduction of such a large magnitude (e.g., 50% of the current filing deadline) may be problematic.

[4] http://ec.europa.eu/internal_market/consultations/docs/2010/audit/green_paper_audit_en.pdf (see Question 11).

filing deadline from 90 days to 60 days for all firms with outstanding common equity by non-affiliates of $75M or more. At that time, all firms subject to the deadline change were known as "accelerated filers". The reduction was stipulated to take place over a two-year period. The deadline went from 90 days to 75 days on December 15, 2003 with a further reduction to 60 days scheduled for December 15, 2004 (which was later postponed). The objective of the deadline reduction was to provide investors with more timely, relevant information. "While quarterly and annual reports at present generally reflect historical information, a lengthy delay before that information becomes available makes the information less valuable to investors" (SEC 2002).

The acceleration of filings has been a controversial and heated topic of discussion. The SEC received 302 comments on the proposal to accelerate the deadlines; 20 supported the acceleration, and 282 opposed it. In a May of 2002 response to the SEC, PricewaterhouseCoopers (PWC) questioned the effects of accelerations on the quality of financial reporting. PWC suggested that a shortened reporting window would cause management to focus on the mechanical challenges of closing the books on time and not allow for adequate consideration of increasingly complex accounting standards.[5] BDO Seidman shared similar concerns and cited increased globalization of clients and expanded audit standards related to fraud detection as impediments to simultaneously reducing audit delay and maintaining high quality reporting.[6] Based on negative public reaction to the accelerated deadlines and concerns expressed by filers and auditors over whether they would be able to file reports on a timely basis, the SEC adopted rule 33-8507 in November of 2004. This rule postponed the final phase-in date of the 60-day filing deadline to fiscal year-ends on or after December 15, 2005 (SEC 2004). The one year delay of the final phase-in did little to quiet public dissatisfaction. As the end of 2005

[5] http://www.sec.gov/rules/proposed/s70802/pricewaterhouse.htm
[6] http://www.sec.gov/rules/proposed/s70802/bdoseidman1.htm.

drew near, accounting firms and issuers voiced their concerns that further compression of available audit time could lead to lower audit/financial reporting quality.[7]

The SEC passed the most recent rule on the issue of accelerated filing deadlines, rule 33-8644, in December of 2005 (SEC 2005). This rule created two categories of firms subject to the filing deadline change. A large accelerated filer (LAF) is a firm with a worldwide market value of outstanding common equity held by non-affiliates of $700M or more. LAFs became subject to a reduced 60-day deadline after December 15, 2006. Accelerated filers (AFs), firms with outstanding common equity held by non-affiliates of between $75M and $700M, remained subject to a 75-day deadline. Non-accelerated filers (NAFs), firms with outstanding common equity by non-affiliates of less than $75M, continued to be subject to the original 90-day deadline. Public comments were still mixed as to whether or not all companies should face the same deadline (SEC 2005). Figure 1 illustrates the proposed changes to the 10-K filing deadline and the changes that were ultimately enacted.

[Insert Figure 1 about here]

Audit Delay

The audit report date (i.e., the audit sign-off date) is the date by which the auditors have gathered appropriate and sufficient evidence to conclude fieldwork and issue an audit opinion on a company's financial statements (Arens et al. 2010). Audit delay is defined as the length of time from a company's fiscal year-end to the date of the auditor's report (Ashton et al. 1987). At some point *after* the audit report date, the client files the audited 10-K with the SEC; this date is termed the filing date. It is important to note that on the audit report date (not the filing date) the financial statements are finalized. Accelerations that cause a reduction in filing date, but not the

[7] See, for example, http://www.bloomberg.com/apps/news?pid=10000103&sid=atKZoxTtzuUY&refer=us, http://www.sec.gov/rules/proposed/s70805/deloitte103105.pdf, and http://www.sec.gov/rules/proposed/s70802/bdoseidman1.htm.

audit report date, would likely not impact earnings quality. For this reason, the reduction in audit delay is our independent variable of interest instead of the reduction in filing delay (the time between year-end and the filing date).

Another reason to examine the time period between year-end and the audit report date (i.e., audit delay) rather than the filing date is because auditors presumably know how much time they will need to analyze and initiate the correction of any errors found in the 10-K prior to the filing date. If the accelerated filing deadline only had the effect of reducing the slack in the time between the audit report date and the filing date, then the regulation would not have been nearly as controversial. It would have been an inconvenience for the auditor to truncate their review of the 10-K, but it would have only affected the extent and timing of audit tests in relation to presentation and disclosure assertions. Rather, much of the controversy surrounding the accelerated deadlines centered on mandated reductions in audit delay. This study empirically examines the contexts under which such SEC-mandated reductions in audit delay may have affected the quality of audited financial statements.

Previous Literature

Two other contemporary studies examine the SEC's accelerations of 10-K filing deadlines. Bryant-Kutcher et al. (2010) examine whether a sample of 103 late filers in 2002 and 2003 (pre-SEC rule 33-8644) possess different characteristics than a random sample of 82 timely filers. Results show that late filers are more highly leveraged, less liquid, less profitable, and smaller than timely filers. They also observe that the initial acceleration from 90 days to 75 days resulted in late filings for firms with weak internal controls. Impink et al. (2011) conclude that the accelerated deadlines in 2003 and 2006 are not associated with an increased occurrence of late filing. They also observe that firms with effective internal controls typically met the filing

deadlines, while approximately half the firms with internal control weaknesses filed late. While these studies examine the ability of firms to meet the accelerated filing deadlines (i.e., file timely), we examine if the earnings quality of timely filers suffered due to the deadline change. All of the firms in our sample filed on time; however, some were required to substantially reduce their audit delay to meet the accelerated deadlines. Given that the chief concern over acceleration was its impact on financial statement quality, our analyses makes an important contribution to the debate over the acceleration of 10-K filings.

Research related to the determinants of audit delay reports a variety of client, auditor, and financial factors that affect audit delay. Client size and concentration of ownership, the amount of work completed at interim, the percentage of manager and partner hours charged to an engagement, and the provision of non-audit services have all been found to have significant *negative* relations with audit delay (e.g., Ashton et al. 1987; Knechel and Payne 2001). Audit delay has been found to be *positively* related to a structured audit approach and incremental audit effort, a change in auditors, extraordinary items, net losses, financial vulnerability, client business complexity, issuance of modified audit opinions, correction of previously reported interim earnings, and identified material weaknesses in internal controls (e.g., Ashton et al. 1989; Knechel and Payne 2001; Ettredge et al. 2006). While previous research has identified important determinants of audit delay, we focus on the *consequences* of audit delay. We are not aware of any research that has considered the impact of changes in audit delay on earnings quality.

Studies have argued that earnings quality (using discretionary accruals as a proxy) can be used to draw inferences about audit quality (Myers et al. 2003). Audit quality, as measured by auditor size, has been found to be associated with earnings management and the pricing of discretionary accruals (Becker et al. 1998; Krishnan 2003). Positive relations have been found

between discretionary accrual levels and other audit-related variables such as the issuance of qualified audit opinions, auditor litigation, audit failures, and lower audit hours (e.g., Becker et al. 1998; Caramanis and Lennox 2008). A higher level of auditor conservatism and audit tenure has been found to be negatively associated with discretionary accrual levels (Francis and Krishnan 1999; Myers et al. 2003).

In the same vein as Myers et al. (2003), we argue that lower audit quality will be reflected in more extreme income increasing financial reporting choices by management (i.e., higher discretionary accrual levels). We do not use the absolute value of discretionary accruals, as is occasionally used in the earnings management literature (e.g., Frankel et al. 2002), because the focus of this paper is capturing the effect of reductions in audit delay on audit/earnings quality. While earnings management could be income decreasing or income increasing, auditors face a much greater risk when the client manages income upward (i.e., higher discretionary accrual levels). As such, prior studies of the audit and earnings quality relation have typically examined the constraining of income increasing discretionary accruals. For example, Kinney and Martin (1994) analyze nine data sets of audit-related adjustments from more than 1,500 audits and conclude that audit adjustments are typically income decreasing. Bonner et al. (1998) and Palmrose and Scholz (2004) find a prevalence of non-GAAP income *increasing* activity leading to SEC Accounting and Auditing Enforcement Releases and restatement announcements, respectively. In addition, prior research indicates that client management prefers to record income increasing, over income decreasing, audit adjustments (e.g., Antle and Nalebuff 1991; Sanchez et al. 2007). Thus, as suggested by Myers et al. (2003), auditors are primarily concerned with clients over-reporting income (i.e., higher discretionary accrual levels). Large, mandated

reductions in audit delay may impair auditors' abilities to address this concern and tests on signed accruals allow us to examine this possibility.[8]

The earnings quality literature acknowledges the limitations of all measures of earnings quality, including discretionary accruals.[9] Therefore, we use the probability of meeting or just beating the consensus analyst forecast as an alternative measure of earnings quality. Prior research finds a significant reward (*penalty*) for meeting or beating (*missing*) analysts' forecasts (Bartov et al. 2002; Kasznik and McNichols 2002; Skinner and Sloan 2002). Similar to our examination of discretionary accruals, we investigate whether reductions in audit delay impair the auditor's ability to constrain the likelihood of their client meeting or just beating analysts' forecasts (with the assumption that some forecasts are met or just beaten via the management of earnings) (Graham et al. 2006; Dechow et al. 2010). With the combination of these two measures, we attempt to capture the underlying construct of earnings quality.

3. Hypotheses Development

Mandatory Reductions in Audit Delay and Earnings Quality

All of the factors that have been previously determined to affect audit delay are observable by the auditor and would normally trigger a change in audit approach. Effectively, these findings are mechanical or consistent with the audit risk model. Auditors are required to adjust the scope of their testing based on risks of the engagement so that audit risk is at an acceptable level (AICPA 2006a; AICPA 2006b). If the auditor knows he or she needs to perform more work due to an observed increase in an audit-related risk (e.g., a material weakness in internal control), then a

[8] In addition to the argument contained herein for examining signed accruals to evaluate earnings quality, Hribar and Nichols (2007) find that using *unsigned* discretionary accrual models leads to an over-rejection of the null hypothesis of no earnings management and exposure to correlated omitted variables.

[9] See Dechow et al. (2010) and Defond (2010) for recent comprehensive reviews and discussions of the earnings quality literature.

longer audit delay, on average, is expected. We consider the *unobservable* characteristic of whether management intends to use its discretion to manage earnings and if reductions in audit delay impair the auditor's ability to constrain this behavior. Graham et al. (2006), in a survey of 401 senior financial executives and additional in-depth interviews, find that the presence of earnings management is pervasive, and income *increasing* accruals are seen as a method of meeting earnings benchmarks. One CFO in the study stated, '"You have to start with the premise that every company manages earnings"' (Graham et al. 2006, 30).[10] The authors report that several other interviewees provided similar comments.

If management intends to manage earnings, and if audits provide a constraint of such practices, then requiring auditors to perform an audit in less time after fiscal year-end could allow for a greater opportunity for earnings management.[11] On the other hand, auditors may be able to mitigate reductions in audit delay by performing more interim procedures, relying more on the client's internal control systems and internal audit function, and using advanced audit technology (cf., PCAOB 2004, 2007; Brazel and Agoglia 2007; Pizzini et al. 2011). Employing these strategies may reduce the extent to which post-fiscal year-end audit procedures/evidence are needed to provide an acceptable level of audit quality. For example, client implementations of internal control monitoring technology are associated with shorter audit delays (Masli et al. 2010). Therefore, there is the potential that mandated reductions in audit delay will not affect audit quality. However, as we will describe below, when mandated reductions are large (e.g., ≥ 15 days), it becomes less likely that these strategies will overcome a substantial reduction in post-fiscal year-end audit time.

[10] While much of Graham et al. (2006) discusses "real" earnings management, the paper also addresses management of accruals, and the quote applies to earnings management in general.

[11] This argument is similar to that provided by Caramanis & Lennox (2008, 117), "clients that wish to manage earnings can anticipate that hard-working auditors are more likely to thwart their earnings management attempts."

As stated previously, the SEC twice reduced 10-K filing deadlines by 15 days. In the text of Rule 33-8128, the SEC disclosed that those who objected to the proposal "raised several common concerns over the *extent* of acceleration" (emphasis added, SEC 2002). For example, while a 5-day reduction in audit delay may not impact the process of confirming accounts receivable, a 20-day reduction might require receivables to be confirmed at an interim date. In extreme cases, this change in timing could allow management to fraudulently manipulate earnings by recording fictitious sales *after* the auditor has confirmed accounts receivable. This is a particular concern given the concentration of frauds and restatements related to improper revenue recognition (Beasley et al. 1999; Gullapalli 2005b; Beasley et al. 2010).

Given the double-entry nature of accounting, many audit firms have historically taken a *balance sheet* approach to the audit. That is, they devote the majority of their substantive testing (i.e., evidence evaluation) to balance sheet (vs. income statement) accounts (e.g., Gopez 1954; Basilo 2007). The most effective time to inspect, confirm, and recalculate *balance sheet* accounts is at year-end (Arens et al. 2010). As noted previously with respect to accounts receivable confirmation, a substantial mandated reduction in audit delay might require auditors to perform some (if not all) of this testing prior to year-end. Concurrently, audit standards explain that expanding (*reducing*) interim (*year-end*) testing may actually increase audit risk (AICPA 1983).[12]

The listing of audit-related adjustments to the financial statements (i.e., misstatements identified) is typically not finalized until after year-end. With less time after year-end to audit the financial statements, the audit team would have less time to fully evaluate both the qualitative and quantitative aspects of these misstatements. Also, auditors obtain reliable, post-fiscal year-

[12] SAS No. 45 (AICPA 1983) provides several examples of when moving substantive testing from post year-end to interim may be especially challenging and should be discouraged.

end evidence to evaluate year-end account balances. A substantial reduction in audit delay as a result of accelerated filings may curb these practices.[13] In addition, auditors often require considerable time after year-end (and substantial post-fiscal year-end evidence) to examine client estimations (e.g., the reserve for obsolete inventory, income tax provision, fair value of complex financial instruments). The recent trend from historical costs to fair value accounting makes the year-end analysis of client estimates even more complex and important.

In addition to altering the timing of testing and the quality of evidence gathered, large mandated reductions in audit delay may also increase time pressure on the engagement team. Experimental research has shown that increasing time pressure decreases audit effectiveness and can result in behavior that reduces audit quality (e.g., accepting doubtful evidence, truncating sample selections) (McDaniel 1990; Coram et al. 2004). As time pressure increases beyond moderate levels, research shows that auditors become overwhelmed and suffer anxiety, which has a detrimental effect on performance (DeZoort and Lord 1997). For large, mandated audit delay reductions, audit firms generally cannot assign more staff to an audit to perform the same amount of testing in a shorter year-end window. Obtaining additional staff, specifically for less prestigious/smaller public audit clients, may be difficult as audit firms during the time period in question were operating at or near 100% capacity (McGee 2005; Gullapalli 2005a; Rose 2007). Also, if additional audit staff is available, their current lack of assignment to a concurrent audit engagement may suggest a possible lack of competence.[14]

[13] For example, suppose that a company manipulates sales through "channel stuffing" (i.e. selling excessive amounts of product at discounted prices near year-end to distributors with a verbal right of return). The most effective means of detecting this type of earnings management would be to (1) extend the amount of time after year-end examining subsequent cash receipts (evidence that year-end accounts receivable were valid and collectible) and (2) extend the amount of time after year-end searching for an unusually high number of returned products (evidence that revenue recognition of shipments immediately prior to year-end was suspect). Accelerating the 10-K filing deadline impairs such tests.

[14] Discussions with practitioners support the supposition that when additional staff is obtained to meet reduced audit deadlines, the staff typically lack competence and/or required industry expertise.

Finally, when increased risks require an expansion of audit testing, much of the additional work cannot be compressed into a short window. For example, discrepancies found during the confirmation of accounts receivable must be followed up by the client and the auditor (Caster 1990).[15] Such factors delaying the audit are out of the auditor's control, and simply increasing the number of auditors assigned to the engagement will not speed the process. Much post-year-end audit work requires effort and time from the audit client as well as others that the auditor cannot control (e.g., customers, creditors, attorneys). Thus, assigning more auditors cannot take the place of allowing more post-fiscal year-end time for evidence accumulation, testing, research, and correspondence between the auditor, the client, and other independent third parties.

In response to accelerated filings, we expect large, mandated reductions in audit delay to be associated with lower earnings quality. Small reductions in audit delay are commonly due to calendaring issues. For example, some firms have year-ends that fall on the last Friday of the month as opposed to the last day of the month. Given a change in a client's year-end calendar date, auditors routinely adjust the audit timeline by up to a week. Also, under the previously motivated premise that less post year-end audit time leads to less effective testing and more time pressure, the size of the mandatory reduction should be inversely related to the level of audit quality. As one would expect, we do not predict that voluntary increases in audit delay during the accelerated filing periods will impair earnings quality.[16] In sum, we do not posit that small mandated reductions or voluntary increases in audit delay will have a significant effect on

[15] For example, if a customer reports that an invoice was no longer due at year-end because the product was returned, then the client must research when the returned product was received, compare that date to the year-end date, and communicate that information and related evidence to the auditor.

[16] In fact, our theory suggests that increases in audit delay may be associated with increases in audit/earnings quality. However, unlike mandatory reductions, we are unable to disentangle the reason for voluntary increases in audit delay during our sample period. Many increases in audit delay may be due to calendaring or other issues and may not necessarily entail additional audit effort.

earnings quality. However, the SEC has twice reduced filing deadlines by 15 days. We suspect that if these accelerations required large reductions in audit delay (≥15 days), the quality of earnings was adversely affected. Formally, we hypothesize:

> **H1:** *Large, mandatory reductions in audit delay (≥15 days) are associated with reductions in earnings quality (vs. small reductions or increases in audit delay).*

3.2. Filer Type

The SEC's decision to have three distinct groups of filers (LAFs, AFs, and NAFs), and three separate reporting deadlines (60 days, 75 days, and 90 days, respectively), was quite controversial. As stated earlier, the SEC received a substantial amount of comments that opposed the accelerated filing deadline. Commentators disagreed on the proposed definition of an accelerated filer. Some companies and associations (e.g., Comcast Corporation and Troutman Sanders LLP) expressed that all public companies should be required to adhere to the same deadline. Others, including the AFL-CIO and KPMG LLP, agreed with the notion of excluding smaller companies because they may not have the necessary resources or infrastructure to meet the accelerated deadline (SEC 2002). We shed light on this issue by examining whether the relation between large, mandated reductions in audit delay and changes in earnings quality differs by filer type (AFs vs. LAFs).

The American Bar Association (ABA) argued that "large businesses tend to be more complex, often with international operations, multiple divisions and subsidiaries and investments from other entities from which they often must await reports."[17] Therefore, LAFs may suffer the most from reductions in filing deadlines. However, if audits of LAFs already employed more extensive interim testing and already exhibited shorter audit delays, then they would be less likely to suffer a *change* in audit quality due to accelerations. Indeed, empirical research prior to

[17] http://www.sec.gov/rules/proposed/s70802/skeller1.htm

the acceleration of filings finds that larger firms have shorter audit delays (e.g., Bamber et al. 1993). In addition, for LAFs that *did employ* substantial year-end testing prior to accelerations, Brazel et al. (2010) find a positive relation between client size and the degree to which auditors change the staffing and timing of their testing. Because auditors of LAFs tend to be present at the client throughout the year, it may be easier to shift testing from year-end to interim to meet filing deadlines and still maintain the same level of audit quality. LAF clients also tend to be more prestigious and, if needed to meet filing deadlines, these audits typically have a greater ability to procure higher quantities of competent audit staff (if available). Last, Pizzini et al. (2011) provide evidence that the audits of LAFs use LAFs' internal audit functions to reduce audit delay. It is less probable that the auditors of AFs, whose internal audit functions are likely smaller and less sophisticated (Pizzini et al. 2011), adopted a similar strategy. Given these competing arguments, we state our second hypothesis in the null form:

> **H2:** *The association between large, mandatory reductions in audit delay and earnings quality is not different for accelerated filers and large accelerated filers.*

4. Sample Selection and Research Method

Sample

We derive our sample of audit delay changes from the years that the two 10-K filing reductions took effect. The first deadline change (i.e., 90 days to 75 days) took effect for all accelerated filers (LAFs and AFs) filing after December 15, 2003. The second deadline change (i.e., 75 days to 60 days) took effect for all LAFs filing after December 15, 2006. Thus, mandatory reductions in audit delay could occur during fiscal year-ends from December 15, 2003 through December 14, 2004 and from December 15, 2006 through December 14, 2007. As shown in Table 1, our sample consists of 3,586 firm-year observations (2,607 from the first filing deadline change and

979 from the second deadline change) which were subject to a change in the filing deadline. The 3,586 firm-year observations represent 2,721 unique firms (i.e., 865 LAF's in our sample were subject to both filing deadline changes and are included in our sample twice).

[Insert Table 1 about here]

Audit Analytics is our source for audit delay data, and *Compustat* is our source for financial data. Combining the *Audit Analytics* and *Compustat* samples provides a sample of 18,303 firm-year observations. We then exclude financial institutions and regulated industries because of their unique nature of accounting for discretionary accruals (Frankel et al. 2002; Tucker and Zarowin 2006), firms that were not subject to the first filing deadline change (NAFs), and firms that were not subject to the 2nd deadline reduction (NAFs and AFs). We drop observations with negative audit delays,[18] missing audit report dates, and missing control variables. We exclude firms lacking the data necessary to calculate discretionary accruals and those receiving qualified audit opinions. Finally, we delete observations who filed late in either the current or the prior year.

Hypotheses Testing

We test H1 by examining the association between large, mandated reductions in audit delay (≥ 15 days) and changes in discretionary accrual levels for a sample of AFs and LAFs subject to the SEC's accelerated filing rules (SEC 2002, 2005). To test H2, we partition our sample based on filer type (i.e., AFs and LAFs) and re-perform the aforementioned analysis. In sum, we focus on AFs and LAFs in the years of the deadline change because this setting provides a natural experiment to examine unwanted reductions in audit delay (i.e., large, mandated reductions imposed from an exogenous source). It is important to isolate mandatory reductions in audit

[18] We traced a sample of the firm-years with negative audit delay to the report filed on edgar.gov. It appears that the negative audit delay is a result of a typo on the reports as they were originally filed (i.e., audit report date precedes the fiscal year-end date), and therefore does not indicate a problem with the *Audit Analytics* database.

delay because even large, voluntary reductions may not always lead to reductions in earnings quality. For example, auditors could choose to reduce audit delay substantially because they determined the client is low risk and more time after year end is unnecessary or if a lower risk client requested a shorter audit delay to accelerate an earnings release. By examining large reductions during the year of the filing deadline changes, we do not need to disentangle the reason for the reduction in audit delay and our analyses speak directly to the firms' criticism of the filing deadline change creating unwanted (i.e., harmful) reductions to audit delay. In an additional analysis, we examine the effect of large, voluntary reductions in audit delay for all firm-year observations before and after the deadline change that are available on *Audit Analytics* and *Compustat*). To test H1 and H2, we estimate the following regression model[19]:

$$\begin{aligned} ChDAC_t = {} & \beta_0 + \beta_1 15\text{-}DAY_t + \beta_2 SEASON_t + \beta_3 LOSS_t + \beta_4 ChCFO_t + \beta_5 ChAbsCFO_t + \\ & \beta_6 ChB/M_t + \beta_7 Ch\mathit{ln}MVE_t + B_8 ChLEVERAGE_t + \beta_9 EXTRAORDINARY_t + \\ & \beta_{10} PARAGRAPH_t + \beta_{11} ACQUISTION_t + \beta_{12} ChAUDITOR_t + \beta_{13} NEWBIG4_t + \\ & \beta_{14} OLDBIG4_{t-1} + \beta_{15\text{-}17} Year + \beta_{18\text{-}29} Industry + \varepsilon \end{aligned} \quad (1)$$

ChDAC refers to current year discretionary accruals less prior year discretionary accruals, measured using the Jones (1991) model with two additional modifications. First, we include ROA as described by Kothari et al. (2005). Second, we include a dummy variable equal to one if the company had negative cash flow from operations and a variable that measures the interaction between the negative cash flow dummy and total cash flow from operations (scaled by total assets) as described by Ball and Shivakumar (2006).[20] Ball and Shivakumar (2006) argue that the

[19] Consistent with Peterson (2009), we control for standard error bias due to repeated measures of firm and year by including year dummies in the regression and performing a cluster regression with a firm identifier as a repeated measure (SAS procedure proc surveyreg with a gvkey cluster).

[20] The specific model is $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$. Consistent with Dechow et al. (1995), the estimates of β_0, β_1, β_2, β_3, β_4, β_5 and β_6 were obtained from the original Jones Model (with modifications for ROA and cash flows). The change in sales is then adjusted for the change in receivables for the calculation of discretionary accruals. Due to sample size restrictions, our measure of discretionary accruals is estimated from cross-sectional models. Further, Bartov et al. (2000) find that the cross-sectional Jones model and the cross-sectional modified Jones model outperform their time-series counterparts in detecting earnings management. We estimate model coefficients from cross-sectional industry regressions by two-

relation between accruals and cash flows is not linear because unrealized losses are recognized immediately via accruals while unrealized gains are delayed.

We define audit delay as the audit report date less the fiscal year-end date (Ashton et al. 1987). We measure change in audit delay as the current year audit delay less the prior year audit delay. We define a dummy variable (15-DAY) equal to one if the firm had a large reduction in audit delay (i.e., greater than or equal to 15 days and zero otherwise). Fifteen days was chosen as a cutoff because the SEC twice accelerated filings by 15 days (SEC 2002, 2005). H1 predicts a positive relation between 15-DAY and ChDAC. That is, larger, mandated reductions in audit delay are associated with lower earnings quality as evidenced by increases in discretionary accruals.

Our regression model includes multiple control variables. Given that we examine changes in audit delay and earnings quality, we use changes (rather than levels) measures for all continuous and auditor change control variables. Consistent with prior research (Knechel and Payne 2001; López and Peters 2011), we include a dummy variable (SEASON) to classify audits of companies with fiscal year-ends during the months of December and January. We include an indicator variable as to whether or not the firm reported a loss for the year (LOSS), because firms are expected to manipulate accruals in a systematically different way during loss years (Frankel et al. 2002; López and Peters 2011). Prior research suggests that discretionary accrual models do not completely extract nondiscretionary accruals that are correlated with firm performance (Frankel et al. 2002). Thus, we control for firm performance by including the change in cash flows from operations (ChCFO) (e.g., DeFond and Subramanyam 1998; Choi et al. 2006). Because the relation between cash flows and discretionary accruals is not linear, we also control

---

digit SIC codes. We require a minimum of 10 observations for each two-digit SIC code and year combination. We estimate the model on all firms in *Compustat*. We winsorize all variables at the 1st and 99th percentile.

for the absolute value of cash flows from operations (ChAbsCFO) (DeFond and Subramanyam 1998; Frankel et al. 2002). Following Frankel et al. (2002) and Choi et al. (2006), we control for firm growth by including the change in the ratio of book to market value (ChB/M). We control for firm size using the change in the natural log of the market value of equity (Ch*ln*MVE) (Frankel et al. 2002; Kothari et al. 2005). We control for leverage (ChLEVERAGE), measured as the change in the ratio of total liabilities to total assets (Frankel et al. 2002).

We also control for variables that the prior literature has found to impact audit delay (e.g., Bamber et al. 1993): extraordinary items (EXTRAORDINARY); an explanatory paragraph added to an unqualified opinion (PARAGRAPH); and whether the company made an acquisition during the year (ACQUISITION). In addition, the audit delay literature finds that auditor switches are associated with changes in audit delay (Schwartz and Soo 1996). Our model controls for auditor switches in three different ways. We include a dummy variable (ChAUDITOR) equal to one for any switch in auditor during the year. In addition, many firms were switching between Big 4 auditors and non-Big 4 auditors during our sample period and we specifically control for these effects. We include a dummy variable (NEWBIG4) equal to one if the firm switched from a non-Big 4 auditor to a Big 4 auditor and a dummy variable (OLDBIG4) if the firm switched from a Big 4 auditor to a non-Big 4 auditor. Finally, we include three dummy variables to control for year, and, following Ashbaugh et al. (2003), we include 12 dummy variables to control for industry. In order to maintain parsimonious tables, the year and industry dummy variables are not tabulated.[21]

[21] Industries were divided into the following groups: SIC 0100-1499, SIC 1500-1999, SIC 2000-2199, SIC 2200-2399, SIC 2400-2799, SIC 2800-3299, SIC 3300-3499, SIC 3500-3999, SIC 4000-4899, SIC 4900, SIC 5000-5299, SIC 5300-5999, and SIC 7000-7999.

5. Results

Descriptive Statistics

Table 2 provides descriptive statistics for our variables of interest and control variables for our mandated sample. Change in discretionary accruals (ChDAC) is *positive* (0.0014), or income increasing, as our theory would predict for a sample where mandatory audit delay reductions occurred. The mean change in audit delay is 1.0488 days. The dummy variable 15-DAY reflects the firms reducing audit delay by ≥ 15 days in response to the two 15-day accelerations mandated by the SEC. Table 2 also illustrates that, for our sample, 73% of all audits were for fiscal years-ending December and January (i.e., during the "busy season"); this percentage is consistent with Bedard and Johnstone (2010). Our percentage of firms experiencing a loss in the current year (24%) is somewhat smaller than the percentage reported in Frankel et al. (2002) (47%) and López and Peters (2011) (38%). However, this is likely due to the fact that non-accelerated filers (i.e., the smaller firms available on public databases) are not represented in our sample. Only 3% of the firms in our sample reported an extraordinary item. This is consistent with Massoud et al. (2007) who report that the classification has reduced from approximately 16% (of reporting companies) in 1994 to approximately 2% in 2003. Another item of interest is that 61% of the firms in the sample had an explanatory paragraph in their audit report. We randomly selected a few audit reports in the sample with explanatory paragraphs and found that most were simply an emphasis of a matter (e.g., an accounting change or adoption of an accounting standard) with a corresponding reference to a footnote. Finally, 12% of the firms in our sample had an acquisition during the sample year. This is consistent with Francis and Martin (2010) who report a range between 9% and 13% during the period 2000 through 2006.

Sample means for our continuous variables are similar to those disclosed in previous literature. Cash flow from operations (CFO) averaged 0.0791 for our sample, which is consistent with ranges of -0.05 through 0.075 reported in previous research (Dechow and Dichev 2002; Frankel et al. 2002; Geiger and North 2006). Our book to market ratio mean (B/M = 0.5465) is consistent with the mean reported by Geiger and North (2006) (B/M = 0.49), while our control for size (*ln*MVE = 7.0300) is somewhat larger than Geiger and North (2006), which ranges from 4.531 to 5.111. Again, this is not surprising as non-accelerated filers are not represented in our sample. Finally, our sample mean for leverage is 0.4001 and similar to that reported by Lim and Tan (2008) of 0.34.

[Insert Table 2 about here]

Table 3 presents the correlation matrix. The variables 15-DAY and ChDAC are positively correlated (*p*-value = .07). As expected, ChDAC is highly correlated with several control variables: LOSS, ChCFO, ChAbsCFO, ChlnMVE, and EXTRAORDINARY.

[Insert Table 3 about here]

Results of Hypotheses Testing using Discretionary Accruals to Proxy for Earnings Quality

Table 4 presents results of the regression to test H1, that large, mandatory reductions in audit delay (≥15 days) are associated with lower earnings quality. The coefficient on 15-DAY is significant and positive ($p = 0.039$). Thus, we find support for H1 using discretionary accruals to proxy for earnings quality. Large, mandatory reductions in audit delay appear to decrease the extent to which auditors are able to constrain income-increasing earnings management.

[Insert Table 4 about here]

The average firm in our sample has total assets of $4.87 billion and net income of $285 million. To illustrate the economic significance of our results, the magnitude of the coefficient on

the 15-DAY variable (0.0105) represents an additional increase in discretionary accruals of 1.05% of total assets when the auditor has a mandated reduction in audit delay that is greater than or equal to 15 days. This additional increase in discretionary accruals averages $51 million or approximately 22% of average net income.

We also note that the sign and significance of our control variables are generally consistent with previous research. Specifically, LOSS, ChCFO, ChAbsCFO, and ChLEVERAGE are significantly negative (Frankel et al. 2002; Choi et al. 2006; Geiger and North 2006; Lim and Tan 2008), while ChlnMVE is significantly positive (Geiger and North 2006). We find a marginally significant positive coefficient on ChB/M. However, we note that previous literature concerning the book-to-market ratio and discretionary accruals relation is mixed. Geiger and North (2006) show a significantly negative relation, while Frankel et al. (2002) find a positive but insignificant coefficient. Choi et al. (2006) find a negative insignificant coefficient for B/M. Consistent with Kim et al. (2003); we also find that the coefficient on ChAUDITOR is not significant.

As a sensitivity test, we investigate whether our results in Table 4 are sensitive to other cut-off points for 15-DAY. In untabulated results, we re-estimate the regression in Table 4 using different cut-off points for the 15-DAY dummy. We find that the variable is significant down to a cut-off of 10 days. That is, at a 9-day cutoff, the variable is not statistically significant. Thus, it appears that mandated reductions in audit delay of as little as 10 days are associated with reduced earnings quality.

Filer Type

Table 5 presents Model (1) results when we partition our sample based on filer type. The first regression includes accelerated filers (AFs), and the second regression includes large accelerated

filers (LAFs).[22] AFs are subject to the first accelerated filing deadline change and currently have 75 days after year-end to file their 10-K. LAFs are subject to the first deadline change and the second deadline change and now have a 60-day deadline to file their 10-K. The coefficient for 15-DAY is positive and marginally significant (p = 0.071) for the sample of AFs. The same coefficient is positive, but not significant for audits of LAFs (p = 0.163). These results support rejecting H2. The association between large, mandatory reductions in audit delay and earnings quality is (*is not*) significant for AFs (*LAFs*).

We also performed an analysis (untabulated) in which we partition our sample based on the first and second deadline change. We find that the coefficient on 15-DAY is positive and marginally significant (p =0 .07) for firms subject to the first deadline change (this includes both AFs and LAFs). The coefficient on 15-DAY for the second deadline change (which affected only LAFs) is at the conventional cutoff point for marginal significance (p = 0.10).[23,24] Finally, we partitioned the first deadline change into AFs and LAFs and find significance on our variable of interest for AFs (p =0 .07), but not LAFs (p = 0.28). The evidence suggests that the positive association between 15-DAY and earnings quality is being driven primarily by the audits of AFs.

[22] We classify each firm's filer status based on its classification in *Audit Analytics*. Per our discussion with personnel at *Audit Analytics*, firms self-report their classification as an accelerated filer (AF) and a large accelerated filer (LAF). When a firm does not self report, *Audit Analytics* classifies the firm's status as unknown. In those cases, we classify an AF as a firm with a market value of equity (MVE) between $75M and $700M and a LAF as a firm with MVE greater than $700M according to SEC regulations (see footnote 1).

[23] The greater level of significance on the 15-DAY coefficient for the sample of firms in the first deadline change (vs. the second deadline change) is noteworthy because SOX 404 took effect between the deadline changes. SOX Section 404 was first implemented by AFs and LAFs for fiscal years ending on or after November 15, 2004. An alternative explanation for why some firms had large audit delay reductions during second deadline change is that companies experienced excessive audit delays in 2004 and 2005, during initial implementation years of SOX 404, and returned to more "normal" levels of audit delay in 2006. For example, Ettredge et al. (2006) report an average audit delay of 50 days in 2003 but the average increased to 70 days in 2004. However, given that the effect of large reductions in audit delay is significantly correlated with lower earnings quality in the *first* (pre-SOX 404) deadline change (even more so than the second deadline change) suggests that our observed effects occurred independent of audit delay anomalies related to the implementation of SOX 404.

[24] As noted in footnote 23, material weaknesses were only reported at the time of the second deadline reduction. For the aforementioned analysis of the second deadline change we controlled for the effects of reported material weaknesses in internal control (Ettredge et al. 2006). We included a variable coded 1 if the firm reported an internal control weakness in the prior year, the current year, or both years. The control variable is coded 0 otherwise. In addition, removing these observations from our testing of H1 does not affect conclusions drawn from our results.

[Insert Table 5 about here]

Our results indicate that smaller publicly traded firms are most likely to exhibit a reduction in earnings quality as a consequence of a deadline change that substantially reduces audit delay. Currently, AFs and NAFs face 75- and 90-day 10-K filing deadlines, respectively. We therefore provide initial empirical evidence that further accelerations for AFs may not be advisable and that expanding accelerations to smaller NAFs could lead to lower earnings quality as well. In additional analyses that follow, we specifically examine the historical association between large reductions in audit delay and earnings quality for NAFs.

Alternative Measure of Earnings Quality

To provide additional support for H1, that large, mandated reductions in audit delay are associated lower earnings quality, we consider an alternative measure of earnings quality. We examine whether large, mandatory reductions in audit delay increase the likelihood that firms meet or just beat the consensus analyst forecast. As stated previously, Graham et al. (2006) observe that income increasing accruals are used as a method of meeting earnings benchmarks and auditors focus on constraining income increasing accruals (Myers et al. 2003). Prior research finds a significant reward (*penalty*) for meeting or just beating (*missing*) analysts' forecasts (Bartov et al. 2002; Kasznik and McNichols 2002; Skinner and Sloan 2002).

As discussed by Caramanis and Lennox (2008), there are many cases in which audit effort may not explain the management of earnings vis-à-vis benchmarks. For example, companies with either large profits or large losses do not have the need to manage earnings to avoid missing analysts' forecasts. These companies either will or will not meet the forecast regardless of how much they are able to manage earnings. Thus, similar to Caramanis and Lennox (2008) (who examine a benchmark of small reported profits due to lack of analyst data)

and McVay et al. (2006), we restrict our sample to firms who meet, just beat (by $0.01), or just miss (by $0.01) analysts' forecasts. We create a dummy variable (Meet or Just Beat Expected EPS) set equal to 1 if the actual earnings per share (per *First Call*) is equal to or greater (by $0.01) than the mean analyst forecast of the last *First Call* update prior to the earnings announcement date and zero otherwise (Cheng and Warfield 2005). We include Meet or Just Beat Expected EPS as the dependent variable and 15-DAY as the independent variable along with the other control variables (measured as level variables) from Model (1). We also include the standard deviation of the analyst forecast (to control for analyst dispersion) and the number of analysts following the stock (to control for forecast accuracy and firm size) (Behn et al. 2008).

Table 6 presents the result of our logistic regression. We find that the 15-DAY dummy is positive and marginally significant ($p = 0.092$).[25] In other words, the probability of meeting or just beating the consensus analyst forecast of EPS is greater for firms with large, mandated reductions in audit delay. This result provides additional evidence in support of H1.

[Insert Table 6 about here]

Additional Analyses

We expand our sample beyond mandatory changes to examine the general association between 15-DAY and changes in discretionary accruals during the time period before and after the SEC mandated accelerations. Table 7 presents results of a regression using all firm-year observations available through *Audit Analytics* and *Compustat* from the year 2000 through 2009 (excluding firms in our mandatory sample analyzed above).[26] The coefficient on 15-DAY is positive and

[25] In addition, we perform an alternative analysis where the dependent variable equals 1 if the firm was able to meet or beat the consensus forecast (i.e., earnings surprise was zero or positive) (e.g., see Heflin and Hsu 2008; McInnis and Collins 2011). This approach allows for a larger sample size because it is not limited to observations with earnings surprises between -$0.01 and $0.01. Untabulated results show that 15-DAY is highly significant ($p = .01$).

[26] We delete observations from financial institution and regulated utilities, observations with qualified audit opinions, observations from firms that filed late in the current year or prior year, and those missing necessary control variables or data to calculate discretionary accruals.

significant ($p < 0.01$), suggesting large reductions in audit delay are generally associated with income-increasing discretionary accruals even in years unaffected by mandatory filing deadline changes. Again, with voluntary changes we are unable to disentangle the *reason* for large reductions in audit delay. However, we provide evidence that even "voluntary" reductions of 15 days or more may impair audit/earnings quality.

[Insert Table 7 about here]

We next consider the impact of large audit delay reductions solely on non-accelerated filers (NAFs). NAFs are currently required to file their 10-K with the SEC within 90 days after fiscal year-end. As previously noted, the SEC could impose filing deadline changes on NAFs in the future. For example, now that NAFs have been exempted from SOX 404 by the Dodd-Frank Act of 2010, it could be argued that NAF filing deadlines could be accelerated because their auditors do not have to spend the time required to opine on internal controls.[27] Table 8 presents results of a regression using all firm-year observations for NAFs from the year 2000 through 2009. Similar to the larger sample presented in Table 7, the coefficient on 15-DAY is positive and significant ($p < 0.05$), suggesting large reductions in audit delay are associated with income-increasing discretionary accruals. This evidence suggests that, similar to AFs, accelerating 10-K filings from 90 to 75 days could be equally problematic for NAFs.

[Insert Table 8 about here]

6. Conclusion

SEC rules 33-8128 and 33-8644 substantially reduce the 10-K filing period for large accelerated (LAFs) and accelerated filers (AFs) from 90 to 60 and 75 days, respectively, for fiscal years ending on or after December 15, 2006 (SEC 2002, 2005). For many firms and their

[27] http://www.journalofaccountancy.com/Web/20103115.htm.

auditors, this regulation led to a mandatory reduction in audit delay or the length of time from a company's fiscal year-end to the date of the auditor's report. The SEC implemented accelerated reporting deadlines largely over the objections of auditors and preparers, and many suggest that the SEC did not give sufficient consideration to the potential for negative consequences. It is possible that auditors mitigated the negative effects of audit delay reductions by performing more interim procedures, relying more on the client's internal control system/internal audit function, and using advanced audit technology (cf., PCAOB 2004, 2007; Brazel and Agoglia 2007; Pizzini et al. 2011). Such tactics may have reduced the extent to which post-fiscal year-end audit procedures/evidence were needed to provide an acceptable level of audit quality. Still, when mandated reductions are large (e.g., $\geq$ 15 days), it becomes less likely that these approaches can overcome a substantial reduction in post-fiscal year-end audit time.

We empirically assess the disputed effects of the rule by examining the contexts under which mandated reductions in audit delay have been associated with reductions in earnings quality. Consistent with our hypothesis, we find that large, mandatory reductions in audit delay are positively associated with changes in discretionary accruals and the likelihood of meeting or just beating consensus analysts' forecasts. The evidence suggests an unintended consequence of the SEC's two separate 15-day reductions in filing deadlines (i.e., lower earnings quality). We also find that the relation between large, mandated reductions and earnings quality appears to be attributable to AFs (as opposed to LAFs). The audit/earnings quality of LAFs seems to be more impervious to such reductions. As noted in the development of H2, it is likely that LAFs already employed more extensive interim testing and already exhibited shorter audit delays than AFs. Thus, they would be less likely to suffer a change in audit quality due to accelerations. Furthermore, LAF clients tend to be more prestigious and, if needed to meet filing deadlines,

these audits typically have a greater ability to procure higher quantities of competent audit staff (if available). Last, Pizzini et al. (2011) provide evidence that audits of LAFs use LAFs' internal audit functions to reduce audit delay.

Overall, our findings support claims by auditors and preparers that the accelerations of 10-K filings have the capacity to reduce the quality of financial information supplied to external users. However, these adverse effects appear to depend on the context of the acceleration (size of the audit delay reduction and filer type). We do provide some initial evidence regarding the potential negative effects of accelerating deadlines for AFs and NAFs in the future. Our empirical evidence should also be of considerable use when foreign regulators consider accelerating their filing processes in the future.

Given the substantial effect of this rule on the financial reporting and audit processes, we believe the results of this study will spur future research related to the regulation's impact on preparers, auditors, investors, and the capital markets. For example, future studies could measure the increased relevance of accelerated filings and examine whether it possibly outweighs the reductions in information quality described herein. Researchers could investigate how investors perceive/balance the benefits of more timely financial information with the cost of potentially less reliable financial statements. Finally, a fruitful area of research might be to examine how auditors can cope with accelerated filings by making their audits more efficient, while attempting to preserve their effectiveness.

References

American Institute of Certified Public Accountants (AICPA). 1983. *Statement on Auditing Standards No. 45: Omnibus Statement on Auditing Standards-1983*. New York: AICPA.

American Institute of Certified Public Accountants (AICPA). 2006a. *Statement on Auditing Standards No. 107: Audit Risk and Materiality in Conducting an Audit*. New York: AICPA.

American Institute of Certified Public Accountants (AICPA). 2006b. *Statement on Auditing Standards No. 110: Performing Audit Procedures in Response to Assessed Risks and Evaluating the Audit Evidence Obtained*. New York: AICPA.

Antle, R., and B. Nalebuff. 1991. Conservatism and Auditor-Client Negotiations. *Journal of Accounting Research* 29 (nSUPP): 31-54.

Arens, A.A., Elder, R.J., and M.S. Beasley. 2010. *Auditing and Assurance Services, an Integrated Approach*. Upper Saddle River, NJ: Prentice Hall.

Ashbaugh, H., LaFond, R., and B.W. Mayhew. 2003. Do Nonaudit Services Compromise Auditor Independence? Further Evidence. *The Accounting Review* 78 (3): 611-639.

Ashton, R.H., Willingham, J.J., and R.K. Elliott. 1987. An Empirical Analysis of Audit Delay. *Journal of Accounting Research* 25 (2): 275-292.

Ashton, R.H., Graul, P.R., and J.D. Newton. 1989. Audit Delay and the Timeliness of Corporate Reporting. *Contemporary Accounting Research* 5 (2): 657-673.

Ball, R., and L. Shivakumar. 2006. The Role of Accruals in Asymmetrically Timely Gain and Loss Recognition. *Journal of Accounting Research* 44 (22): 207-242.

Bamber, E.M., Bamber, L.S., and M.P. Schoderbek. 1993. Audit Structure and Other Determinants of Audit Report Lag: An Empirical Analysis. *Auditing: A Journal of Practice & Theory* 12 (1): 1-23.

Bartov, E., Givoly, D., and C. Hayn. 2002. The Rewards to Meeting or Beating Earnings Expectations. *Journal of Accounting and Economics* 33 (2): 173–204.

Bartov, E., Gul, F.A., and J.S.L. Tsui. 2000. Discretionary-Accruals Models and Audit Qualifications. *Journal of Accounting and Economics* 30 (3): 421-452.

Basilo, T. A. 2007. Reducing Sarbanes-Oxley Compliance Costs: Is the Top Down, Risk-Based Audit Approach a Solution, or a Mistake? *The CPA Journal* 77 (1): 6-9.

Beasley, M., Carcello, J., and D. Hermanson. 1999. *Fraudulent Financial Reporting: 1987-1997 An Analysis of U.S. Public Companies.* New York: Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Beasley, M., Carcello, J., Hermanson, D., and T. Neal. 2010. *Fraudulent Financial Reporting: 1998-2007 An Analysis of U.S. Public Companies*. New York: Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Becker, C.L., DeFond, M.L., Jiambalvo, J., and K.R. Subramanyam. 1998. The Effect of Audit Quality on Earnings Management. *Contemporary Accounting Research* 15 (1): 1-24.

Bedard, J.C., and K.M. Johnstone. 2010. Audit Partner Tenure and Audit Planning and Pricing. *Auditing: A Journal of Practice & Theory* 29 (2): 45-70.

Behn, B.K., Choi, J.H., and T. Kang. 2008. Audit quality and properties of analyst earnings forecasts. *Accounting Review* 83 (2): 327–349.

Bonner, S.E., Palmrose, Z-V., and S.M. Young. 1998. Fraud Type and Auditor Litigation: An Analysis of SEC Accounting and Auditing Enforcement Releases. *The Accounting Review* 73 (4): 503-532.

Brazel, J.F., and C.P. Agoglia. 2007. An Examination of Auditor Planning Judgments in a Complex Accounting Information System Environment. *Contemporary Accounting Research* 24 (4): 1059-1083.

Brazel, J. F., Carpenter, T.D., and J.G. Jenkins. 2010. Auditors' Use of Brainstorming in the Consideration of Fraud: Reports from the Field. *The Accounting Review* 85 (4): 1273-1301.

Bryant-Kutcher, L., Peng, E.Y., and K. Zvinakis. 2010. The Impact of the Accelerated Filing Deadline on Timeliness of 10K filings. Working Paper, Colorado State University.

Caramanis, C., and C. Lennox. 2008. Audit Effort and Earnings Management. *Journal of Accounting and Economics* 45 (1): 116-138.

Caster, P. 1990. An Empirical Study of Accounts Receivable Confirmations as Audit Evidence. *Auditing: A Journal of Practice & Theory* 9 (3): 75-91.

Cheng, Q., and T.D. Warfield. 2005. Equity Incentives and Earnings Management. *The Accounting Review* 80 (2): 441-476.

Choi, J.-H., Kim, J.-B., and Y. Zang. 2006. The Association between Audit Quality and Abnormal Audit Fees. Working Paper, Seoul National University.

Coram, P., Ng, J., and D.R. Woodliff. 2004. The Effect of Misstatement on the Propensity to Commit Reduced Audit Quality Acts under Time Budget Pressure. *Auditing: A Journal of Practice & Theory* 23 (2): 159-167.

Dechow, P.M., Sloan, R.G., and A.P. Sweeney. 1995. Detecting Earnings Management. *The Accounting Review* 70 (2): 193-225.

Dechow, P.M., and I.D. Dichev. 2002. The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review* 77 (4): 35-59.

Dechow, P.M., Ge, W., and C. Schrand. 2010. Understanding Earnings Quality: A Review of the Proxies, Their Determinants and Their Consequences. *Journal of Accounting and Economics* 50 (2): 344-401.

DeFond, M.L., and K.R. Subramanyam. 1998. Auditor Changes and Discretionary Accruals. *Journal of Accounting and Economics* 25 (1): 35-67.

DeFond, M.L., 2010. Earnings Quality Research: Advances, Challenges and Future Research. *Journal of Accounting and Economics* 50 (2): 402-409.

DeZoort, F.T., and A.T Lord. 1997. A Review and Synthesis of Pressure Effects Research in Accounting. *Journal of Accounting Literature* 16: 28-85.

Ettredge, M.L., Li, C., and L. Sun. 2006. The Impact of SOX Section 404 Internal Control Quality Assessment on Audit Delay in the SOX Era. *Auditing: A Journal of Practice & Theory* 25 (2): 1-23.

Frankel, R.M., Johnson, M.F., and K.K. Nelson. 2002. The Relationship between Auditors' Fees for Nonaudit Services and Earnings Management. *The Accounting Review* 77 (Supplement): 71-105.

Francis, J.R., and J. Krishnan. 1999. Accounting Accruals and Auditor Reporting Conservatism. Contemp*orary Accounting Research* 16 (1): 135-165.

Francis, J.R., and X. Martin. 2010. Acquisition Profitability and Timely Loss Recognition. *Journal of Accounting and Economics* 49 (1), 161-178.

Geiger, M.A., and D.S. North. 2006. Does Hiring a New CFO Change Things? An Investigation of Changes in Discretionary Accruals. *The Accounting Review* 81 (4): 781-809.

Gopez, E. C. 1954. Auditing with Accent on the Income Statement. *The Accounting Review* 29 (4): 571-574.

Graham, J.R., Harvey, C.R., and S. Rajgopal. 2006. Value Destruction and Financial Reporting Decisions. *Financial Analysts Journal* 62 (6): 27-39.

Gullapalli, D. 2005a. Take this Job and …File it; Burdened by Extra Work Created by the Sarbanes-Oxley Act, CPAs Leave the Big Four for Better Life. *The Wall Street Journal*, May 4, C1.

Gullapalli, D. 2005b. To Err is Human, to Restate Financials, Divine: Companies Redo Reports in Record Numbers, Partly due to Sarbanes-Oxley. *The Wall Street Journal*, January 20, C3.

Heflin, F., and C. Hsu. 2008. The impact of the SEC's regulation of non-GAAP disclosures. *Journal of Accounting and Economics* 46 (2): 349–365.

Hoffman, V.B., and M.F. Zimbelman. 2009. Do Strategic Reasoning and Brainstorming Help Auditors Change Their Standard Audit Procedures in Response to Fraud Risk? *The Accounting Review* 84 (3): 811-837.

Hribar, P., and D.C. Nichols. 2007. The Use of Unsigned Earnings Quality Measures in Tests of Earnings Management. *Journal of Accounting Research* 45 (5): 1017-1053.

Impink, J., Lubberink, M., van Praag, B., and D. Veenman. 2011. Did Accelerated Filing Requirements and SOX Section 404 Affect the Timeliness of 10-K Filings? *Review of Accounting Studies* (forthcoming).

Jones, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research* 29 (2): 193-228.

Kasznik, R., and M.F. McNichols. 2002. Does Meeting Earnings Expectations Matter? Evidence from Analyst Forecast Revisions and Share Prices. *Journal of Accounting Research* 40 (3): 727–759.

Kinney, W.R., and R.D. Martin. 1994. Does Auditing Reduce Bias in Financial Reporting? A Review of Audit Related Adjustment Studies. *Auditing: A Journal of Practice and Theory* 13 (1): 149-156.

Kim, J., Chung, R., and M. Firth. 2003. Auditor Conservatism, Asymmetric Monitoring, and Earnings Management. *Contemporary Accounting Research* 20 (2): 323-359.

Knechel, W.R., and J.L. Payne. 2001. Additional Evidence on Audit Report Lag. *Auditing: A Journal of Practice & Theory* 20 (1): 137-146.

Kothari, S.P., Leone, A., and C. Wasley. 2005. Performance Matched Discretionary Accrual Measures. *Journal of Accounting and Economics* 39 (1): 163-167.

Krishnan, G.V. 2003. Audit Quality and the Pricing of Discretionary Accruals. *Auditing: A Journal of Practice & Theory* 22 (1): 109-126.

Larcker, D.F., and S.A. Richardson. 2004. Fees Paid to Audit Firms, Accrual Choices, and Corporate Governance. *Journal of Accounting Research* 42 (3): 625-658.

Lim, C.-Y., and H.-T. Tan. 2008. Non-audit Service Fees and Audit Quality: The Impact of Auditor Specialization. *Journal of Accounting Research* 46 (1): 199-246.

López, D. M., and G.F. Peters. 2011. The Effect of Workload Compression on Audit Quality. Working Paper. University of Texas at San Antonio.

Masli, A., Peters, G. F., Richardson, V. J., and J. M. Sanchez, 2010. Examining the Potential Benefits of Internal Control Monitoring Technology. *The Accounting Review* 85 (3): 1001-1034.

Massoud, M., Raiborn, C., and J. Humphrey. 2007. Extraordinary Items: Time to Eliminate the Classification. *The CPA Online Journal* 77 (2): 32-39.

McDaniel, L.S. 1990. The Effects of Time Pressure and Audit Program Structure on Audit Performance. *Journal of Accounting Research* 28 (2): 267-285.

McGee, S. 2005. CPA Recruitment Intensifies as Accounting Rules Evolve. *The Wall Street Journal*, March 22, B6.

McInnis, J., and D. Collins. 2011. The Effect of Cash Flow Forecasts on Accrual Quality and Benchmark Beating. *Journal of Accounting and Economics* 51 (3): 219-239.

McVay, S., Nagar, V., and V.W. Tang. 2006. Trading Incentives to Meet the Analyst Forecast. *Review of Accounting Studies* 11 (4): 575-598.

Myers, J.N., Myers, L.A., and T.C. Omer. 2003. Exploring the Term of the Auditor-Client Relationship and the Quality of Earnings: A Case for Mandatory Auditor Rotation? *The Accounting Review* 78 (3): 779-799.

Palmrose, Z-V., and S.W. Scholz. 2004. The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements. *Contemporary Accounting Research* 21 (1): 139-180.

Peterson, M. 2009. Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches. *The Review of Financial Studies* 22 (1): 435-480.

Pizzini, M., Lin, S., Vargus, M., and D. Ziegenfuss. The impact of internal audit function quality and contribution on audit delays. Working Paper, Southern Methodist University.

Public Company Accounting Oversight Board (PCAOB). 2004. *Auditing Standard No. 2, An Audit of Internal Control over Financial Reporting in Conjunction with an Audit of Financial Statements*. Washington, DC: AICPA.

Public Company Accounting Oversight Board (PCAOB). 2007. *Auditing Standard No. 5, An Audit of Internal Control over Financial Reporting that is Integrated with an Audit of Financial Statements.* Washington, DC: AICPA.

Rose, J. 2007. Recruiters Take Hip Path to Fill Accounting Jobs. *The Wall Street Journal*, September 18, B8.

Sanchez, M.H., Agoglia, C.P., and R.C Hatfield. 2007. The Effect of Auditors' Use of a Reciprocity-Based Strategy on Auditor Client Negotiations. *The Accounting Review* 82 (1): 241-263.

Schwartz, K.B., and B.S Soo. 1996. The Association between Auditor Changes and Reporting Lags. *Contemporary Accounting Research* 13 (1): 353-370.

Securities and Exchange Commission (SEC). 2002. Release No. 33-8128 Acceleration of Periodic Report Filing Dates and Disclosure Concerning Website Access to Reports. Washington, DC: SEC.

Securities and Exchange Commission (SEC). 2004. Release No. 33-8507, Temporary Postponement of the Final Phase-In Period for Acceleration of Periodic Report Filing Dates. Washington, DC: SEC.

Securities and Exchange Commission (SEC). 2005. Release No. 33-8644, Revisions to Accelerated Deadlines for Filing Periodic Reports. Washington, DC: SEC.

Skinner, D.J., and R.G Sloan. 2002. Earnings Surprises, Growth Expectations, and Stock Returns or Don't Let an Earnings Torpedo Sink your Portfolio. *Review of Accounting Studies* 7 (2/3): 289–312.

Tucker, J.W., and P.A. Zarowin. 2006. Does Income Smoothing Improve Earnings Informativeness? *The Accounting Review* 81 (1): 251-270.

FIGURE 1
Proposed and Enacted Changes to the 10-K Filing Deadline for Accelerated Filers*

For Fiscal Year on or After	Proposed Deadline[1]	As Enacted	
December 15, 2002	90 days	90 days	
December 15, 2003	75 days	75 days	
December 15, 2004	60 days	75 days[2]	
December 15, 2005	60 days	75 days	
December 15, 2006	60 days	75 days – AFs[3]	60 days – LAFs[4]

[*] According to rule 33-8128 (SEC 2002), an accelerated filer (AF) is one that meets the following conditions at the end of its fiscal year: 1) Its common equity public float was $75M or more as of the last business day of its most recently completed second fiscal quarter; 2) The company has been subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act for a period of at least 12 calendar months; 3) The company has previously filed at least one annual report pursuant to Section 13(a) or 15(d) of the Exchange Act; and the company is not eligible to use Forms 10-KSB and 10-QSB.
[1] Rule 33-8128, *Acceleration of Periodic Report Filing Dates and Disclosure Concerning Website Access to Reports* (SEC 2002)
[2] Rule 33-8507 *Temporary Postponement of the Final Phase-In Period for Acceleration of Periodic Filing Dates* (SEC 2004)
[3] Rule 33-8644, *Revisions to Accelerated Deadlines for Filing Periodic Reports* (SEC 2005).
[4] Rule 33-8644 created a new filer category called the Large Accelerated Filer (LAF), which is an accelerated filer with a worldwide market value of outstanding voting and non-voting common equity by non-affiliates of $700M or more (SEC 2005).

TABLE 1

Sample Selection

	1st Deadline Reduction[1]	2nd Deadline Reduction[2]	Total
Net Observations after Combining *Compustat* & *Audit Analytics*	9,526	8,777	18,303
Financial Institutions (6000-6999) & Regulated Utilities (4900-4999)	-3,028	-2,865	-5,893
NAFs (and AFs with regard to the 2nd Deadline Reduction)	-2,945	-4,757	-7,702
Negative Audit Delay	-8	0	-8
Missing PY or CY Audit Report Date	-308	-21	-329
Missing Control Variables	-306	-92	-398
Missing Information to Calculate Discretionary Accruals	-28	-6	-34
Qualified Audit Opinion	-2	0	-2
Filed Late in the Prior Year or Current Year	-294	-57	-351
	2,607	979	3,586
Unique Firms			2,721

1 – First filing deadline reduction from 90 days to 75 days for all accelerated filers (all firms with outstanding common equity by non-affiliates greater than $75M). Deadline change affected fiscal year-ends from December 15, 2003 – December 14, 2004.

2 – Second filing deadline reduction from 75 days to 60 days for all Large Accelerated Filers (firms with outstanding common equity by non-affiliates greater than $700M). Deadline change affected fiscal year-ends from December 15, 2006 – December 14, 2007.

TABLE 2

Descriptive Statistics

Variables	N	Mean	Median	Standard Deviation	Lower Quartile	Upper Quartile
ChDAC	3586	0.0014	0.0033	0.1312	-0.0462	0.0510
ChDELAY	3586	1.0488	0.0000	17.5488	-8.0000	7.0000
15-DAY	3586	0.1308	0.0000	0.3372	0.0000	0.0000
SEASON	3586	0.7267	1.0000	0.4457	0.0000	1.0000
LOSS	3586	0.2373	0.0000	0.4255	0.0000	0.0000
CFO	3586	0.0791	0.1053	0.2639	0.0445	0.1707
ChCFO	3586	0.0052	0.0028	0.2490	-0.0382	0.0439
B/M	3586	0.5465	0.4269	0.7245	0.2610	0.6708
ChB/M	3586	-0.2170	-0.0708	0.8137	-0.2532	0.0175
lnMVE	3586	7.0300	6.9957	1.7408	5.8039	8.1327
ChlnMVE	3586	0.4233	0.3134	0.6182	0.0824	0.6296
LEVERAGE	3586	0.4001	0.3828	0.2747	0.2391	0.5145
ChLEVERAGE	3586	-0.0145	-0.0110	0.2325	-0.0455	0.0231
EXTRAORDINARY	3586	0.0315	0.0000	0.1747	0.0000	0.0000
PARAGRAPH	3586	0.6113	1.0000	0.4875	0.0000	1.0000
ACQUISITON	3586	0.1154	0.0000	0.3196	0.0000	0.0000
ChAUDITOR	3586	0.0446	0.0000	0.2065	0.0000	0.0000
NEWBIG4	3586	0.0073	0.0000	0.0849	0.0000	0.0000
OLDBIG4	3586	0.0089	0.0000	0.0941	0.0000	0.0000

All continuous variables are reported as the change from the previous year to the current year. *ChDAC* is calculated as the change in discretionary accruals. Discretionary accruals are calculated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$.. *ChDELAY* is calculated as the change in audit delay. Audit delay is calculated as the number of days from year-end to audit report date. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *CFO* is cash from operations divided by average total assets. *ChCFO* is calculated as change in CFO. *ChB/M* is calculated as the change in book to market ratio. *lnMVE* is the natural log of market value of equity. Chl*n*MVE is the change in *lnMVE*. *LEVERAGE* is equal to total liabilities divided by total assets. *ChLEVERAGE* is calculated as the change in *LEVERAGE*. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *ChAUDITOR* is coded 1 if an auditor change occurred during the current year and 0 otherwise. NEWBIG4 is coded 1 if the firm switched to a Big 4 auditor from a Non-Big auditor in the prior year and 0 otherwise. *OLDBIG4* is coded 1 if the firm switched to a Non-Big 4 auditor from a Big 4 auditor in the prior year and 0 otherwise. All variables are winsorized at the 1st and 99th percentiles.

Table 3

Correlation Matrix

	1. ChDAC	2. 15-DAY	3. SEAS	4. LOSS	5. ChCFO	6. CHACF	7. ChB/M	ChMVE	9. ChLEV	10. EXT	11. PARA	12. ACQ	13. ChAUD	14. NB
1. ChDAC	1													
2. 15-DAY	0.025 *	1												
3. SEASON	0.006	-0.002	1											
4. LOSS	-0.059 ***	0.052 ***	0.082 ***	1										
5. ChCFO	-0.346 ***	-0.040 **	0.020	-0.028 *	1									
6. ChAbsCFO	0.047 ***	0.054 ***	-0.014	-0.011	-0.755 ***	1								
7. ChB/M	0.009	-0.010	-0.074 ***	-0.135 ***	-0.015	-0.016	1							
8. ChlnMVE	-0.066 ***	0.042 **	0.101 ***	0.146 ***	0.108 ***	0.064 ***	-0.510 ***	1						
9. ChLEVERAGE	0.090 *	-0.036 **	0.011	0.034 **	0.057 ***	-0.145 ***	-0.183 ***	-0.215 ***	1					
10. EXTRAORDINARY	0.051 ***	0.001	0.096 ***	-0.003	0.006	0.016	0.035 **	-0.040 **	-0.032	1				
11. PARAGRAPH	0.026	0.018	0.149 ***	-0.081 ***	-0.034 **	0.011	-0.016	-0.114 ***	0.060 ***	0.075 ***	1			
12. ACQUISITON	0.005	0.007	-0.029 *	-0.025	0.021	-0.006	0.020	0.026	0.060 ***	-0.010	0.036 **	1		
13. ChAUDITOR	-0.004	-0.008	0.020	0.048 ***	0.002	0.005	-0.042 **	0.049 **	-0.032 *	0.031 *	-0.108 ***	0.019	1	
14. NEWBIG4	-0.011	-0.033 **	0.038 **	0.022	0.000	0.003	-0.045 **	0.069 ***	-0.011	0.003	-0.053 ***	0.000	0.395 ***	1
15. OLDBIG4	0.030 *	-0.002	-0.015	0.059 ***	-0.005	0.012	-0.081 ***	0.030 *	-0.009	0.000	-0.052 **	-0.006	0.439 ***	-0.008

This table presents the correlation matrix. We report Pearson correlations. All continuous variables are reported as the change from the previous year to the current year. *ChDAC* is calculated as the change in discretionary accruals. Discretionary accruals are calculated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. Audit delay is calculated as the number of days from year-end to audit report date. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *ChCFO* is calculated as the change in the variable equal to cash from operations divided by average total assets (CFO). *ChAbsCFO* is calculated as the change in absolute value of CFO. *ChB/M* is calculated as the change in book to market ratio. Chl*n*MVE is calculated as the change in natural log of market value of equity. *ChLEVERAGE* is calculated as the change in the variable total liabilities divided by total assets. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *ChAUDITOR* is coded 1 if an auditor change occurred the current year and 0 otherwise. *NEWBIG4* is coded 1 if the firm switched to a Big 4 auditor from a Non-Big auditor in the prior year and 0 otherwise. *OLDBIG4* is coded 1 if the firm switched to a Non-Big 4 auditor from a Big 4 auditor in the prior year and 0 otherwise. All variables are winsorized at the 1st and 99th percentiles. *, **, and *** indicate, respectively, statistical significance at the 0.10, 0.05, and 0.01. The *p*-values are one-tailed when there are hypothesized directional expectations. All other *p*-values are two-tailed.

TABLE 4

Audit Delay Changes and Discretionary Accruals - Multivariate Regressions

		Mandated Sample (See Table 1)	
Variables	Predicted Sign	Parameter Estimate	*p-value*
INTERCEPT	?	-0.0053	0.619
15-DAY	+	0.0105	0.039
SEASON	?	-0.0185	0.002
LOSS	-	-0.0331	<0.001
ChCFO	-	-0.4018	<0.001
ChAbsCFO	-	-0.2829	<0.001
ChB/M	?	0.0076	0.106
ChlnMVE	+	0.0205	0.006
ChLEVERAGE	-	0.0494	0.044
EXTRAORDINARY	?	0.0368	<0.001
PARAGRAPH	?	0.0020	0.629
ACQUISITON	?	0.0033	0.551
ChAUDITOR	?	-0.0119	0.257
NEWBIG4	?	-0.0059	0.862
OLDBIG4	?	0.0395	0.318
Year and Industry dummies			
R2		0.280	
No. of obs		3,586	

This table provides the results of estimating Model (1) on the sample of all Accelerated Filers (i.e., firms with outstanding common equity by non-affiliates between $75M and $700M) and Large Accelerated Filers (i.e., firms with outstanding common equity by non-affiliates greater than $700M) in the years of the filing deadline changes (see Table 1 sample selection). All continuous variables are reported as the change from the previous year to the current year. The dependent variable, *ChDAC*, is calculated as the change in discretionary accruals. Discretionary accruals are estimated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. Audit delay is calculated as the number of days from year-end to audit report date. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *ChCFO* is calculated as the change in the variable equal to cash from operations divided by average total assets (CFO). *ChAbsCFO* is calculated as the change in absolute value of CFO. *ChB/M* is calculated as the change in book to market ratio. Chl*n*MVE is calculated as the change in natural log of market value of equity. *ChLEVERAGE* is calculated as the change in the variable total liabilities divided by total assets. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *ChAUDITOR* is coded 1 if an auditor change occurred during the current year and 0 otherwise. NEWBIG4 is coded 1 if the firm switched to a Big 4 auditor from a Non-Big auditor in the prior year and 0 otherwise. *OLDBIG4* is coded 1 if the firm switched to a Non-Big 4 auditor from a Big 4 auditor in the prior year and 0 otherwise. All variables are winsorized at the 1st and 99th percentiles and *p*-values are one-tailed when there are hypothesized directional expectations. All other *p*-values are two-tailed.

TABLE 5

Multivariate Regression partitioned by Accelerated Filer vs. Large Accelerated Filers

		Accelerated Filers		***Large Accelerated Filers***	
Variables	Predicted Sign	Parameter Estimate	*p-value*	Parameter Estimate	*p-value*
INTERCEPT	?	-0.0079	0.585	0.0093	0.541
15-DAY	+	0.0169	0.071	0.0057	0.163
SEASON	?	-0.0303	0.006	-0.0053	0.256
LOSS	-	-0.0401	<0.001	-0.0128	0.067
ChCFO	-	-0.3687	<0.001	-0.5749	<0.001
ChAbsCFO	-	-0.2531	<0.001	-0.1621	0.066
ChB/M	?	0.0106	0.105	0.0002	0.963
ChlnMVE	+	0.0223	0.032	0.0163	0.018
ChLEVERAGE	-	0.0623	0.023	-0.0191	0.629
EXTRAORDINARY	?	0.0510	0.045	0.0359	0.002
PARAGRAPH	?	0.0021	0.768	-0.0020	0.619
ACQUISITON	?	0.0108	0.316	-0.0003	0.955
ChAUDITOR	?	0.0056	0.772	-0.0226	0.045
NEWBIG4	?	-0.0378	0.449	0.0222	0.556
OLDBIG4	?	-0.0012	0.970	0.1205	0.299
Year and Industry dummies		Not Reported			
R^2		0.256		0.342	
No. of obs		1,473		2,113	

This table provides the results of estimating Model (1) on the sample of all Accelerated Filers (i.e., firms with outstanding common equity by non-affiliates between $75M and $700M) and Large Accelerated Filers (i.e., firms with outstanding common equity by non-affiliates greater than $700M) in the years of the filing deadline changes (see Table 1 for sample selection) partitioned on filer type. The first column includes all Accelerated Filers. The second column includes all Large Accelerated Filers. All continuous variables are reported as the change from the previous year to the current year. The dependent variable, *ChDAC*, is calculated as the change in discretionary accruals. Discretionary accruals are estimated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. Audit delay is calculated as the number of days from year-end to audit report date. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *ChCFO* is calculated as the change in the variable equal to cash from operations divided by average total assets (CFO). *ChAbsCFO* is calculated as the change in absolute value of CFO. *ChB/M* is calculated as the change in book to market ratio. Chl*n*MVE is calculated as the change in natural log of market value of equity. *ChLEVERAGE* is calculated as the change in the variable total liabilities divided by total assets. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *ChAUDITOR* is coded 1 if an auditor change occurred during the current year and 0 otherwise. NEWBIG4 is coded 1 if the firm switched to a Big 4 auditor from a Non-Big auditor in the prior year and 0 otherwise. *OLDBIG4* is coded 1 if the firm switched to a Non-Big 4 auditor from a Big 4 auditor in the prior year and 0 otherwise. All variables are winsorized at the 1st and 99th percentiles and *p*-values are one-tailed when there are hypothesized directional expectations. All other p-values are two-tailed.

TABLE 6

15-Day Reduction in Audit Delay and the Probability of Meeting or Just Beating the Consensus Analyst Forecast - Logistic Regression

Variables	Predicted Sign	Parameter Estimate	*p-value*
INTERCEPT	?	0.4283	0.632
15-DAY	+	0.4983	0.092
DAC	+	6.5245	0.014
NUM_ESTS	-	-0.0115	0.568
STD_DEV_EST	-	-19.7319	<0.001
SEASON	?	-0.1093	0.821
LOSS	?	0.6833	0.132
CFO	?	5.9939	<0.001
AbsCFO	?	3.0637	0.086
B/M	?	0.6301	0.183
lnMVE	?	0.0000	0.327
LEVERAGE	?	0.6904	0.244
EXTRAORDINARY	?	1.1048	0.304
PARAGRAPH	?	-0.0166	0.949
ACQUISITON	?	-0.0514	0.884
BIG4	?	0.1484	0.784
Year and Industry dummies			Not Reported
No. of obs		715	

This table provides results of estimating the probability of meeting or just beating the consensus analyst forecast (i.e., earnings forecast error of 0 or $0.01). The dependent variable in the regression, *Meet or Just Beat Expected EPS*, is coded 1 if the actual earnings per share reported by *First Call* is equal to or $0.01 greater than the consensus (mean) analyst forecast of the last *First Call* update prior to the earnings announcement date and 0 otherwise. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. Audit delay is calculated as the number of days from year-end to audit report date. *DAC* represents discretionary accruals - estimated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$ *NUM_ESTS* represents the number of forecasted estimates of EPS (i.e., number of analysts following the stock). *STD_DEV_EST* represents the standard deviation of the analyst estimates. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *CFO* is calculated as cash from operations divided by average total assets. *AbsCFO* is calculated as the absolute value of CFO. *B/M* is calculated as the book to market ratio. Chl*n*MVE is calculated as the natural log of market value of equity. *LEVERAGE* is calculated as total liabilities divided by total assets. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *BIG4* is coded 1 if the firm had a Big 4 auditor. All variables are winsorized at the 1st and 99th percentiles and *p*-values are one-tailed when there are hypothesized directional expectations. All other *p*-values are two-tailed**.**

TABLE 7

Audit Delay Changes and Discretionary Accruals - Multivariate Regressions

		All firms between 2000-2009 (excluding mandatory sample)	
Variables	Predicted Sign	Parameter Estimate	*p-value*
INTERCEPT	?	-0.0032	0.448
15-DAY	+	0.0113	0.006
SEASON	?	0.0035	0.031
LOSS	-	-0.0197	<0.001
ChCFO	-	-0.3444	<0.001
ChAbsCFO	-	-0.3027	<0.001
ChB/M	?	0.0029	0.027
ChlnMVE	+	0.0102	<0.001
ChLEVERAGE	-	-0.0026	0.483
EXTRAORDINARY	?	0.0006	0.932
PARAGRAPH	?	0.0049	0.011
ACQUISITON	?	-0.0010	0.737
ChAUDITOR	?	-0.0018	0.677
NEWBIG4	?	-0.0034	0.823
OLDBIG4	?	0.0043	0.587
Year and Industry dummies			
R2		0.150	
No. of obs		30,728	

This table provides results from estimating Model (1) on all firm-year observations between the years 2000-2009. All continuous variables are reported as the change from the previous year to the current year. *ChDAC* is calculated as the change in discretionary accruals. Discretionary accruals are estimated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. Audit delay is calculated as the number of days from year-end to audit report date. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *ChCFO* is calculated as the change in the variable equal to cash from operations divided by average total assets. *ChAbsCFO* is calculated as the change in absolute value of CFO. *ChB/M* is calculated as the change in book to market ratio. Chl*n*MVE is calculated as the change in natural log of market value of equity. *ChLEVERAGE* is calculated as the change in the variable total liabilities divided by total assets. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *ChAUDITOR* is coded 1 if an auditor change occurred during the current year and 0 otherwise. NEWBIG4 is coded 1 if the firm switched to a Big 4 auditor from a Non-Big auditor in the prior year and 0 otherwise. *OLDBIG4* is coded 1 if the firm switched to a Non-Big 4 auditor from a Big 4 auditor in the prior year and 0 otherwise. All variables are winsorized at the 1st and 99th percentiles and *p*-values are one-tailed when there are hypothesized directional expectations. All other *p*-values are two-tailed.

TABLE 8

Multivariate Regression for Non-Accelerated Filers

		All Firm Years between 2000-2009	
Variables	Predicted Sign	Parameter Estimate	*p-value*
INTERCEPT	?	0.0158	0.082
15-DAY	+	0.0163	0.019
SEASON		0.0059	0.052
LOSS	?	-0.0349	<0.001
ChCFO	-	-0.3301	<0.001
ChAbsCFO	-	-0.2918	<0.001
ChB/M	+	0.0024	0.108
ChlnMVE	?	0.0074	0.040
ChLEVERAGE	?	-0.0031	0.399
EXTRAORDINARY	?	-0.0107	0.485
PARAGRAPH	?	0.0125	0.002
ACQUISITON	?	0.0003	0.975
ChAUDITOR	?	-0.0061	0.436
NEWBIG4	?	-0.0008	0.970
OLDBIG4	?	0.0071	0.556
Year and Industry dummies			
R2		0.1148	
No. of obs		12,443	

This table provides results from estimating Model (1) on all firm-year observations between the years 2000-2009. All continuous variables are reported as the change from the previous year to the current year. *ChDAC* is calculated as the change in discretionary accruals. Discretionary accruals are estimated using the following model: $TA = \beta_0 + \beta_1(1/Assets_{it-1}) + \beta_2(\Delta Sales_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \beta_5 NegCFO_{it} + \beta_6 Neg\ CFO_{it} \times CFO_{it} + \varepsilon_{it}$. *15-DAY* is coded 1 if the reduction in audit delay is greater than or equal to 15 days and 0 otherwise. Audit delay is calculated as the number of days from year-end to audit report date. *SEASON* is coded 1 if the firm has a December or January fiscal year-end and 0 otherwise. *LOSS* is coded 1 if net income is less than 0 and 0 otherwise. *ChCFO* is calculated as the change in the variable equal to cash from operations divided by average total assets. *ChAbsCFO* is calculated as the change in absolute value of CFO. *ChB/M* is calculated as the change in book to market ratio. Chl*n*MVE is calculated as the change in natural log of market value of equity. *ChLEVERAGE* is calculated as the change in the variable total liabilities divided by total assets. *EXTRAORDINARY* is coded 1 if the company reported extraordinary item(s) and 0 otherwise. *PARAGRAPH* is coded 1 if an explanatory paragraph was added to audit opinion and 0 otherwise. *ACQUISITION* is coded 1 if there was an acquisition in the current year and 0 otherwise. *ChAUDITOR* is coded 1 if an auditor change occurred during the current year and 0 otherwise. NEWBIG4 is coded 1 if the firm switched to a Big 4 auditor from a Non-Big auditor in the prior year and 0 otherwise. *OLDBIG4* is coded 1 if the firm switched to a Non-Big 4 auditor from a Big 4 auditor in the prior year and 0 otherwise. All variables are winsorized at the 1st and 99th percentiles and *p*-values are one-tailed when there are hypothesized directional expectations. All other *p*-values are two-tailed.