A Growing Disparity in Earnings Disclosure Mechanisms: The Rise of Concurrently Released Earnings Announcements and 10-Ks

Salman Arif
Assistant Professor
Indiana University
arifs@indiana.edu

Nathan T. Marshall
Assistant Professor
University of Colorado
Nathan.Marshall@colorado.edu

Joseph H. Schroeder
Assistant Professor
Indiana University
jhschroe@indiana.edu

Teri Lombardi Yohn
Professor
Conrad Prebys Professorship
Indiana University
tyohn@indiana.edu

December, 2017

We appreciate helpful comments and suggestions from Wayne Guay (Editor), an anonymous reviewer, Bill Kinney, Jing Pan, Eddie Riedl, and Jonathan Rogers, as well as workshop participants at Boston College, Colorado State University, Emory University, Indiana University, London School of Economics, Miami University, University of Florida, University of North Carolina Charlotte, University of Wisconsin at Milwaukee, the 2017 FARS Conference, the 2016 Conference on Financial Economics and Accounting (Toronto) and the 2016 Midwest Accounting Research Conference (Penn State).

A Growing Disparity in Earnings Disclosure Mechanisms: The Rise of Concurrently Released Earnings Announcements and 10-Ks

Abstract

We document that the conventional disclosure practice of 'stand-alone' earnings announcements (EAs), which preempt 10-K filings, is steadily disappearing over time. Instead, firms are increasingly delaying the EA until the 10-K filing date. We find that firms are more likely to have switched from stand-alone EAs to concurrent EA/10-Ks when they have a less sophisticated investor base, greater impediments to producing timely and reliable earnings information, and more industry peers who also release concurrent EA/10-Ks. We also examine the market implications of concurrent EA/10-Ks. We find that concurrent EA/10-Ks are less timely and less decision useful than stand-alone EAs and are more likely to be preempted by more timely EAs within the industry. We next hold the timeliness of the EA constant and find an attenuated market reaction to concurrent EA/10-Ks relative to stand-alone EAs, and this reaction is further attenuated when the concurrent EA/10-K is longer and more difficult to process. Further, concurrent EA/10-Ks are associated with greater post-earnings-announcement drift compared to stand-alone EAs. These findings suggest that investor information overload contributes to the muted market reaction to concurrent EA/10-Ks. Collectively, we document a distinct divide in the marketplace, with a growing number of firms switching to the less timely and less decision useful practice of concurrent EA/10-Ks.

Keywords: Earnings Announcements; Disclosure; SEC Filings; Information Content; Timeliness; Concurrent Information

1. Introduction

Firms have traditionally provided two separate annual financial statement disclosures released at distinctly different points in time. Specifically, the traditional disclosure mechanism first features a 'stand-alone' earnings announcement (EA) containing 'big-picture' highlights of firm performance, followed later by a second, more comprehensive disclosure of performance in the form of a 10-K filing. In this paper, we show that the conventional "two-step" disclosure mechanism has been steadily replaced over time by a less timely "single-step" disclosure mechanism in which firms release their EA on the date of their 10-K filing (hereafter 'concurrent EA/10-K'). Specifically, we find that the percentage of firms that disclose earnings concurrently with the 10-K rose from approximately nine percent in 2002 to 33 percent by 2013 (Figure 1).[1] In addition, firms that move to concurrent EA/10-Ks delay their EA by 14 days and accelerate their 10-K filing by three days, on average, leading to less timely EAs and timelier 10-Ks. Concurrent EA/10-Ks are also associated with smaller, less profitable firms with lower analyst following compared to stand-alone EA firms. We examine the factors associated with the transition to concurrent EA/10-Ks as well as the implications of these disclosures for equity investors.

Stand-alone EAs in advance of 10-K filings have been commonplace since at least the early to mid-1900s (e.g., Ball and Brown 1968; Sivakumar and Waymire 1993). However, we contend that a number of changes to the regulatory and institutional environment from 2003 to 2005 (e.g., SOX provisions, PCAOB audit regulations, SEC filing deadline accelerations) reduced the ability of firms to release stand-alone EAs and precipitated the rise of concurrent EA/10-Ks. As such, our first set of hypotheses and tests examine the factors associated with the move from stand-alone

[1] Concurrent EAs are released 35 days later than stand-alone EAs, on average. Further, in untabulated analyses we extend our sample and find that 43 percent of firms issued concurrent EA/10-Ks in 2016, indicating a continuation in the trend towards such disclosures.

EAs to concurrent EA/10-Ks. We predict and find that the likelihood of a firm moving to a concurrent EA/10-K is negatively associated with the sophistication of the firm's investor base (e.g. firm size, analyst following, institutional ownership), positively associated with impediments to compiling reliable accounting information (e.g. a weak accounting system, complex financial reporting, limited auditor resources), and positively associated with the prevalence of concurrent EA/10-Ks in the industry.[2]

We next examine the implications of concurrent EA/10-Ks for equity investors. First, given that concurrent EA/10-Ks are significantly less timely than stand-alone EAs, we predict that investors are more likely to anticipate the earnings news in concurrent EA/10-Ks compared to stand-alone EAs because investors have more time to acquire earnings information from alternative, timelier sources. To test this prediction, we perform a price-leads-earnings analysis (e.g., Collins et al., 1994; De Franco et al., 2011) and use a difference-in-difference research design. We find that after firms switch to concurrent EA/10-Ks, stock returns from the fiscal year-end to the EA date are positively and significantly associated with the actual earnings released; however, prior to switching, stock returns over the same window are not significantly associated with the actual earnings for the same firms. Moreover, stock returns over this window are never significantly associated with the earnings of our control observations (matched on industry, firm size, and earnings to market value), which release stand-alone EAs for the entire sample period. These results suggest, consistent with our prediction, that investors may glean earnings information for concurrent EA/10-Ks from other, timelier sources and incorporate this information in stock prices.

[2] We further find that the issuance of a concurrent EA/10-K is relatively sticky, i.e. firms that choose to switch to concurrent EA/10-Ks tend to maintain this disclosure mechanism in subsequent years (see Figure 2).

To provide insight into the information sources that facilitate investors' anticipation of the news in concurrent EA/10-Ks, we examine the disclosures made by the firm and its peers in the lead-up to the earnings announcement. We find that concurrent EA/10-Ks are more likely preceded by peer firm EAs, but are less likely to be preceded by voluntary management forecasts, compared to stand-alone EAs. These results suggest that the news in concurrent EA/10-Ks is preempted by timelier EAs of industry peers and not by voluntary disclosures.

We also hypothesize that the decision usefulness of concurrent EA/10-Ks differs from stand-alone EAs, after controlling for the timeliness of the announcement. We do not make a directional prediction, as there are credible reasons to expect a differential market reaction in either direction. On the one hand, information overload may lead to a muted reaction to concurrent EA/10-Ks since they may contain too much information for investors to process instantaneously (e.g., Bloomfield, 2002). A muted reaction may also arise from limited investor attention if concurrent EA/10-Ks are released on days when many other firms also announce earnings (e.g. Hirshleifer et al., 2009), or from investor perceptions of lower information quality for concurrent EA/10-Ks.

On the other hand, there are reasons to expect that the market reaction to concurrent EA/10-Ks may be stronger than the reaction to stand-alone EAs. Investors may perceive concurrent EA/10-Ks to include more reliable earnings information as they are released with a completed audit (Marshall et al., 2017). The reaction may also be greater because investors simultaneously receive summary earnings information in the EA, as well as more detailed information in the 10-K filing, and more information is associated with larger investor reactions (e.g., Hoskin et al., 1986; Francis et al., 2002; Schroeder, 2016). Our tests compare the market

response – in terms of short-window absolute abnormal returns, abnormal stock return volatility, and abnormal volume – surrounding concurrent EA/10-Ks relative to stand-alone EAs.

We test the market reaction to concurrent EA/10-Ks using three different research designs, given that the issuance of a concurrent EA/10-K is an endogenous choice. First, we use a pooled regression design and include firm fixed effects to control for unobservable time-invariant firm characteristics. Second, we use a difference-in-difference design, where we compare treatment firms that switch from stand-alone EAs to concurrent EA/10-Ks to control firms that release only stand-alone EAs in the same years (matched on industry, size, and the change in EA timeliness). Third, we employ an entropy balance design in which we balance the treatment and control samples based on the factors associated with the issuance of concurrent EA/10-Ks. Using each of these research designs, we find a muted market response to concurrent EA/10-Ks relative to stand-alone EAs even after controlling for the timeliness of the announcement.

Having documented a relatively muted reaction to concurrent EA/10-Ks, we investigate whether these disclosures are associated with information overload, limited investor attention, or investor perceptions of lower information quality. While we do not find evidence that the muted reaction to concurrent EA/10-Ks is associated with the number of EAs made by firms in the industry on the same day, we do find that the market reaction to concurrent EA/10-Ks is further muted when the 10-K is longer and more complex. We also find that post-earnings-announcement drift is more pronounced for concurrent EA/10-Ks, suggesting that the muted reaction is temporary and not associated with more permanent investor concerns about information quality. Collectively, these results are consistent with concurrent EA/10-Ks being associated with information overload, whereby investors find it difficult to process all the information in a concurrent EA/10-K instantaneously.

In sum, we document a pronounced shift over time in how firms disclose earnings to the market. Specifically, the traditional "two-step" disclosure mechanism is steadily disappearing and being replaced by a "single-step" disclosure mechanism in which firms delay their EA to the 10-K filing. We provide insight into the forces that influence the transition from stand-alone EAs to concurrent EA/10-Ks. We also find that concurrent EA/10-Ks have important implications for investors because both the timeliness and decision usefulness of such EAs are impaired relative to stand-alone EAs. In addition, while prior research notes the importance of excluding concurrent EA/10-Ks when estimating filing window returns due to potential contamination from EAs (e.g. Li and Ramesh, 2009; Doyle and Magilke, 2013), we are not aware of work that explores the market's reaction to concurrent EA/10-Ks relative to stand-alone EAs. Our findings of lower market responses to concurrent EA/10-Ks have important implications for future research exploring the market's reaction to EAs.

Our findings also contribute to recent research that documents changes in EA disclosure timing since the turn of the century. Specifically, there has been an increase in the number of firms releasing earnings outside of normal trading hours (e.g. DeHaan et al. 2015), prescheduling the release weeks in advance of the EA announcement (e.g. Johnson and So 2017), and releasing earnings in advance of audit completion (e.g. Bronson et al. 2011; Schroeder 2016). We contribute by demonstrating a significant trend since 2003 of firms releasing the EA concurrently with the 10-K filing.

The remainder of the paper proceeds as follows. Section 2 reviews the literature and develops our hypotheses. Section 3 describes our sample and provides descriptive trends and statistics. Section 4 describes our research design and provides the results of our empirical tests. Section 5 concludes the paper with a summary of our results and a discussion of their implications.

2. Literature Review and Hypotheses Development

The traditional earnings disclosure mechanism first features a 'stand-alone' EA containing 'big-picture' highlights of firm performance, followed later by a second, more comprehensive disclosure of performance in the form of a 10-K or 10-Q. Prior accounting research has emphasized the importance of EAs to the market (Ball and Brown, 1968; Beaver, 1968; Landsman and Maydew, 2002). In fact, prior research documents that the market places greater reliance on EAs than on 10-K or 10-Q filings (Beyer et al., 2010).

We contend that key changes in the financial reporting environment starting 2003 significantly reduced the ability of firms to release stand-alone EAs. Most notably, there was a significant lengthening of the time to complete the external audit to meet new PCAOB requirements (i.e. AS2 and AS3) (Krishnan and Yang, 2009; Bronson et al., 2011; Schroeder, 2016; Marshall et al, 2017). In addition, Sarbanes Oxley Act (SOX) section 302/404 internal control assessments and disclosures lengthened the financial close process (Alexander et al., 2013) and exposed key executives to personal liability concerning the accuracy of the financial statements. Further, SOX (in tandem with corporate accounting frauds and the demise of Arthur Andersen) increased public and regulatory scrutiny of the reliability of financial reports. Around the same time, the SEC accelerated the periodic filing deadlines for accelerated and large accelerated filers. Collectively, these changes in the regulatory and institutional environment (many of which occurred from 2003 to 2005) introduced new frictions in the preparation of timely earnings information. More specifically, we contend the preparation of the EA information and the

timing of its release could become so constrained relative to the 10-K date that the firm releases the EA with the 10-K.[3]

We hypothesize that firms with a more sophisticated investor base are less likely to switch to a concurrent EA/10-K strategy. Prior research suggests that firms with a more sophisticated investor base (in terms of institutional ownership or analyst following) provide more timely earnings announcements and greater voluntary disclosure to facilitate information acquisition and processing by sophisticated investors (e.g. El-Gazzar 1998; Ajinkya et al., 2005; Sengupta 2004). That is, while all investors might demand timely disclosure, firms with a more sophisticated investor base could face greater pressure to maintain timely EAs despite the regulatory changes. This suggests that firms with a more sophisticated investor base are less likely to move to concurrent EA/10-K disclosures.

We also hypothesize that firms with stronger impediments to compiling reliable and timely financial information and those with limited auditor resources are more likely to switch to concurrent EA/10-Ks given that the regulatory changes introduced new frictions in the preparation of timely financial reports. First, in order for a company to meet the stricter financial reporting and auditing regulations while also maintaining the timeliness of EAs, it must have a sophisticated and reliable accounting system (e.g., Becker et al., 1998; Bushman et al., 2004). Second, companies with high operating or reporting complexity are less likely to meet the stricter regulations while maintaining the timeliness of EAs because generating financial reports for such firms requires more information and analysis (Sengupta, 2004). For example, it is likely more difficult to meet

[3] In fact, the SEC expressed concern that regulatory changes could be particularly burdensome for certain types of firms, resulting in a subset of registrants releasing the EA concurrently with the 10-K filing. For example, in Release No. 33-8128 (2003), the SEC stated that "some companies would need to revise their internal processes to prepare their reports on a more concurrent basis with the earnings release."

stricter regulations and maintain disclosure timeliness when the firm must combine diverse operating segments (Bushman et al., 2004; Givoly et al., 1999; Habib et al., 1997) or geographic segments (Bushman et al., 2004; Denis et al., 2002; Duru and Reeb, 2002; Reeb et al., 1998). Third, we argue that the interplay with the external auditor has implications for the decision to issue a concurrent EA/10-K. Firms with lower uncertainty surrounding the audit and those that engage an audit firm with significant resources, expertise, and employee capacity are more likely to meet the stricter regulatory standards while maintaining the timeliness of EAs (e.g. Schroeder, 2016; Francis and Yu, 2009).

Finally, we posit that firms' disclosures are influenced by the disclosures of industry peer firms. Prior literature provides evidence that firms in the same industry make similar financial reporting choices, leading to contagion in financial reporting practices within industries (e.g., Tse and Tucker, 2010; Gleason et al., 2008). As such, we predict that firms are more likely to transition from stand-alone EAs to concurrent EA/10-Ks if a larger percentage of industry peers issue concurrent EA/10-Ks.

This leads to our first set of hypotheses:

> ***H1a:*** *The likelihood of a firm moving to concurrent EA/10-Ks is negatively associated with the sophistication of the firm's investor base.*
>
> ***H1b:*** *The likelihood of a firm moving to concurrent EA/10-Ks is positively associated with impediments the firm faces in generating reliable financial information and timely audit completion.*
>
> ***H1c:*** *The likelihood of a firm moving to concurrent EA/10-Ks is positively associated with the percentage of firms in the industry that issue concurrent EA/10-Ks.*

Our next hypotheses relate to the market consequences of concurrent EA/10-Ks relative to stand-alone EAs. Prior research finds a significant market reaction to both EAs (Beaver 1968; Li and Ramesh 2009) and to 10-K filings (Griffin 2003; Asthana et al., 2004). However, Li and

Ramesh (2009) argue that the research on the market reaction to 10-K filings does not distinguish between 10-K filings made separately and 10-K filings made concurrent with EAs. Examining the market reaction to 10-Ks issued separately from the EA, Li and Ramesh (2009) find a market reaction only for the 10-Ks filed at calendar quarter-end. Importantly, Li and Ramesh (2009) find a more pronounced market reaction to EAs compared to 10-K filings. This suggests that the greater timeliness of EAs leads to a more pronounced market reaction. Doyle and Magilke (2013) examine the market reaction to 10-Ks around the SEC 10-K filing accelerations. They find an increased market reaction for large firms, whose filing deadlines had been significantly accelerated as a result of the SEC regulations.[4] Overall, these studies indicate that the timeliness of accounting information is an important factor in explaining the market's reaction to earnings information.

We begin our examination of the market consequences of concurrent EA/10-Ks by first hypothesizing greater market anticipation of the information in concurrent EA/10-Ks compared to stand-alone EAs. Concurrent EA/10-Ks are less timely than stand-alone EAs, in that they are associated with a longer lag between fiscal year end and the EA (EA lag). Given the longer EA lag associated with concurrent EA/10-Ks, we argue that investors have greater opportunity for earnings information acquisition and/or information transfers from other sources. For example, investors may obtain earnings information from increased voluntary disclosure in the form of management forecasts prior to the concurrent EA/10-K or via timelier industry peer EAs (e.g. Foster, 1981; Han et al., 1989; Han and Wild 1990; Arif and De George, 2017), leading to smaller information revelation at the time of the EA. This leads to our second hypothesis:

> ***H2:*** *Stock prices anticipate more of the earnings information prior to the EA for concurrent EA/10-Ks than for stand-alone EAs.*

[4] Doyle and Magilke (2013) also find a decrease in the market reaction to the 10-K filings of small firms after the accelerations, suggesting that the regulation lowered the value relevance of the 10-K filings of small firms.

Finally, we examine the decision usefulness of concurrent EA/10-Ks, relative to stand-alone EAs, holding the announcement timing constant. On the one hand, the market reaction to (or the decision usefulness of) concurrent EA/10-Ks may be muted relative to the reaction to stand-alone EAs. Specifically, concurrent EA/10-Ks may provide too much information for investors to process instantaneously, leading to information overload since investors receive both earnings and 10-K information at the same time. This notion is consistent with prior research which suggests that there are instances in which it is too costly for investors to instantaneously extract information from large and complex disclosures (e.g., Bloomfield, 2002; Callen et al., 2013; Lawrence, 2013; Miller, 2010; You and Zhang, 2009). In addition, a muted reaction could arise from limited investor attention if concurrent EA/10-Ks are released on days when many other firms also announce earnings, given the finding by Hirshleifer et al. (2009) that the under-reaction to EAs is more pronounced on days when many firms announce earnings. A muted reaction could also arise if investors perceive concurrent EA/10-K firms to have a lower quality information environment or if these firms are associated with greater uncertainty, which could arise if concurrent EA/10-Ks are more likely to be issued by firms with impediments to compiling reliable accounting information.

On the other hand, there are reasons to assert that the reaction to concurrent EA/10-Ks may be larger than the reaction to stand-alone EAs, after controlling for the differential timeliness of the announcements. For example, investors may view concurrent EA/10-Ks as more informative (relative to stand-alone EAs) because investors simultaneously receive both the summarized earnings information in the earnings press release and the more detailed information in the 10-K filing. This argument is supported by the vast body of research suggesting that greater disclosure is informative and useful to investors (e.g., Francis et al., 2002; Hoskin et al., 1986). Investors may

also perceive concurrent EA/10-Ks to possess more reliable information as the audit is complete at the time of the EA (Marshall et al., 2017). Given these conflicting predictions, we state our third hypothesis in the null form:

> ***H3:*** *There is no difference in the decision usefulness of concurrent EA/10-Ks and stand-alone EAs, after controlling for differential timeliness of the announcement.*

3. Sample Selection and Descriptive Statistics

3.1 Sample Selection

Table 1 provides the details of our sample selection. Our firm-year samples begin with the intersection of Compustat, CRSP, and Edgar from 1995 to 2013. We exclude observations with a fiscal year end on or before December 15, 1995 because of limited filing data in Edgar. We also remove late filers (i.e., filings greater than 105 days after fiscal year end) and extreme EA dates (i.e., those where EAs precede the fiscal year end or are after the filing deadline) to avoid drawing inferences from firms in unique circumstances or firm-years with data issues. We use this sample (86,556 observations) in our figures depicting concurrent EA/10-Ks over time. Subsequent firm-level analyses in Tables 2 through 10 make additional restrictions to account for industry membership, control variables, and matching procedures.

[Insert Table 1 Here]

3.2 Descriptive Trends and Statistics

We begin our analyses by presenting descriptive trends from 1995 to 2013 on the percentage of concurrent EA/10-Ks by year. Panel A of Figure 1 plots the historical trend of concurrent EA/10-Ks, while Panel B plots the percent of non-accelerated, accelerated, and large-

accelerated filers that issue concurrent EA/10-Ks.[5] The percentage of concurrent EA/10-Ks was stable through 2002, increased significantly during the regulatory transition period (2003 to 2005), and continued an increasing trend through 2013. Overall, there is a dramatic increase in the percentage of concurrent EA/10-Ks over the period in that 9 percent of firms issued their EAs concurrently with the 10-K in 2002, while 33 percent issued a concurrent EA/10-K in 2013.[6] Similarly, in panel B, we document a rise from 2 to 26 percent, 5 to 36 percent, and 20 to 52 percent for large-accelerated, accelerated, and non-accelerated filers filing concurrent EA/10-Ks, respectively, from 2002 to 2013. In untabulated analyses, we extend our original sample through 2016 and document that the trend towards concurrent EA/10-Ks has continued, with 43 percent of firms releasing concurrent EA/10-Ks by 2016.

[Insert Figure 1 Here]

To provide insight into whether the move to a concurrent EA/10-K is a temporary or permanent change, we calculate the percentage of subsequent EAs that are concurrent with the 10-K for all firm-years after the initial concurrent EA/10-K. Figure 2 plots the frequency distribution of these percentages. The plot shows that the vast majority of firms continue to issue concurrent EA/10-Ks for over half of the subsequent EAs and the most frequent outcome is that the firm issues concurrent EA/10-Ks for all of its EAs following the first concurrent EA/10-K. This suggests that the move to a concurrent EA/10-K reflects a relatively permanent change in strategy rather than an idiosyncratic decision for the current period only.

[Insert Figure 2 Here]

[5] Large accelerated filers have public float greater than $700 million, accelerated filers have public float between $75 and $700 million, and non-accelerated filers have public float of $75 million or less (SEC, 2003).
[6] In untabulated analyses, we also examine the trend of concurrent EAs for a sample of firms that exist over the entire 1995 to 2013 period. Similar to the results presented in Figure 1, we document a dramatic increase in concurrent EAs over the period from a low of four percent to a high of 25 percent of this constant sample.

To provide insight into the effect of concurrent EA/10-Ks on the timeliness of disclosing the earnings information relative to stand-alone EAs, Figure 3a plots the distribution of the change in the EA lag (Δ*EALAG*) for the sample of firms that switch to a concurrent EA/10-K during the sample period. Specifically, the plot provides insight into the within-firm changes from the last year that firms issue a stand-alone EA to the first year they issue a concurrent EA/10-K. The plot shows that the most frequent outcome is that EA lag increases by one to five days. In addition, Δ*EALAG* is greater than or equal to zero for 75 percent of the observations. The mean (median) increase in EA lag is 14.83 (11) days. Figure 3b plots the distribution of the change in the 10-K filing lag (Δ*FILELAG*) for the same firms from the last year that the firm issues a stand-alone EA to the first year it issues a concurrent EA/10-K. The plot shows that the most frequent outcome is that the filing lag decreases by zero to four days. The mean (median) change in filing lag is a decrease of 3.69 (2) days. Overall, these results indicate that concurrent EA/10-Ks are associated with less timely EA information and somewhat timelier 10-K filings.

[Insert Figure 3 Here]

Table 2 provides descriptive statistics to compare the characteristics of concurrent EA/10-Ks to stand-alone EAs. The table documents that the average number of days from fiscal year end to the EA (*EALAG*) for concurrent EA/10-Ks is roughly 31 days longer than that for stand-alone EAs. Relatedly, we document that the average number of days from fiscal year end to the 10-K filing date (*FILELAG*) for concurrent EA/10-Ks is almost three days shorter than that for stand-alone EAs. The descriptive statistics also reveal that firms with concurrent EA/10-Ks tend to be smaller and less profitable than firms with stand-alone EAs. Firms with concurrent EA/10-Ks also have lower analyst following and are less likely to use a Big N auditor. Further, concurrent EA/10-Ks are more likely to be associated with firm-years that have bad news, losses and higher

stock return volatility. In addition, abnormal stock return volatility (*AVAR*) and abnormal volume (*AVOL*) around the EA are lower for concurrent EA/10-Ks than for stand-alone EAs, while absolute abnormal returns (|*ARET*|) are greater.

[Insert Table 2 Here]

To provide greater insight into the types of firms that move to concurrent EA/10-Ks and the permanence of this move, Panel A of Appendix A lists the top 100 firms by market value (as of the firm's first concurrent EA/10K) and the percentage of the firm's subsequent EAs that are concurrent EA/10-Ks. Panel A indicates that concurrent EA/10-Ks are issued by large corporations such as Staples, QualComm, Amazon, and Waste Management. In fact, all these firms continued to release concurrent EA/10-Ks during our sample after first switching to a concurrent EA/10-K. In addition, Panel B documents the percentage of firms by industry (GICS code) that issue concurrent EA/10-Ks in 2002, 2006, and 2013.

4. Research Design and Empirical Results

4.1 Concurrent EA/10-Ks

Our first set of hypotheses predict that the move to concurrent EA/10-Ks is a function of investor sophistication (*H1a*), impediments to compiling reliable accounting information (*H1b*), and the percentage of firms in the industry that previously issued concurrent EA/10-Ks (*H1c*). We test these hypotheses by examining the move towards concurrent EA/10-Ks during (i) the 2003 to 2005 transition period and (ii) the 2006-2013 post-transition period.

4.1.1 Concurrent EA/10-Ks during the Transition Period

For the transition period analysis, we begin with firms that only issued stand-alone EAs from 2000 to 2002 (i.e., prior to the transition period). We then identify a sample of firms that switched from issuing only stand-alone EAs in the pre-transition period to issuing a concurrent

EA/10-K in 2003, 2004 or 2005 (i.e. during the transition period). We use the resulting sample of 3,823 firms.

Before testing our hypotheses, we note that the switch to a concurrent EA/10-K by a firm in the transition period is likely associated with its filer status and the average proximity of its EA to its 10-K filing date in the pre-transition period. Table 3, Panel A provides descriptive statistics on the average change in the EA lag and the change in the filing date lag for firms partitioned into nine groups based on their filer status (large-accelerated, accelerated, or non-accelerated) and their average EA to 10-K filing date proximity from 2000 to 2002 (i.e., the average number of days between the EA and the 10-K filing date in the pre-transition period). We then test for differences in the likelihood of releasing a concurrent EA/10-K in the 2003-2005 period across the groups and examine the change in EA lag and filing lag over the transition period.

The results indicate that within each filer-status group, sub-groups with the shortest historical proximity between the EA and 10-K filing dates are significantly more likely to issue a concurrent EA/10-K during the transition period than sub-groups with longer historical EA proximity. For example, within the accelerated filers, only 3.6 percent of firms in the tercile of longest EA-filing date proximity move to concurrent EA/10-Ks in the transition period, whereas 23.6 percent of those in the tercile of shortest EA-filing date proximity release concurrent EA/10-Ks. We also note that the propensity for firms to switch to a concurrent EA/10-K during the transition period is significantly higher for non-accelerated and accelerated filers relative to large-accelerated filers. Specifically, 13.5 percent of accelerated and 25.3 percent of non-accelerated filers release concurrent EA/10-Ks during the transition period, whereas only 6.0 percent of large-accelerated filers release concurrent EA/10-Ks. Firms that switched to a concurrent EA/10-K delayed the release of their EA by 15, 16, and 22 days on average for large

accelerated, accelerated, and non-accelerated filers, respectively, in the post-transition period compared to the pre-transition period. In contrast, firms that maintained a stand-alone EA released earnings 2, 3, and 4 days (for large accelerated, accelerated, and non-accelerated filers, respectively) later in the post-transition period compared to the pre-transition period, on average. These results indicate that EA-filing date proximity and filer status groupings play a role in the concurrent EA/10-K decision.

[Insert Table 3 Here]

Our hypotheses predict that the sophistication of the investor base, impediments to producing timely and reliable information, and the percentage of industry peer firms that issue concurrent EA/10-Ks are associated with the adoption of concurrent EA/10-Ks by firms. We measure the sophistication of the investor base and impediments to producing reliable and timely information using confirmatory factor analysis. We estimate each construct individually using principle component factoring with a promax (oblique) rotation and extract the factors with eigenvalues greater than one (Rogers and Stocken, 2005).

The results are presented in Panel A of Table 4. The first factor captures the *Investor Sophistication* of the firm's investor base and loads positively on four variables: the market value of equity (*LNMVE*), the percentage of shares owned by institutional investors (*INST_OWN*), analyst following (*FOLLOW*), and the number of shareholders (*SH*). The second factor captures *Accounting System Weaknesses* and loads positively on the likelihood of the firm having a material weakness (*PRED_MW*) and an indicator variable for whether the current year financial statements are restated during future years (*RESTATE*). We include two factors to capture complexity. The *Operating Complexity* factor loads positively on the number of business segments (*LNBSEG*), the number of geographic segments (*LNGSEG*), and an indicator variable if the firm has foreign operations (*FOREIGN*). The *Reporting Complexity* factor loads positively on the FOG index from

the firm's 10-K (*FOG_10K*) and the length of the firm's 10-K (*LENGTH_10K*). Next, we include two factors to capture auditor influence: *Limited Auditor Resources* loads negatively on an indicator for a Big N auditor (*BIGN*) and on the total audit fees for the office of the audit firm performing the audit (*LNOFFSIZE*). *Audit Uncertainty* loads positively on abnormal audit fees (*ABFEES*). We also control for the level of competition faced by the firm given that prior research suggests that competition can influence the incentives for disclosure (Darrough and Stoughton, 1990; Verrecchia, 1983). *Competition* loads negatively on the firm's market share (*MKT_SHR*) and on the Herfindahl index for the industry in which the firm operates (*HERF*), and loads positively on the number of firms in the industry (*LNFIRMS*). We define each of the variables that we use in our confirmatory factor analyses in Appendix B.

We test our hypotheses with the following cross-sectional logistic model (firm and time subscripts suppressed):

$$\begin{aligned} CONCUR = {} & \alpha + \beta_1 Investor\ Sophistication + \\ & \beta_2 Accounting\ System\ Weaknesses + \beta_3 Operating\ Complexity + \\ & \beta_4 Reporting\ Complexity + \beta_5 Limited\ Auditor\ Resources + \\ & \beta_5 Audit\ Uncertainty + \beta_5 Competition + \\ & \beta_6 Percent\ of\ Peers\ Concurrent + \\ & Filer\ Status\ \&\ EA\text{-}Filing\ Date\ Proximity\ Groups + \\ & Ex\ Post\ Situational\ Controls + \varepsilon, \end{aligned} \tag{1}$$

where *CONCUR* is the dependent variable and takes the value of one if the firm switches to a concurrent EA/10-K during the 2003-2005 transition period and zero if it continues to issue a stand-alone EA. We include the factors above as well as *Percent of Peers Concurrent*, which is the percentage of firms in the same GICS industry classification that issue concurrent EA/10-Ks.

We include a variety of control variables that may be associated with the release of concurrent EA/10-Ks. Given our previous finding that filer status and EA-filing date proximity play a role in the decision to switch to a concurrent EA/10-K, we include indicator variables

reflecting membership in one of the nine categories from the analysis in Table 3. In addition, firms with poor performance may be more likely to switch to a concurrent EA/10-K. Thus, we include several *Ex Post Situational Controls* including average ROA (*Avg. ROA*) over the 2003-2005 transition period and indicator variables reflecting negative earnings (*LOSS*) in any of the three years (labeled *TOT_LOSS*) as well as negative changes in earnings (*BN*) in any of the three years (labeled *TOT_BN*). We also control for the firm's average market-to-book (*MTB*) over the three years (labeled *Avg. MTB*) and average beta (*BETA*) over the three years (labeled *Avg. BETA*).

For these tests, we require non-missing values for the investor sophistication, accounting system weakness, complexity, auditor, and competition variables, along with the percentage of peer firms issuing concurrent EA/10-Ks. This results in a sample of 3,087 firms. Table 4, Panel B presents the results of the cross-sectional logistic regression in equation (1). Column (1) (column (2)) reports the results excluding (including) the *Ex Post Situational Controls*. Consistent with hypothesis *H1(a)*, we find consistent negative and significant coefficients on *Investor Sophistication*, suggesting that firms with more sophisticated investors are less likely to switch to a concurrent EA/10-K. Regarding hypothesis *H1(b)*, we find consistent positive associations between the impediments that firms face in producing reliable accounting information and the likelihood of a concurrent EA/10-K, as indicated by the significant positive coefficients on *Accounting System Weaknesses*, *Operating Complexity*, and *Audit Uncertainty*. Consistent with hypothesis *H1(c)*, we find consistent positive and significant coefficients on *Percent of Peers Concurrent*, suggesting that firms are more likely to switch to a concurrent EA/10-K when more firms in the industry issue concurrent EA/10-Ks.

[Insert Table 4 Here]

4.1.2 Concurrent EA/10-Ks - Hazard Analysis

While the shift towards concurrent EA/10-Ks first began during the 2003 to 2005 transition period, the upward trend continues after this time period. Our next set of tests examines the duration until the issuance of a concurrent EA/10-K during 2006 to 2013. For this analysis, we measure investor sophistication using *Analyst Following* and *Institutional Ownership Percent*. We use *Restatement* and *Material Weakness* announcements to capture realizations of poor accounting system quality that would suggest impediments to the firm generating reliable financial information, where *Restatement* includes announcements over the fiscal year up to and including the current EA release date and *Material Weakness* includes announcements during the current year. Finally, we capture industry peer effects using the percentage of peers in the same GICS industry that released a concurrent EA/10-K in the prior year *(Percent of Peers Concurrent).* Formally, we test our hypotheses for the post-transition period with the following duration analysis (variable definitions are found in Appendix B):

$$\begin{aligned} CONCUR = {} & \alpha + \beta_1 Analyst\ Following + \\ & \beta_2 Institutional\ Ownership\ Percent + \beta_3 Restatement + \\ & \beta_4 Material\ Weakness + \beta_5 Percent\ of\ Peers\ Concurrent + \\ & Control\ Variables + \varepsilon. \end{aligned} \tag{2}$$

We follow prior research (e.g., O'Brien et al., 2005; Brochet et al., 2011) and conduct the duration analysis using a semiparametric, discrete time Cox proportional hazard model.[7] We implement the hazard model by first identifying all stand-alone EA firms with available data in 2002. We then drop firms that transitioned to concurrent EA/10-Ks during the regulatory transition period (2003-2005) to focus on the gradual evolution toward concurrent EA/10-Ks after this period. We then follow the remaining firms forward until they either transition to a concurrent

[7] The model is said to be semiparametric because the baseline hazard function is unknown (hence nonparametric), but the functional form of the covariates' effects is specified (hence parametric).

EA/10-K ("die") or become censored (i.e. continue with stand-alone EAs until the end of their sample data). That is, the first annual EA after the regulatory transition period (the 2006 EA) has a duration of one year, the second (2007) has a duration of two years, and so forth. The general form of the hazard model is:

$$h_i(t) = \alpha(t) + BX_i, \quad (3)$$

where, $h_i(t)$ is the "hazard" or instantaneous "risk" of issuing a concurrent EA/10-K in year t following 2005 for firm i, conditional on survival to t; $\alpha(t)$ is the baseline hazard, or the common probability that the firm – holding all covariates equal to zero – will issue a concurrent EA/10-K; B is a vector of unknown regression estimates; and X is the vector of observable covariates included in equation (2). A positive coefficient on a covariate of interest, such as *Restatement*, would indicate that firms experiencing a restatement announcement are faster in transitioning to a concurrent EA/10-K, relative to non-restatement firms.

The results are reported in Table 5. Consistent with *H1a*, we find a negative and significant coefficient on *Analyst Following*, suggesting that firms with greater investor sophistication are slower in moving to a concurrent EA/10-K. Consistent with *H1b*, we find positive and significant coefficients on *Restatement* and *Material Weakness*, suggesting that firms with recent realizations of poor accounting system or financial reporting quality move to a concurrent EA/10-K sooner than firms without such realizations. In fact, firms with a recent restatement (material weakness) announcement are 1.7 times (1.4 times) more likely to move to a concurrent EA/10-K than firms without a restatement (material weakness) announcement. Finally, consistent with *H1c*, we find a significant positive coefficient on *Percent of Peers Concurrent*, indicating that industry peer effects play a role in firms' decisions to move to a concurrent EA/10-K. Specifically, we find that

a firm whose industry peers all release concurrent EA/10-Ks are two times more likely to release a concurrent EA/10-K as firms in an industry where no peers release concurrent EA/10-Ks.

[Insert Table 5 Here]

4.2 Market Consequences Tests

4.2.1 Price-Leads Earnings (Hypothesis H2)

Hypothesis *H2* predicts greater stock price anticipation of the earnings information in concurrent EA/10-Ks compared to stand-alone EAs. To test this hypothesis, we use a price-leads-earnings analysis (e.g., DeFranco et al., 2011: Collins et al., 1994). Specifically, we compare the price-leads-earnings attributes for firms that switch from a stand-alone EA to a concurrent EA/10-K to a control group of matched stand-alone EAs. We identify our treatment firms as those that only issued stand-alone EAs prior to 2003, but begin issuing concurrent EA/10-Ks sometime thereafter. We then match each firm-year to a control observation from the same industry (GICS designation) and size quartile (market value of equity) with the closest ratio of earnings to market value of equity to ensure similar information content. By definition, our control observations only consist of stand-alone EAs over the entire time period. Our variable of interest is the cumulative stock return from fiscal year end until the two days *before* the EA. If returns during this period are more significantly associated with the firm's earnings once it begins releasing concurrent EA/10-Ks (incremental to any change for the control observations over the same time period), then this would indicate that the market anticipates more of the earnings news for concurrent EA/10-Ks. For ease of exposition, we estimate the following equation (time and firm subscripts suppressed) separately for treatment and control observations and use seemingly unrelated regressions techniques to compare the coefficients:[8]

[8] We find qualitatively similar results when we estimate a fully interacted model.

$$EARN = \alpha + \beta_1 PLE\_RET + \beta_2 PLE\_RET * POST + \beta_3 POST + Controls + Controls * POST + Time\ Fixed\ Effects + \varepsilon, \quad (4)$$

where *EARN* is the earnings before extraordinary items, scaled by the market value of equity at the beginning of the year; *PLE_RET* is the firm's buy-and-hold stock return from the first trading day after the fiscal year end up through two trading days before the EA; and *POST* is an indicator variable set to one for years on or after the treatment firm begins releasing concurrent EA/10-Ks, where the control observations are aligned in time. Our control variables include lagged earnings (*LAG_EARN*), the returns over the fiscal year (*FYRET*), the EA returns (*EA_RET*), the post-announcement returns up through 6-months following fiscal year end (*POST_RET*), and an indicator for the post period (*POST*). We present the results of equation (4) in Table 6.

[Insert Table 6 Here]

We document a positive association between price-lead-earnings returns (*PLE_RET*) and earnings once firms begin releasing concurrent EA/10-Ks; however, we find no significant association prior to the release of concurrent EA/10-Ks. Specifically, for our treatment firms, we document a significant coefficient of 0.067 on *PLE_RET * POST*, but an insignificant coefficient on *PLE_RET*. Moreover, price-lead-earnings returns are not positively associated with earnings for our control group in either the pre- or post-periods. Further, the coefficient on *PLE_RET*POST* for the treatment group is significantly greater than the same coefficient for the control group.[9]

[9] We also note that many of the control variables have a positive association with earnings, as expected. For example, we document positive and significant coefficients on *LAG_EARN*, *FYRET*, and *EA_RET* for both the treatment and control samples. Additionally, the interaction of our control variables with the *POST* indicator are generally not significant, except for *FYRET*POST* for the treatment firms. More importantly, however, *FYRET*POST* for the treatment group is not significantly different than that for the control group.

In addition, the only coefficient that shows true difference-in-difference characteristics is the *PLE_RET* variable. Collectively, this evidence suggests that investors anticipate more earnings information for concurrent EA/10-Ks than for stand-alone EAs.

We next examine the source of the anticipated news for concurrent EA/10-Ks relative to stand-alone EAs. First, we examine whether concurrent EA/10-K firms compensate for less timely EAs by increasing their issuance of management forecasts prior to the EA. Accordingly, we examine the propensity of firms to issue management forecasts from the fiscal year end to two days prior to the EA date. We examine the same sample of treatment and matched control observations as in the price leads earnings analysis in Table 6. The results are reported in Table 7. In Panel A, we find that the likelihood of issuing a management forecast from year-end to two days before the EA date in the post period is lower for both groups than in the pre-period as the ratio of proportions is 0.516 for the treatment group (Chi-square = 39.15) and 0.704 for the control group (Chi-square = 13.15). In Panel B, we examine the relation between management forecast issuance and concurrent EA/10-Ks using a logistic regression analysis. We find that the treatment group is significantly less likely to issue a management forecast from year-end to the EA date in the post period than the control group, as the coefficient on *POST*TREAT* is negative and significant. These results suggest that investors' greater anticipation of earnings news for concurrent announcements documented in the prior section is unlikely to be driven by increased voluntary disclosure by managers prior to the EA.

[Insert Table 7 Here]

We further examine whether the information in concurrent EA/10-Ks is more likely to be preempted by timelier peer firm EAs, which could give rise to the greater investor anticipation of the news in concurrent EA/10-Ks. Accordingly, we examine the propensity of concurrent EA/10-K firms to announce earnings later in the earnings season relative to control firms in the same industry

(i.e. same GICS code). We examine the same sample of treatment and matched control observations as in the price-leads-earnings analysis in Table 6, but restrict the sample to matched pairs in which both firms have a calendar year end. The results are reported in Table 8. In Panel A, we find an increase in the percentile ranking of the EA in the earnings season (*EARN_SEASON_PCT*) for the treatment firms, indicating that concurrent EA/10-Ks occur later in the earnings season (*POST* mean - *PRE* mean = 18.96). In contrast, we find a decrease in the percentile ranking of the EA in the earnings season for the control firms (*POST mean - PRE mean* = -2.98). In Panel B, we examine the relation between *EARN_SEASON_PCT* and concurrent EA/10-Ks using regression analysis. We find that the EAs of the treatment group occur significantly later in the earnings season in the post period than the control group, as the coefficient on *POST*TREAT* is positive and significant. These results suggest that investors' greater anticipation of earnings news for concurrent EA/10-Ks is partially attributable to the earnings news being preempted by more timely EAs of peer firms in the same industry.[10]

[Insert Table 8 Here]

4.2.2 Decision Usefulness (Hypothesis H3)

We next examine the decision usefulness of concurrent EA/10-Ks, relative to stand-alone EAs, after controlling for the timeliness of the announcement. We follow prior research and use the absolute value of short-window abnormal stock returns, abnormal stock return volatility, and abnormal volume around the EA to assess the information content of concurrent versus stand-alone EAs (e.g., Beaver, 1968; Landsman and Maydew, 2002; Collins et al., 2009; Landsman et

[10] In untabulated analyses, we confirm that these results are robust to regression techniques for proportional or bounded dependent variables. Because the results are consistent, we elect to tabulate the OLS specification for ease of interpretation.

al., 2012). For our first specification, we estimate the following regression with variable definitions found in Appendix B (time and firm subscripts suppressed):

$$|ARET|, AVAR\ or\ AVOL = \alpha + \beta_1 CONCUR + \beta_2 EALAG + \beta_3 TREND + \beta_4 LNMVE + \beta_5 FOLLOW + \beta_6 LEV + \beta_7 BN + \beta_8 ABSUE + \beta_9 STDRET + Firm\ Fixed\ Effects + \varepsilon, \quad (5)$$

where |*ARET*|, *AVAR*, and *AVOL* are the absolute value of abnormal stock returns, abnormal stock return volatility, and abnormal volatility, respectively, defined similarly to Collins et al. (2009) and Landsman et al. (2012); *CONCUR* is our primary variable of interest which is set to one for concurrent EA/10-Ks and zero otherwise; and *EALAG* is the number of days from fiscal year end to the EA, which controls for the timeliness of the announcement.

We follow Landsman et al. (2012) and include a series of control variables identified by prior research as potentially affecting the decision usefulness or information content of EAs. For example, we include a *TREND* variable to allow for possible time trends, as documented in Landsman and Maydew (2002). *LNMVE* proxies for firm size and *FOLLOW* proxies for analyst following, which has been shown to have a positive association with *AVAR* (Bamber et al., 2011; DeFond et al., 2007). *LEV* proxies for firm leverage. *BN* is an indicator variable for bad news and is included based on prior work that documents that market responses are more sensitive to good news than bad news (Karpoff, 1987). *ABSUE* is the absolute value of the unexpected earnings, which proxies for the amount of earnings news. *STDRET* is a proxy for uncertainty. We also include firm fixed effects to control for unobservable time-invariant firm characteristics.

We present the results of equation (5) in Panel A of Table 9. The first set of columns documents the results with |*ARET*|, the second set with *AVAR*, and the third set with *AVOL* as the dependent variable. The findings in Table 9 show that the coefficient on our variable of interest (*CONCUR*) is negative and significant across all specifications. The control variables are generally

consistent with prior work. For example, we document consistently positive and significant coefficients on *TREND* and *FOLLOW* and consistently negative and significant coefficients on *BN*. Collectively, the results suggest that the market response to concurrent EA/10-Ks is muted, relative to that of stand-alone EAs, after controlling for the timeliness of the announcement.

For our second analysis, we use a difference-in-difference analysis. We identify our treatment firms as those that only issued stand-alone EAs prior to 2003, but begin issuing concurrent EA/10-Ks sometime thereafter. We then match these treatment firms to a set of control firms from the same industry (GICS designation) and size quartile (market value of equity) with the closest change in EA lag (i.e., we calculate the difference in *EALAG* for our treatment firm from its last stand-alone EA to its first concurrent EA/10-K and find the closest match in the same years from our set of possible control observations). We then use the last stand-alone EA and the first concurrent EA/10-K observations for our treatment firms and compare them to the same year observations (which are both stand-alone EAs) for our control firms. We examine if the absolute value of abnormal returns (column 1), abnormal return volatility (column 2), and abnormal volume (column 3) around EAs are significantly different once the firm begins releasing concurrent EA/10-Ks and whether this change is incremental to any change for the control firms over the same time period. While we find a negative and statistically insignificant coefficient on *POST*TREAT* when |*ARET*| is the dependent variable, we find significant negative coefficients on *POST*TREAT* when *AVAR* and *AVOL* are the dependent variables.

While the inclusion of firm fixed effects in the first analysis and the difference-in-difference design in the second analysis are intended to address the endogeneity of issuing a concurrent EA/10-K, we perform a third analysis to further mitigate this concern. Specifically, for our third test we use an entropy balancing approach that weights each control observation so that

the mean, variance, and skewness of observable characteristics are similar across treatment (*CONCUR*=1) and control (*CONCUR*=0) conditions (Hainmueller, 2012). Accordingly, we entropy balance on the covariates from Table 4 that are determinants of the decision to release a concurrent EA/10-K. Specifically, we entropy balance on each of the underlying variables (rather than the factors) for completeness. Appendix C reports the mean, variance, and skewness of each variable for the concurrent EA/10-K group and for the stand-alone EA group both before and after entropy balancing. The entropy balancing results in treatment and control groups with nearly identical mean, variance, and skewness of the balanced variables.

Panel C of Table 9 reports the results of the test of differential decision usefulness of concurrent EA/10-Ks relative to stand-alone EAs after entropy balancing. Columns (1), (3), and (5) report the results with no control variables while columns (2), (4), and (6) include the control variables. We find a negative and statistically significant coefficient on *CONCUR* for all three dependent variables. Collectively, the results in Table 9 reject the null hypothesis *H3*, in favor of a muted investor reaction to concurrent EA/10-Ks relative to stand-alone EAs.

In untabulated analyses, we test whether the market reaction to concurrent EA/10-Ks depends on whether it is the first instance of a concurrent EA/10-K disclosure by a firm and whether the market reaction to concurrent EA/10-Ks depends on whether the firm persistently releases such disclosures. We find that the market reaction to concurrent EA/10-Ks is muted regardless of whether it is the first instance of a concurrent EA/10-K by a firm or not, and regardless of whether the firm persistently releases concurrent EA/10-Ks or not.

[Insert Table 9 Here]

We next provide insight into whether the muted reaction to concurrent EA/10-Ks is associated with information overload (Bloomfield, 2002), limited investor attention (Hirshleifer et

al., 2009), or investor perceptions of lower information quality for concurrent EA/10-Ks.[11] Table 10, Panel A provides evidence on whether the muted market reaction to concurrent EA/10-Ks is driven by information overload. Specifically, we examine whether the attenuated reaction to concurrent EA/10-Ks is associated with the amount and complexity of information included in the 10-K filing. We apply principal component analysis to the length of the 10-K and the FOG index for the 10-K to construct a measure of the difficulty in processing the 10-K (*INFOPROCESS*). We examine whether the muted reaction is more pronounced for 10-Ks that are more difficult to process. Consistent with the notion of information overload, we find significant negative relations between *AVAR* and *AVOL* and *CONCUR*INFOPROCESS*. We find no relation between |*ARET*| and *CONCUR*INFOPROCESS*. These results suggest that the muted market reaction to concurrent EA/10-Ks is more pronounced when the 10-K is longer and more difficult to read. Collectively, these results are consistent with investors receiving too much information in a concurrent EA/10-K to process immediately.

Table 10, Panel B presents empirical tests to examine whether the market reaction to concurrent EA/10-Ks is driven by limited investor attention. The panel presents an analysis of the market reaction to concurrent EA/10-Ks based on the number of disclosures released on the same day by firms in the same industry, i.e. *d(NUM_iRELEASES).*[12] We find that the muted

[11] One additional explanation for the attenuated investor reaction to concurrent EA/10-Ks is that investors primarily respond to EA information and firms that switch from stand-alone to concurrent EA/10-Ks reduce the amount of information that is included in the EA. To investigate this possibility, we randomly selected 60 first-time concurrent EA/10-K observations equally from the three filer status subgroups during our sample period and compared the content of the EA disclosure to the prior year's stand-alone EA. In 58 of the 60 cases, the amount of content in the EA disclosure was either similar to the prior year or more detailed. This suggests that our result is not due to a reduction in EA disclosure content when firms switch from stand-alone to concurrent EA/10-K disclosures.

[12] In untabulated analyses, we find that concurrent EA/10-Ks coincide with significantly fewer industry- and economy-wide EAs compared to stand-alone EAs but with significantly more industry- and economy-wide combined EA, 10-K, and 10-Q releases on the same day, compared to stand-alone EAs. We tabulate the results using industry-wide combined EA, 10-K, and 10-Q releases. Results are quantitatively similar if we use an economy-wide measure of releases.

reaction to concurrent EA/10-Ks persists after controlling for the number of disclosures made by firms in the industry, and we do not find evidence of a significant negative coefficient on *CONCUR x d(NUM_iRELEASES)*. Overall, the results do not support the notion that the market's reaction to concurrent EA/10-Ks is muted because of more disclosure releases by firms in the same industry, as would be expected if limited attention plays a role in the muted reaction to concurrent EA/10-Ks.

While our decision usefulness tests in this section explicitly control for the timing of the earnings announcement (and therefore a firm's general placement in the earnings season), they do not necessarily account for the firm's *relative* placement within the industry. As such, in untabulated analyses, we also examine whether our finding of a muted market reaction to concurrent EA/10-Ks, and our results indicating these disclosures are associated with information overload, are robust to controlling for the ranking of the firm's EA relative to the EAs of its industry peers. In order to align fiscal periods across firms, we limit this analysis to calendar year end firms. Although this requirement causes a reduction in sample size, we continue to find significantly muted market responses to concurrent EA/10-Ks using the *AVAR* and *AVOL* as the dependent variable. The coefficient on *CONCUR* for the absolute value of returns (i.e. |*ARET*|) also reflects a muted response, but is no longer significant at conventional levels (p-value of 0.18). In addition, we continue to find explanatory power for the information overload explanation.

Finally, to provide additional insight into whether the muted market reaction to concurrent EA/10-Ks is attributable to information overload or to investor perceptions of lower information quality or greater uncertainty, we examine whether post-earnings-announcement-drift (PEAD) in the 20 days after the announcement is more pronounced for concurrent EA/10-Ks. If concurrent EA/10-Ks are associated with concerns over information quality and/or uncertainty, then the muted

reaction to these disclosures should be relatively permanent. As such, these disclosures should not have implications for stock returns in the days after the EA. In contrast, if concurrent EA/10-Ks are associated with information overload, then these disclosures are likely to be followed by more pronounced PEAD as investors process the information in the disclosure and incorporate it into prices over time.

Panel C of Table 10 presents tests of the relation between PEAD and concurrent EA/10-Ks. The dependent variable in the analysis is the buy-and-hold market-adjusted return from day +2 to day +20, where day 0 is the day of the EA. We control for the scaled decile ranks of *EALAG*, *LNMVE*, *MTB*, *BETA*, and *FOLLOW*. Our variables of interest are the scaled decile rank of unexpected earnings (*d(UE)*) and the interaction between *d(UE)* and *CONCUR*. If concurrent EA/10-Ks are associated with information overload, then the coefficient on *d(UE)*CONCUR* would be positive and significant as the information in the disclosure is impounded into prices in the days after the announcement. Consistent with prior research, we find a significant positive coefficient on *d(UE)*, consistent with PEAD, on average. We also find a significant positive coefficient on *d(UE)*CONCUR*, indicating that PEAD is more pronounced for concurrent EA/10-Ks relative to stand-alone EAs. These findings provide additional support for the notion that investors have greater difficulty processing concurrent EA/10-Ks compared to stand-alone EAs.

[Insert Table 10 Here]

4.3 Quarterly Analyses

In a final set of untabulated analyses, we examine whether there is also a trend toward concurrent EA/10-Qs for quarterly announcements, as well as the market reaction to concurrent EA/10-Qs relative to stand-alone quarterly EAs. Similar to the increasing trend towards concurrent EA/10-Ks over time, we find that firms are increasingly releasing quarterly EAs concurrently with

the 10-Q. We also test whether there is a differential market reaction to concurrent EA/10-Qs relative to stand-alone quarterly EAs, after controlling for differential timing. We do not find significant evidence of a muted reaction to concurrent EA/10-Qs for Q1-Q3. This finding is consistent with the idea that since 10-Q disclosures are less detailed and easier to process than 10-Ks, investor information overload is attenuated for 10-Qs compared to 10-Ks.

5. Conclusion

We document the steady disappearance of stand-alone EAs over time. Instead, firms are increasingly releasing concurrent EA/10-Ks, whereby the EA is delayed to be concurrent with the 10-K filing. We predict and find that the likelihood of releasing concurrent EA/10-Ks is negatively associated with the level of investor sophistication, positively associated with impediments to compiling reliable internal accounting information (e.g. accounting system weaknesses, operating and reporting complexity, limited auditor resources, audit uncertainty), and positively associated with the percentage of industry peers that release concurrent EA/10-Ks.

We also document important market consequences – in terms of greater anticipation of earnings information by the market and an attenuated market response to the EA after controlling for the timing of the announcement – for concurrent EA/10-Ks relative to stand-alone EAs. Our findings suggest that the information in concurrent EA/10-Ks is preempted by timelier industry peer EAs and that concurrent EA/10-Ks are less decision useful relative to stand-alone EAs, even after controlling for timing of the announcement. Our results also indicate that information overload plays a role in the muted market reaction to concurrent EA/10-Ks.

Our study provides important contributions to academic research. We uncover a growing disparity in how firms disclose earnings to the market and investigate the factors associated with

the decision of firms to release concurrent EA/10-Ks. Further, while prior research either ignores the differential implications of concurrent EA/10-Ks or excludes concurrent EA/10-Ks when examining the market response to earnings or 10-K filings (e.g. Li and Ramesh, 2009), we explicitly study the market implications of concurrent EA/10-Ks relative to stand-alone EAs. Overall, the results suggest that the rise of concurrent EA/10-Ks has important implications for future work exploring firm disclosure and the nature and information content of earnings announcements.

References

Alexander, C., Bauguess, S. Bernile, G. Lee, Y., and Marietta-Westberg, J. 2013. Economic effects of SOX Section 404 compliance: corporate insider perspective. *Journal of Accounting and Economics* 56 (2-3): 267-290.

Ajinkya, B., Bhojraj, S., Sengupta, P., 2005. The association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of Accounting Research* 43 (3): 343-376.

Arif, S., De George, E., 2017. Does financial reporting frequency affect investors' reliance on alternative sources of information? Evidence from earnings information spillovers around the world. Working Paper.

Asthana, S., Balsam, S., Sankaraguruswamy, S. 2004. Differential response of small versus large investors to 10-K filings on EDGAR. *The Accounting Review* 79 (3), 571-589.

Ball, R., Brown, P., 1968. An empirical evaluation of accounting income numbers. *Journal of Accounting Research* 6 (2), 159-178.

Bamber, L., Barron, O., Stevens, D., 2011. Trading volume around EAs and other financial reports: Theory, research design, empirical evidence, and directions for future research. *Contemporary Accounting Research* 28 (2), 431-471.

Beaver, W., 1968. The information content of annual EAs. *Journal of Accounting Research* 6 (1), 67-92.

Becker, C., Defond, M., Jiambalvo, J., Subramanyam, K., 1998. The effect of audit quality on earnings management. *Contemporary Accounting Research* 15 (1), 1-24.

Beyer, A., D. A. Cohen, T. Z. Lys, and B. R. Walther. 2010. The financial reporting environment: Review of the recent literature. *Journal of Accounting and Economics* 50: 296-343.

Bloomfield, R., 2002. The "Incomplete Revelation Hypothesis" and financial reporting. *Accounting Horizons* 16 (3), 233–243.

Bonsall, S., Leone, A., Miller, B., Rennekamp, K., 2017. A plain English measure of financial reporting readability. *Journal of Accounting and Economics* 63 (2), 329-357.

Brochet, F., Faurel, L., Mcvay, S., 2011. Manager-Specific Effects on Earnings Guidance: An Analysis of Top Executive Turnovers. *Journal of Accounting Research* 49 (5), 1123-1162.

Bronson, S., Hogan, C., Johnson, M., Ramesh, K., 2011. The unintended consequences of PCAOB auditing Standard Nos. 2 and 3 on the reliability of preliminary earnings releases. *Journal of Accounting and Economics* 51 (1), 95-114.

Bushman, R., Chen, Q., Engel, E., Smith, A., 2004. Financial accounting information, organizational complexity and corporate governance systems. *Journal of Accounting and Economics* 37 (2), 167-201.

Callen, J., Khan, M., Lu, H., 2013. Accounting quality, stock price delay, and future stock returns. *Contemporary Accounting Research* 30 (1), 269-295.

Collins, D. W., Kothari, S.P., Shanken, J., Sloan, R., 1994. Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association. *Journal of Accounting and Economics* 18, 289-324.

Collins, D.W., Li, O.Z., Xie, H., 2009. What drives the increased informativeness of EAs over time? *Review of Accounting Studies* 14 (1), 1-30.

Darrough, M., Stoughton, N. 1990. Financial disclosure policy in an entry game. *Journal of Accounting and Economics* 12 (1-3): 219-243.

DeFond, M., Hung, M., Trezevant, R., 2007. Investor protection and the information content of annual EAs: international evidence. *Journal of Accounting and Economics* 43, 37–67.

De Franco, G., Kothari, S.P., Verdi, R., 2011. The Benefits of Financial Statement Comparability. *Journal of Accounting Research* 49 (4), 895-931

Dellavigna, S., Pollet, J., 2009. Investor inattention and Friday EAs. *The Journal of Finance* 64 (2), 709-749.

Denis, D.J., Denis, D.K., Yost, K., 2002. Global diversification, industrial diversification, and firm value. *Journal of Finance* 57 (5), 1951-1980.

Doyle, J., Magilke, M., 2013. Decision usefulness and accelerated filing deadlines. *Journal of Accounting Research* 51 (3), 549-581.

Duru, A., Reeb, D., 2002. Geographic and industrial corporate diversification: the level and structure of executive compensation. *Journal of Accounting Auditing and Finance* 17 (1), 1-24.

El-Gazzar, S. 1998. Predisclosure information and institutional ownership: A cross-sectional examination of market revaluations during earnings announcement periods. *The Accounting Review* 73 (1), 119-129.

Foster, G. 1981. Intra-industry information transfers associated with earnings releases. *Journal of Accounting and Economics* 3 (3), 201-232.

Francis, J., Schipper, K., Vincent, L., 2002. Expanded disclosures and the increased usefulness of EAs. *The Accounting Review* 77 (3), 515-546.

Francis, J. R., and M. Yu, 2009. The effect of Big 4 office size on audit quality. *The Accounting Review* 84 (5): 1521–1552.

Ge, W., Koester, A. and McVay, S. 2017. Benefits and costs of Sarbanes-Oxley section 404(b) exemption: evidence from small firms' internal control disclosures. *Journal of Accounting and Economics*, forthcoming.

Givoly, D., Hayn, C., D'Souza, J., 1999. Measurement errors and information content of segment reporting. *Review of Accounting Studies* 4 (1), 15-43.

Gleason, C.A., Jenkins, N.T. and Johnson, W.B., 2008. The contagion effects of accounting restatements. *The Accounting Review* 83 (1), 83-110.

Griffin, P. 2003. Got information? Investor response to form 10-K and form 10-Q EDGAR filings. *Review of Accounting Studies* 8 (4), 433-460.

Habib, M., Johnsen, D.B., Naik, N., 1997. Spinoffs and information. *Journal of Financial Intermediation* 6 (2), 153-176.

Han, J., Wild, J. 1990. Unexpected earnings and intra-industry transfers: Further evidence. *Journal of Accounting Research* 28, 211-219.

Han, J.C., Wild, J.J. and Ramesh, K., 1989. Managers' earnings forecasts and intra-industry information transfers. *Journal of Accounting and Economics*, *11*(1), 3-33.

Hainmueller, J. 2012. Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. Political Analysis 20 (1): 25-46.

Hirshleifer, D., Lim, S. and Teoh. S. 2009. Driven to distraction: Extraneous events and underraction to earnings news. *Journal of Finance* 64 (5), 2289-2325.

Hoskin, R., Hughes, J., Ricks, W., 1986. Evidence on the incremental information content of additional firm disclosures made concurrently with earnings. *Journal of Accounting Research* 24 (supp), 1-32.

Johnson, T., and E. So. 2017. Time Will Tell: Information in the Timing of Scheduled Earnings News. *Journal of Financial and Quantitative Analysis*, forthcoming.

Karpoff, J., 1987. The relation between price changes and trading volume: A survey. *Journal of Financial and Quantitative Analysis* 22 (01), 109-126.

Krishnan, J. and J. Yang. 2009. Recent trends in audit report and EA lags. *Accounting Horizons* 23 (3): 265-288.

Landsman, W., Maydew, E., 2002. Has the information content of quarterly EAs declined in the past three decades? *Journal of Accounting Research* 40 (3), 797-808.

Landsman, W., Maydew, E., Thornock, J., 2012. The information content of annual EAs and mandatory adoption of IFRS. *Journal of Accounting and Economics* 53 (1), 34-54.

Lawrence, A. 2013. Individual investors and financial disclosure. *Journal of Accounting and Economics* 56 (1), 130-147.

Li, F., 2008. Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics* 45 (2), 221-247.

Li, E., Ramesh, K., 2009. Market reaction surrounding the filing of periodic SEC reports. *The Accounting Review* 84 (4), 1171-1208.

Marshall, N., Schroeder, J., Yohn, T.L., 2017. An Incomplete Audit at the EA: Implications for Financial Reporting Quality and the Market's Reliance on Earnings. Kelley School of Business Research Paper No. 2014-38. Available at SSRN: https://ssrn.com/abstract=2370048

Miller, B., 2010. The effects of reporting complexity on small and large investor trading. *The Accounting Review* 85 (6), 2107-2143.

O'Brien, P., McNichols, M., Lin, H., 2005. Analyst Impartiality and Investment Banking Relationships. *Journal of Accounting Research* 43 (4), 623-650.

Reeb, D., Kwok, C.Y., Baek, Y., 1998. Systematic risk of the multinational corporation. *Journal of International Business Studies* 29 (2), 263-279.

Rogers, j, , Stocken, P. 2005. Credibility of Management Forecasts. *The Accounting Review* 80 (4): 1233-1260.

Schroeder, J., 2016. The impact of audit completeness and quality on EA GAAP disclosures. *The Accounting Review*, 91 (2), 677-705.

Securities and Exchange Commission (SEC). 2003. Final rule: Acceleration of periodic report filing dates and disclosure concerning website access to reports. Release No. 33-8128. Available at: http://www.sec.gov/rules/final/33-8128.htm

Sengupta, P., 2004. Disclosure timing: Determinants of quarterly earnings release dates. *Journal of Accounting and Public Policy* 23 (6), 457-482.

Sivakumar, K.N., and Waymire, G., 1993. The information content of earnings in a discretionary reporting environment: Evidence from NYSE industrials, 1905-10. *Journal of Accounting Research*, 62-91.

Tse, S., and Tucker, J. W., 2010. Within-industry timing of earnings warnings: do managers herd? *Review of Accounting Studies* 15 (4), 879-914.

Verrecchia, R. 1983. Discretionary disclosure. *Journal of Accounting and Economics* 5: 179-194.

You, H., Zhang, X., 2009. Financial reporting complexity and investor underreaction to 10-K information. *Review of Accounting Studies* 14 (4), 559-586.

Appendix A
Additional Descriptive Statistics on Firms with Concurrent EA/10-Ks

Panel A: Top 100 Concurrent EA/10-K Firms by Market Cap

Firms with observations after their first Concurrent EA/10-K

	Descriptives of EAs After First Concurrent EA		
Company Name	**# Concurrent**	**# Annual EAs**	**% Concurrent**
QUALCOMM INC	9	9	100%
GENERAL MOTORS CO	1	1	100%
EXPRESS SCRIPTS HOLDING CO	1	1	100%
FANNIE MAE	2	2	100%
VIACOM INC	7	7	100%
PRICELINE GROUP INC	2	2	100%
REYNOLDS AMERICAN INC	1	1	100%
AMAZON.COM INC	5	5	100%
NEWMONT MINING CORP	6	6	100%
WASTE MANAGEMENT INC	4	4	100%
MEDCO HEALTH SOLUTIONS INC	4	4	100%
EDISON INTERNATIONAL	7	7	100%
BROADCOM CORP	4	4	100%
NOBLE ENERGY INC	6	6	100%
STAPLES INC	9	9	100%
NORTEL NETWORKS CORP	1	1	100%
PG&E CORP	8	8	100%
NII HOLDINGS INC	7	7	100%
AES CORP	7	7	100%
OFFICE DEPOT INC	8	8	100%
SOUTHWESTERN ENERGY CO	5	5	100%
STARZ	2	2	100%
DISH NETWORK CORP	10	10	100%
GENON ENERGY INC	3	3	100%
NISOURCE INC	1	1	100%
DONNELLEY (R R) & SONS CO	7	7	100%
WINDSTREAM HOLDINGS INC	2	2	100%
SEMPRA ENERGY	6	6	100%
FLUOR CORP	8	8	100%
KBR INC	6	6	100%
CABLEVISION SYS CORP -CL A	1	1	100%
VORNADO REALTY TRUST	10	10	100%
KEYSPAN CORP	1	1	100%
ANALOG DEVICES	5	5	100%
CAREFUSION CORP	1	1	100%
MYLAN NV	4	4	100%
PINNACLE WEST CAPITAL CORP	1	1	100%
SCHEIN (HENRY) INC	6	6	100%
TENET HEALTHCARE CORP	9	10	90%
AMERICAN INTERNATIONAL GROUP	7	8	88%
MARRIOTT INTL INC	5	6	83%
DOLLAR GENERAL CORP	5	6	83%
TRANSOCEAN LTD	3	4	75%
DTE ENERGY CO	3	4	75%
SIGMA-ALDRICH CORP	3	4	75%
MOSAIC CO	4	6	67%

Appendix A (Continued)

Company Name	# Concurrent	# Annual EAs	% Concurrent
QWEST COMMUNICATION INTL INC	2	3	67%
FIRST SOLAR INC	3	5	60%
APOLLO EDUCATION GROUP INC	3	5	60%
BLOCK H & R INC	3	5	60%
ECOLAB INC	1	2	50%
WELLTOWER INC	1	2	50%
MCKESSON CORP	2	4	50%
COCA-COLA EUROPEAN PARTNERS	1	2	50%
GARMIN LTD	2	4	50%
CA INC	2	5	40%
DXC TECHNOLOGY COMPANY	1	3	33%
BERKSHIRE HATHAWAY	2	7	29%
GRAHAM HOLDINGS CO	2	7	29%
EL PASO CORP	1	4	25%
VIRGIN MEDIA INC	1	4	25%
BIOGEN INC	1	5	20%
SPRINT CORP	1	7	14%
CBS CORP	0	1	0%
DEVON ENERGY CORP	0	1	0%
SEARS HOLDINGS CORP	0	7	0%
NORTHROP GRUMMAN CORP	0	3	0%
QUEST DIAGNOSTICS INC	0	6	0%
ENERGY TRANSFER EQUITY LP	0	6	0%
EXPEDITORS INTL WASH INC	0	1	0%
ENBRIDGE ENERGY PRTNRS -LP	0	2	0%
GEORGIA-PACIFIC CORP	0	1	0%
TIM HORTONS INC	0	1	0%
PATTERSON-UTI ENERGY INC	0	8	0%
DENTSPLY SIRONA INC	0	1	0%
CIT GROUP INC	0	4	0%

Firms with no additional observations after their first Concurrent EA/10-K

Company Name
PEPSICO INC
CVS HEALTH CORP
EOG RESOURCES INC
T-MOBILE US INC
ALLTEL CORP
HILTON WORLDWIDE HOLDINGS
CERNER CORP
OMNICOM GROUP
CHESAPEAKE ENERGY CORP
ANTERO RESOURCES CORP
CONSOLIDATED EDISON INC
LIBERTY MEDIA SIRIUSXM GROUP

Company Name
LIBERTY GLOBAL PLC GLOBAL GP
HERTZ GLOBAL HOLDINGS INC
MICHAEL KORS HOLDINGS LTD
TRIPADVISOR INC
BIOMARIN PHARMACEUTICAL INC
MOLSON COORS BREWING CO
WESTERN GAS EQUITY PRTNRS LP
ADT CORP
QUINTILES IMS HOLDINGS INC
ALLIANT ENERGY CORP
BARR PHARMACEUTICALS INC
SPROUTS FARMERS MARKET

Appendix A (Continued)

Panel B: Percent of Concurrent EA/10-Ks by Industry in 2002, 2006, and 2013

GICS	GICS Description	Number of Firms in 2013	Percent Concurrent in 2002	Percent Concurrent in 2006	Percent Concurrent in 2013
551050	Power and Renewable Electricity Producers	9	N/A	50%	78%
551020	Gas Utilities	8	13%	25%	75%
551040	Water Utilities	11	17%	80%	73%
201030	Construction & Engineering	23	22%	52%	65%
352010	Biotechnology	180	13%	39%	61%
551010	Electric Utilities	30	8%	48%	57%
551030	Multi-Utilities	20	7%	48%	55%
404030	Real Estate Management & Development	24	42%	64%	54%
251010	Auto Components	31	13%	40%	52%
201070	Trading Companies & Distributors	24	14%	27%	50%
303020	Personal Products	12	7%	45%	50%
302010	Beverages	14	14%	25%	50%
101020	Oil, Gas & Consumable Fuels	223	18%	40%	48%
352020	Pharmaceuticals	66	12%	40%	47%
151040	Metals & Mining	49	6%	34%	47%
253020	Diversified Consumer Services	18	18%	23%	44%
254010	Media	61	14%	29%	43%
201020	Building Products	22	6%	22%	41%
202010	Commercial Services & Supplies	49	10%	21%	41%
301010	Food & Staples Retailing	10	11%	31%	40%
251020	Automobiles	5	0%	25%	40%
302030	Tobacco	5	20%	17%	40%
201040	Electrical Equipment	36	13%	27%	36%
201010	Aerospace & Defense	31	5%	31%	35%
302020	Food Products	31	13%	25%	35%
452030	Electronic Equipment, Instruments & Components	68	13%	22%	35%
151010	Chemicals	66	7%	19%	35%
501020	Wireless Telecommunication Services	9	15%	38%	33%
255020	Internet & Direct Marketing Retail	19	5%	5%	32%
253010	Hotels, Restaurants & Leisure	76	11%	30%	32%
402020	Consumer Finance	16	0%	15%	31%
252020	Leisure Products	13	10%	14%	31%
201060	Machinery	75	7%	16%	31%
351020	Health Care Providers & Services	72	8%	28%	31%
101010	Energy Equipment & Services	56	15%	28%	30%
402030	Capital Markets	89	15%	25%	30%
404020	Real Estate Investment Trusts (REITs)	186	16%	21%	30%
252030	Textiles, Apparel & Luxury Goods	21	15%	26%	29%
351030	Health Care Technology	14	22%	19%	29%
255040	Specialty Retail	33	4%	14%	27%
351010	Health Care Equipment & Supplies	85	8%	17%	27%
202020	Professional Services	37	19%	26%	27%

Appendix A (Continued)

GICS	GICS Description	Number of Firms in 2013	Percent Concurrent in 2002	Percent Concurrent in 2006	Percent Concurrent in 2013
501010	Diversified Telecommunication Services	30	18%	25%	27%
452010	Communications Equipment	34	7%	17%	26%
451030	Software	67	5%	15%	24%
401020	Thrifts & Mortgage Finance	83	3%	4%	23%
402010	Diversified Financial Services	27	13%	23%	22%
403010	Insurance	108	5%	15%	21%
452020	Technology Hardware, Storage & Peripherals	15	10%	11%	20%
201050	Industrial Conglomerates	5	9%	27%	20%
203030	Marine	5	20%	44%	20%
303010	Household Products	5	23%	29%	20%
451020	IT Services	57	5%	14%	19%
352030	Life Sciences Tools & Services	26	11%	10%	19%
203020	Airlines	11	0%	0%	18%
451010	Internet Software & Services	91	8%	17%	18%
255010	Distributors	6	7%	50%	17%
151030	Containers & Packaging	13	0%	10%	15%
252010	Household Durables	34	5%	17%	15%
203010	Air Freight & Logistics	10	7%	22%	10%
453010	Semiconductors & Semiconductor Equipment	70	4%	8%	9%
203040	Road & Rail	26	3%	9%	8%
151050	Paper & Forest Products	17	0%	8%	6%
401010	Banks	290	1%	2%	4%

Appendix B
Variable Definitions

Variable	***Definition of Variable***
Primary Variables of Interest	
CONCUR	An indicator variable set to one for firm years where the firm releases its EA on the same day as the 10-K filing or on the day preceding the 10-K filing, zero otherwise. We allow for the one day difference to account for any time-stamp or procedure differences between Compustat, I/B/E/S and Edgar. Following prior research, we determine EA dates as the earlier of the I/B/E/S or Compustat EA date (Dellavigna and Pollet, 2009). We gather filing dates from Edgar.
EALAG	Number of days between fiscal year end and the EA date. We determine EAs dates as the earlier of the I/B/E/S or Compustat EA dates.
FILELAG	Number of days between fiscal year end and the filing date of the 10-K. Filing dates are determined according to Edgar.
| *ARET* |	The absolute value of abnormal stock returns for days -1, 0, and +1, relative to announcement day 0. Abnormal returns are calculated using market model residuals for firm-year *i* in the non-event window (*t-60* to *t-10* and *t+10* to *t+60*).
AVAR	Abnormal stock return volatility, or the ratio of the event window return volatility to the return volatility in the non-event period, calculated consistently with prior research (e.g., Landsman et al., 2012). Specifically, $AVAR_i = \ln(\overline{u_{it}^2} / \sigma_i^2)$, where u^2 is the mean of the squared market model returns for days -1, 0 and +1, relative to announcement day 0; and σ^2 is the variance of the market model residuals for firm-year *i* in the non-event window (*t-60* to *t-10* and *t+10* to *t+60*).
AVOL	Abnormal trading volume, or the ratio of the event period volume to the average estimation-period volume, calculated consistently with prior research (e.g., Landsman et al., 2012). Specifically, $AVOL_i = \ln(\overline{V_{it}} / V_i)$, where V_{it} is the shares of firm *i* traded during day *t* divided by shares outstanding for firm-year *i* during day *t*, where t is -1, 0, and +1, relative to announcement day 0. V_i is the average daily trading volume for firm-year *i* for days *t-60* to *t-10* and *t+10* to *t+60*.
EARN	Earnings before extraordinary items (*IB*) scaled by beginning of year market value of equity.
MF in PLE Window	Indicator variable set to one if the firm issues a management forecast between the fiscal year end and the earnings announcement date, zero otherwise.
EARN_SEASON_PCT	The earnings season percentile ranking, defined as the firm's percentile rank within its industry (GICS) based on the earnings announcement dates for all calendar year-end firms in the industry.
Industry and Year Designations	
Industry	We use 6-digit GICS codes for our industry classifications.
YEAR	For consistency with regulatory filing deadlines, we group observations by regulatory filing deadline years (e.g., the year 2003 includes fiscal year ends >= 12/15/2003 and < 12/15/2004).

Explanatory Variables	
LAF; AF; NAF	Large-accelerated, accelerated, and non-accelerated filers, respectively. We define *LAF* as firm-years with a market-cap > $700M, *AF* as firm-years with a market-cap > $75M and <= $700M, *NAF* as firm-years with a market-cap <= $75M.
TREND	A time trend variable, calculated as transition year t less 1995.
LNMVE	The natural log of the market value of equity.
MTB	The ratio of a firm's market value of equity at fiscal year end to its book value.
BETA	The slope coefficient from regressing daily returns on the CRSP value-weighted index over the fiscal year.
FOLLOW	The natural log of 1 plus the number of analysts providing annual earnings estimates during the year.
BIGN	An indicator variable set to one if the firm's auditor is a Big-N audit firm, zero otherwise.
ROA	The ratio of operating income after depreciation and amortization (*OIADP*) to total assets.
LOSS	An indicator variable set to one if *OIADP* is negative, zero otherwise.
LEV	The ratio of total liabilities to total assets, as of fiscal-year-end.
BN	An indicator variable set to one when the change in earnings is negative, zero otherwise. Specifically, we calculate the change in operating earnings after depreciation (*OIADP*) in the current year, relative to the prior year.
ABSUE	The absolute difference between actual earnings per share and the most recent mean analyst estimate of earnings, divided by the stock price at fiscal year-end. If the firm does not have analyst coverage, then the change in OIADP per share is used as unexpected earnings.
STDRET	The standard deviation of daily returns over the fiscal year.
POST	For treatment firms (i.e., firms that transition from no concurrent EA/10-Ks to concurrent EA/10-Ks after 2003), *POST* is an indicator variable set to one for firm-years on or after the first instance of a concurrent filing. For control firms, *POST* follows the timing of the matched treatment firm. That is, if the matched treatment firm first has a concurrent EA/10-K in 2005, then the control firm would have *POST* set to one for 2005 and beyond, zero for firm years preceding 2005.
PLE_RET	The cumulative buy-and-hold returns for the firm's stock from the trading day after fiscal year end up through two trading days before the EA date.
FYRET	The cumulative buy-and-hold returns for the firm's stock for the fiscal year.
EA_RET	The cumulative buy-and-hold returns for the firm's stock in the three trading day window surrounding the EA (i.e., *t-1* to *t+1*).
POST_RET	The cumulative buy-and-hold returns for the firm's stock from two trading days after the EA date (*t+2*) up through 6 months following fiscal year end.
INST_OWN	The percentage of shares owned by institutional investors, calculated using data from Thomson Reuters.
SH	The natural log of the number of shareholders.
LNBSEG	The natural log of the number of business segments.
LNGSEG	The natural log of the number of geographic segments.

FOREIGN	An indicator variable set to 1 if a firm has foreign operations in the year, zero otherwise. We set *FOREIGN* equal to 1 when the Compustat variable *FCA* is not missing, zero otherwise.
FOG_10-K	The Gunning (1952) Fog Index for the annual report portion (Form 10-K and Exhibit 13) of the firm's parsed 10-K filing for the current year. We follow the parsing procedures in prior literature (see Bonsall et al. (2017) and Li (2008)).
LENGTH_10-K	The length (number of words) of the annual report portion (Form 10-K and Exhibit 13) of the firm's parsed 10-K filing for the current year. We follow the parsing procedures in prior literature (see Bonsall et al. (2017) and Li (2008)).
PRED_MW	The predicted value of the likelihood that a firm will have a material weakness. To calculate the predicted value, we estimate the following model for years 2003 to 2013 based on a common model from the material weakness literature (e.g., Ge et al., 2017): $MW_{i,t} = \beta_0 + \beta_1 LNMVE_{i,t} + \beta_2 LNAGE_{i,t} + \beta_3 LNBSEG_{i,t} + \beta_4 FOREIGN_{i,t} + \beta_5 MERGER_{i,t} + \beta_6 RESTRUCTURE_{i,t} + \beta_7 ARINV_{i,t} + \beta_8 AGROWTH_{i,t} + \beta_9 LOSS_{i,t} + \beta_{10} MTB_{i,t} + \beta_{11} PY\_MW_{i,t} + \beta_{12} BIGN_{i,t} + \beta_{13} ANNC\_RST_{i,t}$ + industry fixed effects + year fixed effects + $\varepsilon_{i,t}$ *Variables not defined in table above or below:* *MW* = An indicator variable set to 1 if a firm discloses a material weakness (i.e. 302, 404(a) and/or 404(b)) in the current year and 0 otherwise *LNAGE* = natural log of the total number of years listed as provided by Compustat *RESTRUCTURE* = An indicator variable set to 1 if a firm discloses in restructuring charges in Compustat and 0 otherwise *ARINV* = sum of total AR (RECT) and inventory (INVT) scaled by total assets *AGROWTH* = current year total assets less prior year total assets scaled by prior year total assets *PY_MW* = An indicator variable set to 1 if a firm discloses a material weakness (i.e. 302, 404(a) and/or 404(b)) in the prior year and 0 otherwise *ANNC_RST* = An indicator variable set to 1 if a firm announces a restatement during the current year and 0 otherwise

RESTATE	An indicator variable equal to 1 if the current year financial states are restated in the future and 0 otherwise. Classification is based on restatement data available in Audit Analytics. Restatements related to option backdating and leases are classified as non-restatements for purposes of variable construction.
SABFEES	The abnormal audit fees. To calculate the predicted value, we estimate the following model for years 2003 to 2013: $LNFEES_{i,t} = \beta_0 + \beta_1 LNASSETS_{i,t} + \beta_2 LEVERAGE_{i,t} + \beta_3 ROA_{i,t} + \beta_4 AGROWTH_{i,t} + \beta_5 LOSS_{i,t} + \beta_6 ARINV_{i,t} + \beta_7 MERGER_{i,t} + \beta_8 LNBSEG_{i,t} + \beta_9 FOREIGN_{i,t} + \beta_{10} GC_{i,t} + \beta_{11} BIGN_{i,t} + \beta_{12} INITIALAUD_{i,t} + \beta_{13} YE_{i,t} + \beta_{13} AUD\_LAG_{i,t} + \beta_{13} OP\_404b_{i,t} + \beta_{13} MW_{i,t}$ industry fixed effects + year fixed effects + $\varepsilon_{i,t}$ <u>*Variables not defined in table above or below:*</u> *LNFEES* = Natural log of total audit fees from Audit Analytics *LNASSETS* = Natural log of total assets (AT) *LEVERAGE* = Total liabilities (LT) divided by total assets (AT) *GC* = An indicator variable set to 1 if a firm receives a going concern opinion and 0 otherwise *INITIALAUD* = An indicator variable set to 1 if it is the first year of the auditor/client relationship and 0 otherwise. *YE* = An indicator variable set to 1 if it is a calendar year client and 0 otherwise *AUD_LAG* = Number of days between the financial statement period end and the audit report date *OP_404b* = An indicator variable set to 1 if the company receives a section 404(b) audit option and 0 otherwise
LNOFFSIZE	The natural log of total audit fees for the office of the audit firm performing the year-end audit consistent with Francis and Yu (2009).
MKT_SHR	A firm's market share, as calculated as the firm's primary segment revenue scaled by the total revenue for the industry (two-digit SIC).
HERF	The Herfindahl-Hirschman index, as measured as the sum of squared market shares of all firms in an industry. We define industries by two-digit SIC and obtain sales data from Compustat's segment database.
LNFIRMS	The natural log of the number of firms in the industry (two-digit SIC).
INFOPROCESS	The first principal component of *FOG_10-K* and *LENGTH_10-K* to capture the difficulty in processing a firm's 10-K.
NUM_iRELEASES	The number of releases on the same day in the same industry as the firm's EA, where releases are EAs, 10-Ks, and 10-Qs.

Appendix C
Entropy Balancing Details

Panel A: Comparison of Covariates before Entropy Balancing

	Concurrent EA/10-Ks			Stand Alone EAs		
	Mean	Variance	Skewness	Mean	Variance	Skewness
LNMVE	5.29	3.72	0.21	6.39	3.76	0.04
INST_OWN	0.38	0.12	0.45	0.52	0.11	-0.21
FOLLOW	1.02	0.90	0.47	1.62	0.94	-0.22
SH	-0.23	3.62	0.16	0.31	4.49	0.17
PRED_MW	0.20	0.05	1.60	0.13	0.03	2.62
RESTATE	0.09	0.09	2.77	0.11	0.10	2.45
LNBSEG	0.48	0.34	0.73	0.55	0.37	0.57
LNGSEG	0.37	0.35	1.37	0.58	0.44	0.69
FOREIGN	0.29	0.20	0.95	0.35	0.23	0.63
FOG_10K	19.88	1.14	0.08	19.56	1.10	0.14
LENGTH_10K	10.45	0.20	-0.29	10.40	0.18	-0.16
BIGN	0.59	0.24	-0.38	0.84	0.13	-1.89
ABFEES	0.00	0.00	-0.21	0.00	0.00	-0.15
LNOFFSIZE	16.51	4.27	-0.35	17.16	2.81	-0.67
MKT_SHR	0.07	0.03	3.75	0.10	0.04	3.02
HERF	0.22	0.05	1.79	0.21	0.04	1.94
LNNFIRMS	3.64	2.13	-0.30	3.67	2.16	-0.26
EALAG	70.63	226.80	-0.26	43.93	248.30	0.53
LAGEA2FILE	7.34	405.00	-3.67	28.78	705.90	-3.62
ABSUE	0.10	0.06	4.42	0.04	0.03	7.46
LOSS	0.35	0.23	0.63	0.21	0.16	1.44

Appendix C (Continued)

Panel B: Comparison of Covariates after Entropy Balancing

	Concurrent EA/10-Ks			Stand Alone EAs		
	Mean	Variance	Skewness	Mean	Variance	Skewness
LNMVE	5.29	3.72	0.21	5.29	3.72	0.21
INST_OWN	0.38	0.12	0.45	0.38	0.12	0.45
FOLLOW	1.02	0.90	0.47	1.02	0.90	0.47
SH	-0.23	3.62	0.16	-0.23	3.62	0.16
PRED_MW	0.20	0.05	1.60	0.20	0.05	1.60
RESTATE	0.09	0.09	2.77	0.09	0.09	2.77
LNBSEG	0.48	0.34	0.73	0.48	0.34	0.73
LNGSEG	0.37	0.35	1.37	0.37	0.35	1.37
FOREIGN	0.29	0.20	0.95	0.29	0.20	0.95
FOG_10K	19.88	1.14	0.08	19.88	1.14	0.08
LENGTH_10K	10.45	0.20	-0.29	10.45	0.20	-0.29
BIGN	0.59	0.24	-0.38	0.59	0.24	-0.38
ABFEES	0.00	0.00	-0.21	0.00	0.00	-0.21
LNOFFSIZE	16.51	4.27	-0.35	16.51	4.27	-0.35
MKT_SHR	0.07	0.03	3.75	0.07	0.03	3.75
HERF	0.22	0.05	1.79	0.22	0.05	1.79
LNNFIRMS	3.64	2.13	-0.30	3.64	2.13	-0.30
EALAG	70.63	226.80	-0.26	70.63	226.80	-0.26
LAGEA2FILE	7.34	405.00	-3.67	7.34	405.00	-3.67
ABSUE	0.10	0.06	4.42	0.10	0.06	4.42
LOSS	0.35	0.23	0.63	0.35	0.23	0.63

Figure 1
Percent of Firms Releasing Earnings Concurrent with the 10-K Filing (i.e., same 2-day window)

Panel A: Full Sample

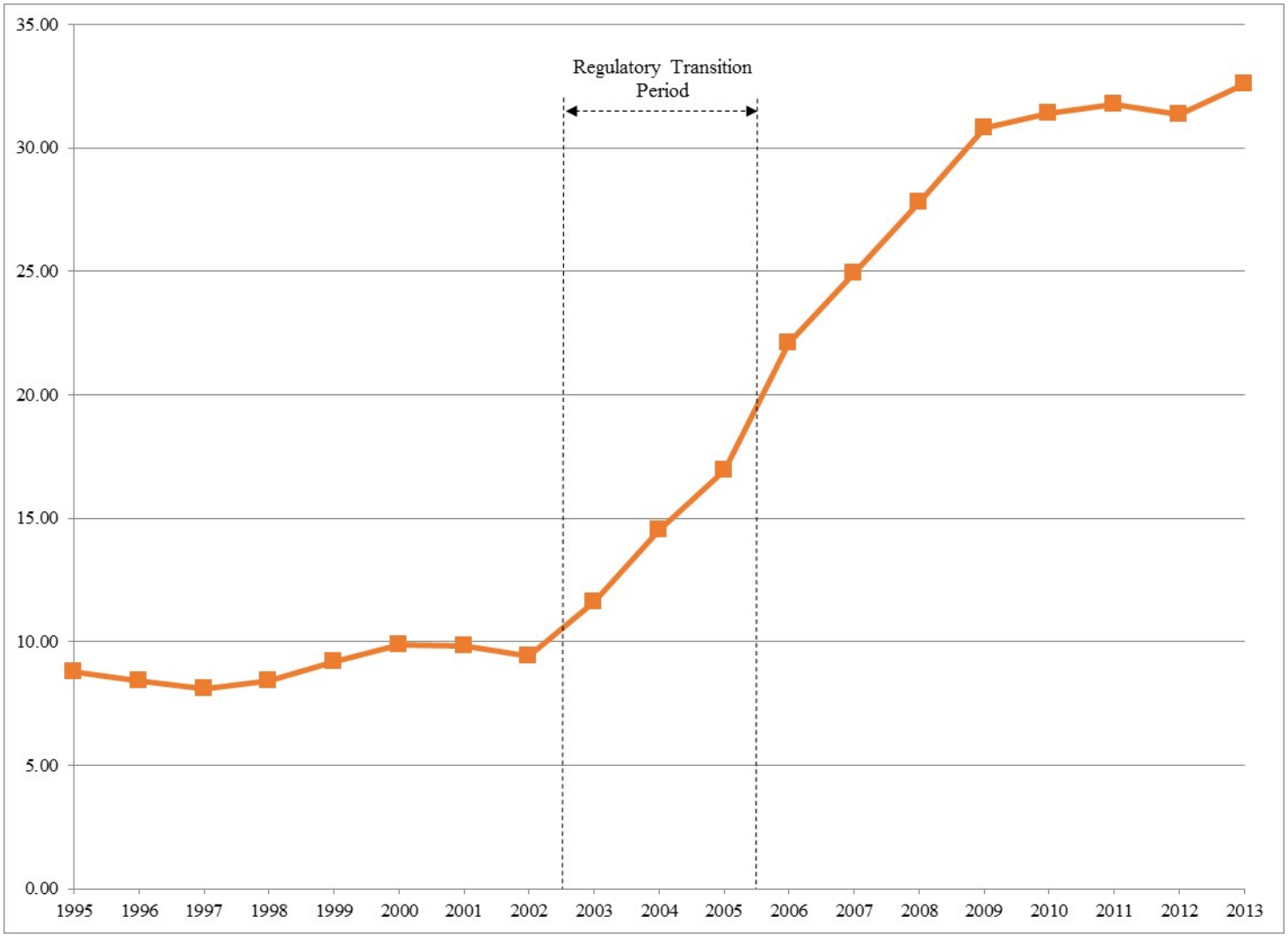
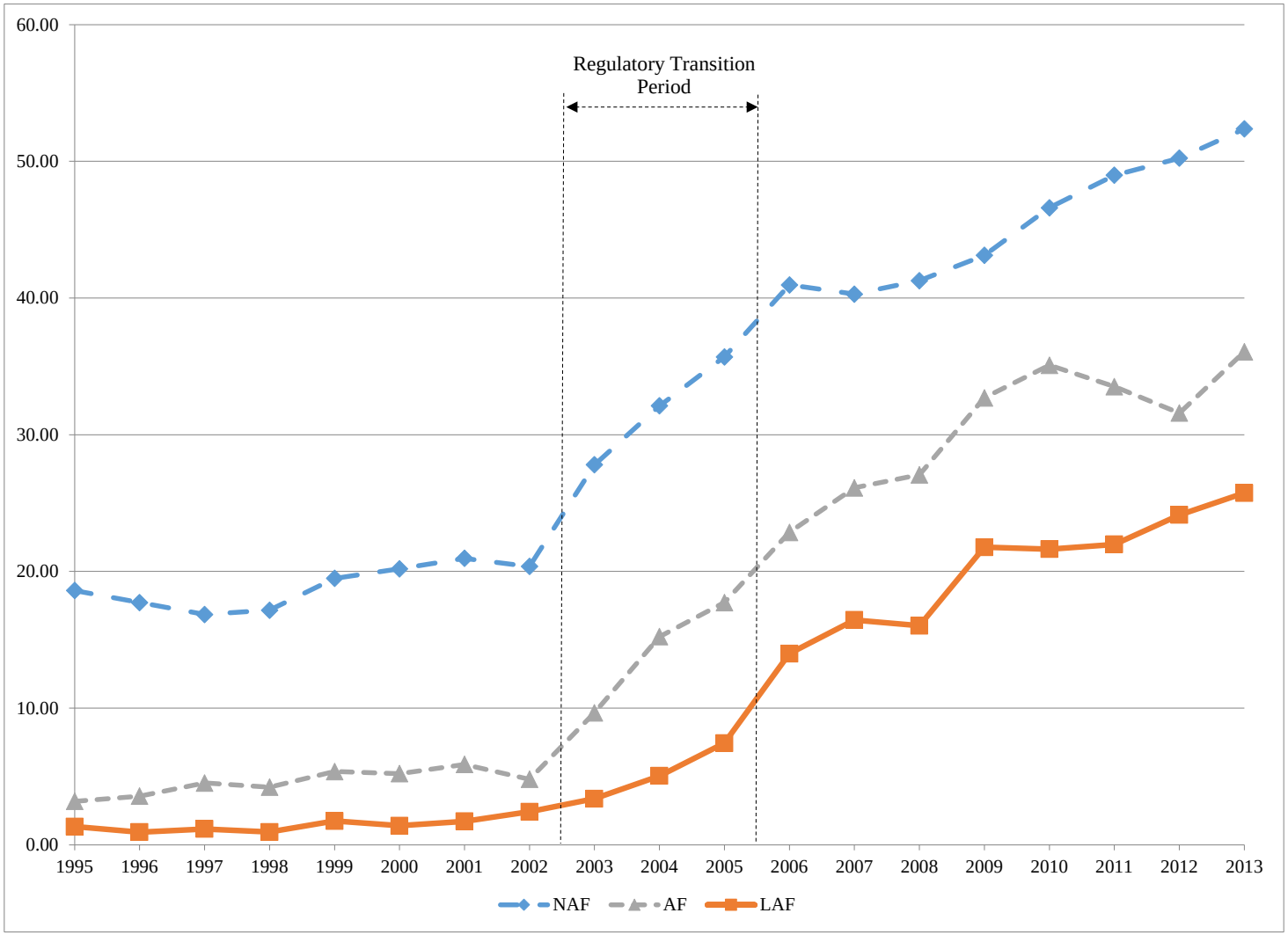


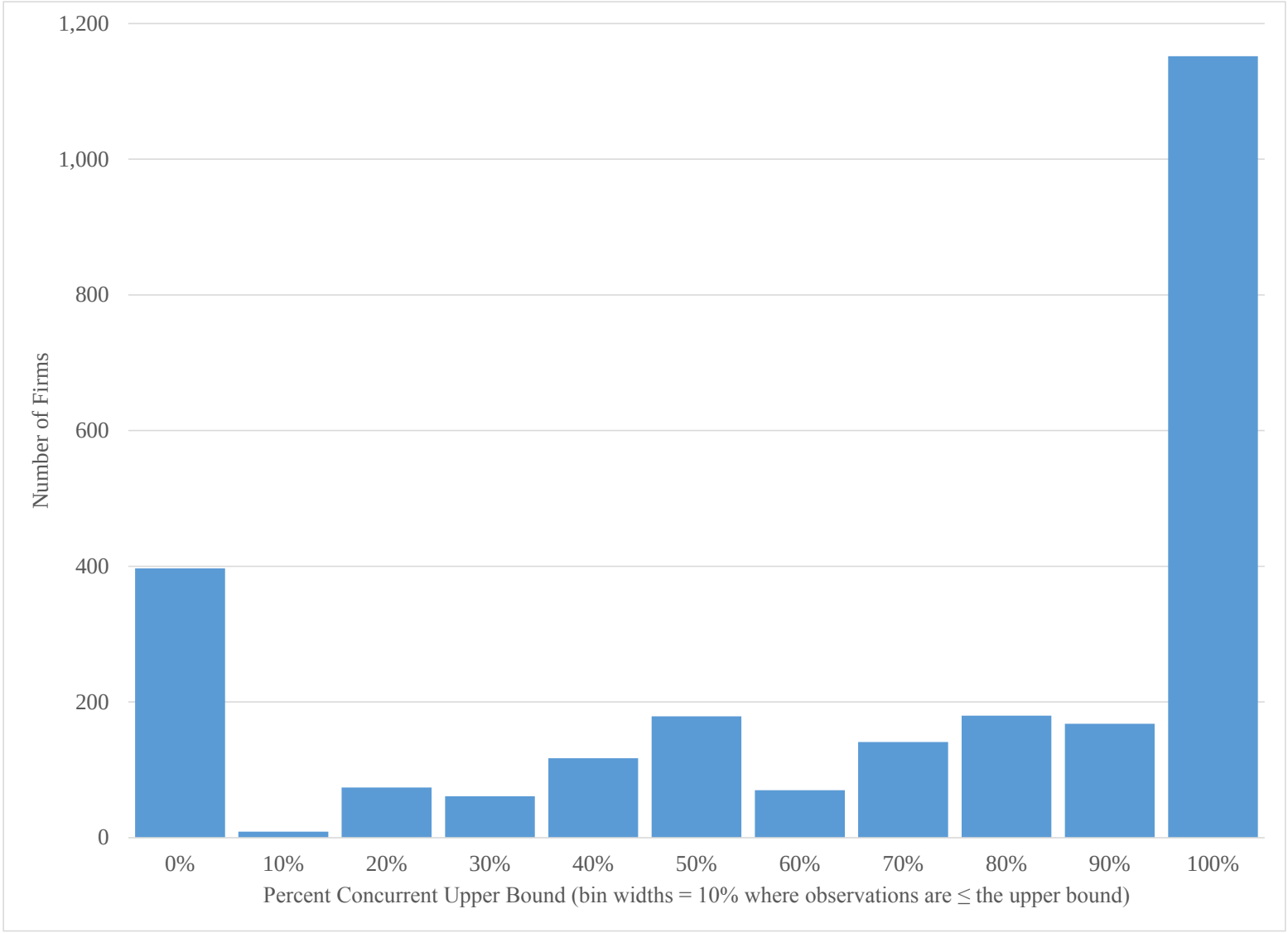
Figure 1 (Continued)

Panel B: By Filer Status



Notes: This figure plots the annual percentage of firms releasing their annual EA concurrently with their 10-K filing. Panel A presents the annual percentage for the entire sample, whereas Panel B present the annual percentages by filer status: Non-Accelerated (*NAF*), Accelerated (*AF*), and Large-Accelerated (*LAF*), respectively. We define concurrent as firm years where the EA is released in the same two-day window as the regulatory filing (i.e., the day before or the day of the filing). We provide further details on the classification of *NAF*, *AF*, and *LAF* in Appendix A. For consistency with regulatory deadlines, we present our results based on regulatory deadline years (e.g., year 2003 includes fiscal year ends >= 12/15/2003 and < 12/15/2004).

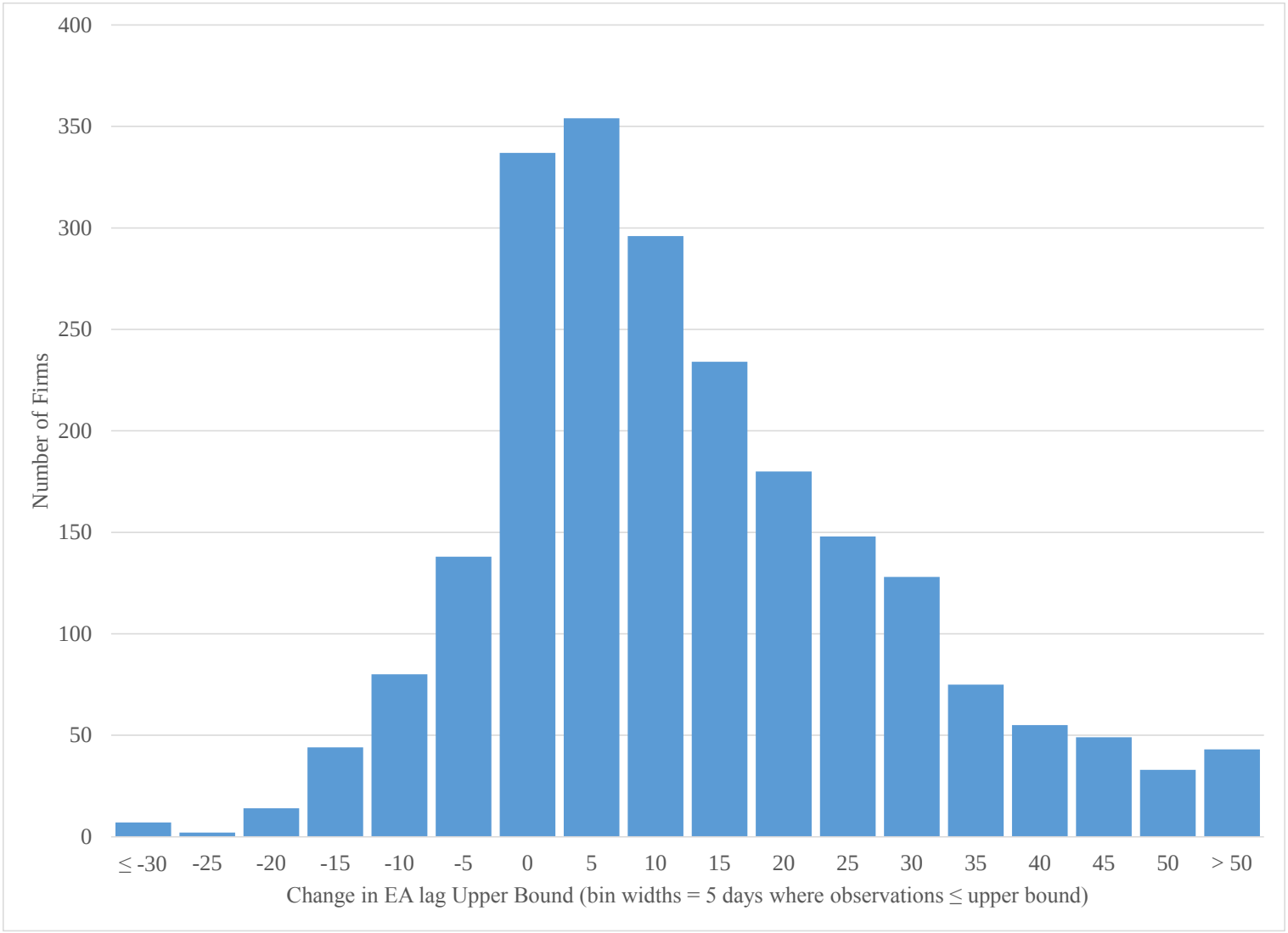
Figure 2
Frequency Distribution: Percent Concurrent After the Firm's First Concurrent EA/10-K



Notes: This figure plots the frequency distribution of percentage of subsequent earnings announcements in which the EA and 10-K are concurrent for each firm that issued a first-time concurrent EA/10-K (i.e. percentage of firm years that are concurrent after the firm's first concurrent EA/10-K). This provides insight into whether the move to a concurrent EA/10-K is a relatively permanent change or is instead temporary.

Figure 3
Histograms: Change in EA Lags and Filing Lags Associated with Concurrent EA/10-Ks

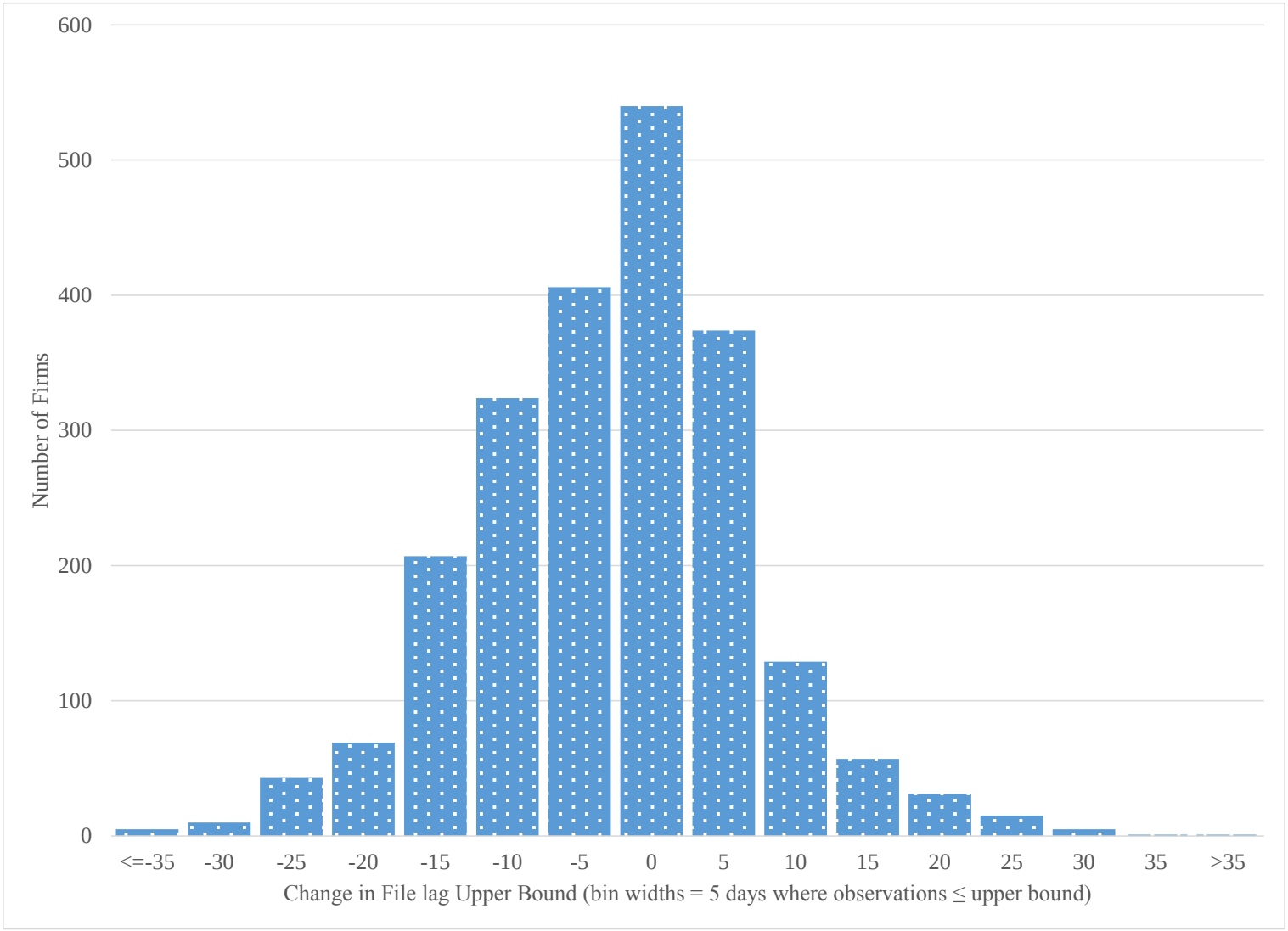
Panel A: Change in EA Lags



Notes: This figure plots the distribution of the change in earnings announcement lag and the change in filing lag for the sample of firms that switch to a concurrent EA/10-K during the sample period. Panel A provides details on the change in EA lag and Panel B provides the details on the change in Filing lag. Specifically, each plot provides insight into the within-firm changes from the last year that firms issue stand-alone EAs to the first year that they issue a concurrent EA/10-K.

Figure 3 (Continued)

Panel B: Change in 10-K Filing Lags



Notes: This figure plots the distribution of the change in earnings announcement lag and the change in filing lag for the sample of firms that switch to a concurrent EA/10-K during the sample period. Panel A provides details on the change in EA lag and Panel B provides the details on the change in Filing lag. Specifically, each plot provides insight into the within-firm changes from the last year that firms issue stand-alone EAs to the first year that they issue a concurrent EA/10-K.

Table 1
Sample Selection

	Figure 1	*Table 5*	*Tables 6-8*	*Table 9, Panel A*	*Table 9, Panel B*	*Table 9, Panel C*	*Table 10*
Compustat Firm Years (1995-2013)	221,188	221,188	221,188	221,188	221,188	221,188	221,188
Require Permno Match	(84,373)	(84,373)	(84,373)	(84,373)	(84,373)	(84,373)	(84,373)
Price Missing at FYE	(5,808)	(5,808)	(5,808)	(5,808)	(5,808)	(5,808)	(5,808)
Missing CIK codes	(9,191)	(9,191)	(9,191)	(9,191)	(9,191)	(9,191)	(9,191)
No Corresponding File Dates in Edgar	(30,723)	(30,723)	(30,723)	(30,723)	(30,723)	(30,723)	(30,723)
Drop Transition Years < 1995 (i.e., < 12/15/1995)	(807)	(807)	(807)	(807)	(807)	(807)	(807)
Remove Late Filers (i.e., filelag > 105 days)	(3,417)	(3,417)	(3,417)	(3,417)	(3,417)	(3,417)	(3,417)
Remove Extreme Earnings Announcements (i.e., ealag<0 or ealag>105)	(313)	(313)	(313)	(313)	(313)	(313)	(313)
Remove observations with no GICS assignment		(298)	(298)	(298)	(298)	(298)	(298)
Remove observations with less than 5 firms per GICS-year		(117)	(117)	(117)	(117)	(117)	(117)
Remove observations with missing controls (lnmve, mtb, beta, follow, roa)		(212)	(212)	(212)	(212)	(212)	(212)
Require Market Test Variables and Controls (avar, avol, lev, absue, stdret)		(2,325)	(2,325)	(2,325)	(2,325)	(2,325)	(2,325)
Only include firms present in 2002 with no concurrent obs. prior to 2003		(58,025)					
Remove firm years from firms that switched to concurrent EAs in the regulatory transition period (2003-2005)		(2,448)					
Remove regulatory transition period observations		(8,229)					
Remove observations after the first concurrent EA occurrence for that firm and those with missing hazard model data		(2,528)					
Only include firms with no concurrent obs. prior to 2003 and concurrent observations post 2003 and their control matches			(59,310)		(64,896)		
Only include year t and year t-1 for treatment firms, where year t is the first year concurrent; require matching observations for the control firms.					(15,856)		
Remove observations prior to 2001 to allow for audit analytics data						(41,009)	
Remove observations with missing overload proxies (length/readability of 10-K)							(2,053)
Total Sample	86,556	12,374	24,294	83,604	2,852	42,595	81,551

Notes: This table presents an overview of the sample selection procedure for the firm-year samples used in Figures 1-3 and Tables 5-10.

Table 2
Descriptive Statistics
Concurrent EA/10-Ks versus Stand-Alone EAs

	Concurrent EA/10-Ks (n= 13,198)		Stand-Alone EAs (n= 70,406)		Difference	
	Mean	Median	Mean	Median	Mean	Median
EALAG	73.5670	75.0000	42.5515	40.0000	31.0155 ***	35.0000 ***
FILELAG	74.0027	75.0000	76.7352	79.0000	-2.7325 ***	-4.0000 ***
| ARET |	0.0658	0.0418	0.0588	0.0377	0.0070 ***	0.0041 ***
AVAR	0.0706	0.1069	0.1931	0.2417	-0.1225 ***	-0.1348 ***
AVOL	0.0885	0.2561	0.2616	0.4340	-0.1731 ***	-0.1779 ***
LNMVE	4.9558	4.8042	5.8315	5.7535	-0.8757 ***	-0.9493 ***
MTB	2.9385	1.6232	2.7881	1.8377	0.1504 ***	-0.2145 ***
BETA	0.8221	0.7641	0.8457	0.7827	-0.0236 ***	-0.0186 ***
FOLLOW	0.8844	0.6932	1.4165	1.3863	-0.5321 ***	-0.6931 ***
BIGN	0.5998	1.0000	0.8047	1.0000	-0.2049 ***	0.0000 ***
ROA	-0.0657	0.0270	0.0263	0.0549	-0.0920 ***	-0.0279 ***
LOSS	0.3904	0.0000	0.2003	0.0000	0.1900 ***	0.0000 ***
LEV	0.5039	0.4853	0.5426	0.5379	-0.0388 ***	-0.0527 ***
BN	0.4655	0.0000	0.3679	0.0000	0.0976 ***	0.0000 ***
ABSUE	0.1223	0.0179	0.0527	0.0033	0.0696 ***	0.0146 ***
STDRET	0.0423	0.0366	0.0347	0.0292	0.0076 ***	0.0074 ***

Notes: This table presents descriptive statistics to compare Concurrent EA/10-Ks to Stand-Alone EAs across the entire sample of Concurrent EA/10-Ks and Stand-Alone EAs. We winsorize each variable at the 1 percent and 99 percent levels. We provide variable definitions in Appendix B. ***/**/* indicate whether the means (medians) are significantly different across the Concurrent EA/10-K and Stand-Alone EA samples at the 1%, 5%, and 10% levels, respectively, based on t-tests (Wilcoxon signed rank tests).

Table 3
Concurrent EA/10-K Trends in the Transition Period (2003-2005) for Firms That Previously Released Stand-Alone EAs Only

Difference Between File Date and Earnings Announcement Date (2000 - 2002)			% of Firms with >=1 Concurrent in Post Period (2003-2005)	Change in Earnings Announcement Lag		Change in Filing Date Lag	
Tercile	Mean Difference (Days)	# Firms		Non-Concurrent Firms	Concurrent Firms	Non-Concurrent Firms	Concurrent Firms
Large Accelerated Filers ("LAF")							
1	31	527	12.0% ***	0	10	-7	-12
2	47	527	3.8%	2	24	-12	-10
3	60	527	2.3%	4	30	-14	-18
Total LAF	*46*	*1,581*	*6.0%*	*2*	*15*	*-11*	*-12*
Accelerated Filers ("AF")							
1	26	550	23.6% ***	-1	8	-8	-8
2	44	546	13.2% ***	4	24	-10	-8
3	61	550	3.6%	5	33	-11	-11
Total AF	*44*	*1,646*	*13.5% ###*	*3*	*16*	*-10*	*-8*
Non-Accelerated Filers ("NAF")							
1	20	199	41.2% ***	0	13	1	0
2	38	196	22.4% ***	5	27	0	-1
3	55	201	12.4%	6	41	-1	-2
Total NAF	*38*	*596*	*25.3% ###*	*4*	*22*	*-1*	*-1*
	Sample Firms	***3,823***					
	# Firms Concurrent (>=1)	637					
	Total Firms	4,460					

Notes: This table provides descriptive statistics on the population of firms that only released stand-alone EAs in the pre-transition period (2000-2002). We partition the analysis into 9 subgroups based on filer status (*LAF*, *AF*, or *NAF*) and the average number of days between the filing date and the EA date in the pre-transition period. We then examine the percentage of firms within each subgroup that become concurrent any time in the transition period (2003-2005) and the average change in the firms' EA and filing lags (i.e., lag from the fiscal year end).

***/**/* indicates that the likelihood of a concurrent EA/10-K for the identified tercile is significantly greater than that for the tercile with the longest distance from the EA to the filing date (i.e., tercile 3) at the 1%, 5%, or 10% level, respectively, based on two-tailed tests in a logistic regression.

###/##/# indicates that the likelihood of a concurrent EA/10-K is significantly greater for the identified filer status than for that of the large-accelerated subgroup at the 1%, 5%, or 10% level, respectively, based on two-tailed tests in a logistic regression.

Table 4

Logistic Regression Analyses to Examine the Sorting between Stand-Alone EAs and Concurrent EA/10-Ks in 2003 to 2005

Panel A: Factor Loadings from Confirmatory Factor Analysis

Investor Sophistication	*LNMVE*	*INST_OWN*	*FOLLOW*	*SH*
Investor Sophistication	**0.9256**	**0.5815**	**0.8877**	**0.6027**

Accounting System Weaknesses	*PRED_MW*	*RESTATE*
Accounting System Weaknesses	**0.7363**	**0.7363**

Complexity	*LNBSEG*	*LNGSEG*	*FOREIGN*	*FOG_10K*	*LENGTH_10K*
Operating Complexity	**0.6176**	**0.4767**	**0.6235**	0.1242	0.6817
Reporting Complexity	0.0781	-0.4989	-0.1929	**0.8227**	**0.3846**

Auditor	*BIGN*	*ABFEES*	*LNOFFSIZE*
Limited Auditor Resources	**-0.8398**	0.0604	**-0.7103**
Audit Uncertainty	-0.2648	**0.9345**	0.3574

Competition	*MKT_SHR*	*HERF*	*LNNFIRMS*
Competition	**-0.8540**	**-0.9223**	**0.8941**

Notes: This panel of Table 4 presents the results of a series of confirmatory factor analyses to be used in our formal tests of hypothesis *H1* (see Panel B). The presented factor loadings are based on principle component factoring with promax (oblique) rotation. Variables are measured in the first fiscal year in the transition period (2003 to 2005) and are winsorized at the 1 percent and 99 percent levels prior to factor analysis. We define all variables in Appendix B.

Table 4 (Continued)

Panel B: Logistic Regression

Dependent Variable: CONCUR					
	(1)			(2)	
	Margin	*z-stat*		Margin	*z-stat*	
Primary Variables						
Investor Sophistication	-0.0401	*-4.90*	***	-0.0374	*-4.54*	***
Accounting System Weaknesses	0.0206	*5.39*	***	0.0193	*5.05*	***
Operating Complexity	0.0194	*3.72*	***	0.0180	*3.48*	***
Reporting Complexity	0.0083	*1.80*	*	0.0051	*1.12*	
Limited Auditor Resources	0.0055	*1.42*		0.0066	*1.68*	*
Audit Uncertainty	0.0107	*2.31*	**	0.0090	*1.94*	*
Competition	0.0041	*0.92*		0.0018	*0.41*	
Percent of Peers (GICS) Concurrent	0.0039	*5.99*	***	0.0035	*5.51*	***
Filer Status-EA to File Tercile						
LAF-1	0.1177	*4.45*	***	0.1154	*4.46*	***
LAF-2	0.0277	*0.90*		0.0250	*0.83*	
AF-1	0.1360	*4.82*	***	0.1174	*4.23*	***
AF-2	0.0929	*3.24*	***	0.0741	*2.62*	***
AF-3	0.0304	*0.91*		0.0143	*0.44*	
NAF-1	0.1707	*5.11*	***	0.1344	*4.00*	***
NAF-2	0.1189	*3.51*	***	0.0823	*2.40*	**
NAF-3	0.0869	*2.40*	**	0.0477	*1.30*	
Ex Post Situational Controls						
Avg. MTB				-0.0015	*-1.20*	
Avg. BETA				-0.0123	*-1.30*	
Avg. ROA				-0.0558	*-2.15*	**
TOT_LOSS				0.0198	*1.69*	*
TOT_BN				0.0284	*2.99*	***
Psuedo. R-Square	*0.164*			*0.176*		
Area under ROC Curve	*0.788*			*0.795*		
N	*3,087*			*3,087*		

Notes: This Panel of Table 4 presents the results of a firm-level logistic regression to formally test our hypothesis *H1*. The primary variables are factors identified in the confirmatory factor analyses presented in Panel A. Our dependent measure (*CONCUR*) is set to one if the firm moves to a concurrent EA/10-K in the transition years (2003-2005), zero otherwise. We also include fixed effects for the nine subgroups presented in table 3 (i.e., 3 filer status groups * 3 terciles of distance from the historical EA to the filing date). The *Ex Post Situational Controls* are measured as the average values for 2003 to 2005 (*Avg. MTB, Avg. BETA, Avg. ROA*) or the presence of the indicator variable of interest in any of those same three years (*TOT_LOSS, TOT_BN*). We define all variables in Appendix B.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively, based on two-sided tests.

Table 5
Hazard Model Analysis to Examine the Sorting from Stand-Alone EAs to Concurrent EA/10-Ks in 2006 to 2013

Dependent Variable: CONCUR			
	Coef.	*Chi-Sq.*	*Hazard Ratio*
Primary Variables			
Analyst Following	-0.1614	*5.39* **	*0.85*
Institutional Ownership Percent	-0.1265	*0.71*	*0.88*
Restatement	0.5308	*18.13* ***	*1.70*
Material Weakness	0.3193	*8.41* ***	*1.38*
Percent of Peers (GICS) Concurrent	0.7382	*4.47* **	*2.09*
Control Variables			
Prior year EA to filing deadline (tercile)	-1.9431	*236.37* ***	*0.14*
LNMVE	-0.1344	*10.86* ***	*0.87*
MTB	0.0072	*0.24*	*1.01*
BETA	-0.0377	*0.20*	*0.96*
ROA	-0.6054	*2.09*	*0.55*
LOSS	0.4798	*11.55* ***	*1.62*
BN	0.0100	*0.01*	*1.01*
ABSUE	0.7555	*21.65* ***	*2.13*
Likelihood Ratio of Global Null Hypothesis that all Coefficients = 0			*559.99*
Number of Observations (N)			*12,374*
Number of Firms			*2,418*
Number of Concurrent EAs			*566*

Notes: This table presents the results of a hazard model estimation to test our hypothesis *H1*. *Restatement* is set to one if the firm announced a restatement within the prior fiscal year up to and including the current EA, zero otherwise. *Material Weakness* is set to one of the firm announces a material weakness in the current EA, zero otherwise. *Percent of Peers Concurrent* is calculated as the number of concurrent EA/10-Ks in a 6-digit GICS divided by the number of firms in that same 6-digit GICS. We use the lagged ratio. *Prior year EA to filing deadline (days)* is the number of calendar days from last year's EA to the current year's filing deadline. We winsorize all continuous variables at the 1 percent and 99 percent levels and define other variables in Appendix B.

We begin the analysis with all stand-alone EA firms with available data in 2002. We then drop observations that transition to concurrent EA/10-Ks during the regulatory transition period (2003-2005). We then follow the remaining firms forward until they either transition to a concurrent EA/10-K ("die") or become censored (continue with stand-alone EAs until the end of their sample data). That is, the first EA after the regulatory period (2006) has a duration of 1 year, 2007 has a duration of 2 years, etc.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Table 6
Price-Lead-Earnings Regressions to Examine Investor Anticipation of Stand-Alone EA vs. Concurrent EA/10-K Information

Dependent Variable: EARN						
	(1)		(2)		Test Differences	
	Treatment Firm Years		***Control Firm Years***		***Treatment - Control = 0***	
	Coef.	*t-stat*	Coef.	*t-stat*	Coef. Diff.	*p-value*
Primary Variables						
PLE_RET	0.0057	*0.44*	-0.0237	*-1.79* *	0.0293	*0.111*
PLE_RET * POST	**0.0670**	***2.58*** ***	**-0.0297**	***-0.90***	**0.0967**	***0.021*** **
Control Variables						
LAG_EARN	0.4081	*23.71* ***	0.3766	*17.84* ***	0.0315	*0.246*
*LAG_EARN * POST*	0.0312	*1.04*	0.0252	*0.74*	0.0061	*0.894*
FYRET	0.0530	*14.95* ***	0.0565	*14.69* ***	-0.0035	*0.497*
*FYRET * POST*	0.0281	*2.78* ***	0.0170	*1.44*	0.0110	*0.478*
EA_RET	0.1527	*6.14* ***	0.1272	*5.37* ***	0.0254	*0.458*
*EA_RET * POST*	-0.0120	*-0.22*	-0.0399	*-0.85*	0.0279	*0.697*
POST_RET	0.0019	*0.30*	0.0121	*1.84* *	-0.0102	*0.269*
*POST_RET * POST*	0.0085	*0.52*	0.0035	*0.22*	0.0050	*0.826*
POST	-0.0236	*-4.64* ***	-0.0164	*-3.44* ***	-0.0072	*0.302*
Fixed Effects	*Tyear*		*Tyear*			
Adj. R-Square	*0.373*		*0.381*			
N	*12,147*		*12,147*			

Notes: This table presents the results of a series of price-lead-earnings regression analyses to test our hypothesis *H2*. For this analysis, we first identify a set of 'treatment' firms that never issued an EA concurrently with the regulatory filing prior to 2003. Further, the treatment firms begin issuing EAs concurrently sometime after 2003. We then match each of these firm-year observations to a 'control' firm-year from the same industry (GICS designation) and same size quartile (based on market value of equity) with the closest ratio of earnings to market value of equity. We winsorize all continuous variables at the 1 percent and 99 percent levels and define all variables in Appendix B.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.

Table 7
Management Forecast Analyses

Panel A: Contingency Tables

Treatment Firm Years				Control Firm Years			
	Management Forecast				***Management Forecast***		
POST	**0**	**1**	**N**	***POST***	**0**	**1**	**N**
0	94.00%	**6.00%**	9,046	**0**	94.32%	**5.68%**	9,046
1	96.90%	**3.10%**	3,101	**1**	96.00%	**4.00%**	3,101
Ratio of Proportions	*0.516*				*0.704*		
Chi. Sq.	*39.154*				*13.150*		
P-Value	*0.000*				*0.000*		

Panel B: Logistic Regression

Dependent Variable: MF in PLE Window				
	Coef.	*Odds Ratio*	*z-stat*	
POST	-0.369	*0.691*	*-2.92*	***
TREAT	0.058	*1.060*	*0.63*	
POST * TREAT	**-0.324**	***0.724***	***-1.74***	*****
Constant	-2.809	*0.060*	*-44.67*	***
Psuedo. R-Square	0.0057			
Area under ROC Curve	0.5497			
N	*24,294*			

Notes: This table presents a series of analyses to test whether the source of the anticipated news for concurrent EA/10-Ks relative to stand-alone EAs is from managers compensating for less timely EAs by increasing their issuance of management forecast prior to the EA. Panel A provides contingency tables to compare the proportion of treatment and control observations that issued management forecasts between fiscal year end and the EA date (i.e., in the PLE window). Panel B provides the results of a difference-in-difference logistic regression on the likelihood of issuing a management forecast in the PLE window. The analyses in this table use the same matched sample described in table 6.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Standard errors are clustered by firm.

Table 8
Earnings Season Percentile Analyses

Panel A: Univariate Analyses

	PRE		*POST*		*POST-PRE*	
	Mean	Median	Mean	Median	Mean	Median
Treatment Firms						
EARN_SEASON_PCT	48.32	49.00	67.28	71.00	18.96 ***	22.00 ***
Control Firms						
EARN_SEASON_PCT	38.93	37.00	35.94	32.00	-2.98 ***	-5.00 ***

Panel B: Regression Analysis

Dependent Variable:	***EARN_SEASON_PCT***	
	Coef.	*t-stat*
POST	-2.98	*-3.08* ***
TREAT	9.40	*8.96* ***
POST * TREAT	**21.94**	***15.44*** ***
Constant	38.93	*62.85* ***
Adj. R-Square	*0.140*	
N	*13,246*	

Notes: This table presents a series of analyses to test whether the source of the anticipated news for concurrent EA/10-Ks relative to stand-alone EAs is from timelier peer firm EAs. Panel A provides univariate analyses to compare the changes in percentile ranking of treatment firms from the last stand-alone EA to the first concurrent EA/10-K to the change for the matched control firms over the same time period. Panel B provides the results of a difference-in-difference regression on the earnings season percentile ranking. The analyses in this table use the same matched sample described in table 6, however it is restricted to the sample of matched pairs in which both firms have a calendar year end. We define the earnings season percentile ranking (*EARN_SEASON_PCT*) as the firm's percentile rank within its industry (GICS) based on the earnings announcement dates for all calendar year-end firms in the industry.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Standard errors are clustered by firm.

Table 9
Regression Analyses to Examine the Association between Concurrent EA/10-Ks and the Decision Usefulness of Earnings Releases Holding EA Timing Constant

Panel A: Full Sample

Dependent Variable:	***| ARET |***		***AVAR***		***AVOL***	
	(1)		(2)		(3)	
	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*
Primary Variable						
CONCUR	-0.0023	*-2.14* **	-0.1209	*-5.15* ***	-0.0626	*-3.86* ***
Control Variables						
EALAG	0.0002	*5.47* ***	0.0043	*6.82* ***	0.0017	*3.67* ***
TREND	0.0005	*7.24* ***	0.0456	*29.06* ***	0.0386	*36.27* ***
LNMVE	-0.0024	*-4.91* ***	0.0945	*9.87* ***	0.2026	*28.69* ***
FOLLOW	0.0052	*8.81* ***	0.1068	*8.00* ***	0.1511	*16.15* ***
LEV	0.0113	*5.35* ***	-0.0452	*-1.01*	-0.0229	*-0.74*
BN	-0.0014	*-2.74* ***	-0.0922	*-7.77* ***	-0.0788	*-10.18* ***
ABSUE	0.0114	*5.61* ***	0.0384	*1.14*	-0.0341	*-1.31*
STDRET	0.7134	*32.07* ***	-4.1146	*-9.84* ***	0.1268	*0.43*
Fixed Effects	*Firm*		*Firm*		*Firm*	
Adj. R-Square	*0.196*		*0.138*		*0.383*	
N	*83,604*		*83,604*		*83,604*	

Notes: This table presents the results of a series of regression analyses to test our hypothesis *H3*. Panel A presents the full sample specification with firm fixed effects. Panel B presents the results of a matched-pair difference-in-difference analysis. Panel C presents the results of an entropy-balanced design (based on the covariate variables in Table 4). We winsorize all continuous variables at the 1 percent and 99 percent levels and define all variables in Appendix B.

For the difference-in-difference analysis, we first identify a set of 'treatment' firms that never issued a concurrent EA/10-K prior to 2003. Further, the treatment firms begin issuing EAs concurrently sometime after 2003. We then match each of these firms with a control firm from the same industry (GICS designation) and same size quartile (based on market value of equity) with the closest change in EA lag (i.e., we calculate the difference in *EALAG* for our treatment firm from its last stand-alone EA to its first concurrent EA/10-K and find the closest match in the same years from our set of possible control observations). The difference-in-difference analysis uses the last stand-alone EA and the first concurrent EA/10-K observations for our treatment firms and the same year observations (which are both stand-alone EAs) for our control firms.

For the entropy-balanced analysis, we provide the covariates of interest and their corresponding mean, variance, and skewness before and after balancing in Appendix C.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.

Table 9 (Continued)

Panel B: Difference-in-Difference, Matched Pair Sample

Dependent Variable:	***| ARET |***		***AVAR***		***AVOL***	
	(1)		(2)		(3)	
	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*
Primary Variable(s)						
POST	0.0023	*0.68*	0.0737	*0.96*	0.0366	*0.84*
TREAT	-0.0002	*-0.05*	0.1665	*1.75 **	0.1208	*2.21 ***
POST * TREAT	**-0.0032**	***-0.70***	**-0.1852**	***-1.78 ****	**-0.1280**	***-2.15 *****
Controls	*Yes*		*Yes*		*Yes*	
Fixed Effects	*Year*		*Year*		*Year*	
Adj. R-Square	*0.131*		*0.043*		*0.276*	
N	*2,852*		*2,852*		*2,852*	

Notes: This table presents the results of a series of regression analyses to test our hypothesis *H3*. Panel A presents the full sample specification with firm fixed effects. Panel B presents the results of a matched-pair difference-in-difference analysis. Panel C presents the results of an entropy-balanced design (based on the covariate variables in Table 4). We winsorize all continuous variables at the 1 percent and 99 percent levels and define all variables in Appendix B.

For the difference-in-difference analysis, we first identify a set of 'treatment' firms that never issued a concurrent EA/10-K prior to 2003. Further, the treatment firms begin issuing EAs concurrently sometime after 2003. We then match each of these firms with a control firm from the same industry (GICS designation) and same size quartile (based on market value of equity) with the closest change in EA lag (i.e., we calculate the difference in *EALAG* for our treatment firm from its last stand-alone EA to its first concurrent EA/10-K and find the closest match in the same years from our set of possible control observations). The difference-in-difference analysis uses the last stand-alone EA and the first concurrent EA/10-K observations for our treatment firms and the same year observations (which are both stand-alone EAs) for our control firms.

For the entropy-balanced analysis, we provide the covariates of interest and their corresponding mean, variance, and skewness before and after balancing in Appendix C.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.

Table 9 (Continued)

Panel C: Entropy-Balanced Analyses

Dependent Variable:	***| ARET |***				***AVAR***				***AVOL***			
	(1)		(2)		(3)		(4)		(5)		(6)	
	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*
Primary Variable(s)												
CONCUR	-0.0048	*-2.33* **	-0.0064	*-3.16* ***	-0.1131	*-3.30* ***	-0.1408	*-4.22* ***	-0.0495	*-1.78* *	-0.0654	*-2.52* ***
Controls	*No*		*Yes*		*No*		*Yes*		*No*		*Yes*	
Fixed Effects	*No*		*No*		*No*		*No*		*No*		*No*	
Adj. R-Square	*0.001*		*0.128*		*0.001*		*0.052*		*0.000*		*0.223*	
N	*42,595*		*42,595*		*42,595*		*42,595*		*42,595*		*42,595*	

Notes: This table presents the results of a series of regression analyses to test our hypothesis *H3*. Panel A presents the full sample specification with firm fixed effects. Panel B presents the results of a matched-pair difference-in-difference analysis. Panel C presents the results of an entropy-balanced design (based on the covariate variables in Table 4). We winsorize all continuous variables at the 1 percent and 99 percent levels and define all variables in Appendix B.

For the difference-in-difference analysis, we first identify a set of 'treatment' firms that never issued a concurrent EA/10-K prior to 2003. Further, the treatment firms begin issuing EAs concurrently sometime after 2003. We then match each of these firms with a control firm from the same industry (GICS designation) and same size quartile (based on market value of equity) with the closest change in EA lag (i.e., we calculate the difference in *EALAG* for our treatment firm from its last stand-alone EA to its first concurrent EA/10-K and find the closest match in the same years from our set of possible control observations). The difference-in-difference analysis uses the last stand-alone EA and the first concurrent EA/10-K observations for our treatment firms and the same year observations (which are both stand-alone EAs) for our control firms.

For the entropy-balanced analysis, we provide the covariates of interest and their corresponding mean, variance, and skewness before and after balancing in Appendix C.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.

Table 10
Regression Analyses to Examine the Source of the Muted Reaction to Concurrent EA/10-Ks After Holding EA Timing Constant

Panel A: Information Overload Analyses

Dependent Variable:	***| ARET |***		***AVAR***		***AVOL***	
	(1)		(2)		(3)	
	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*
Primary Variable(s)						
CONCUR	-0.0019	*-1.58*	-0.1658	*-5.81* ***	-0.0888	*-4.75* ***
CONCUR x INFOPROCESS	0.0002	*0.27*	-0.0530	*-3.14* ***	-0.0319	*-2.73* ***
Control Variables						
INFOPROCESS	0.0011	*2.41* **	0.0619	*5.56* ***	0.0312	*4.13* ***
EALAG	0.0002	*5.29* ***	0.0038	*5.86* ***	0.0013	*2.83* ***
TREND	0.0003	*3.32* ***	0.0379	*17.50* ***	0.0347	*23.41* ***
LNMVE	-0.0022	*-4.49* ***	0.0926	*9.49* ***	0.1991	*27.87* ***
FOLLOW	0.0050	*8.38* ***	0.1057	*7.78* ***	0.1538	*16.22* ***
LEV	0.0108	*5.00* ***	-0.0594	*-1.30*	-0.0358	*-1.13*
BN	-0.0014	*-2.63* ***	-0.0939	*-7.77* ***	-0.0793	*-10.11* ***
ABSUE	0.0136	*6.02* ***	0.0498	*1.38*	-0.0506	*-1.76* *
STDRET	0.7100	*31.45* ***	-4.0931	*-9.63* ***	0.1214	*0.40*
Fixed Effects	*Firm*		*Firm*		*Firm*	
Adj. R-Square	*0.197*		*0.138*		*0.384*	
N	*81,551*		*81,551*		*81,551*	

Notes: This panel of Table 10 table provides evidence on whether the muted market reaction to concurrent EA/10-Ks is driven by information overload. We examine whether the lower reaction to concurrent EA/10-Ks is associated with the amount and complexity of information included in the 10-K filing. We use principal component analysis with the length of the 10-K and the FOG index for the 10-K to construct *INFOPROCESS* to capture the difficulty in processing the 10-K. We examine whether the muted reaction is more pronounced for 10-Ks that are more difficult to process. We winsorize all continuous variables at the 1 percent and 99 percent levels and define all other variables in Appendix B.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.

Table 10 (Continued)

Panel B: Limited Attention Analyses

Dependent Variable:	***| ARET |***		***AVAR***		***AVOL***	
	(1)		(2)		(3)	
	Coef.	*t-stat*	Coef.	*t-stat*	Coef.	*t-stat*
Primary Variable(s)						
CONCUR	-0.0034	*-1.86* *	-0.1835	*-4.70* ***	-0.0548	*-2.07* **
CONCUR x d(NUM_iRELEASES)	0.0023	*0.87*	0.1289	*2.23* **	-0.0036	*-0.09*
Control Variables						
d(NUM_iRELEASES)	-0.0010	*-0.93*	-0.0479	*-1.83* *	-0.0311	*-1.80* *
EALAG	0.0002	*5.43* ***	0.0042	*6.71* ***	0.0017	*3.70* ***
TREND	0.0005	*7.08* ***	0.0456	*28.90* ***	0.0384	*35.80* ***
LNMVE	-0.0023	*-4.64* ***	0.0946	*9.85* ***	0.2013	*28.46* ***
FOLLOW	0.0052	*8.77* ***	0.1076	*8.05* ***	0.1527	*16.30* ***
LEV	0.0113	*5.34* ***	-0.0478	*-1.07*	-0.0228	*-0.74*
BN	-0.0014	*-2.75* ***	-0.0926	*-7.80* ***	-0.0787	*-10.18* ***
ABSUE	0.0137	*6.15* ***	0.0531	*1.49*	-0.0492	*-1.74* *
STDRET	0.7080	*31.77* ***	-4.1611	*-9.92* ***	0.1557	*0.53*
Fixed Effects	*Firm*		*Firm*		*Firm*	
Adj. R-Square	*0.196*		*0.138*		*0.382*	
N	*83,604*		*83,604*		*83,604*	

Notes: This panel of Table 10 table provides evidence on whether the muted market reaction to concurrent EA/10-Ks is driven by limited investor attention. Specifically, it presents an analysis of the market reaction to concurrent EA/10-Ks based on the number of disclosures released on the same day (i.e., earnings announcements, 10-Ks, and 10-Qs). We define the variable *NUM_iRELEASES* as the number of releases on the same day in the same industry as the firm's EA, where releases are EAs, 10-Ks, and 10-Qs. In these regressions, we use the scaled decile rank of the *NUM_iRELEASES* variable. We examine whether the muted reaction for concurrent EA/10-Ks is more pronounced when there are a larger number of releases on the same day. We winsorize all continuous variables at the 1 percent and 99 percent levels and define all other variables in Appendix B.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.

Table 10 (Continued)

Panel C: Post-Earnings Announcement Drift Analyses

Dependent Variable: Buy-and-hold market adjusted return (EA+2 to EA+20 trading days)	(1)		(2)	
	Coef.	*t-stat*	Coef.	*t-stat*
Primary Variable(s)				
d(UE)	0.0498	*10.89* ***	0.0202	*3.30* ***
d(UE) x CONCUR	0.0092	*2.56* ***	0.0095	*1.70* *
Control Variables				
d(UE) x d(EALAG)	-0.0231	*-4.39* ***	-0.0261	*-3.46* ***
d(UE) x d(LNMVE)	-0.0421	*-6.15* ***	-0.0108	*-1.19*
d(UE) x d(MTB)	-0.0265	*-5.93* ***	-0.0028	*-0.41*
d(UE) x d(BETA)	-0.0168	*-4.14* ***	0.0027	*0.40*
d(UE) x d(FOLLOW)	0.0009	*0.15*	0.0098	*1.08*
CONCUR			-0.0011	*-0.31*
d(EALAG)			0.0081	*1.43*
d(LNMVE)			-0.0683	*-8.04* ***
d(MTB)			-0.0118	*-2.46* **
d(BETA)			-0.0192	*-4.44* ***
d(FOLLOW)			-0.0128	*-1.97* **
Fixed Effects	*Firm*		*Firm*	
Adj. R-Square	*0.049*		*0.054*	
N	*83,600*		*83,600*	

Notes: This panel of Table 10 table provides post-earnings announcement drift evidence to provide additional insight into whether the muted market reaction to concurrent EA/10-Ks is attributable to investor perceptions of lower information quality or greater uncertainty associated with these firms. Specifically, we examine whether the post-earnings-announcement drift (PEAD) in the 20 days after the announcement is more pronounced for concurrent EA/10-Ks. If the muted reaction is associated with concerns over information quality and/or uncertainty, then the muted reaction should be relatively permanent in the days after the EA. In contrast, if the muted reaction is associated with information overload, then muted reaction should be relatively temporary as investors process the information.

We control for the scaled decile ranks of *EALAG*, *LNMVE*, *MTB*, *BETA*, and *FOLLOW* in this analysis. Our variables of interest are the scaled decile rank of unexpected earnings (*d(UE)*) and the interaction between *d(UE)* and *CONCUR*. We define all variables in Appendix B.

***/**/* represent significance at the 1 percent, 5 percent, and 10 percent levels, respectively. Fixed effects are not tabulated for brevity. Standard errors are clustered by firm.