The Informational Content of Regulatory Filing Dates for Investors

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Current Draft: April 2013

Preliminary draft. Please do quote without permission.

The authors would like to thank workshop participants at Florida State University for their helpful comments on earlier drafts of this paper.

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Abstract

We examine the association of three potentially important report filing dates with future abnormal returns: the elapsed time between a company's fiscal year end and (1) the disclosure of their audit fees(*fee lag*), (2) the 10-K filing date (*10-K lag*), and (3) the audit report date (*opinion lag*). Controlling for all three dates simultaneously, we find that both *fee lag* and *opinion lag* are related to future abnormal returns. Both *10-K lag* and *opinion lag* are related to abnormal returns between their release and the financial statement date, whereas *fee lag* is not. Consistent with this, a trading strategy based on *fee lag* decile portfolios produces positive hedge returns during our sample period, and a combined strategy with both *fee lag* and *10-K lag* outperforms each individual portfolio. We further explore the association between audit fees and the filing dates as a means of better assessing their informational content. All three dates are associated with both current and future audit fees, suggesting that the information implicit in the dates is impounded by the auditor over multiple periods. Taken together, these results imply that *fee lag* contains information useful to the market, but which is not fully impounded contemporaneously.

Introduction

We investigate the association of three key regulatory disclosure dates with abnormal returns. Specifically, we study the number of days between the fiscal year end and (1) the date a firm's 10-K is released ("10-K lag"), (2) the date on which the auditor signs the audit report ("opinion lag"), and (3) the date that audit fee information is publicly disclosed ("fee lag"). Audit fees are typically disclosed in the company's proxy statement, but occasionally are disclosed in the 10-K. Unlike the proxy statement, the audit fee disclosures have a deadline of 120 days after the financial statement date, thus providing a stable benchmark for determining timeliness. The audit report date is almost always disclosed in the company's 10-K, but is not equivalent to the 10-K filing date. Traditionally it is dated before the filing of the 10-K, although we show that in recent years the trend has been toward the convergence of these two dates.

To our knowledge, no study has examined the simultaneous association between these dates and their potential information content for investors. Various studies have explored the determinants of opinion lag, and whether it is associated with contemporaneous audit fees, but not whether it has information content for future returns. Several studies have explored the determinants of late 10-K filings and whether late filings have contemporaneous and future returns implications, but not in conjunction with the other dates. No study has investigated whether fee lag encapsulates information relevant to investors, or even to auditors.

Our study investigates the information content of all three dates for investors, with particular emphasis on fee lag, by examining whether they are associated with future abnormal returns. Examining all three dates in conjunction, rather than in isolation, is important because the dates are highly correlated, leading to a potential correlated omitted variables problem.

We find that both 10-K lag and opinion lag are strongly associated with abnormal returns between the financial statement date and the disclosure date ("pre-disclosure returns"), but only opinion lag is associated with future abnormal returns. Fee lag is not associated with pre-disclosure returns, but is the only one of the three measures predictive of one year ahead size-adjusted future returns after controlling for other factors. We test whether the association between fee lag and future returns is driven by information disclosed in conjunction with the audit fee disclosure by examining five day returns around the disclosure dates. We further supplement this test with a content analysis of a random sample of proxy statements. The evidence is consistent with the information content being in the date itself, as we find insignificant returns in the five day window surrounding the fee disclosure ($p=0.7013$).

Based on these findings, we examine whether a simple trading strategy based on fee lag would produce positive returns. We construct hedge portfolios on June 1st for all December year-end firms, going long in firms in the bottom fee lag decile and short in firms in the top fee lag decile. The hedge portfolio provides an average annual size-adjusted return of 8.6% over the ten years examined, and produces positive returns in eight of the ten years. Interestingly, even though the 10-K lag is not significantly associated with future returns in the multivariate regressions, a hedge portfolio based on 10-K lag also yields a positive average market-adjusted return of 12.9% over the same period and produces positive returns in all ten years. A hedge portfolio combining the two lags produces an average annual market-adjusted return of 17.3% over the ten years, and is positive in eight of the ten years, with near zero returns in the two negative years. Together these findings suggest that the information in fee lag is value relevant above any information contained in 10-K lag, and can potentially be exploited by informed investors.

Finally, drawing on recent studies that examine whether auditors have private information useful for measuring earnings quality (Hribar et al. 2010) and for predicting future returns (Picconi and Reynolds, 2013), we examine whether information implicit in the dates is impounded into audit fees. We find that both opinion lag and fee lag are positively associated with contemporaneous audit fees and also with future audit fees, while 10-K lag is negatively associated with both contemporaneous and future audit fees when controlling for the other two lags. These findings suggest that the information implicit in all three date lags are incorporated into audit fees over multiple periods.

The remainder of the study is organized as follows. Section II discusses background theory and presents our hypotheses. Section III discusses our sample and estimation models, while Section IV presents the results of our tests. Section V concludes the study.

II. Background and Hypotheses

The association between disclosure timing and abnormal returns

We define fee lag to be the length of time between a firm's fiscal year end and the disclosure of their audit fees. To the best of our knowledge, this variable has not appeared in the literature, either in isolation or in conjunction with other commonly used filing dates. SEC registrants are required to disclose "audit fees, audit related fees, tax fees and other fees billed in each of the last two fiscal years, and the percentage (if greater than 50) of hours worked on the audit by persons other than the accountant's full time, permanent employees."[1] While audit and non-audit fee data for the prior fiscal year is typically included in the proxy statement, it is technically a required 10-K disclosure (Part III), and may be incorporated by reference as part of

1 Section 14(a) of the Securities Exchange Act of 1934

the proxy statement if the proxy is filed within 120 days after the registrant's fiscal year end (irrespective of the registrant's 10-K filing deadline). Failure to file the proxy statement within 120 days would necessitate filing a restated 10-K, including the required Part III information. While the filing deadline for Form 10-K has changed in response to various SEC rules since 2003[2], and is dependent on a firm's filing status as "accelerated", "large accelerated", or "non-accelerated", the fee disclosure deadline has remained fixed and invariant to firm size.

The actual proxy date itself is only available by hand collection, but Audit Analytics reports the date on which audit fees are disclosed. In our sample, the audit fee date was taken from the proxy statement approximately 90% of the time. Hence, although we view the audit fee date as a reasonable measure of the proxy date, it should convey more information than simply the proxy statement date because the disclosure has a fixed deadline. The proxy statement, on the other hand, may be issued within a certain number of days before the annual meeting, and this time frame varies based on both the nature of the voting items contained in proxy and the firm's state of incorporation.

Prior research provides some evidence regarding 10-K filing lags – typically, the number of days between a firm's fiscal period end and their related SEC filing. Easton and Zmijewski (1993) document the mean/median reporting lags for 10-K's and 10-Q's for a broad sample of firms, noting that most reports are filed on or close to statutory reporting deadlines. However, Alford, et al. (1994) documents that approximately 20% of 10-Ks are filed after the statutory deadline, and of those late filers, more than two-thirds do not file the required form 12b-25 notification. The study finds that late 10-K filers tend to be small, underperforming firms, and

2 SEC rule 33-8128, SEC rule 33-8644

that the most common causes for late filing are "financial distress" and "accounting and auditing issues".

The advent of the EDGAR system and subsequent regulatory changes impacted 10-K lags and the investor response to late filings. Qi et al. (2000) documents that 10-K filings continue to provide information to investors in the post-EDGAR period. Similarly, Griffin (2003) finds a negative response to non-timely (NT) 10-K and 10-Q filings, after controlling for industry composition, market capitalization, accounting accruals and institutional holdings.

Like Alford, et al. (1994), Pevzner (2008) examines late 10-K filings and differentiates between late filers who do and do not notify via Form 12b-25. The study shows that, while *notifying* late filers do have negative abnormal returns during the twelve months following the missed deadline, non-notifiers subsequent performance is not significantly different from timely filers. Notifying late filers are also more likely to delist than non-notifiers. In a related study, Buchheit, et al. (2010) documents that firms experience negative abnormal returns on missed 10-K filing deadline dates. Examining the impact of recent regulatory changes, Impink et al. (2012) finds that the additional reporting burden of section 404 of the Sarbanes-Oxley Act did not result in an increase in late 10-K filings, except for those firms reporting a material weakness in internal controls over financial reporting. These material weakness reporting firms experience negative abnormal returns around the filing of Form 12b-25 (notification of non-timely filing), particularly for those who do not provide a meaningful explanation for the cause of the missed deadline.

Opinion lag, the number of days between a firm's fiscal period end and the date on the related audit report, is closely related to 10-K lag, because the audit report typically is made available to the public through the 10-K. While not technically a statutory disclosure date

separate from the 10-K, a substantial body of research has used the opinion lag as a proxy for financial or audit difficulty. Much of the research on opinion lag focuses on its determinants, such as firm size, firm complexity, auditor characteristics, and the collaboration of internal audit staff (Ashton et al. 1987, Ashton et al. 1989, Bamber et al. 1993, Kinney and McDaniel 1993, Ettredge et al. 2006, Pizzini et al. 2012). Two papers examine whether returns or earnings quality might be associated with opinion lag. Schwartz and Soo (1996) finds that the timing of auditor switches is a significant explanatory variable in predicting opinion lags, with firms that undergo auditor switches late in their fiscal year experiencing longer opinion lags. They, however, find no significant market reaction surrounding the filing of the 8-K report detailing the auditor change. Similarly, Krishnan and Yang (2009) finds that longer opinion lags are not associated with lower quality earnings or accruals.

A recent study by Bronson et al. (2011) examines the impact of recent regulation on opinion lags and documents a corresponding market reaction; the study shows that opinion lags increased surrounding the implementation of AS2 and AS3, and revisions of preliminary earnings announcements are more likely when earnings are announced prior to the audit report date. In addition, when firms foreshadow the upcoming revision in a press release, the market discounts the reliability of announced earnings.

Since prior research has dealt with 10-K lags and opinion lags in isolation, we formulate our hypotheses around fee lag. However, we also report and discuss results for 10-K lag and opinion lag because they have not been studied jointly, nor in all of the contexts we present in this study. We anticipate that delays in fee reporting will generally be associated with poorer firm performance either due to specific negative information generating the delay or general firm disorganization. We therefore hypothesize that fee lag will be negatively associated with

abnormal returns. We begin by examining abnormal returns in the period between the end of the firm's fiscal year and the date on which the disclosure is filed. We refer to this as the "pre-disclosure" return. Significant abnormal returns during this period indicate that there is information either in the disclosure or in the timing of the disclosure, but that it leaks into the market early. We next examine abnormal returns in the five day window surrounding the disclosure date to determine if the market identifies information content in the disclosure itself. We define the five day window as starting two days before the disclosure date and ending two days after the disclosure date. Finally, we examine year ahead abnormal returns to determine whether there are pricing implications for future returns that are not contemporaneously impounded by the market. We state those hypotheses as follows:

H1a: Fee lag in year t is negatively associated with pre-disclosure abnormal stock returns.

H1b: Fee lag in year t is negatively associated with abnormal stock returns in the five day window surrounding the date of the disclosure.

H1c: Fee lag in year t is negatively associated with abnormal stock returns in year t+1.

The impact on audit fees

Many studies in the literature help explain the cross-sectional variation in audit fees using publicly observable client and auditor characteristics,[3] but relatively little is known about the exact process by which audit fees are determined. O'Keefe at al. (1994) asserts that fees represent "an aggregation of the hours charged to the engagement priced at effective (not

3 Simunic 1980, Francis 1984, Firth 1985, Simon 1985, Palmrose 1986, Francis and Simon 1987, Simon and Francis 1988, Craswell et al. 1995, Simunic and Stein 1996, Ferguson et al. 2003, Reynolds et al. 2004, Francis et al. 2005, Antle et al. 2006, Ferguson et al. 2006, Venkataraman et al. 2008.

standard) billing rates." While a significant part of the joint effect of hours and effective billing rate are captured in cross-sectional audit fee models, some portion of the remaining unexplained variation in fees almost certainly represents information that is private to the auditor.

Recent studies demonstrate that fees are significantly associated with proxies for the auditor's private client-specific information. Stanley (2011) finds that future changes in operating performance are a significant determinant of current audit fees. His study also investigates the relationship between audit fees and earnings, and finds that current audit fees are significantly negatively related to future unexpected changes in earnings, indicating that auditors have access to, and are able to make use of, a superior information set compared to outsiders; even sophisticated outsiders, such as analysts. Hackenbrack, et al. (2011) finds that stock price crash risk, lawsuits, and debt downgrades are significant predictors of changes in industry adjusted audit fees, indicating that auditors are able to utilize their access to confidential client information to price protect themselves from the increases in engagement risk caused by these events. Hribar et al. (2010) use audit fees as a new proxy for accounting quality, and find that abnormal fees have explanatory power incremental to measures presented in previous literature. Picconi and Reynolds (2013) further investigate the relationship between audit fees and future abnormal returns, and find that both abnormally high and abnormally low fees are associated with negative future abnormal returns.

This literature suggests the underlying cause of any association between fee lag and future returns may also be part of the auditor's private information set. We test this explanation by examining whether the three lag variables are related to either current year or future audit fees. As was the case for H1, we state our hypotheses in terms of fee lag, but also investigate the joint association with 10-K lag and opinion lag. Audit fees have already been shown to be

associated with opinion lag, as discussed earlier. The possibility that fee lag may be associated with audit fees arises because a longer fee lag may indicate that the auditor is price protecting against negative, private firm information, or the auditor experienced a disorganized or sloppy client - characteristics which could drive not only audit fees, but also the release of other information and future firm performance.

H2a: Fee lag in year *t* is positively associated with audit fees in year *t.*

Anecdotal evidence suggests that audit fees for continuing clients are largely determined during the first quarter of the year under audit, which occurs in approximately the same timeframe as the audit fee disclosure from the prior year. Any information affecting the release of the previous year's fees may therefore be considered by auditors in determining audit fees for the current fiscal year. As such, fee lag may be associated with future audit fees rather than, or in addition to, current audit fees. We test this by examining the association between the prior value of fee lag and contemporaneous audit fees.

H2b: Fee lag in year *t-1* is positively associated with audit fees in year *t.*

III. Sample and Models

Sample and data

Our sample consists of all Compustat listed companies with necessary auditor and audit fee disclosure data on Audit Analytics from 2000 – 2011. For the returns tests, we also require that stock price data be available on CRSP. We also eliminate all stocks not listed on the NYSE, AMEX, or NASDAQ, and all banks and utilities. Additionally, we restrict the sample to fee lag of greater than 45, but less than or equal to 150 days for our main tests (approximately the 1st and 85th percentile of the raw fee lag distribution). As the deadline for fee disclosures is 120 days

from fiscal year end, this timeframe allows us to examine a broad range of fee lag, including those up to one month past the statutory deadline, while eliminating questionable data points. Our final sample consists of 33,352 firm-year observations that contain all three lag variables of interest.

[Insert Table 1 about here]

Table 1 presents descriptive statistics for our key test and control variables. The mean (median) values of fee lag in our sample are approximately 99 (100) days; slightly shorter than the 120 day statutory deadline. The mean (median) values of opinion lag and 10-K lag are 61 (61) days and 76 (75) days, respectively. These values are highly variable over time, however, as illustrated in Figure 1. Table 1 also shows the means for the key test and control variables for the bottom, middle two, and top fee lag deciles. Table 1 demonstrates that there is significant variation in control variable means across the deciles, making it important to consider fee lag in a multivariate setting.

[Insert Figure 1 about here]

Figure 1 illustrates the variation in fee lag, opinion lag, and 10-K lag by year and asset decile. All three variables decline monotonically with asset decile. The mean 10-K lag has decreased since 2001, mainly due to regulatory changes in SEC filing deadlines. At the same time, the mean opinion lag has increased by approximately one month between 2002 and 2004. The result has been a significant reduction in time between the audit opinion date and the filing of the 10-K, with near convergence by 2011. This is rather striking since the audit opinion date is defined as the end of significant fieldwork. Traditionally, administrative processes such as final review of documentation, report completion, and perhaps most importantly, concurring review procedures, all took place between the end of fieldwork and the release of the audit report and

10-K. The convergence suggests either that the review process has become so efficient that it can be wrapped up and any review points cleared on the same day that the audit report and financial statements are actually released to the public; or that audit reports are now being dated past the actual end of fieldwork. Fee lag exhibits less of a clear pattern than the other two variables, noticeably increasing from 2003 to 2005, around the period of SOX implementation, but decreasing in the years since.

[Insert Table 2 about here]

The correlation matrix for the three key variables and their lagged values is presented in Table 2 panel A. Fee lag, opinion lag and 10-K lag, as well as their prior year values, are all significantly positively correlated. Panel B presents the correlation matrix of fee lag and a selection of control variables that are most strongly correlated with fee lag. Fee lag is positively correlated with indicators for negative Net Income, going concern opinions and negatively correlated with firm size, auditor size and return on assets, and firm age.

To more thoroughly examine the determinants of fee lag, we regress FEELAGCL, the annual decile rank of fee lag scaled from 0 to 1, on a number of control variables that have been shown to be predictors of audit fees, under the assumption that many of these variables may also be associated with fee lag. All control variables are detailed in the appendix. The form of the full regression is:

$$FEELAGCL_{i,t} =$$

$$\alpha + \beta_1 FEELAGCL_{i,t-1} + \beta_2 OPINLAGCL_{i,t} + \beta_3 10KLAGCL_{i,t} + \beta_4 ASSETCL_{i,t} +$$

$$\beta_5 AUDSIZE_{i,t} + \beta_6 SPECAUD_{i,t} + \beta_7 AUDCHG_{i,t} + \beta_8 GC\_OPIN_{i,t} + \beta_9 IC\_OPOIN_{i,t} +$$

$$\beta_{10} SOX_{i,t} + \beta_{11} NONDECYR_{i,t} + \beta_{12} RESTATE_{i,t} + \beta_{13} ROACL_{i,t} + \beta_{14} LOSS_{i,t} +$$

$$\beta_{15} QUICKCL_{i,t} + \beta_{16} INVRECCL_{i,t} + \beta_{17} D/ACL_{i,t} + \beta_{18} SQRTSEGS_{i,t} +$$

$$\beta_{19}FORPCT_{i,t} + \beta_{20}RESTR_{i,t} + \beta_{21}EXT\_DISC_{i,t} + \beta_{22}ACQ_{i,t} + \beta_{23}STOCKFIN_{i,t} +$$

$$\beta_{24}DEBTFIN_{i,t} + \beta_{25}LITRISK_{i,t} + \beta_{26}BTDIFFCL_{i,t} + \beta_{27}ZCL_{i,t} + \beta_{28}B/MCL_{i,t} +$$

$$\beta_{29}AGE_{i,t} + Year\ and\ Industry\ Dummies + \varepsilon_{i,t} \qquad (1)$$

Table 3 Panel A reports the results of the regression without the variables FEE $LAGCL_{t-1}$, OPINIONLAGCL and 10KLAGCL, the prior year's fee lag and the current year's opinion lag and 10-K lag respectively, included in the regression. The regression has an R^2 of 17.3% and shows that asset size is negatively associated with fee lag and the largest predictor. Auditor size, ROA and firm age are also significantly negatively associated with fee lag, while going concern opinion, material weakness in internal controls, book to market, and negative net income (LOSS) are all significant predictors of fee lag. Panel B shows repeats the regression including the prior year's fee lag and the other two lags. Inclusion of these variables greatly improves the explanatory power of the model, increasing the R^2 to 54.4%, most of this due to the inclusion of the previous year's fee lag.[4]

Model specification

To test H1, we model returns as a function of the disclosure timing variables and control variables, as follows:

$$RET_i = \alpha + \beta_1 FEELAGCL_{i,t} + \beta_2 OPINLAGCL_{i,t} + \beta_3 10KLAGCL_{i,t} + \beta_4 AUDSIZE_{i,t} +$$

$$\beta_5 SPECAUD_{i,t} + \beta_6 AUDCHG_{i,t} + \beta_7 GC\_OPIN_{i,t} + \beta_8 IC\_OPIN_{i,t} + \beta_9 SOX_{i,t} +$$

$$\beta_{10} NONDECYR_{i,t} + \beta_{11} RESTATE_{i,t} + \beta_{12} ROA_{i,t} + \beta_{13} LOSS_{i,t} + \beta_{14} QUICKCL_{i,t} +$$

$$\beta_{15} INVRECACL_{i,t} + \beta_{16} D/ACL_{i,t} + \beta_{17} SQRTSEGS_{i,t} + \beta_{18} FORPCT_{i,t} + \beta_{19} RESTR_{i,t} +$$

$$\beta_{20} EX\_DISC_{i,t} + \beta_{21} ACQ_{i,t} + \beta_{22} STOCKFIN_{i,t} + \beta_{23} DEBTFIN_{i,t} + \beta_{24} LITRISK_{i,t} +$$

[4] In untabulated results, the R^2 excluding the previous year's fee lag is 24.8%. The regressions in Table 3 are all run on scaled fee lag decile ranks. If raw fee lag is used as the dependent variable, the model's explanatory power is significantly lower, but the relative importance of the regressors remains unchanged.

$$\beta_{25}BTDIFFCL_{i,t} + \beta_{26}ZCL_{i,t} + \beta_{27}B/MCL_{i,t} + \beta_{28}E/PCL_{i,t} + \beta_{29}BETACL_{i,t} +$$

$$\beta_{30}MOMCL_{i,t} + \beta_{31}NOACL_{i,t} + \beta_{32}TACCCL_{i,t} + \beta_{33}SDEVAQ_{i,t} + \beta_{34}AGE_{i,t} +$$

$$Year\ and\ Industry\ Dummies + \varepsilon_{i,t} \quad (2)$$

For our multivariate tests, we construct class variables by ranking all variables into deciles and scaled from 0 to 1 to adjust for the potential effects of nonlinearity. All variables are defined in the appendix. For H1a, we define RET as the buy and hold size adjusted abnormal return from the end of the firm's fiscal year until the date on which audit fees are disclosed. For H1b, we define RET as the buy and hold size adjusted abnormal return in the five day window surrounding the date that audit fees are reported. For H1c, we define RET as the year ahead buy and hold size adjusted abnormal return beginning ten days after the audit fee disclosure date. Because our main focus is on fee lag, we do not tabulate the corresponding returns associated with the 10-K release date. We do however discuss these results briefly in Section IV.

To test H2 we model audit fees as a function of the disclosure timing variables and control variables selected for consistency with prior literature. The coefficient on $FEELAG_t$, serves as the test of H2a and the coefficient on $FEELAG_{t-1}$ serves as the test of H2b. As is the case for the returns tests, we have ranked all variables into deciles and scaled from 0 to 1. The model for testing H2 is as follows:

$$logAuditFees_{i,t} = \alpha + \beta_1 FEELAGCL_{i,t} + \beta_2 FEELAGCL_{i,t-1} + \beta_3 OPINLAGCL_{i,t} +$$

$$\beta_4 10KLAGCL_{i,t} + \beta_5 AUDSIZE_{i,t} + \beta_6 SPECAUD_{i,t} + \beta_7 AUDCHG_{i,t} + \beta_8 GC\_OPIN_{i,t} +$$

$$\beta_9 IC\_OPOIN_{i,t} + \beta_{10} SOX_{i,t} + \beta_{11} NONDECYR_{i,t} + \beta_{12} RESTATE_{i,t} + \beta_{13} ROACL_{i,t} +$$

$$\beta_{14} LOSS_{i,t} + \beta_{15} QUICKCL_{i,t} + \beta_{16} INVRECCL_{i,t} + \beta_{17} D/ACL_{i,t} + \beta_{18} SQRTSEGS_{i,t} +$$

$$\beta_{19} FORPCT_{i,t} + \beta_{20} RESTR_{i,t} + \beta_{21} EXT\_DISC_{i,t} + \beta_{22} ACQ_{i,t} + \beta_{23} STOCKFIN_{i,t} +$$

$$\beta_{24}DEBTFIN_{i,t} + \beta_{25}LITRISK_{i,t} + \beta_{26}BTDIFFCL_{i,t} + \beta_{27}ZCL_{i,t} + \beta_{28}B/MCL_{i,t} +$$

$$\beta_{29}ASSETCL_{i,t} + \beta_{30}AGE_{i,t} + Year\ and\ Industry\ Dummies + \varepsilon_{i,t} \quad (3)$$

IV. Results

We report the return results in Table 4. All statistics are adjusted for heteroskedasticity and clustered by firm to control for serial correlation. We define our class variables for fee lag, 10-K lag, and opinion lag as FEELAGCL, 10KLAGCL, and OPINIONLAGCL, respectively. Table 4 shows that FEELAGCL is not significantly associated with pre-disclosure abnormal returns (p=0.1426) in Panel A, or with five day abnormal returns (p=0.7013) in Panel B. Panel C, however, shows that FEELAGCL is negatively associated with future abnormal returns (-0.0539, p=0.0025).[5] Hence, only H1c is supported. This suggests that fee lag has information content for investors, but that it is not impounded either before the disclosure date or during the period surrounding the disclosure date. The fact that it is not impounded in the window surrounding the disclosure date suggests that the year ahead abnormal returns are not due to the content of the proxy statement or 10-K in which the fee information is released, but rather conveys that fee lag itself has information content. To further investigate whether we have inadvertently captured information in the content of the proxy statement, we selected a random sample of 100 proxy statements covering the range of fee lag deciles and classified their contents. We were not able to detect any systematic content differences between early and late audit fee disclosures to include as additional controls in the model.

[Insert Table 4 about here]

[5] Note that because the FEELAGCL variable is a decile rank scaled between zero and one, the .0539 coefficient on the variable equates to a 5.39% abnormal return over the following year.

In Table 4 it is notable that both 10-K lag and opinion lag are significantly associated with returns in the pre-audit fee disclosure period. This period, however, includes both the period leading up to and surrounding the 10-K filing and generally a period afterwards between the 10-K filing and the release of the proxy statement. Because our main focus in this paper is on fee lag, we include these variables primarily as important controls due to their high correlation with fee lag. In untabulated regressions, we run pre-disclosure, 5-day, and one-year-ahead returns regressions centered on the 10-K filing date. In these regressions both OPINIONLAGCL and 10KLAGCL are negatively associated with pre-10K filing returns, suggesting that some of the information causing delays in these dates is impounded by the market prior to the 10-K filing. In the 5-day returns, only OPINIONLAGCL is significant (0.0093, p=.001), interestingly implying that firms with longer opinion lags experience an almost 1% higher 5-day abnormal return around the 10-K filing. In the one-year ahead future returns, only OPINIONLAGCL again is significant (-0.084, p=.0006), suggesting that although firms with longer opinion lags may have a slight positive 5-day return, it substantially reverses over the following year. These results are also interesting as they may indicate that the negative long-run abnormal returns found in studies examining late 10-K filings may in fact be associated more with opinion lag rather than the 10-K filing date studied.

While the results of Table 4 indicate that future positive abnormal returns are associated with fee lag, it is unclear how easy these returns may be to realize. To help answer this question, we construct hedge portfolios each June 1st, using only December year end firms, to ensure that the strategies are implementable. The hedge portfolio goes long in firms in the lowest fee lag decile and shorts firms in the highest fee lag decile (again implementing the >45 and <150 fee lag cutoffs). Size adjusted returns are then calculated from June 1st through May 31st at which

point a new portfolio is formed from the firms with fiscal years ending the past December. Table 5, Panel A presents the results of this trading strategy from 2000 through 2009. It shows that this strategy produces an average market adjusted return of 8.6% and yields positive returns in eight of the ten years. It therefore appears that investors could potentially profit from implementing a fairly straight forward fee lag trading strategy.

[Insert Table 5 about here]

Panel B shows the results of a similarly constructed portfolio based on 10-K lag. This strategy produces an average size adjusted return of 12.9% during our sample period, with positive hedge returns in all of the ten years. Panel C likewise shows the result of a similar trading strategy based on opinion lag, which yields 7.0% and is positive in eight of the ten years. It is interesting that of the three strategies, 10-K lag has the strongest and most consistent return, as it is the only one of the three variables not associated with future returns in the multivariate analysis. Panel D investigates a combined strategy based on long positions in firms in the lowest deciles of both fee lag and 10-K lag, and short positions in firms in the top deciles of both lags. This combined strategy produces an average market adjusted return of 17.3%, with positive hedge returns in eight out of ten years, and only negligible negative returns in the two off years. This illustrates that each strategy potentially adds incremental value to the other.[6]

The results for the tests of H2a and H2b are reported in Table 6. Panel A shows the parameter estimates from the regression of current year logged audit fees, clustered by firm. The coefficient on fee lag is positive and significant (0.203, $p<.001$), indicating that longer fee lags are associated with higher contemporaneous audit fees. This supports hypothesis H1a, although does not control for past-year fee lag or the other two lags of interest. Panel B repeats the

[6] A combined fee lag and opinion lag strategy also appears to have incremental value, yielding an average return of 10.6% over the ten years, although returns are negative in three of the years.

regression adding the past year's fee lag. In this regression both the coefficient on FEELAGCL and FEELAGCL_L1 are positive and significant, with similar magnitudes, supporting both H1a and H1b. Finally, in Panel C we run the regression controlling for the other two lags. Both fee lag and prior year fee lag remain positive and significant, confirming H2a and H2b. Opinion lag is also positive and significant (0.269, p<.0001), consistent with prior literature. Interestingly, 10-K lag is negative and significant (-0.165, p<0.0001). The negative coefficient for 10-K lag is contrary to our expectations based on prior literature. We address this in the sensitivity tests that follow. These results suggest that fee lag captures some aspect of the auditor's information set that is relevant to fee negotiations for both the current year and the following year.[7]

[Insert Table 6 about here]

Sensitivity Tests

In articulating the theory underlying the study, we discussed that it is important to control for all three dates simultaneously to avoid potential correlated omitted variables problems. However, a strong correlation between variables can lead to a less critical, but still problematic issue of multicollinearity. Multicollinearity inflates standard errors and hence cannot create a statistically significant result, but can mask a significant association making it appear insignificant. Diagnostic tests show that multicollinearity is not serious in our tests, with variance inflation factors being low.

The issue of the significant negative association between 10-K lag and audit fees remains, though. Although the association could not have been a result of multicollinearity in any event, the high correlation between the three date variables means that the incremental effect of each

[7] In untabulated results, we also add prior year opinion lag and 10-K lag to our Equation 3 regressions. Both prior year lags load significantly with the same sign as the contemporaneous lags. This suggests that, like fee lag, both opinion lag and 10-K lag capture information relevant to audit fee negotiations in both the current and following year.

variable, after controlling for the others, may be ambiguous. To investigate this, in untabulated tests we ran three variations of the fee regressions, incorporating only one date variable at a time. Results for fee lag and opinion lag remain unchanged, but the 10-K lag loads with a significantly positive coefficient. The positive coefficient on 10-K lag without controlling for the other two date variables is what we would have expected based on prior research. This change in sign when not controlling for the other two dates indicates that, while the main effect of 10-K lag on audit fees is positive, after controlling for opinion lag, the *marginal effect* of additional days of filing delay on audit fees is negative. This could imply a fee premium when auditors are required to allocate scarce resources to a client close to filing deadlines.

An additional issue arises with the consistency between the date variables over time. Figure 1 clearly shows that during the latter portion of our period the opinion lag and 10-K lag began to converge around 2006, becoming nearly identical in the last couple of years. To address this, we split the sample into two time periods: 2001-2005, and 2006-2011. The results for all three date variables are consistent with those reported in the tables.

Because fee lag is associated with both contemporaneous and future audit fees, the long-run abnormal returns we find associated with fee lag may simply reflect the long-run market response to abnormal audit fees demonstrated in Picconi and Reynolds (2013). To ensure this is not the case, in untabulated results we replicate our returns tests incorporating positive and negative abnormal fees as additional control variables. The results for H1a, b, and c remain unchanged.

V. Conclusion

We examine the association of three potentially important report filing dates with future abnormal returns. Unlike previous papers, we consider the information content of all three key lags (fee lag, opinion lag, and 10-K lag) in conjunction to determine whether the lags contain incremental information. We find that both fee lag and opinion lag are predictive of one year ahead size-adjusted future returns after controlling for other factors. Fee lag, however, is not predictive of returns prior to or surrounding the audit fee disclosure date. This suggests that the actual disclosure lag itself has information relevance, not the other information simultaneously disclosed. Constructing simple hedge portfolios based on fee lag yields an average size-adjusted return of 8.6% and the fee lag strategy appears to add incremental value to a 10-K trading strategy. Together these findings suggest that the information in fee lag is value relevant above any information contained in 10-K lag or opinion lag, and can potentially be exploited by informed investors.

We additionally explore whether all three lags are associated with audit fees. We find that both opinion lag and fee lag are positively associated with both contemporaneous and future audit fees, while 10-K lag is, surprisingly, negatively associated with both contemporaneous and future audit fees. These findings suggest that all three lags proxy for private auditor-specific information.

Overall, we show that all both fee lag and opinion lag contain market relevant information and that all three lags contain information priced by auditors. While this paper demonstrates some of the informational properties associated with fee lag, future research may help uncover the specific value relevant information for which the fee lag is a proxy.

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APPENDIX
Variable Definitions

Variable Name	Definition
Primary test variables	
FEELAG	Number of days between a company's fiscal year end and the audit fee disclosure date in the Audit Analytics database
FEELAGCL	Decile rank of the company's fee lag, scaled from 0 to 1
OPINLAG	Number of days between a company's fiscal year end and the date on which the audit report is issued
OPINLAGCL	Decile rank of the company's opinion lag, scaled from 0 to 1
10KLAG	Number of days between a company's fiscal year end and the date on which the Form 10-K is filed
10KLAGCL	Decile rank of the company's 10-K lag, scaled from 0 to 1
$RET_{i, t-2 - t+2}$	Five day size adjusted returns centered around the audit fee disclosure date.
$RET_{i, t+1}$	Year-ahead size adjusted buy-and-hold abnormal returns, beginning ten days after the audit fee disclosure date. We calculate size adjusted returns by subtracting the corresponding CRSP size decile buy-and-hold return from a firm's return over the same period. Firm's that delist are assigned the CRSP delisting return at the date of delisting and assumed to have a zero size-adjusted return for the remainder of the return period.
Control variables	
ACQ	Indicator variable defined as 1 if the company engaged in acquisition activities during the year and 0 otherwise
AGE	The company's age, defined as the number of active years in the Compustat database
AUDCHG	Indicator variable defined as 1 if the company changed auditors during the year and 0 otherwise
AUDFEES	Audit fees for the fiscal year, from Audit Analytics
AUDSIZE	Indicator variable defined as 1 if the auditor is a Big-4 firm and 0 otherwise
B/MCL	Decile rank of the company's book to market ratio at the beginning of the fiscal year, scaled from 0 to 1
BETACL	Decile rank of the company's market Beta, obtained from CRSP

CAPCL	CRSP decile rank of the company's market value of equity at the beginning of the calendar year, scaled from 0 to 1
D/ACL	Decile rank of the company's ratio of debt to total assets, scaled from 0 to 1
DEBTFIN	Indicator variable defined as 1 if the company engaged in debt financing during the year and 0 otherwise
E/PCLS	Decile rank of the company's earnings to price ratio, scaled from 0 to 1
EX_DISC	Indicator variable defined as 1 if the company reported extraordinary or discontinued items for the year and 0 otherwise.
FORPCT	Percentage of sales from foreign operations during the year
GC_OPIN	Indicator variable defined as 1 if the company received a going concern modification to its audit opinion and 0 otherwise
IC_OPIN	Indicator variable defined s 1 if the company received a qualified opinion on its internal controls during the year and 0 otherwise
INVRECCL	Decile rank of the company's ratio of inventory plus receivables to total assets, scaled from 0 to 1
LITRISK	Dummy variable for inclusion in high litigation risk industry groups.
BTDIFFCL	Book/tax difference
LOGMVE	Log of market value of equity
LOSS	Indicator variable defined as 1 if the company reported a net loss during the year, and 0 otherwise
MOMCLS	Decile rank of the company's Momentum, computed as returns for the six month period preceding the return period in Equation 1, scaled from 0 to 1
NOACLS	Decile rank of the company's net operating assets at the beginning of the fiscal year, scaled from 0 to 1
NONDECYR	Indicator variable defined as 1 if the company has a non-December fiscal year end and 0 otherwise
QUICKCL	Decile rank of the company's quick ratio, scaled from 0 to 1
RESTATE	Indicator variable defined as 1 if the company was engaged in restatement activities during the year and 0 otherwise
RESTR	Indicator variable defined as 1 if the company engaged in restructuring activities during the year and 0 otherwise
ROACL	Decile rank of the company's return on assets, computed as Net Income scaled by total assets at the beginning of year zero, scaled from 0 to 1

SDEVAQ	Standard deviation of accruals
SOX	Indicator variable defined as 1 if the company's controls were audited pursuant to SOX section 404, and 0 otherwise
SPECAUD	Indicator variable defined as 1 if the company's auditor served 20% or more of the market share of the industry in which the company operates and 0 otherwise
SQRTSEGS	Square root of the number of operating segments reported by the company for the year
STOCKFIN	Indicator variable defined as 1 if the company engaged in stock financing during the year and 0 otherwise
ZCL	Decile rank of the score from Zmijewski (1984), computed as: -4.336 -4.513*ROA +5.679*Leverage +0.004*Current Ratio. Note that a higher score indicates greater financial distress. This variable is scaled from 0 to 1

Table 1 Descriptive Statistics

	All Firms		Bottom FEELAG Decile	5th and 6th FEELAG Decile	Top FEELAG Decile
Variable	Mean	Median	Mean	Mean	Mean
FEELAG	99.292	100	67.270	100.136	129.271
OPINLAG	61.207	61	49.667	61.650	74.796
10KLAG	76.568	75	64.121	76.859	91.559
ACQ	0.364	0	0.435	0.366	0.298
AGE	17.908	13	26.210	16.546	13.675
AUDCHG	0.082	0	0.053	0.083	0.120
AUDSIZE	0.800	1	0.914	0.820	0.652
B/M	0.562	0.462	0.150	0.633	0.659
DEBTA	0.169	0.088	0.191	0.169	0.130
DEBTFIN	0.469	0	0.554	0.457	0.406
EX_DISC	0.206	0	0.234	0.207	0.188
FOR_PCT	0.196	0.012	0.247	0.184	0.168
GC_OPIN	0.036	0	0.012	0.033	0.084
IC_OPIN	0.032	0	0.014	0.032	0.054
INVARECA	0.248	0.216	0.256	0.244	0.258
LITRISK	0.384	0	0.326	0.394	0.440
LOGASSET	5.741	5.656	7.040	5.681	4.701
LOGBTDIFF	0.890	0.226	1.785	0.856	0.163
LOGMVE	5.800	5.789	7.152	5.718	4.757
LOSS	0.389	0	0.212	0.390	0.520
NONDECYR	0.300	0	0.300	0.294	0.348
QUICK	2.755	1.606	2.100	2.800	2.880
RESTATE	0.0019	0	0.000	0.0024	0.0030
RESTR	0.272	0	0.337	0.275	0.191
ROA	-0.029	0.058	0.062	-0.021	-0.130
SOX	0.463	0	0.579	0.473	0.325
SPECAUD	0.528	1	0.628	0.541	0.399
SQRTSEGS	1.753	1.732	1.938	1.716	1.659
STOCKFIN	0.518	1	0.626	0.511	0.440
ZSCORE	-1.168	-1.650	-1.470	-1.258	-0.728
Observations	33,352	33,352	3,302	6,771	2,329

Table 2, panel A
Correlation matrix: Fee lag, Opinion lag, 10-K lag
Pearson correlations above the diagonal/Spearman correlations below the diagonal

	FEELAG	FEELAG_L1	OPINLAG	OPINLAG_L1	10KLAG	10KLAG_L1
FEELAG	1	0.27891 <.0001	0.26331 <.0001	0.16669 <.0001	0.38281 <.0001	0.16547 <.0001
FEELAG_L1	0.63724 <.0001	1	0.14927 <.0001	0.27493 <.0001	0.22881 <.0001	0.424 <.0001
OPINLAG	0.35064 <.0001	0.29011 <.0001	1	0.37168 <.0001	0.57363 <.0001	0.22244 <.0001
OPINLAG_L1	0.30043 <.0001	0.3483 <.0001	0.6161 <.0001	1	0.21779 <.0001	0.53251 <.0001
10KLAG	0.45939 <.0001	0.3826 <.0001	0.4193 <.0001	0.25954 <.0001	1	0.34693 <.0001
10KLAG_L1	0.357 <.0001	0.47005 <.0001	0.32376 <.0001	0.38649 <.0001	0.74531 <.0001	1

Table 2, panel B
Correlation matrix, Fee lag and selected control variables
Pearson correlations above the diagonal/Spearman correlations below the diagonal

	FEELAG	LOG ASSSET	AUDSIZE	SPECAUD	AUDCHG	GC_OPIN	IC_OPIN	ROA	LOSS	ZSCORE	LOG BTDIFF	AGE	E/PCLS	SDEVAQ
FEELAG	1	-0.14752	-0.09227	-0.07278	0.08375	0.12206	-0.12926	-0.07433	0.12498	0.04787	-0.10163	-0.14289	-0.12144	0.08713
		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
LOGASSET	-0.33679	1	0.43582	0.31951	-0.10917	-0.23374	0.3948	0.22544	-0.35777	-0.10554	0.69105	0.35433	0.35004	-0.30215
	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
AUDSIZE	-0.17722	0.44861	1	0.53375	-0.15142	-0.12254	0.13377	0.06945	-0.11041	-0.03858	0.30071	0.04147	0.10244	-0.12862
	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
SPECAUD	-0.13116	0.32067	0.53375	1	-0.10325	-0.0743	0.14839	0.05389	-0.08736	-0.02548	0.22317	0.05845	0.07787	-0.09388
	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
AUDCHG	0.09008	-0.11048	-0.15142	-0.10325	1	0.03408	-0.0998	-0.01881	0.05179	0.01141	-0.0835	-0.05159	-0.04954	0.02905
	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	0.0003	<.0001	0.0278	<.0001	<.0001	<.0001	<.0001
GC_OPIN	0.14168	-0.22166	-0.12254	-0.0743	0.03408	1	-0.10698	-0.27209	0.23774	0.24195	-0.0711	-0.06904	-0.27936	0.13244
	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
IC_OPIN	-0.15459	0.41106	0.13377	0.14839	-0.0998	-0.10698	1	0.08752	-0.18314	-0.04449	0.25721	0.17448	0.14181	-0.14708
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
ROA	-0.23736	0.36695	0.10304	0.08982	-0.05714	-0.27722	0.2054	1	-0.26897	-0.82867	0.06346	0.09792	0.29373	-0.1708
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
LOSS	0.22847	-0.36361	-0.11041	-0.08736	0.05179	0.23774	-0.18314	-0.85029	1	0.17209	-0.15849	-0.22608	-0.80529	0.23017
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001
ZSCORE	0.05541	0.02802	0.02767	0.0148	0.02079	0.27335	-0.05803	-0.55766	0.42126	1	0.00587	-0.02504	-0.1838	0.12557
	<.0001	<.0001	<.0001	0.0043	<.0001	<.0001	<.0001	<.0001	<.0001		0.258	<.0001	<.0001	<.0001
LOGBTDIFF	-0.24307	0.67505	0.30622	0.21998	-0.0835	-0.08452	0.27075	0.19893	-0.1871	0.10841	1	0.27659	0.16091	-0.16245
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
AGE	-0.26056	0.26448	-0.00622	0.01823	-0.04383	-0.07047	0.19979	0.23754	-0.23531	-0.01804	0.20642	1	0.24709	-0.23258
	<.0001	<.0001	0.2305	0.0004	<.0001	<.0001	<.0001	<.0001	<.0001	0.0005	<.0001		<.0001	<.0001
E/PCLS	-0.23439	0.35577	0.10406	0.07951	-0.05005	-0.27213	0.14403	0.8274	-0.81358	-0.39162	0.18713	0.25495	1	-0.22263
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001
SDEVAQ	0.22143	-0.41706	-0.16622	-0.12987	0.05334	0.12974	-0.20728	-0.22827	0.24474	0.05316	-0.26114	-0.27915	-0.23765	1
	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	

Table 3 Determinants of Fee Lag

	Panel A y = FEELAG		Panel B y = FEELAG	
Parameter	Estimate	Pr > |t|	Estimate	Pr > |t|
Intercept	0.6571	<.0001	0.15619	<.0001
FEELAGCL_L1			0.61848	<.0001
OPINLAGCL			0.05230	<.0001
10KLAGCL			0.13358	<.0001
LOGASSETCL	-0.2381	<.0001	-0.02360	0.0244
AUDSIZE	-0.0373	<.0001	-0.00835	0.0846
SPECAUD	-0.0007	0.9058	0.00282	0.3835
AUDCHG	0.0139	0.0213	-0.00634	0.2107
NONDECYR	-0.0083	0.2867	-0.00626	0.0828
GC_OPIN	0.0353	0.0020	0.01530	0.0874
B/MCLS	0.0372	0.0003	0.00026	0.9656
SOX	-0.0108	0.1311	0.02488	<.0001
IC_OPIN	0.0939	<.0001	0.01773	0.0197
QUICKCL	0.0269	0.0324	0.02809	<.0001
STOCKFIN	0.0069	0.1809	0.00982	0.0025
DEBTFIN	0.0000	0.9946	-0.00005	0.9877
INVARECCL	0.0067	0.6121	-0.00362	0.5773
EX_DISC	0.0135	0.0120	-0.00140	0.6738
D/ACL	0.0290	0.0565	-0.00801	0.3584
ROACL	-0.0334	0.0175	-0.00690	0.4119
LOSS	0.0336	<.0001	0.01072	0.0113
SQRTSEGS	-0.0020	0.7266	-0.00331	0.2520
FORPCT	0.0040	0.8694	-0.01454	0.2502
ACQ	0.0127	0.0122	0.00691	0.0235
RESTR	-0.0147	0.0083	-0.00341	0.2916
RESTATE	0.0585	0.0677	-0.01664	0.6259
ZCL	0.0145	0.3140	0.00944	0.2899
LITRISK	-0.0160	0.2053	-0.00972	0.0901
LOGBTDIFFCL	-0.0085	0.3490	0.00324	0.5584
AGE	-0.0039	<.0001	-0.00084	<.0001
Observations	33,822		26,607	
R-square	.1733		.5443	
Industry and year dummy variables not tabulated				

Table 4 Regressions of stock returns on fee lag

	Panel A Prior Period Returns		Panel B Five Day Returns		Panel C Year Ahead Returns	
Variable	Estimate	Pr > |t|	Estimate	Pr > |t|	Estimate	Pr > |t|
Intercept	-0.0968	0.0212	-0.0063	0.5140	-0.2903	0.0023
FEELAGCL	-0.0106	0.1426	0.0007	0.7013	-0.0539	0.0025
OPINLAGCL	-0.0209	0.0183	-0.0036	0.1615	-0.0250	0.2504
10KLAGCL	-0.0212	0.0466	0.0016	0.5768	-0.0194	0.4375
AUDSIZE	-0.0048	0.5152	0.0010	0.6123	0.0677	<.0001
SPECAUD	0.0043	0.3638	-0.0016	0.1884	0.0273	0.0175
AUDCHG	-0.0059	0.4469	-0.0022	0.3974	-0.0040	0.8963
NONDECYR	0.0062	0.1810	0.0011	0.3789	-0.0263	0.0153
GC_OPIN	-0.1357	<.0001	-0.0093	0.1552	-0.1616	<.0001
B/MCLS	0.1629	<.0001	0.0087	0.0033	0.2358	<.0001
SOX	-0.0184	0.0125	-0.0024	0.2383	0.0038	0.8105
IC_OPIN	-0.0314	0.0008	-0.0036	0.1963	-0.0120	0.6022
QUICKCL	-0.0491	<.0001	0.0008	0.7775	-0.0677	0.0385
STOCKFIN	-0.0104	0.0276	-0.0012	0.3300	-0.0580	<.0001
DEBTFIN	-0.0135	0.0065	-0.0025	0.0594	-0.0051	0.7048
INVARECCL	0.0022	0.8248	0.0008	0.7656	0.0830	0.0005
EX_DISC	-0.0185	0.0002	0.0042	0.0028	-0.0173	0.1125
D/ACL	0.0103	0.5260	0.0010	0.8128	0.0599	0.1123
ROACL	0.0935	<.0001	0.0131	0.0002	0.2047	<.0001
LOSS	-0.0135	0.0417	0.0044	0.0471	-0.0151	0.4587
SQRTSEGS	-0.0001	0.9696	-0.0005	0.6408	0.0202	0.0225
FORPCT	0.0145	0.3728	-0.0045	0.2942	-0.0473	0.2339
ACQ	-0.0135	0.0008	-0.0016	0.1524	-0.0043	0.6579
RESTR	-0.0046	0.3400	0.0013	0.3076	-0.0077	0.5095
RESTATE	-0.0793	0.0335	0.0031	0.8258	0.0346	0.7001
ZCL	0.0886	<.0001	0.0098	0.0313	0.0754	0.0517
LITRISK	-0.0070	0.3175	0.0015	0.4839	-0.0293	0.0593
LOGBTDIFFCL	-0.0067	0.3500	0.0011	0.5826	-0.0048	0.8114
AGE	-0.0007	<.0001	0.0000	0.4945	-0.0014	0.0003
E/PCLS	0.0042	0.7863	0.0033	0.4850	-0.1896	<.0001
BETACLS	0.0062	0.5868	0.0045	0.1160	0.0578	0.0140
MOMCLS	0.0111	0.0780	-0.0047	0.0061	-0.0489	0.0039
WNOAQR	-0.0613	<.0001	0.0010	0.7090	-0.1442	<.0001
WTACCQR	-0.0218	0.0023	-0.0022	0.2644	0.0219	0.3111
SDEVAQ	0.0181	0.5705	-0.0019	0.8139	-0.0874	0.2141
Observations	29,898		29,925		27,597	
R-square	.0328		.0074		.0269	
Industry and year dummy variables not tabulated						

Table 5 Trading strategy results

Panel A: Fee Lag Trading Portfolios - December Year End Firms (Top and Bottom Deciles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Low fee lag	0.119	-0.038	0.030	-0.010	0.069	0.063	0.039	-0.008	0.046	0.083	**0.039**
High fee lag	-0.115	-0.138	0.130	-0.024	0.085	0.050	-0.062	-0.181	-0.093	-0.116	**-0.047**
hedge return	**0.234**	**0.100**	**-0.101**	**0.014**	**-0.016**	**0.014**	**0.101**	**0.174**	**0.139**	**0.200**	**0.086**
# of firms	234	223	229	220	211	232	241	211	215	195	
	189	149	125	137	187	211	91	116	85	65	

Panel B: 10K Lag Trading Portfolios - December Year End Firms (Top and Bottom Deciles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Low file lag	0.014	-0.001	0.128	0.001	0.028	0.037	0.024	-0.022	0.195	0.113	**0.052**
High file lag	-0.169	-0.186	0.024	-0.055	0.023	-0.004	-0.054	-0.179	-0.165	-0.010	**-0.078**
hedge return	**0.183**	**0.185**	**0.105**	**0.055**	**0.006**	**0.040**	**0.078**	**0.157**	**0.360**	**0.124**	**0.129**
# of firms	241	329	334	300	337	394	398	357	312	291	
	107	185	280	269	253	262	166	157	145	112	

Panel C: Opinion Lag Trading Portfolios - December Year End Firms (Top and Bottom Deciles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Low opinion lag	-0.056	-0.075	0.133	-0.052	-0.002	0.049	0.014	-0.009	0.146	0.118	**0.027**
High opinion lag	-0.154	-0.185	0.117	-0.024	0.003	-0.021	-0.075	-0.179	0.070	0.011	**-0.044**
hedge return	**0.098**	**0.110**	**0.016**	**-0.028**	**-0.005**	**0.070**	**0.089**	**0.170**	**0.076**	**0.107**	**0.070**
# of firms	249	341	390	356	338	364	340	371	325	281	
	213	295	299	304	280	268	279	248	252	199	

Panel D: Combined Fee Lag and 10K Lag Trading Portfolios - December Year End Firms (Top and Bottom Deciles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Low/Low	0.130	-0.035	0.020	-0.002	0.055	0.021	0.090	0.008	0.117	0.136	**0.054**
High/High	-0.281	-0.271	-0.180	-0.001	-0.023	-0.062	0.097	-0.113	-0.249	-0.110	**-0.119**
hedge return	**0.411**	**0.237**	**0.200**	**-0.001**	**0.077**	**0.082**	**-0.007**	**0.121**	**0.366**	**0.246**	**0.173**
# of firms	89	92	83	198	80	87	65	46	46	41	
	40	16	20	52	38	41	37	29	24	18	

Table 6 Regressions of future audit fees on fee lag

	Panel A y = Log Audit Fees		Panel B y = Log Audit Fees		Panel C y = Log Audit Fees	
Variable	Estimate	Pr > |t|	Estimate	Pr > |t|	Estimate	Pr > |t|
Intercept	8.6341	<.0001	9.3067	<.0001	9.2420	<.0001
FEELAGCL	0.2027	<.0001	0.1147	<.0001	0.0977	<.0001
FEELAGCL_L1			0.1415	<.0001	0.1293	<.0001
OPINLAGCL					0.2689	<.0001
10KLAGCL					-0.1645	<.0001
LOGASSET	0.4473	<.0001	0.4487	<.0001	0.4543	<.0001
AUDSIZE	0.2434	<.0001	0.2232	<.0001	0.2044	<.0001
SPECAUD	0.0187	0.1015	0.0114	0.3586	0.0148	0.2315
AUDCHG	-0.0438	0.0008	-0.0546	0.0001	-0.0653	<.0001
NONDECYR	-0.0885	<.0001	-0.0784	<.0001	-0.0650	<.0001
GC_OPIN	0.1677	<.0001	0.1960	<.0001	0.1906	<.0001
B/MCL	-0.1485	<.0001	-0.1539	<.0001	-0.1685	<.0001
SOX	0.3315	<.0001	0.4125	<.0001	0.4079	<.0001
IC_OPIN	0.3359	<.0001	0.3117	<.0001	0.2801	<.0001
QUICKCL	-0.0148	0.5544	-0.0263	0.3468	-0.0046	0.8687
STOCKFIN	0.0371	0.0003	0.0168	0.1375	0.0139	0.2176
DEBTFIN	0.0252	0.0071	0.0216	0.0325	0.0231	0.0208
INVRECCL	0.3847	<.0001	0.4058	<.0001	0.3966	<.0001
EXT_DISC	0.1361	<.0001	0.1456	<.0001	0.1396	<.0001
D/ACL	-0.3323	<.0001	-0.3301	<.0001	-0.3493	<.0001
ROACL	-0.1018	0.0002	-0.1126	0.0002	-0.1046	0.0005
LOSS	-0.0067	0.5716	-0.0027	0.8337	-0.0043	0.7331
SQRTSEGS	0.1231	<.0001	0.1263	<.0001	0.1210	<.0001
FORPCTCL	0.5086	<.0001	0.5712	<.0001	0.5706	<.0001
ACQ	0.0941	<.0001	0.1030	<.0001	0.1013	<.0001
RESTR	0.1602	<.0001	0.1634	<.0001	0.1645	<.0001
RESTATE	0.3269	<.0001	0.2353	0.0135	0.2278	0.0156
ZCL	0.5294	<.0001	0.5107	<.0001	0.5099	<.0001
LITRISK	0.0106	0.6282	0.0287	0.2249	0.0209	0.3732
LOGBTDIFFCL	0.0376	0.0244	0.0423	0.0168	0.0455	0.0097
AGE	0.0023	<.0001	0.0027	<.0001	0.0027	<.0001
Observations	33,785		26,865		26,593	
R-square	.8425		.8529		.8555	
Industry and year dummy variables not tabulated						

Figure 1, panel A
Mean values of fee lag, 10-K filing lag, and opinion lag, by asset decile

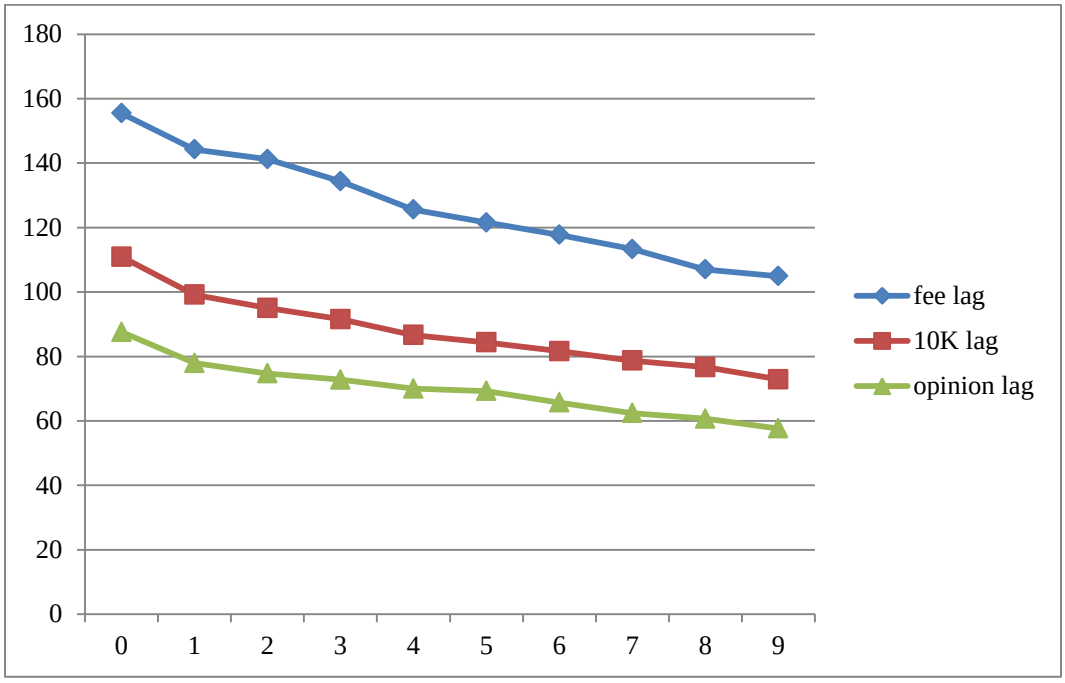

Figure 1, panel B
Mean values of fee lag, 10-K filing lag, and opinion lag, by year