AUDIT COMMITTEE EXPERTISE AND FINANCIAL ANALYSTS' AND INVESTORS' ABILITY TO ANTICIPATE FUTURE EARNINGS

ABSTRACT

One of the important attributes of high quality accounting information is its ability to aid financial statement users in forming expectations about the firm's future earnings. Prior research finds that accounting financial expertise of the audit committee is associated with higher financial reporting quality. We extend the literature by examining the association between audit committee expertise and security analysts' and investors' ability to anticipate future earnings. We find that analyst earnings forecasts of firms with an audit committee member with accounting financial expertise are more accurate and less dispersed. These associations tend to be stronger in weaker governance firms. We also find that audit committee expertise is associated with a more informative stock price for firms with weaker governance. We do not find a significant association between non-accounting financial expertise and attributes of analysts' forecasts or earnings informativeness. These findings contribute to our understanding of the role of accounting expertise in audit committees.

Keywords: *Audit committees; Financial expertise; Analyst Forecasts; Corporate governance; Financial reporting quality*

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1. INTRODUCTION

We examine whether accounting financial expertise on the audit committee is associated with financial statement users' ability to anticipate future earnings. We start from the premise that having accounting financial experts on the audit committee is associated with higher financial reporting quality (e.g., DeFond, Hann and Hu 2005; Krishnan and Visvanathan 2008; and Dhaliwal, Naiker and Navissi 2010). We then examine whether improved financial reporting quality from such expertise is associated with certain economic benefits to the firms. Specifically, we investigate the association between audit committee financial expertise and financial analysts' and equity investors' ability to predict future earnings and to incorporate them into the stock price. Despite the extant evidence on the association between audit committee expertise and reporting quality, little is known about whether higher reporting quality from audit committee expertise is associated with an improvement in financial statement users' decision making. This is an important issue to capital market participants because more accurate analyst earnings forecasts can improve equity valuation and more informative stock prices can lead to more efficient resource allocation in the economy. Our investigation fills that void.

The Sarbanes-Oxley Act (SOX) of 2002 required the Securities Exchange Commission (SEC) to issue rules mandating that the audit committee of every public company have a designated financial expert; and that the name of that financial expert be disclosed (Sarbanes-Oxley Act of 2002). The SEC suggests that having at least one financial expert on the audit committee should improve the quality of information available to investors. Prior research supports this notion by showing that the financial expertise of the audit committee is significantly associated with a reduced incidence of financial statement restatement (Abbott,

Parker and Peters 2004), a reduced likelihood of material weaknesses in internal control reported during an auditor change (Krishnan 2005), and a reduced incidence of fraud (Farber 2005).

The SEC initially proposed a stringent definition of financial expert, which defined individuals as financial experts only if they had education and experience in accounting or auditing (i.e. as a certified public accountant, auditor, chief financial officer, financial controller or accounting officer). In response to criticism that this definition was overly restrictive, the SEC adopted the current definition of audit committee financial expert, which is broad in nature. Specifically, an audit committee member could be deemed a financial expert if the member has had work experience in accounting or auditing, as well as any work experience in finance positions or as a chief executive officer (CEO) or company president. Hence, financial expertise could involve accounting or finance expertise, or any expertise entailed in supervising the preparation of financial statements (supervisory expertise). However, critics argue that the current definition of financial expertise may be too broad and lack the ability to ensure high financial reporting quality.

Consistent with the critics' view, some studies suggest that the presence of accounting financial expertise (but not non-accounting financial expertise) on the audit committee is associated with certain financial reporting characteristics such as greater accounting conservatism (Krishnan and Visvanathan 2008), higher quality accruals (Dhaliwal et al. 2010), and less earnings management (Bedard, Chtourou and Courteau 2004; Carcello, Hollingsworth and Neal 2006). The accounting financial expertise of the audit committee is also shown to be negatively associated with suspicious auditor switches (Archambeault and DeZoort 2001) and significantly positively associated with firm credit ratings (Ashbaugh-Skaife, Collins and LaFond 2006). Prior research also suggests that investors care about the accounting financial

expertise of audit committee members. For example, DeFond et al. (2005) find that companies appointing audit committee members with accounting expertise experience significant positive abnormal market returns, while no market reaction is observed upon the appointment of those with non-accounting financial expertise.

Survey evidence suggests that financial analysts also care about audit committee expertise. Dickins et al. (2009) survey financial analysts and find that analysts are more confident in the financial statements when the Audit Committee Financial Expert (ACFE) has accounting-based financial expertise. However, there is little evidence on how financial analyst earnings forecast characteristics, one of the most important outputs financial analysts generate, vary with audit committee expertise. It has been documented that financial analysts use accounting information to form their expectation of future earnings (e.g., Abarbanell and Bushee 1997). Thus, if audit committee accounting expertise increases both analyst confidence in financial statements and the quality of financial information, which financial analysts use to formulate their forecasts, it is possible that the properties of analysts' earnings forecasts improve (e.g., higher forecast accuracy and lower dispersion) with audit committee accounting expertise.

Audit committee expertise might also relate to stock price informativeness. Investors capitalize their expectation of future earnings into the stock price. An important set of information investors use in forming the expectation of future earnings is the current accounting information. Hence, higher quality financial reporting due to audit committee expertise will likely facilitate investors' task of anticipating future earnings. Further, to the extent that audit committee expertise relates to financial analysts' ability to predict future earnings more accurately and that financial analysts represent an important and influential group of financial

statement users, it is possible that the ability of an average investor to anticipate future earnings also improves with audit committee expertise.

To address our research question, we examine the associations between audit committee expertise and financial analyst earnings forecast properties (i.e., accuracy and dispersion) as well as the future earnings response coefficient (FERC hereafter), which measures stock price informativeness as captured by the extent to which stock price reflects future earnings. Financial analysts are often viewed as a group of sophisticated financial statement users (Schipper 1991) and their earnings forecasts are commonly used as a proxy for the market's expectation of earnings, which is a critical element in firm valuation. Informative stock price is important because it affects efficient resource allocation (Fishman and Hagerty 1989). To the extent that audit committee expertise is associated with the quality of accounting information, which capital market participants use to form expectation of future earnings, audit committee expertise is expected to be related to stock price informativeness, i.e., the extent to which current stock price reflects future earnings.

In addition, we examine the role of alternative corporate governance mechanisms in the hypothesized relations between audit committee expertise and analyst earnings forecast properties and stock price informativess. To the extent that the effectiveness of alternative governance mechanisms influence managers' reporting incentives, the association between audit committee expertise and analysts' and investors' ability to anticipate future earnings might vary with the strength of alternative corporate governance mechanisms. One possibility is that audit committee expertise is more effective when the other governance mechanisms are stronger (the complementary view). Another possibility is that audit committee monitoring plays a greater role when the alternative governance mechanisms are weaker (the substitution view). Under this

scenario, financial statement users might benefit more from audit committee expertise when the other governance mechanisms fail to provide adequate monitoring of managers.

The results of this study suggest that the accounting financial expertise of the audit committee is significantly associated with greater analyst forecast accuracy and lower forecast dispersion. However, testing the broad definition of financial expertise adopted by the SEC suggests that non-accounting financial expertise is not significantly associated with either analyst forecast accuracy or lower analyst forecast dispersion. Further, we find that the association between audit committee expertise and forecast accuracy is stronger in the weaker governance sample. Our stock price informativeness tests show that audit committee expertise is associated with more informative stock price when the alternative governance mechanisms are weaker. For firms with stronger other governance mechanisms, we do not observe an association between audit committee expertise and future earnings response coefficient.

This study contributes to the literature in the following ways. First, in contrast to most prior studies that examine the relation between audit committee expertise and financial reporting quality, we examine whether audit committee expertise is associated with improved financial statement users' decisions. Our findings extend the literature by showing that audit committee expertise enhances financial statement users' ability to anticipate future earnings. To shed some light on the channel through which such improvement takes place, we examine the time-series property of earnings, which is perhaps the most relevant aspect of financial reporting quality when it comes to earnings predictability, and find that the bottom line earnings are more persistent when there is an accounting expert on the audit committee. These findings are important because they suggest that the benefit of audit committee expertise is not limited to higher reporting quality but translates into specific economic benefits to the users of financial

statements. By being able to better anticipate future earnings from having an accounting expert on the audit committee, equity investors can improve firm valuation and allocate resources in a more efficient manner (i.e., invest their capital in firms with better future prospects).

Our findings also contribute to the discussions on the governance role of audit committee accounting financial expertise. We find that the association between audit committee expertise and financial users' ability to anticipate future earnings varies with the strength of alternative corporate governance mechanisms. In our context, audit committee expertise is more effective in facilitating financial statement users' ability to anticipate future earnings when alternative governance mechanisms are weaker. In contrast to prior studies (e.g., DeFond et al. 2005; Krishnan and Visvanathan 2008) that condition managers' reporting incentives or investor perception of audit committee composition on corporate governance, our focus is solely on the benefits accrued to financial statement users from having a financial expert on the audit committee. Thus, without considering various costs (e.g., agency, financial, etc.) associated with having a financial expert on the audit committee, the users of weaker governance firms appear to benefit more from the accounting financial expertise of an audit committee member.[1]

Third, our results contribute to the debate on the role of accounting expertise on an audit committee. Our evidence suggests that accounting financial expertise enhances financial statement users' ability to anticipate future earnings, but not non-accounting financial expertise. In line with some prior research (Archambeault and DeZoort 2001; Bedard et al., 2004; Ashbaugh-Skaife et al. 2006; Carcello et al. 2006; Krishnan and Visvanathan 2008); Dhaliwal et

[1] For example, it is possible that the agency cost of conservative accounting is greater for weaker governance firms that have greater agency problems. In other words, conservative accounting due to audit committee monitoring might be costlier for firms from weaker governance, ceteris paribus. Further, the greater market reaction to an appointment of an accounting expert on the audit committee for stronger governance firms (DeFond et al. 2005) suggests that investors perceive the cost of having a financial expert on the audit committee to be higher (lower) for firms with weaker (stronger) corporate governance. If this is the case, holding other things constant, the market might react more to the announcement of an accounting expert on the audit committee regardless of the actual cost (which is difficult to assess) of having one.

al. 2010) these results suggest that accounting specific financial expertise is beneficial to analysts and investors.

Finally, our results suggest that the benefit of audit committee expertise extends to both a group of 'sophisticated' financial statement users such as financial analysts as well as an average investor. In addition to analyst earnings forecasts being more accurate and less dispersed, audit committee expertise is also related to greater stock price informativeness. These results suggest that an audit committee expertise is beneficial to stock market participants, especially when the alternative governance mechanisms are unable to provide sufficient protection of those investors.

The paper proceeds as follows. Section 2 reviews prior literature and develops the hypotheses relating audit committee expertise to the properties of analysts' forecasts and FERC. Section 3 describes the research design. Section 4 describes the sample selection process employed in this study and presents the empirical results, and Section 5 concludes the paper.

2. PRIOR RESEARCH AND HYPOTHESES

Prior Research on Audit Committees and Financial Expertise

Prior studies using the broad definition of financial expertise have provided mixed evidence about an association between financial expertise and financial reporting quality. Abbott et al. (2004), and Agrawal and Chadha (2005) find that the financial expertise (under a broad definition) of the audit committee is significantly negatively related to the occurrence of restatement. Farber (2005) also employs the broad definition of financial expertise and finds a significantly lower occurrence of financial fraud in firms with financial expertise on the audit committee. However, Anderson et al. (2004) employ the broad definition of financial expertise and find no association between audit committee financial expertise and cost of debt. Additionally, anecdotal evidence suggests that financial expertise obtained through experience as

a CEO or President does not ensure an adequate understanding of accounting matters for an audit committee member (Livingston 2003).

Later studies have adopted a more narrow definition of financial expertise, similar to the definition initially proposed by the SEC. This definition differentiates between accounting and nonaccounting financial expertise. Such research has provided more consistent associations between financial expertise on the audit committee and financial reporting quality. Krishnan & Visvanathan (2008) find that firms with accounting financial experts on the audit committee are associated with more conservative financial reporting. Dhaliwal et al. (2010) finds a significant positive relation between accounting expertise on audit committees and accrual quality.

Additionally, research has also shown that the market values accounting financial expertise on the audit committee. For example, Davidson et al. (2004) finds that the market rewards companies for the appointment of accounting financial experts, but shows no reaction for the appointment of audit committee members with corporate financial management expertise. Similarly, DeFond et al. (2005) find a significant positive market reaction to the appointment of accounting financial experts to the audit committee, but no significant reaction to the appointment of non-accounting financial experts. These studies suggest that the market discriminates between types of audit committee financial expertise.

Hypothesis Development

The primary objective of financial reporting according to *Statement of Financial Concepts No. 1* is to provide information that is useful to present and potential users in making decisions (FASB 1978). An effective audit committee can enhance the credibility and reliability of the financial statements provided to users. Prior research shows that the accounting financial expertise of the audit committee is associated with lower levels of earnings management

(Carcello et al. 2006); higher levels of accounting conservatism (Krishnan and Visvanathan 2008); and lower probability of material internal control weaknesses (Hoitash et al. 2009). To the extent that financial statement users rely on accounting information to form expectations of future earnings, therefore, their expectation is likely to be more accurate if the firm has an audit committee member who has financial/accounting expertise.

Prior research suggests that analysts assimilate and process publicly available information such as past earnings and prices to predict future earnings (e.g., Schipper 1991; Abarbanell and Bushee 1997). Thus, analysts' forecasting ability increases with the quality (reliability) of financial information used to predict future earnings (e.g., Behn, Choi and Kang 2008). In addition, Dickins et al. (2009) suggest that analysts are sensitive to the financial expertise of the audit committee. In an experimental setting, they document that financial analysts have more confidence in financial statements when the disclosed Audit Committee Financial Expert's source of expertise is accounting-based rather than supervisory-based. If analysts find the financial statements of firms whose audit committee includes an accounting financial expert more credible, they are more likely to use to the financial statement information to formulate their forecasts and the resulting forecasts are likely to be more accurate.

In sum, if historical earnings information contains errors, it will be less likely that analysts will issue accurate forecasts. Hence, based on prior evidence that audit committee accounting expertise is associated with higher reporting quality, we expect that the accounting financial expertise of the audit committee will be positively associated with analysts' earnings forecast accuracy. Our first hypothesis in alternative form is as follows:

H1: The accounting expertise of a firm's audit committee is positively associated with analysts' earnings forecast accuracy.

Prior research indicates that analysts' forecast dispersion reflects uncertainty about the firm's information environment (e.g., Imhoff and Lobo 1992; Payne and Robb 2000, Behn et al. 2008). Imhoff and Lobo (1992) suggest that forecast dispersion is a proxy for uncertainty about earnings before they are announced. Furthermore, Herrmann and Thomas (2005) propose that greater forecast dispersion indicates less agreement among analysts. They suggest that analysts with more precise information regarding future earnings are more likely to be in agreement, and thus the forecast dispersion should be smaller.

Thus, if audit committee accounting financial expertise and financial reporting reliability are positively correlated, we expect that analysts' forecast dispersion to be negatively associated with audit committee accounting financial expertise. Unlike forecast accuracy, which is a function of both realized current period earnings and forecasted earnings, the dispersion measure does not depend on realized earnings, the quality of which is also likely to be a function of audit committee expertise. In this sense, forecast dispersion complements forecast accuracy as a measure of financial analysts' information environment. Our second hypothesis in alternative form is as follows:

> *H2: The accounting financial expertise of the audit committee is negatively associated with analysts' earnings forecast dispersion.*

We also examine whether the presence of a financial expert on the audit committee is associated with stock price informativeness, i.e., the ability of current period returns to reflect information in future earnings measured by the future earnings response coefficient (FERC). Based on prior research, our conjecture is that accounting expertise of the audit committee enhances earnings quality (Krishnan and Visvanathan 2008 and Dhaliwal et al. 2010) and thus, earnings

informativeness is likely to increase with the accounting expertise of the audit committee. Our third hypothesis is as follows:

> *H3: The accounting financial expertise of the audit committee is positively associated with earnings informativeness.*

Finally, we condition our analysis on other corporate governance mechanisms. While audit committee monitoring has shown to be an effective monitoring mechanism, there are other types of corporate governance mechanisms. However, how these different corporate governance mechanisms interact is not clear ex-ante. One possibility is the existence of a substantial interdependence among governance mechanisms, presumably leading to a 'synergy' among different governance mechanisms (e.g., Menon and Williams 1994; Agrawal and Knoeber 1996; Klein 2002). Under this view, audit commiteee expertise is likely to have a greater influence on the ability to anticipate future earnings in firms with stronger governance (the complementary view). Another possibility is that audit committee expertise adds more value when the other governance mechanisms are weaker (the substitution view). This is likely to be the case if audit committee expertise can play a significant governance function where alternative governance mechanisms are unable to effectively monitor the managers (e.g., Choi and Wong 2007). However, prior research suggests that weaker boards undermine accounting expertise of the audit committee (Krishnan and Visvanathan 2008). Taken together, it is not obvious whether audit committee expertise plays a more or less important role in corporations with stronger/weaker governance mechanisms in place. Thus, we offer our final hypothesis in null form:

> *H4: The association between audit committee expertise and the ability of analysts and investors to anticipate future earnings is not conditional on other corporate governance mechanisms.*

3. RESEARCH DESIGN

Measurement of Financial Expertise

[INSERT TABLE 1 ABOUT HERE]

Table 1 defines our test variables. To measure financial expertise, we assign audit committee members into one of three categories of financial expertise. First, audit committee members are categorized as accounting financial experts if they have experience as a certified public accountant, auditor, chief financial officer, controller, or chief accounting officer, consistent with the original definition of financial expertise proposed by the SEC. Second, audit committee members are classified as nonaccounting financial experts if they have experience as chief executive officer or president of a for-profit company. Third, those audit committee members who are neither accounting financial experts nor nonaccounting financial experts are categorized as nonfinancial experts.

Consistent with prior research (e.g. Hoitash et al. 2009; Krishnan and Visvanathan 2008), we measure financial expertise of the audit committee as the number audit committee directors with accounting (nonaccounting) financial expertise divided by the total number of directors on the AC. *AFIN* (*NAFIN*) is the proportion of accounting (nonaccounting) financial experts on the audit committee.

Analyst Forecast Accuracy

To empirically test hypothesis one, we use the following equation, which controls for previously identified determinants of analysts' forecast properties. Because multiple observations from the same firm (but from different years) are in the sample, we use t-statistics based on Huber-White standard errors to correct for clustering, and these standard errors are robust to

heteroscedasticity and serial correlation (Huber 1967; White 1980; Rogers 1993) for all the analyses. We use the following model to test *H1*:

$$ACCY = \varphi_0 + \varphi_1 AFIN + \varphi_2 NAFIN + \varphi_3 SIZE + \varphi_4 SURPRISE + \varphi_5 LOSS + \varphi_6 ZMIJ + \varphi_7 HORIZON + \varphi_8 STDROE + \varphi_9 NANA + \varphi_{10} EL + industry\ dummies + year\ dummies + \varepsilon \quad (1)$$

Forecast accuracy (*ACCY*) is measured by the negative of the absolute value of forecast error scaled by stock price at time t-1 (Lang and Lundholm 1996), as follows:

$$ACCY_t = (-1)\frac{|FORECAST_t - EPS_t|}{PRICE_{t-1}} \quad (2)$$

where $FORECAST_t$ is the mean I/B/E/S consensus forecast of period t earnings made during the period starting two months before the corresponding actual earnings announcement and ending three days before the announcement, EPS_t is the actual earnings per share before extraordinary items at time t, taken from I/B/E/S, and $PRICE_{t-1}$ is the stock price at the end of period t-1.

Firm size (*SIZE*) and number of analysts following *(NANA*) are included based on Lang and Lundholm (1996), who document a positive association between firm size, analyst following and forecast accuracy. Absolute value of the earnings surprise (*SURPRISE*) is also based on Lang and Lundholm (1996), who find that larger changes in earnings are associated with less accurate forecasts. The loss indicator variable (*LOSS*) is included based on Hwang et al. (1996), who find that analysts' forecasts for loss-reporting firms are on average less accurate than forecasts for profit-reporting firms. Zmijewski's (1984) financial distress score (*ZMIJ*) is also included because financially distressed firms tend to have less accurate forecasts.[2]

[2] *ZMIJ* is calculated using the following equation: $X = -4.3 - 4.5X_1 + 5.7X_2 - 0.004X_3$, where X is the overall index (*ZMIJ*), X_1 is net income/total assets; X_2 is total debt/total assets; and X_3 is current assets/current liabilities. Higher values of *ZMIJ* indicate higher financial distress.

Per Brown (2001), we control for forecast horizon (*HORIZON*), which is the natural logarithm of the average number of calendar days between the forecast announcement date and corresponding actual earnings announcement date. We expect that a forecast announced closer to the actual earnings announcement date (i.e., short forecast horizon) is more accurate than a forecast announced in the earlier period (i.e., long forecast horizon). Earnings volatility (*STDROE*) is included based on Kross et al. (1990), who have shown that analysts' earnings forecasts are less accurate for firms with higher long-term earnings volatility. Finally, we include the earnings per share variable *(EL)* to control for earnings level based on Eames and Glover (2003), who report that earnings level is related to forecast accuracy.

Analyst Forecast Dispersion

Analyst forecast dispersion has commonly been used as a measure for uncertainty about future earnings since it represents the consensus among analysts regarding future firm prospects (see, for instance, Imhoff and Lobo 1992 and Barron and Stuerke 1998). The dispersion of analysts' forecasts (*DISP*) is defined as the standard deviation of earnings forecasts issued by individual analysts scaled by stock price at time t-1.

$$DISP_t = \frac{STD(FORECAST_t)}{PRICE_{t-1}} \tag{3}$$

To test the second hypothesis, we use the following equation:

$$DISP = \varphi_0 + \varphi_1 AFIN + \varphi_2 NAFIN + \varphi_3 SIZE + \varphi_4 SURPRISE + \varphi_5 ZMIJ + \varphi_6 HORIZON + \varphi_7 STDROE + industry\ dummies + year\ dummies + \varepsilon \tag{4}$$

The control variables are as defined in the accuracy model (1), but we do not include number of analysts (*NANA*) and earnings level (*EL*) because the conceptual link between these variables and forecast dispersion is not clearly established in the literature (Behn et al. 2008).

We expect that large (*SIZE*) firms would have smaller dispersions, while financially distressed (*ZMIJ*) firms, firms with longer forecast horizons (*HORIZON*), and firms with more volatile earnings streams (*SURPRISE* and *STDROE*) would have larger dispersions.

Future Earnings Response Coefficient (FERC)

To test Hypothesis three, we use a model adapted by Collins, Kothari, Shanken and Sloan (1994) and Lundholm and Myers (2002), which reflects the ability of returns to reflect future earnings:

$$R_t = b_0 + b_1 X_{t-1} + b_2 X_t + \Sigma (b_{3i} X_{t+i} + b_{4i} R_{t+i}) + \varepsilon_t \qquad (5)$$

where for years t and i:

R_t = the cumulative return for fiscal year t; and

X_t = income available to common shareholders before extraordinary items deflated by the market value of equity at the beginning of fiscal year t.

Following Collins et al. (1994) and Lundholm and Myers (2002), we include three years of future earnings and estimate a condensed version of model (5). An assumption here is that stock prices impound information that will later be captured in accounting earnings. Historical cost measurement and transaction-based accounting means that the accounting system might trade off timeliness in recognizing changes in net asset values in favor of objectivity, verifiability, and/or conservatism (Collins et al. 1994). Collins et al. (1994) further note that some economic events that cause revisions in the market's expectations about future earnings are not captured in current period's earnings, but will be captured in future period's earnings when the conditions for accounting recognition are satisfied or when the benefits/sacrifices are realized. Under this scenario of "price leading earnings," the stock return for a given period will be related to earnings of both current and future periods.

If the higher reporting quality of firms that have an accounting expert on the audit committee enables investors to better assess the implications of current earnings for future earnings, the information that will eventually be reflected in future earnings will be more likely to be captured in the current period return. Consistent with Collins et al. (1994) and Lundholm and Myers (2002), we combine three years of future returns (R_{t+1}, R_{t+2}, and R_{t+3}) to form R_{t3}, and combine the next three years of earnings (X_{t+1}, X_{t+2}, and X_{t+3}) to form X_{t3}:

$$R_t = b_0 + b_1 X_{t-1} + b_2 X_t + b_3 X_{t3} + b_4 R_{t3} + \varepsilon_t \quad (6)$$

where for year t:

R_{t3} = the cumulative return for fiscal years t+1 through t+3;

X_{t3} = the sum of income available to common shareholders before extraordinary items for years t+1 through t+3 deflated by the market value of equity at the beginning of fiscal year t; and all other variables are as previously defined.

We follow Collins et al. (1994) and Tucker and Zarowin (2006) and measure returns over the fiscal year. The change in earnings, ΔX_t, often appears in the price-earnings relation under the assumption that earnings follow a random walk. Rather than restrict our specification by this assumption, we follow Lundholm and Myers (2002) and include X_{t-1} and X_t. Consistent with the interpretation in Ettredge et al. (2005) and Tucker and Zarowin (2006), b_2 is the ERC, which reflects the relation between returns and contemporaneous earnings, and b_3 is the FERC, which reflects the relation between returns and future earnings. Based on prior studies, we expect b_1 to be negative and b_2 and b_3 to be positive.

To test our hypotheses, we follow prior literature (Ettredge et al. 2005; Lundholm and Myers 2002; Tucker and Zarowin 2006) and extend model (6) to include additional explanatory variables related to FERCs:

$$R_t = b_0 + b_1 X_{t-1} + b_2 X_t + b_3 X_{t3} + b4\ R_{t3} + b_5 AFINEXD_t + b_6 AFINEXD_t * X_{t-1} + b_7 AFINEXD_t * X_t + b_8 AFINEXD_t * X_{t3} + b_9 AFINEXD_t * R_{t3} + c_1 SIZE_t + c_2 SIZE_t * X_{t3} + c_3 LOSS_t + c_4 LOSS_t * X_{t3} + c_5 GROWTH_t + c_6 GROWTHt_t * X_{t3} + c_7 STDROE_t + c_8 STDROE_t * X_{t3} + \varepsilon_t \quad (7)$$

where for year t:

$AFINEXD_t$ = a dummy variable that equals one if there is an accounting financial expert on the audit committee and 0 otherwise;

$GROWTH_t$ = the percentage growth in total assets from year t-1 to year t+1;

All other variables are as previously defined.

We add $SIZE_t$ to control for differences in the information environment across firms. We include an indicator variable, $LOSS_t$, because negative future earnings may be more difficult than positive future earnings to predict. We include $GROWTH_t$ because high-growth firms tend to have greater FERCs. Lastly, we include the volatility of future earnings, $STDROE_t$, since volatile earnings are more difficult to predict. Our variable of interest is b_8. If stock price reflects more future earnings, the FERCs will be greater (i.e., b_8 will be positive) for firms with accounting financial expertise on the audit committee.

Corporate Governance

Finally, to test hypothesis 4, following DeFond et al. (2005), we construct a measure of strong governance (*SGOV*). *SGOV* is a dummy variable that equals 1 if *GOV* is greater than the sample median and 0 otherwise. The components of *SGOV* are defined as follows:

GOV = a summary measure of corporate governance that is equal to the sum of the following six binary governance variables: *LBSIZE*, *HBIND*, *HACSIZE*, *HACIND*, *LGINDEX*, and *HINSTOWN*;

LBSIZE = a dummy variable that equals 1 if the board size is less than the sample median, and 0 otherwise;

HBIND = a dummy variable that equals 1 if the proportion of outside directors is greater than 60 percent, and 0 otherwise;

HACSIZE = a dummy variable that equals 1 if the proportion of the number of directors on the audit committee to the total number of directors on board is greater than the sample median, and 0 otherwise;

HACIND = a dummy variable that equals 1 if the audit committee is composed solely of independent directors, and 0 otherwise;

LGINDEX = a dummy variable that equals 1 if the GINDEX is below the sample median, and 0 otherwise; GINDEX, developed by Gompers, Ishii, and Metrick (2003), measures the strength of a firm's governance system and is constructed based on a simple counting of 24 corporate governance provisions. A low (high) GINDEX means that a firm has a strong (weak) governance system;

HINSTOWN = a dummy variable that equals 1 if the percentage of institutional ownership (*INSTOWN*) is greater than the sample median, and 0 otherwise.

We partition the sample into strong governance firms (*SGOV*=1) and weak governance firms (*SGOV*=0) and run models (1), (4), and (7) conditioned upon *SGOV*.

4. SAMPLE AND EMPIRICAL RESULTS

Sample

Sample selection begins with firms that are included in the S&P 500 for the years 2000 through 2002. Similar to Krishnan and Visvanathan (2008), we focus on the pre-SOX period as there is more variation in audit committee expertise before SOX became effective. The sample was confined to firms in the S&P 500 to increase the data availability for members of the board of directors. Eighty-six firms in the financial services industries (Standard Industrial Classification [SIC] codes 6000-6999) are excluded. We also exclude 109 firms for which either financial data or governance data are unavailable. The final sample consists of 305 firms (909 firm-years).

[INSERT TABLE 2 ABOUT HERE]

Descriptive statistics for the variables used in the regressions are presented in Table 2. The mean forecast accuracy (*ACCY*) is -.024, which indicates that the mean difference between

analysts' forecasts and actual earnings is about 2.4 percent of the lagged stock price. The mean dispersion (*DISP*) of .018 suggests that the average forecast dispersion is about 1.8 percent of lagged stock price.

AFINEXD is a dummy variable that equals 1 if the audit committee has at least one accounting financial expert, and 0 otherwise. The mean value of .301 for *AFINEXD* indicates that about 30.1 percent of the sample-firm years have at least one accounting financial expert on the audit committee. *AFIN* has a mean value of 0.08, indicating that about 8.0% of the audit committee members are accounting financial experts, while nonaccounting financial experts (*NAFIN*) and nonfinancial experts (*NFE*) comprise 60.3 and 31.5 percent of the audit committee members, respectively. The average firm in our sample has just over 4 board members on the audit committee (*ACSIZE*), of which, about 91.0% are independent board members (*ACIND*). The audit committees of our sample firms meet almost 6 times per year, on average (*ACMEET*).

The average earnings surprise (*SURPRISE*) is .059, and only about six percent of the sample firm-years report a loss (*LOSS*) for the year. The average standard deviation of return on equity (*STDROE*) is 0.164. The mean financial distress score for our sample (*ZMIJ*) is -3.032, which indicates that our sample firms are financially healthy and have very little financial distress. The mean forecast horizon (*HORIZON*) indicates that the average number of calendar days between the forecast announcement date and the actual announcement date is 43 days. The mean number of analysts following each sample firm is 14.9.[3] The average earnings per share (*EL*) for the entire sample are $1.61.

Untabulated correlation coefficients indicate that, as expected, *ACCY* is positively and significantly correlated with *AFINEXD, AFIN,* and *SIZE*. *ACCY* is also negatively and

[3] We use the natural log of the number of analysts following a firm (*NANA*), forecast horizon (*HORIZON*), number of members on the board of directors (*BSIZE*), and number of members on the audit committee (*ACSIZE*) in our analysis. For ease of interpretation, unlogged values are presented in univariate statistics.

significantly correlated with *DISP, SURPRISE, LOSS, HORIZON,* and *STDROE*. On the other hand, *DISP* is positively and significantly correlated with *SURPRISE, LOSS, ZMIJ,* and *STDROE*. *DISP* is negatively correlated with *SIZE* and *ACTUAL*. The correlation between *AFINEXD* and *DISP* is negative but not significant at the 0.10 level. Overall, these results are consistent with the hypothesis that accounting financial expertise of the audit committee is positively associated with analyst forecast accuracy; however without controlling for other variables, the association between audit committee financial expertise and dispersion is not as clear.

Regression Analysis

We estimate models (1) and (4), which use two analysts' forecast property variables, *ACCY* and *DISP*, as the dependent variables. The accuracy regression results using model (1) and (4) are reported in Table 3.

[INSERT TABLE 3 ABOUT HERE]

Panel A of Table 3 examines the relationship between analyst forecast accuracy and accounting financial expertise of the audit committee. In Column 1, which presents regression results for the full sample, the coefficient on *AFIN* (φ_1) is positive and significant at the 0.01 level. This result is consistent with the prediction of the first hypothesis (*H1*) that accounting financial expertise on the audit committee is associated with higher forecast accuracy. The coefficient on *NAFIN* (φ_2) is insignificant, which is consistent with the notion that only the accounting financial expertise of the audit committee is a significant indicator of its effectiveness.

Consistent with Lang and Lundholm (1996), the coefficient on *SIZE* is positive and significant at the .01 level. The coefficients on *HORIZON* and *STDROE* are negative and significant at the .05 and .10 levels, respectively. The coefficient on *ZMIJ* is positive and significant at the .05 level, which is opposite of our prediction. This is likely because very few of our firms are considered financially distressed. None of the coefficients for the other control variables is significant. The explanatory power of the model is about nine percent.

Columns 2-4 of Table 3, Panel A, provide the regression results of model (1) for each year in our sample. For each year in our sample, *AFIN*, the variable of interest, is positive and significant at the .05 level or better. Additionally, in none of the years is the coefficient on *NAFIN* significant, which indicates that only the accounting financial expertise of the audit committee is associated with higher analyst forecast accuracy.

The forecast dispersion regression results of model (4) are reported in Column 1 of Table 3, Panel B. *AFIN*, the variable of interest, has a negative and significant coefficient (p=0.01). This result is consistent with the second hypothesis (*H2*) that the accounting financial expertise of the audit committee is associated with lower analyst forecast dispersion. *NAFIN* is also negative but insignificant, indicating that only the accounting financial expertise of the audit committee is associated with lower analyst forecast dispersion.

Turning to control variables, *DISP* is negatively correlated with firm size (*SIZE*) at the .01 level. *DISP* is positively associated with the magnitude of earnings surprise (*SURPRISE*, p=0.014) and loss (*LOSS*, p=0.16). None of the other control variables is significant. The explanatory power of the model is about 21 percent.

Columns 2-4 of Table 3, Panel B, provide the regression results of model (4) for each year in our sample. For each year in our sample, *AFIN,* the variable of interest is negative and

significant at the .10 level or better. Additionally, in none of the years is the coefficient on *NAFIN* significant, which again indicates that only the accounting financial expertise of the audit committee is associated with lower analyst forecast dispersion.

Additional Control Variables

To control for firm-specific governance characteristics, we rerun models (1) and (4) with controls for firm-specific governance characteristics that may also affect properties of analysts' forecasts. Specifically, we control for several audit committee characteristics, including audit committee size by using the natural log of the number of members on the audit committee (*ACSIZE*), the number of meetings held by the audit committee during the year (*ACMEET*), and the proportion of independent directors on the audit committee (*ACIND*). We expect a positive (negative) association between *ACIND* and *ACCY (DISP)* because Klein (2002) and Abbott et al. (2004) find that audit committee independence is indicative of good governance. Prior research on the frequency of audit committee meetings is mixed (Farber 2005, Hoitash et al. 2009); therefore, we make no prediction about the coefficient of *ACMEET*. We also have no expectation for *ACSIZE* because prior research is mixed on audit committee size and audit committee effectiveness.

We control for board size by using the natural log of the number of directors on the board (*BSIZE*) and expect a positive (negative) association with *ACCY (DISP)* because prior research suggests smaller boards are more effective (Jensen 1993). We control for separation of the roles of CEO and chairman of the board (*NODUAL*) using an indicator variable coded as 1 if the CEO is not the chairman of the board, and 0 otherwise. We also expect a positive (negative) association between *NODUAL* and *ACCY (DISP)* because prior research indicates that separation of the role of CEO and chairman of the board enhances corporate governance (Jensen 1993;

Agrawal and Chadha 2005). Finally, we control for the proportion of directors who are independent (*BIND*), and expect a positive (negative) association with *ACCY (DISP)* because prior research suggests that more independent boards are associated with lower incidence of fraud and earnings management (Beasley 1996; Klein 2002).

[INSERT TABLE 4 ABOUT HERE]

Column 1 of Table 4, Panel A, provides the regression results of model (1) including controls for corporate governance characteristics of the firm. The coefficient on *AFIN* (φ_1) remains positive and significant at the 0.01 level. This result is consistent with the prediction of the first hypothesis (*H1*) that accounting financial expertise on the audit committee is associated with higher forecast accuracy. The coefficient on *NAFIN* (φ_2) remains insignificant, which is consistent with the notion that only the accounting financial expertise of the audit committee is a significant indicator of its effectiveness.

Columns 2-4 of Table 4, Panel A, report the regression results of model (1) with governance controls for each year in our sample. For each year in our sample, *AFIN*, the variable of interest remains positive and significant at the .10 level or better. Additionally, in none of the years is the coefficient on *NAFIN* significant, which indicates that only the accounting financial expertise of the audit committee is associated with higher analyst forecast accuracy.

Panel B of Table 4 shows the forecast dispersion regression results of model (4) with governance characteristics for the entire sample. In Column 1, *AFIN*, the variable of interest, has a negative and significant coefficient (p=0.012). This result is consistent with the second hypothesis (*H2*) that the accounting financial expertise of the audit committee is associated with lower analyst forecast dispersion. *NAFIN* is also negative but insignificant, indicating that only

the accounting financial expertise of the audit committee is significantly associated with lower analyst forecast dispersion.

Year by year regressions of model (4) including governance controls are provided in Columns 2-4 of Table 4, Panel B. For each year in our sample, *AFIN*, the variable of interest is negative and significant at the .10 level or better. Additionally, in none of the years is the coefficient on *NAFIN* significant, which indicates that only the accounting financial expertise of the audit committee is associated with lower analyst forecast dispersion. Taken together, these results provide support for *H1* and *H2*.

Future Earnings Response Coefficient

[INSERT TABLE 5 ABOUT HERE]

Results for our tests of hypothesis 3 are in Table 5. Column 1 presents the results of model (6) for the entire sample. The coefficients are all as expected. Column 2 presents the results for model (7) including our audit committee financial expertise variable. The coefficient on $AFINEXD*X_{t3}$ is positive but insignificant (p = 0.390), indicating that the stock return of an average sample firm does not reflect future earnings to a greater extent when there is an accounting financial expert on the audit committee.[4] So, in the pooled sample, we fail to provide evidence in support of *H3*.

Corporate Governance

[INSERT TABLE 6 ABOUT HERE]

Table 6 shows results from our tests conditioned upon the overall strength of corporate governance. Panel A, Column 1 of Table 6 shows regression results of model (1) for weak

[4] We also perform the analysis using *AFIN* and *NAFIN*. For the full sample, the coefficient on $AFIN*X_{t3}$ is 0.456 (p=0.497) and the coefficient on $NAFIN*X_{t3}$ is 0.038 (p=0.898). For ease of interpretation, only the *AFINEXD* results are tabulated for the FERC analysis.

governance firms (*SGOV*=0).[5] *AFIN* is positively associated with *ACCY* at the .01 level. This result supports *H4*, but it is inconsistent with prior research which suggests that the positive association between audit committee expertise and reporting quality is greater for firms with stronger governance (Krishnan and Visvanathan 2008) and that the market perceives audit committee expertise to be more beneficial for stronger governance firms (DeFond et al. 2005). A possible explanation for this discrepancy is that, unlike the prior studies, we focus solely on the benefit aspect of financial statement users, ignoring the cost aspect. For example, it is possible that it is less costly to improve accounting quality when the overall corporate governance is stronger as the stronger governance might facilitate the channeling of the expertise toward improving reporting quality and enhancing shareholder value. For this reason, the net benefit of audit committee expertise might be greater for firms with stronger governance. However, the 'gross' benefit of audit committee expertise might be greater for firms with weaker governance as in such cases, financial experts might be able to implement more substantial improvements in the reporting environment (DeFond et al. 2005), which can lead to a larger marginal benefit for financial statement users.

AFIN is also positively associated with *ACCY* in the strong governance case (Column 2); however, the association is only significant at the .10 level. Column 3 of Table 6, Panel A, shows the difference between the coefficients on *AFIN* between the strong and weak governance samples. A t-test shows when *SGOV*=0, the *AFIN* coefficient is significantly higher than the *SGOV*=1 coefficient at the .01 level. This suggests that the effect of *AFIN* on analyst forecast accuracy is stronger in the weaker governance setting. This is consistent with the idea that the

[5] In our sample, 28% of weak governance (*SGOV*=0) firms have at least one accountant on the audit committee (*AFINEXD*=0.28), whereas 32% of strong governance firms (*SGOV*=1) have at least one accountant on the audit committee. In addition, *AFIN* is 0.078 for weak governance firms and 0.082 for strong governance firms.

marginal benefit of audit committee expertise is greater when alternative governance mechanisms do not ensure high quality financial reporting.

Panel B of Table 6 shows regression the results of model (4) for the sample partitioned upon the strength of a firm's overall governance structure. *AFIN* is negatively associated with *DISP* for both weak governance firms (Column 1, p=.080) and strong governance firms (Column 2, p=.035). Column 3 of Table 5, Panel B, shows the difference between the coefficients on *AFIN* between the strong and weak governance samples. A t-test shows there is no significant difference between the coefficients on *AFIN* in the strong and weak governance samples. This result suggests that the effect of accounting expertise of the audit committee on analyst forecast dispersion is not contingent upon the overall governance structure of the firm.

[INSERT TABLE 7 ABOUT HERE]

Table 7 shows results of model (7) for our sample partitioned upon the overall governance structure of the firm. When we partition the sample into weak governance (Column 1) and strong governance (Column 2), the results indicate that the returns of weaker governance firms do reflect future earnings to a greater extent when there is an accounting financial expert on the audit committee (p=.034). The coefficient on $AFINEXD*X_{t3}$ is positive but insignificant (p=.951) for strong governance firms.[6] The difference between the coefficients is also significant at the .01 level (Column 3). These results support *H4* and they are largely consistent with the analyst forecast results: audit committee expertise plays a more important role in the ability of stock market participants to anticipate future earnings when the alternative corporate governance mechanisms are less effective. These results are intuitive in the sense that, ignoring the costs of

[6] When we partition the sample into weak and strong governance using *AFIN* and *NAFIN*, the coefficient on $AFIN*X_{t3}$ is 1.398 (p=0.025) and the coefficient on $NAFIN*X_{t3}$ is 0.527 (p=0.484) for weak governance firms. For strong governance firms, the coefficient on $AFIN*X_{t3}$ is 0.169 (p=0.927) and the coefficient on $NAFIN*X_{t3}$ is -0.159 (p=0.878). The results from this analysis are consistent with the results using the dummy variable specification. For brevity, these results are not tabulated.

having an accounting expert on the audit committee, financial statement users benefit more from the improved reporting quality due to audit committee expertise when the other governance mechanisms are weaker and thus the managerial incentive to disclose relevant information is weaker.

Supplemental Analyses

In the following paragraphs, we present findings from additional analyses that build upon our findings that the accounting financial expertise of the audit committee is associated with properties of analysts' forecasts and stock price informativeness. First, prior research shows a positive association between audit committee accounting financial expertise and financial reporting quality (Dhaliwal et al. 2010; Krishnan and Visvanathan 2008). While we acknowledge that the link between overall reporting quality and financial statement user's ability to anticipate future earnings is somewhat nebulous, to see whether if our results can be explained by overall reporting quality as proxied by a firm's discretionary accruals, we rerun Eqs. (1), (4), and (7) with an accrual quality control in the model. This variable (*AQ*) is based on the model in Dechow and Dichev (2002). Including the *AQ* variable in our models does not change the significance of *AFIN* for any of the three models. Additionally, *NAFIN* remains insignificant in all three specifications. These suggest that overall earnings quality of firms with an audit committee expertise does not explain the improved forecast properties and larger FERC.

Second, we investigate the persistence of earnings conditioned upon the presence of an accounting financial expert on the audit committee. The more recurring items net income contains, the more valuable it is to investors as a measure of future performance (Penman and Zhang, 2002; Richardson, 2003). Similarly, Lipe (1986) shows that more persistent components of earnings contain greater information content. To the extent that financial statement users form

expectation of future earnings based on current earnings, greater persistence in current earnings will likely improve their ability to anticipate future earnings. In this sense, earnings persistence can be a possible channel through which audit committee expertise relates to the users' ability to anticipate future earnings. To test this idea, we use the following time-series panel regression to measure the relation between current and prior year net income:

$$NI_{i,t} = \varphi_0 + \varphi_1 NI_{i,t-1} + \varphi_2 AFINEXD_{i,t-1}\ \varphi_3 NI_{i,t-1} * AFINEXD_{i,t-1} + \varepsilon \quad (8)$$

where *NI* is net income divided by either average total assets (*ROA*) or shareholders' equity (*ROE*). Larger values of φ_1 indicate more persistent net income, while values close to 0 reflect transitory performance. Therefore, a positive value for φ_3 indicates an increase in the persistence of earnings associated with the presence of an accounting financial expert on the audit committee. As a robustness test, we also run this specification scaling net income by market value of equity (*ROE*).

[INSERT TABLE 8 ABOUT HERE]

Table 8 shows regression the results of model (8) for the sample. As expected, *ROA* is positive and significant, and the interaction between *ROA* and *AFINEXD* is positive and significant at the 0.05 level. When we use *ROE* (Column 2), the interaction between *ROE* and *AFINEXD* remains positive and significant at the $p<0.01$ level.[7] This result suggests that the presence of accounting expertise on the audit committee is associated with more persistent earnings, providing some insights to why accounting expertise on the audit committee affects analysts' forecasts and FERCs.

[7] We also perform the analysis using *AFIN* and *NAFIN*. The coefficient on $AFIN*NI_{t3}$ is 2.8299 (p=0.000) and the coefficient on $AFIN*ROE_{t3}$ is 3.729 (p=0.000). For ease of interpretation, only the *AFINEXD* results are tabulated for the FERC analysis.

Third, we investigate the effects of adding an accounting expert to the audit committee. Only a small number of firms add accounting financial experts to the audit committee in our sample (44 firms), which makes a single firm year-to-year comparison of analyst forecast properties and FERC after the addition of an accounting financial expert challenging. Instead, to examine the effect of adding an accounting financial expert to the audit committee, we identify those firms that added an accounting financial expert to the audit committee in 2001 or 2002 and classify those firms as *ADD* firms. To control for the effects of having an accounting financial expert on the audit committee from before, we classify firms that had an accounting financial expert on the audit committee for the entire sample period as *AEXP* firms. Both *ADD* and *AEXP* are dummy variables that takes the value of one if the firm added an expert during the sample period (*ADD*) and if the firm had an accounting expert on the audit committee from before, zero otherwise. We run the following model to test the association between the addition of an accounting financial expert to the audit committee and analyst forecast accuracy:

$$\begin{aligned} ACCY = {} & \varphi_0 + \varphi_1 ADD + \varphi_2 AEXP + \varphi_3 BIG4 + \varphi_4 SIZE + \varphi_5 SURPRISE + \\ & \varphi_6 LOSS + \varphi_7 ZMIJ + \varphi_8 HORIZON + \varphi_9 NANA + \varphi_{10} STDROE + \\ & \varphi_{11} EL + industry\ dummies + year\ dummies + \varepsilon \end{aligned} \quad (9)$$

All variables are as defined previously.

To test the association between the addition of an accounting financial expert to the audit committee and analyst forecast dispersion, we run the following model:

$$\begin{aligned} DISP = {} & \varphi_0 + \varphi_1 ADD + \varphi_2 AEXP + \varphi_3 SIZE + \varphi_4 SURPRISE + \varphi_5 LOSS + \\ & \varphi_6 ZMIJ + \varphi_7 HORIZON + \varphi_8 STDROE + industry\ dummies + \\ & year\ dummies + \varepsilon \end{aligned} \quad (10)$$

Finally, we test the association between the addition of an accounting financial expert to the audit committee and FERC using the following model:

$$R_t = b_0 + b_1 X_{t-1} + b_2 X_t + b_3 X_{t3} + b4\ R_{t3} + b_5 ADD_t + b_6 ADD_t * X_{t-1} + b_7 ADD_t * X_t + b_8 ADD_t * X_{t3} + b_9 ADD_t * R_{t3} + c_1 SIZE_t + c_2 SIZE_t * X_{t3} + c_3 LOSS_t + c_4 LOSS_t * X_{t3} + c_5 GROWTH_t + c_6 GROWTHt_t * X_{t3} + c_7 STDROE_t + c_8 STDROE_t * X_{t3} + \varepsilon_t \quad (11)$$

[INSERT TABLE 9 ABOUT HERE]

Panel A of Table 9 presents the results from model (9). For the full sample, firms that add an accounting financial expert to the audit committee (*ADD*) are not associated with *ACCY* (p=0.373). However, when we partition the sample into strong and weak governance firms, we find that *ADD* firms are associated with higher *ACCY* in the weak governance sample (p=0.014), but not in the strong governance sample. The coefficient on *ADD* is significantly higher for weak governance firms than for strong governance firms at the 0.01 level (p=0.000). This result is suggests that those firms that add an accounting financial expert to the audit committee are associated with higher levels of *ACCY* in the year of the addition. Also, consistent with our primary results, this effect is more pronounced for weak governance firms.

Panel B of Table 9 presents the results from model (10). For the full sample, the addition of an accountant to the audit committee (*ADD*) is significantly associated with lower forecast dispersion (p=0.083). When we partition the sample by overall corporate governance, we find that the addition of an accounting financial expert to the audit committee is associated with lower analyst forecast dispersion for both strong and weak governance firms. However, when we compare the coefficients, we find that the coefficient on *ADD* is significantly lower for weak governed firms than for strong governance firms (p=0.000). This indicates that the effect of adding an accounting financial expert to the audit committee is stronger for weak governance firms, which is consistent with our primary results.

[INSERT TABLE 10 ABOUT HERE]

Table 10 presents the results from model (11). For the full sample, we find no significant association between firms that add an accounting financial expert to the audit committee (*ADD*) and the FERC (p=0.473). When we partition the sample into strong and weak governance firms, we again find no significant association between the addition of an accounting financial expert to the audit committee and FERC. This result indicates that the addition of an accounting financial expert to the audit committee is not associated with the informativeness of future earnings.

Finally, we build upon a model used by Agrawal and Chadha (2005) and employed by Krishnan and Visvanathan (2008) to examine whether our results persist after controlling for endogeneity. Here, the type of endogeneity we are concerned about is the possibility that certain economics factors that determine accounting audit committee expertise are somehow related to the analyst forecast properties and FERC. To achieve this objective, we estimate the following logistic regression model to determine the predicted probability of having an accounting financial expert on the audit committee:

$$AFINEXD = \varphi_0 + \varphi_1 SIZE + \varphi_2 PROA + \varphi_3 DEBT + \varphi_4 SGROW + \varphi_5 BSIZE + \varphi_6 AEMP + \varphi_7 GINDEX + \varphi_7 EVOL + \varphi_8 ISSUE + \varphi_9 FIRMAGE + \varepsilon \quad (12)$$

Where *PROA* is prior three-year average return on assets; *DEBT* is long-term debt divided by total assets, *SGROW* is the annual percentage change in sales, *AEMP* is a measure of capital intensity, computed as total assets divided by number of employees; *EVOL* is earnings volatility for the past three years; and *ISSUE* is a dummy variable that equals one if the company issued stock or long-term debt in the past three years; *FIRMAGE* is the age of the firm from the date of listing in number of years.

Untabulated results indicate that signs for all the variables are in the expected direction. *SIZE*, *DEBT*, *GINDEX*, *EVOL,* and *FIRMAGE* are significant at the 0.10 level or better.[8] Next, we replace *AFINEXD* with *PAFINEXD*, the predicted probability of having an accounting financial expert on the audit committee (i.e., the predicted value of *AFINEXD* from equation (12)) and estimate (1), (4), and (7). The untabulated results indicate that *PAFINEX* is positive and significant at the 0.01 level for the *ACCY* (p=0.055), and negative and significant at the 0.05 level for *DISP* (p=0.025). The results for Eq. (7) are consistent with our main findings, that is, the interaction of $PAFINEXD*X_3$ is significant at the 0.05 level (p=0.04) only in the weak governance setting. Overall, these findings are consistent with our hypothesis and alleviate concerns that the reported results are driven by the endogeneity.

5. CONCLUSION

While there is some evidence that having an accounting expert on an audit committee improves financial reporting quality, little is known as to whether the higher reporting quality due to audit committee expertise translates into some tangible economic benefits to financial statement users. Our results show that financial analyst earnings forecast properties improve (i.e., more accurate and less dispersed forecasts) and stock price becomes more informative of future earnings when the firm has an accounting expert on an audit committee. We do not find a significant association between non-accounting financial expertise and properties of analyst forecasts or informativeness of earnings. Supplementary analysis suggests that accounting audit committee expertise is associated with an important aspect of financial reporting quality that is likely to be relevant to financial statement users' task of anticipating future earnings. Further, our evidence shows that these associations are stronger for firms with weaker alternative corporate

[8] The pseudoR^2 for the full model is .078, which is slightly higher than the pseudo R^2 (0.049) reported by Agrawal and Chada (2005).

governance mechanisms. Financial statement users of firms with weaker alternative governance mechanisms appear to benefit more from an accounting expertise of the audit committee.

Our findings contribute to the growing literature on audit committee's expertise by documenting that it is only the accounting expertise that is associated with greater analysts' forecast accuracy and lower forecast dispersion. Our findings have important implications for regulators, corporate boards, investors, and others. Similar to Krishnan and Visvanathan (2008), our findings suggest that adopting a narrower definition of a financial expert as originally proposed by the SEC is likely to enhance the audit committees' effectiveness. Our findings are also relevant to regulators in other countries who are considering steps to enhance the effectiveness of audit committees.

Finally, we note that our findings are subject to two caveats. First, we document an association rather than causation between audit committee expertise and attributes of analysts' forecasts and earnings informativeness. Second, appointment of directors with accounting expertise to the audit committee is likely driven by various firm characteristics. We attempt to mitigate this concern by controlling for several observable governance and other characteristics in our model.

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TABLE 1
Variable Definitions

ACCY	=	the accuracy in analysts' earnings forecasts, defined as the negative of the absolute difference between the forecast and actual earnings, scaled by price;
DISP	=	the dispersion in analysts' earnings forecasts;
AFIN	=	the proportion of audit committee directors who qualify as accounting financial experts to the total number of directors on the audit committee;
NAFIN	=	is the proportion of audit committee directors who qualify as nonaccounting financial experts to the total number of directors on the audit committee;
NFE	=	is the proportion of audit committee directors who qualify as nonfinancial experts to the total number of directors on the audit committee;
$AFINEXD_t$	=	a dummy variable that equals one if there is an accounting financial expert on the audit committee and 0 otherwise;
ACSIZE	=	is the log of total number of directors in the audit committee;
ACMEET	=	is number of meetings by the audit committee during the year;
ACIND	=	is the proportion of directors that are independent in the audit committee;
BSIZE	=	is the log of total number of directors on the board of directors;
NODUAL	=	is a dummy variable that equals 1 if the CEO is also not the chairman of the board, 0 otherwise;
BIND	=	is proportion of directors that are independent in the board of directors;
BIG4	=	is a dummy variable that equals 1 if the firm is audited by a Big 4 accounting firm, 0 otherwise;
SIZE	=	is the logarithm of market value of equity;
SURPRISE	=	is this year's earnings minus last years' earnings deflated by stock price.
LOSS	=	is coded as zero (one) for firm-year observations with positive (negative) earnings.
ZMIJ	=	is the Zmijewski's financial distress score.
HORIZON	=	is the log of the average of the number of calendar days between mean forecast announcement date and subsequent actual earnings announcement date.
NANA	=	is the log of number of analysts following the client.
STDROE	=	is the standard deviation of earnings over the previous five years.
EL	=	is the earnings per share
R_t	=	is the cumulative return for fiscal year t
X_{t-1}	=	is the income available to common shareholders before extraordinary items deflated by the market value of equity at the beginning of fiscal year t-1.
X_t	=	is the income available to common shareholders before extraordinary items deflated by the market value of equity at the beginning of fiscal year t.
R_{t3}	=	is the cumulative return for fiscal years t+1 through t+3;
X_{t3}	=	is the sum of income available to common shareholders before extraordinary items for years t+1 through t+3 deflated by the market value of equity at the beginning of fiscal year t.

TABLE 2
Descriptive Statistics

Variable	Mean	Median	Standard Deviation	Q1	Q3
ACCY	-0.024	-0.002	0.053	-0.030	0.000
DISP	0.018	0.007	0.058	0.003	0.017
AFINEXD	0.301	0.000	0.459	0.000	1.000
AFIN	0.080	0.000	0.133	0.000	0.200
NAFIN	0.603	0.600	0.229	0.500	0.750
NFE	0.315	0.333	0.218	0.200	0.500
ACSIZE	4.374	4.000	1.241	4.000	5.000
ACIND	0.909	1.000	0.153	0.800	1.000
ACMEET	5.704	5.000	2.564	4.000	7.000
NODUAL	0.208	0.000	0.406	0.000	0.000
BSIZE	11.165	11.000	2.472	10.000	13.000
BIND	0.707	0.733	0.152	0.625	0.818
BIG4	0.990	1.000	0.099	1.000	1.000
SIZE	9.126	9.015	1.264	8.229	9.801
SURPRISE	0.059	0.019	0.129	0.006	0.055
LOSS	0.059	0.000	0.236	0.000	0.000
ZMIJ	-3.032	-2.981	1.071	-3.680	-2.358
HORIZON	43.118	41.000	12.216	35.000	48.000
NANA	14.909	13.000	7.735	9.000	19.000
STDROE	0.164	0.062	0.396	0.028	0.126
EL	1.608	1.470	1.256	0.840	2.220
R_t	0.020	-0.028	0.461	-0.226	0.177
X_{t-1}	0.039	0.041	0.067	0.022	0.066
X_t	0.017	0.042	0.192	0.022	0.064
X_{t3}	0.051	0.137	0.507	0.088	0.178
R_{t3}	0.385	0.349	0.587	0.057	0.653
GROWTH	0.088	0.044	0.396	-0.040	0.138

Note:
See Table 1 for variable definitions.

TABLE 3
OLS Regressions of Analyst Forecast Properties on the Accounting Financial Expertise of the Audit Committee and Control Variables

Panel A: Analyst Forecast Accuracy

			YEAR-BY-YEAR REGRESSIONS		
		(1)	(2)	(3)	(4)
		FULL SAMPLE	2000	2001	2002
Variable	Predicted Sign	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)
INTERCEPT	?	-0.0420	-0.06800	-0.04558	-0.02665
		(0.440)	(0.350)	(0.412)	(0.821)
AFIN	+	0.0432	0.06692	0.03244	0.03897
		(0.000***)	(0.003***)	(0.036**)	(0.029**)
NAFIN	?	0.01052	0.01139	0.00955	0.00997
		(0.288)	(0.574)	(0.587)	(0.479)
BIG4	?	-0.01039	0.00233	0.00206	-0.04417
		(0.462)	(0.894)	(0.877)	(0.059*)
SIZE	+	0.00773	0.01207	0.00811	0.00376
		(0.000***)	(0.001***)	(0.009***)	(0.105)
SURPRISE	-	-0.03577	-0.00528	0.04564	-0.07398
		(0.124)	(0.448)	(0.013**)	(0.047**)
LOSS	-	-0.00421	0.00493	-0.00677	-0.00984
		(0.311)	(0.377)	(0.231)	(0.255)
ZMIJ	-	0.00537	0.01068	0.00250	0.00351
		(0.012**)	(0.026**)	(0.387)	(0.249)
HORIZON	-	-0.01308	-0.01624	-0.00442	-0.01602
		(0.077*)	(0.099*)	(0.3295)	(0.231)
NANA	+	-0.00041	-0.00069	-0.00068	-0.00007
		(0.187)	(0.207)	(0.147)	(0.892)
STDROE	-	-0.00961	-0.00939	-0.01561	-0.00412
		(0.066*)	(0.179)	(0.1165)	(0.589)
EL	?	-0.00080	0.00070	-0.00031	-0.00204
		(0.605)	(0.796)	(0.905)	(0.393)
R^2		0.085	0.102	0.106	0.118
Sample Size		909	305	300	304

TABLE 3 (Continued)
Panel B: Analyst Forecast Dispersion

			YEAR-BY-YEAR REGRESSIONS		
		(1)	(2)	(3)	(4)
		FULL SAMPLE	2000	2001	2002
Variable	Predicted Sign	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)
INTERCEPT	?	0.03761	0.03840	0.04786	0.00817
		(0.046)	(0.028**)	(0.053*)	(0.922)
AFIN	-	-0.04235	-0.01517	-0.01347	-0.09254
		(0.012**)	(0.028**)	(0.079*)	(0.027**)
NAFIN	?	-0.00668	0.00110	-0.00481	-0.01327
		(0.159)	(0.810)	(0.386)	(0.562)
BIG4	?	0.01755	0.00825	-0.00031	0.06915
		(0.315)	(0.314)	(0.982)	(0.179)
SIZE	-	-0.00389	-0.31512	-0.00187	-0.00572
		(0.003***)	(0.000***)	(0.073*)	(0.209)
SURPRISE	+	0.10674	0.10128	0.06182	0.11522
		(0.014**)	(0.000***)	(0.000***)	(0.003***)
LOSS	+	0.05519	0.04859	0.03354	0.07775
		(0.016**)	(0.000***)	(0.000***)	(0.000***)
ZMIJ	+	0.00149	0.00128	0.00352	0.00049
		(0.163)	(0.221)	(0.008***)	(0.931)
HORIZON	+	-0.00015	-0.00002	-0.00006	-0.00040
		(0.576)	(0.791)	(0.627)	(0.348)
STDROE	+	0.01282	-0.00626	-0.00206	0.02348
		(0.19)	(0.097*)	(0.548)	(0.037**)
R^2		.212	.358	.348	.201
Sample Size		908	305	300	303

Notes: Variables are defined in Table 1.
Each model includes, but does not tabulate, 10 industry dummies based on 11 Fama-French industries. The full model includes, but does not tabulate year dummies. P-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.
Significances are one-tailed tests where predicted signs are specified and two tailed tests otherwise.
*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 4
OLS Regressions of Analyst Forecast Properties on the Accounting Financial Expertise of the Audit Committee and Other Governance Controls

Panel A: Analyst Forecast Accuracy

			YEAR-BY-YEAR REGRESSIONS		
		(1)	(2)	(3)	(4)
		FULL SAMPLE	2000	2001	2002
Variable	Predicted Sign	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)
INTERCEPT	?	-0.05863	-0.05207	-0.06182	-0.01634
		(0.247)	(0.586)	(0.404)	(0.853)
AFIN	+	0.04171	0.06632	0.02908	0.03920
		(0.000***)	(0.012**)	(0.092*)	(0.072*)
NAFIN	?	0.00963	0.01187	0.00736	0.00907
		(0.317)	(0.485)	(0.569)	(0.530)
ACIND	+	0.00847	0.00280	0.00701	0.01977
		(0.252)	(0.451)	(0.362)	(0.209)
ACMEET	?	0.00045	-0.00051	-0.00028	0.00108
		(0.286)	(0.404)	(0.42)	(0.184)
ACSIZE	?	-0.00493	-0.00472	-0.00774	-0.00561
		(0.405)	(0.752)	(0.451)	(0.345)
NODUAL	+	0.00202	-0.00231	-0.00283	0.01061
		(0.315)	(0.402)	(0.345)	(0.097*)
BSIZE	+	0.00076	-0.00283	0.009625	-0.01164
		(0.475)	(0.457)	(0.330)	(0.325)
BIND	+	0.00655	-0.00516	0.005676	0.01804
		(0.238)	(0.390)	(0.344)	(0.162)
BIG4	?	-0.00993	0.00358	0.00171	-0.03861
		(0.476)	(0.905)	(0.479)	(0.118)
SIZE	+	0.00776	0.01247	0.00806	0.00319
		(0.000***)	(0.001***)	(0.003***)	(0.188)
SURPRISE	-	-0.03813	-0.00029	0.04508	-0.07729
		(0.117)	(0.498)	(0.059**)	(0.001***)
LOSS	-	-0.00330	0.00432	-0.00766	-0.00784
		(0.348)	(0.446)	(0.271)	(0.281)
ZMIJ	-	0.00518	0.01103	0.00245	0.00312
		(0.009*)	(0.003***)	(0.208)	(0.193)
HORIZON	-	-0.01395	-0.01591	-0.00377	-0.02051
		(0.069*)	(0.136)	(0.382)	(0.064*)
NANA	+	-0.00048	-0.00066	-0.00065	-0.00009
		(0.128)	(0.153)	(0.167)	(0.433)
STDROE	-	-0.01083	-0.00935	-0.01457	-0.00704
		(0.044**)	(0.250)	(0.031**)	(0.164)

EL	?	-0.0009	0.00078	-0.00094	-0.00191
		(0.614)	(0.796)	(0.367)	(0.267)

Table 4 (Continued)

R^2	0.089	0.026	0.033	0.067
Sample Size	909	305	300	304

TABLE 4 (Continued)
Panel B: Analyst Forecast Dispersion

			YEAR-BY-YEAR REGRESSIONS		
		(1)	(2)	(3)	(4)
		FULL SAMPLE	2000	2001	2002
Variable	Predicted Sign	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)	Coefficient (p-value)
INTERCEPT	?	-0.03266	0.01212	0.02219	-0.04401
		(0.472)	(0.554)	(0.441)	(0.715)
AFIN	-	-0.04850	-0.01668	-0.01262	-0.10668
		(0.014**)	(0.018**)	(0.095*)	(0.007***)
NAFIN	?	-0.00654	-0.00039	-0.00361	-0.02213
		(0.155)	(0.933)	(0.522)	(0.000***)
ACIND	-	0.00703	-0.00102	-0.00071	0.03326
		(0.169)	(0.434)	(0.935)	(0.395)
ACMEET	?	0.00201	0.00138	0.00197	0.00245
		(0.073*)	(0.014**)	(0.000***)	(0.198)
ACSIZE	?	0.01159	0.00308	0.00090	0.04102
		(0.425)	(0.447)	(0.840)	(0.067*
NODUAL	-	-0.00677	0.00186	0.00160	-0.01576
		(0.290)	(0.451)	(0.600)	(0.226)
BIND	-	0.00212	0.01349	0.00314	0.01173
		(0.386)	(0.046**)	(0.740)	(0.773)
BSIZE	-	-0.00182	0.00541	0.00617	-0.03379
		(0.868)	(0.276)	(0.318)	(0.243)
BIG4	?	0.02523	0.00673	-0.00285	0.08258
		(0.306)	(0.407)	(0.839)	(0.114)
SIZE	-	-0.00343	-0.00350	-0.00219	-0.00516
		(0.009***)	(0.000***)	(0.021**)	(0.295)
SURPRISE	+	0.10296	0.08965	0.05940	0.12290
		(0.022**)	(0.000***)	(0.000***)	(0.001***)
LOSS	+	0.05787	0.05186	0.03266	0.07421
		(0.027**)	(0.000***)	(0.000***)	(0.000***)
ZMIJ	+	0.00070	0.00082	0.00306	-0.00177
		(0.793)	(0.438)	(0.021**)	(0.758)
HORIZON	+	-0.00014	-0.00002	-0.00005	-0.00039
		(0.631)	(0.827)	(0.668)	(0.362)
STDROE	+	0.01797	-0.00584	-0.00276	0.02810
		(0.304)	(0.119)	(0.419)	(0.015**)
R^2		.243	.378	.368	.214
Sample Size		907	305	299	303

Notes: Variables are defined in Table 1.
Each model includes, but does not tabulate, 10 industry dummies based on 11 Fama-French industries. The full model includes, but does not tabulate year dummies. P-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.
Significances are one-tailed tests where predicted signs are specified and two tailed tests otherwise.
*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 5
OLS Regressions of FERC on the Accounting Financial Expertise of the Audit Committee and Control Variables

	(1)	(2)
Variable	**Coefficient (p-value)**	**Coefficient (p-value)**
INTERCEPT	0.07826	0.24454
	(0.000***)	(0.062*)
X_{t-1}	0.25675	0.23091
	(0.288)	(0.314)
X_t	0.22510	0.02359
	(0.011**)	(0.775)
X_{t3}	0.14689	0.27136
	(0.000***)	(0.087*)
R_{t3}	-0.20668	-0.19535
	(0.000***)	(0.000***)
$AFINEXD_t$		-0.02581
		(0.726)
$AFINEXD_t*X_{t-1}$		-0.37696
		(0.663)
$AFINEXD_t*X_t$		0.02079
		(0.869)
$AFINEXD_t*X_{t3}$		***0.09988***
		(0.390)
$AFINEXD_t*R_{t3}$		0.00095
		(0.992)
$SIZE_t$		-0.01575
		(0.250)
$SIZE_t*X_{t3}$		-0.01346
		(0.406)
$LOSS_t$		-0.15973
		(0.000)
$LOSSt*X_{t3}$		-0.15569
		(0.031**)
$GROWTH_t$		0.17077
		(0.001***)
$GROWTHt*X_{t3}$		0.07815
		(0.559)
$STDROE_t$		-0.05754
		(0.061*)
$STDROE_t*X_{t3}$		0.18557
		(0.089*)

Table 5 (Continued)

R^2	.110	.156
Sample Size	886	886

Notes: Variables are defined in Table 1.
Two-tailed p-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.

*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 6
OLS Regressions of Analyst Forecast Properties on the Accounting Financial Expertise of the Audit Committee and Control Variables Conditioned Upon Governance

Panel A: Analyst Forecast Accuracy

		(1) *SGOV*=0	(2) *SGOV*=1	(3)
Variable	**Predicted Sign**	**Coefficient (p-value)**	**Coefficient (p-value)**	**(1) - (2) (p-value)**
INTERCEPT	?	-0.02145	-0.09676	
		(0.700)	(0.364)	
AFIN	+	0.04837	0.02805	.0203
		(0.002***)	(0.068*)	(0.000***)
NAFIN	?	0.01718	0.000236	
		(0.267)	(0.983)	
BIG4	?	-0.00941	-0.01133	
		(0.668)	(0.406)	
SIZE	+	0.00948	0.00498	
		(0.001***)	(0.042**)	
SURPRISE	-	-0.00697	-0.05486	
		(0.770)	(0.323)	
LOSS	-	-0.00072	-0.00494	
		(0.938)	(0.724)	
ZMIJ	-	0.00414	0.00440	
		(0.202)	(0.096*)	
HORIZON	-	-0.00930	-0.01149	
		(0.364)	(0.472)	
NANA	+	-0.00104	0.000501	
		(0.008***)	(0.255)	
STDROE	-	-0.01293	-0.005689	
		(0.164)	(0.262)	
EL	?	-0.00119	0.001129	
		(0.589)	(0.595)	
R^2		0.068	0.185	
Sample Size		501	409	

TABLE 6 (Continued)
Panel B: Analyst Forecast Dispersion

Variable	Predicted Sign	(1) *SGOV*=0 Coefficient (p-value)	(2) *SGOV*=1 Coefficient (p-value)	(3) (1) - (2) (p-value)
INTERCEPT	?	0.02581	0.04692	
		(0.622)	(0.259)	
AFIN	-	-0.04121	-0.04266	0.001
		(0.080*)	(0.035**)	(0.20)
NAFIN	?	-0.00813	-0.00224	
		(0.138)	(0.794)	
BIG4	?	0.04027	0.00289	
		(0.505)	(0.642)	
SIZE	-	-0.00232	-0.00520	
		(0.030**)	(0.010***)	
SURPRISE	+	0.17711	0.03934	
		(0.041**)	(0.177)	
LOSS	+	0.04358	0.06883	
		(0.043**)	(0.074*)	
ZMIJ	+	0.00286	-0.00080	
		(0.080*)	(0.763)	
HORIZON	+	-0.00042	0.00015	
		(0.389)	(0.636)	
STDROE	+	0.01529	0.00947	
		(0.493)	(0.468)	
R^2		0.297	0.184	
Sample Size		499	409	

Notes: Variables are defined in Table 1. Each model includes, but does not tabulate, 10 industry dummies based on 11 Fama-French industries. The full model includes, but does not tabulate year dummies. P-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations. Significances are one-tailed tests where predicted signs are specified and two tailed tests otherwise.
*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 7
OLS Regressions of FERC on the Accounting Financial Expertise of the Audit Committee and Control Variables Conditioned Upon Governance

	(1)	(2)	(3)
	***SGOV*=0**	***SGOV*=1**	
Variable	**Coefficient (p-value)**	**Coefficient (p-value)**	**(1) - (2) (p-value)**
INTERCEPT	0.11906	0.20717	
	(0.545)	(0.301)	
X_{t-1}	0.00064	0.47837	
	(0.999)	(0.306)	
X_t	0.06515	0.09066	
	(0.627)	(0.663)	
X_{t3}	1.67523	0.32366	
	(0.028**)	(0.518)	
R_{t3}	-0.21556	-0.16279	
	(0.002***)	(0.012**)	
$AFINEXD_t$	-0.08282	-0.00651	
	(0.511)	(0.950)	
$AFINEXD_t*X_{t-1}$	0.52146	-0.93177	
	(0.609)	(0.589)	
$AFINEXD_t*X_t$	-0.07995	-0.03666	
	(0.712)	(0.973)	
$AFINEXD_t*X_{t3}$	***0.37205***	***0.02125***	.3507
	(0.034**)	***(0.951)***	(0.000***)
$AFINEXD_t*R_{t3}$	-0.01044	0.03273	
	(0.948)	(0.774)	
$SIZE_t$	0.00054	-0.01506	
	(0.980)	(0.456)	
$SIZE_t*X_{t3}$	-0.18642	-0.01777	
	(0.056*)	(0.754)	
$LOSS_t$	-0.15648	-0.14745	
	(0.026**)	(0.142)	
$LOSSt*X_{t3}$	-0.03995	-0.18491	
	(0.862)	(0.475)	
$GROWTH_t$	0.28699	0.15069	
	(0.018**)	(0.013**)	
$GROWTHt*X_{t3}$	0.45811	-0.09947	
	(0.238)	(0.766)	
$STDROE_t$	-0.03303	-0.05896	
	(0.534)	(0.484)	
$STDROE_t*X_{t3}$	0.19321	0.09809	
	(0.472)	(0.818)	

TABLE 7 (Continued)

R^2	.167	.182
Sample Size	484	402

Notes: Variables are defined in Table 1. Two-tailed p-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.

*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 8
Regressions of Future Earnings on Audit Committee Accounting Financial Expertise, Current Earnings, and Control Variables

Variable	Predicted Sign	(1) Coefficient (p-value)	(2) Coefficient (p-value)
INTERCEPT	?	0.04085	0.2023
		(0.000***)	(0.000***)
ROA	+	0.29823	
		(0.000***)	
AFINEXD	?	-0.01624	-0.1889
		(0.032**)	(0.043**)
*AFINEXD*ROA*	+	0.213129	
		(0.022**)	
ROE	+		-0.0476
			(0.753)
*AFINEXD*ROE*	+		1.0818
			(0.000***)
R^2		.281	.100
Sample Size		909	909

Notes: Current earnings are defined as either return on assets (*ROA*) or return on equity (*ROE*). *ROA* is income before extraordinary items scaled by average total assets; *ROE* is income before extraordinary items scaled by average total shareholder equity; other variables are defined in Table 1.

Two-tailed p-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.

*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 9
OLS Regressions of Analyst Forecast Accuracy on the Addition of Accounting Financial Expertise to the Audit Committee and Control Variables

Panel A: Analyst Forecast Accuracy

	(1) FULL MODEL	(2) *SGOV*=0	(3) *SGOV*=1	(4)
Variable	**Coefficient (p-value)**	**Coefficient (p-value)**	**Coefficient (p-value)**	**(2)- (3) (p-value)**
INTERCEPT	-0.074	-0.0267	-0.084	
	(0.380)	(0.692)	(0.293)	
ADD	0.004	0.01589	-0.009	0.0249
	(0.373)	(0.014**)	(0.241)	(0.000***)
AEXP	0.008**	0.0110	0.000	
	(0.035)	(0.039**)	(0.951)	
BIG4	-0.046	-0.0509	-0.011	
	(0.230)	(0.291)	(0.480)	
SIZE	0.005**	0.0080	-0.001	
	(0.018)	(0.028**)	(0.742)	
SURPRISE	-0.046	-0.0099	-0.086	
	(0.242)	(0.649)	(0.136)	
LOSS	0.005	-0.0012	0.013*	
	(0.429)	(0.895)	(0.092)	
ZMIJ	0.002	0.0001	-0.003	
	(0.589)	(0.967)	(0.313)	
HORIZON	-0.004	0.0075	-0.008	
	(0.703)	(0.536)	(0.488)	
NANA	-0.006	-0.0167	0.007	
	(0.306)	(0.022**)	(0.387)	
STDROE	-0.002	-0.0113	0.017	
	(0.814)	(0.23)	(0.269)	
EL	0.001	-0.0009	0.004*	
	(0.725)	(0.789)	(0.082)	
R^2	.101	.079	.275	
Sample Size	582	312	270	

TABLE 9 (Continued)
Panel B: ***Analyst Forecast Dispersion***

	(1) FULL MODEL	(2) *SGOV*=0	(3) *SGOV*=1	(4)
Variable	**Coefficient (p-value)**	**Coefficient (p-value)**	**Coefficient (p-value)**	**(2)- (3) (p-value)**
INTERCEPT	0.024	-0.205	0.072	
	(0.610)	(0.46)	(0.025**)	
ADD	-0.009	-0.014	-0.012	-0.002
	(0.083*)	(0.087*)	(0.085*)	(0.000***)
AEXP	-0.015	-0.015	-0.017	
	(0.044**)	(0.157)	(0.065*)	
BIG4	0.056	0.282	-0.001	
	(0.290)	(0.325)	(0.857)	
SIZE	-0.006	-0.005	-0.009	
	(0.014**)	(0.033)	(0.035**)	
SURPRISE	0.063	0.144	0.018	
	(0.158)	(0.175)	(0.531)	
LOSS	0.031	0.018	0.041	
	(0.023**)	(0.11)	(0.043**)	
ZMIJ	0.000	-0.001	-0.004	
	(0.895)	(0.874)	(0.369)	
HORIZON	-0.000	-0.001	0.000	
	(0.545)	(0.299)	(0.799)	
STDROE	0.014	0.014	0.011	
	(0.289)	(0.358)	(0.356)	
R^2	.191	.341	.160	
Sample Size	578	310	268	

Notes: *ADD* is a dummy variable that equals 1 if the firm added an accountant to the audit committee during the sample period; 0 otherwise. *AEXP* is a dummy variable that equals 1 if the firm had an accountant on the audit committee for the entire sample period; 0 otherwise. Other variables are defined in Table 1.
Two-tailed p-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.

*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.

TABLE 10
OLS Regressions of FERC on the Addition of Accounting Financial Expertise to the Audit Committee and Control Variables

Variable	(1) FULL SAMPLE Coefficient (p-value)	(2) SGOV=0	(3) SGOV=1 Coefficient (p-value)
INTERCEPT	0.605***	0.07360	0.691***
	(0.000)	(0.068*)	(0.006)
X_{t-1}	0.231	0.02986	0.475
	(0.317)	(0.954)	(0.343)
X_t	0.229	0.16640	0.530
	(0.337)	(0.530)	(0.237)
X_{t3}	-0.166	-0.45922	-0.840
	(0.826)	(0.855)	(0.367)
R_{t3}	-0.117***	-0.13322	-0.098
	(0.002)	(0.051*)	(0.126)
ADD_t	-0.035	0.04490	0.057
	(0.715)	(0.792)	(0.708)
ADD_t*X_{t-1}	0.421	-0.35143	3.415
	(0.740)	(0.859)	(0.133)
ADD_t*X_t	0.391	0.3446	-1.280
	(0.802)	(0.862)	(0.569)
$\boldsymbol{ADD_t*X_{t3}}$	-0.241	-0.0430	-0.864
	(0.473)	(0.955)	(0.195)
ADD_t*R_{t3}	0.007	-0.0602	0.011
	(0.958)	(0.818)	(0.949)
$SIZE_t$	-0.065***	-0.07412	-0.087***
	(0.000)	(0.086*)	(0.001)
$SIZE_t*X_{t3}$	-0.134	0.7396	-0.124
	(0.103)	(0.791)	(0.319)
$LOSS_t$	-0.013	-0.12435	0.190
	(0.887)	(0.431)	(0.240)
$LOSSt*X_{t3}$	0.101	-0.1535	0.028
	(0.434)	(0.866)	(0.910)
$GROWTH_t$	0.053	0.1852	0.167
	(0.484)	(0.324)	(0.116)
$GROWTHt*X_{t3}$	-0.094	0.4493	0.433
	(0.813)	(0.602)	(0.487)
$STDROE_t$	-0.070	-0.1064	-1.219
	(0.908)	(0.423)	(0.246)
$STDROE_t*X_{t3}$	0.332	0.5672	0.440

	(0.340)	(0.602)	(0.600)

TABLE 10 (Continued)

R^2	.239	.230	.325
Sample Size	429	236	193

Notes: *ADD* is a dummy variable that equals 1 if the firm added an accountant to the audit committee during the sample period; 0 otherwise. Other variables are defined in Table 1.
Two-tailed p-values (indicated within parentheses) are computed based on Huber-White robust standard errors that correct for serial correlation among multiple-year observations.

*, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent level (two-tailed), respectively.