CORE
Metadata, citation and similar papers at core.ac.uk
Provided by Clute Institute: Journals

Managerial Overconfidence And Going - Concern Modified Audit Opinion Decisions

Gayoung Ji, Sungkyunkwan University, South Korea
Jong Eun Lee, Sungkyunkwan University, South Korea

ABSTRACT

We examine how auditors perceive managerial overconfidence during audit reporting by testing the relationship between managerial overconfidence and the likelihood of issuing a first-time going-concern modified audit opinion to financially distressed firms. After controlling for the factors affecting auditor's going-concern modified audit opinion decision, we find that the likelihood of issuing a first-time going-concern modified audit opinion is positively associated with managerial overconfidence, suggesting that auditors adversely value overconfident management in financially distressed firms and thus tend to issue a first-time going-concern modified audit opinion to them. We also find that the positive association above is reinforced with capital market uncertainty.

Keywords: Managerial Overconfidence; Going-Concern Modified Audit Opinion; Global Financial Crisis

INTRODUCTION

This study investigates the impact of managerial overconfidence on auditors' going-concern modified audit opinion (GCO) decisions for financially distressed firms.[1]

Recent studies on managerial overconfidence in finance and accounting document the association between managerial overconfidence and a variety of corporate policies, such as corporate investment, mergers and acquisitions, financing, dividend policies, earnings management, management forecasting, tax avoidance, financial misreporting, and accounting conservatism (e.g., Malmendier and Tate, 2005, 2008; Cordeiro, 2009; Deshmukh et al., 2013; Malmendier et al., 2011; Lin et al., 2005; Hirshleifer et al., 2012; Bertrand and Schoar, 2003; Bamber et al., 2010; Frank and Goyal, 2007; Dyreng et al., 2010; Hribar and Yang, 2011; Schrand and Zechman, 2011; Ahmed and Duellman, 2013). However, little attention has been paid to how managerial overconfidence is perceived by stakeholders. This study examines how auditors perceive managers' cognitive bias towards overconfidence when making first-time going-concern modified audit opinion (FGCO) decisions for financially distressed firms.

Audit reports with GCO in the explanatory paragraph have been examined by audit firms and shareholders because of their negative effects, such as bankruptcy.[2] [3] For example, if an auditor does not issue a GCO to the previous financial statements of a bankrupt firm (called a "type II error"), the auditor is more likely to be sued by shareholders (Carcello and Palmrose, 1994). This litigation can damage an auditor's reputation, and subsequent auditor switches by clients can hurt the auditor financially (Carcello and Palmrose, 1994). If an auditor issues a GCO to a firm's financial statement incorrectly and the firm survives (called a "type I error"), the auditor's

[1] In this study, "managerial overconfidence" and "CEO overconfidence" are used interchangeably.
[2] According to the Statement on Auditing Standards, auditors' ultimate responsibility is to express an audit opinion on their client's financial statements. The auditor can issue various types of audit reports, such as a standard audit report with unqualified opinion ("clean opinion"), an audit report with unqualified opinion but an explanatory paragraph, and audit reports with qualified opinion, adverse opinion, or a disclaimer of opinion on financial statements.
[3] A going-concern modified audit opinion is an unqualified opinion, meaning that the financial statements are fairly presented in accordance with financial accounting standards. However, the auditors insert an explanatory paragraph in order to explain that they are suspicious of their client's ability to continue as a going concern due to current and/or potential financial problems.

reputation will be greatly damaged.[4] Therefore, although the GCO is an unqualified audit opinion, it is critical to both auditors and their clients.

According to AU-C Section 570 (SAS No. 126), the auditor is responsible for evaluating "whether there is substantial doubt about the entity's ability to continue as a going concern" within 12 months after a fiscal year end. The evaluation should be based on the "auditor's knowledge of relevant conditions or events that exist at, or have occurred prior to, the date of the auditor's report." An auditor who identifies events and/or conditions that cause substantial doubt about the entity's going concern assumption must collect supporting and/or mitigating evidence related to that doubt and evaluate its impact on the going concern assumption. In this study, we argue that CEO overconfidence should be evaluated as one of the determinants affecting auditors' GCO decisions because CEOs are central to the plans firms implement to escape from financial distress. Overconfident CEOs can be *positively* valued if auditors agree on the overconfident CEOs' optimistic view of the future performance of current investments and believe that the overconfident CEOs are capable of executing a management plan for reviving from financial distress. The recent psychology study in Anderson *et al*. (2012) suggests that overconfident managers can attain high social status because they can be *erroneously* viewed as more competent than they really are. However, other studies (e.g., Malmendier and Tate, 2005, 2008; Ben-David et al., 2010) reveal the negative aspects of overconfident CEOs, such as unnecessary mergers and acquisitions and excessive investment, including investments with negative net present value. Therefore, auditors can *negatively* value overconfident CEOs because they are *less* likely to take appropriate action rationally for their firm's future survival. Consequently, auditors who put more weight on the negative (positive) aspects of overconfident CEOs are more (less) likely to issue GCOs to financially distressed firms. If one aspect does not dominate the other, managerial overconfidence will not influence the auditors' GCO decision. How auditors perceive the overconfident CEOs of firms with going-concern uncertainty when making a GCO decision is thus an important and interesting *open* empirical question.

Following Schrand and Zechman (2011), we measure firm-specific time-variant managerial overconfidence and investigate its impact on auditors' GCO decisions using a sample composed of financially distressed firms that received FGCOs from 2001 to 2011. After controlling for the factors affecting auditors' GCO decisions, we find that the propensity to issue a FGCO is positively associated with CEO overconfidence, suggesting that auditors are more likely to issue FGCOs by adversely valuing the overconfident CEOs of financially distressed firms. Further analysis reveals that the positive association between managerial overconfidence and the likelihood of issuing a FGCO is more pronounced when capital market uncertainty is high, such as during the pre-SOX and global financial crisis periods.

Our study contributes to two important research streams on auditor reporting decisions and managerial overconfidence. First, we provide evidence that CEO overconfidence, a managerial cognitive bias, is an additional determinant affecting auditors' GCO decisions on financially distressed firms. Specifically, we find that auditors adversely value the overconfident CEOs of firms in financial distress and are more likely to issue FGCOs to such firms. Second, recent accounting studies of managerial overconfidence document the association between managerial overconfidence and a variety of corporate policies, such as financial misreporting and accounting conservatism; our study extends the extant literature by focusing on perceptions of managerial overconfidence. We provide evidence that auditors' perceptions of CEO overconfidence lead them to determine that overconfident CEOs are too risky to stabilize their firms' financial distress.

The rest of this paper is organized as follows. The literature is reviewed and the hypotheses are developed in section 2. In section 3, we present the study's research design and empirical model. The sample and data are described in section 4. In section 5, the empirical results are presented. Finally, the last section provides a summary and conclusion.

[4] In a self-fulfilling prophecy, issuing a going-concern modified audit opinion to a firm in financial difficulty can accelerate its bankruptcy.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review

CEO Overconfidence

In the economics literature, humans are assumed to behave rationally and make an optimal decision, while psychological research shows that humans are not perfectly rational and have cognitive biases. Overconfidence, a cognitive bias, has been examined in the recent finance and accounting literature (e.g., Malmendier and Tate, 2005, 2008; Malmendier et al., 2011; Hirshleifer et al., 2012; Hribar and Yang, 2011; Schrand and Zechman, 2011; Ahmed and Duellman, 2013). Overconfidence is described as a behavioral or psychological bias leading to an overestimation of the future uncertain outcomes of current events. This overconfidence is mainly formed by the "better-than-average effect" (Svenson, 1981), the tendency of humans to think of themselves as above average. The overestimation of future outcomes by overconfident CEOs may lead to excessive optimism, which could adversely influence firms' corporate policies or financial reporting decisions.

Accordingly, Malmendier and Tate (2005) show that overconfident CEOs produce a higher sensitivity between investments and free cash flows, implying overinvestment and lower investment efficiency. In terms of mergers and acquisitions, Billett and Qian (2008) use a dynamic measure of overconfidence to show that managerial overconfidence is positively correlated with more acquisition decision making. Malmendier and Tate (2008) show that overconfident CEOs are more likely to execute value-destroying mergers and acquisitions and overpay for acquired firms. In addition, Deshmuk et al. (2013) report that overconfident CEOs prefer lower dividend payouts. Campbell et al. (2009) argue that CEO overconfidence is positively correlated with involuntary turnover. Contrary to these findings on the negative consequence of CEO overconfidence on corporate policy, Galasso and Simcoe (2011) and Hirshleifer et al. (2012) suggest that overconfident CEOs make more investments in innovation and achieve greater innovative success by efficiently utilizing research and development expenditures.

The recent accounting literature has studied the impact of CEO overconfidence on financial reporting behavior. For instance, examining 49 firms subject to the Accounting and Auditing Enforcement Releases (AAERs) of the Securities and Exchange Commission (SEC), Schrand and Zechman (2011) investigate the association between managerial over-optimism and earnings management. They propose two explanations for the earnings management of overconfident managers. One is that such mangers intentionally misstate financial reporting for their own personal interests. The other is that overoptimistic managers are inclined to issue more optimistic earnings forecasts and be involved in intentional misstatement in order to beat or meet earnings forecasts. Consistent with their argument, Schrand and Zechman (2011) find that overconfident managers are more likely to engage in fraudulent financial reporting to beat or meet their overoptimistic earnings expectations. Furthermore, Ahmed and Duellman (2012) show that overconfident CEOs are more likely to delay loss recognition, indicating less loss recognition conservatism. Presley and Abbott (2013) report that overconfident CEOs are more likely to restate previously issued financial statements. Overall, studies confirm that CEO overconfidence adversely affects firms' financial reporting behavior, reducing financial reporting quality and generating more earnings management, less use of conservative accounting, and more frequent restatements of previously reported financial statements.

Going-Concern Modified Audit Opinion

Under SAS No. 126 (AICPA 2012), auditors must "evaluate whether there is substantial doubt about the entity's ability to continue as a going concern" during a period of time not exceeding 12 months from the balance sheet date. Auditor evaluations of going-concern uncertainty are made based on knowledge of the relevant events and conditions existing at or prior to the date of the field completion (i.e., the date of the auditor's report). While verifying the assertions embodied in the entity's financial statements, auditors can detect indications of an entity's going-concern uncertainty, including financial difficulties (e.g., recurring operating losses, negative operating cash flows) and internal or external matters (e.g., work stoppages, litigation, bankruptcy of a principal customer or supplier). The auditors will then evaluate the degree of going-concern uncertainty and consider issuing GCOs to the firms.

The prior literature on GCOs, focusing on financial statement information, identifies a variety of client characteristics related to GCO decision making. For instance, the issuance of GCOs is negatively associated with profitability (e.g., Kida, 1980; Mutchler, 1985; Dopuch et al., 1987; Altman and McGough, 1974; Menon and Schwartz, 1987), liquidity (e.g., Koh and Killough, 1990; Koh, 1991; Lennox, 1999; Raghunandan and Rama, 1995), and firm size (e.g., McKeown et al., 1991; Mutchler et al., 1997; Geiger and Raghunandan, 2001) while positively associated with leverage (e.g., Altman and McGough, 1974; Kida, 1980; Mutchler, 1985; Dopuch et al., 1987; Raghunandan and Rama, 1995). In addition to financial statement variables, studies (e.g., Dopuch et al., 1987; Mutchler and Williams, 1990; DeFond et al., 2002) provide evidence that market variables such as return and its volatility as non-financial information are associated with GCO issuance. Most research finds that auditors are more likely to issue GCOs to firms with lower industry-adjusted return or higher return volatility. In terms of auditor independence, auditors are less likely to issue GCOs to firms with significant economic dependence (Geiger and Rama, 2003; Blay and Geiger), whereas Reynolds and Francis (2000) and DeFond et al. (2002) find no association between economic dependence and propensity to issue GCOs. In addition, a recent study of Fargher et al. (2014) provides evidence that auditors are more likely to issue GCOs to financially distressed firms that have executive compensation structure with risk-taking incentives, suggesting that auditors adversely value CEOs with risk-taking motivation.

Auditors are also supposed to find GCO-mitigating factors (e.g., management's future financing plan) and evaluate their potential impacts on current going-concern uncertainty. Specifically, SAS No. 126 (AICPA 2012) requires auditors to evaluate management's plan to escape from current financial distress. Behn et al. (2001) find that management plans to raise capital from equity issuance or borrowings are negatively associated with GCO issuance.

Taken together, studies suggest that auditors seek to identify events or conditions affecting clients' going-concern uncertainty, primarily based on financial statement information. When auditors detect a going-concern factor, they must identify and evaluate management's plans to mitigate the issuance of a GCO. Consequently, auditors' GCO decisions are made after considering both the going-concern status and the mitigating factors affecting the potential issuance of a GCO.

Hypothesis Development

According to SAS No. 126 (AICPA 2012), if, after identifying conditions or events that violate an entity's going-concern assumption, the auditor detects a going-concern uncertainty, the auditor must obtain and evaluate management's plans (e.g., to sell assets or raise capital through issuing equity or borrowing) to mitigate the going-concern uncertainty. The auditor has to assess the significance of management's plans to overcome the going-concern uncertainty or the feasibility of future financing plans. More importantly, the auditor must assess if management is willing and able to implement its plans. Furthermore, when prospective financial information is critical to the success of the management plans, the auditor must thoroughly review its validity and reliability. This assessment should be based on knowledge of the firm, its business, and its management.

When assessing management along with the relevant financial information, the auditor should apply a professional skepticism. The financial information provided by overconfident CEOs may be unrealistically optimistic because, as mentioned, they are overoptimistic about future returns on current investments. While it is absolutely the auditor's responsibility if accepting plans by overconfident CEOs after considering all the relevant information, we expect that auditors can respond to CEOs' overconfidence in one of three ways: 1) positively, 2) negatively, or 3) neutrally.

There are positives to CEO overconfidence in terms of corporate policy and management ability. For example, Hirshleifer et al. (2012) and Galasso and Simcoe (2011) show that overconfident CEOs invest more in innovation and are more likely to achieve innovative success. Anderson et al. (2012) suggest that overconfident CEOs are more likely to have a higher social status, enhancing their social network and making them look more competent and capable than they are. Therefore, overconfident CEOs can be positively perceived by auditors making GCO decisions. However, there are also negatives to CEO overconfidence in terms of corporate policy and financial reporting behavior. Studies reveal the adverse consequence of CEO overconfidence, such as inefficient

investment decisions (Malmendier and Tate, 2005), value-destroying mergers and acquisition (Malmendier and Tate, 2008), increased likelihood of fraudulent financial reporting (Schrand and Zechman, 2011), less use of conservative accounting (Ahmed and Duellman, 2012), and more frequent restatements of previously reported financial statements (Presley and Abbott, 2013).

Consequently, if an auditor believes that, in assessing a firm's going-concern uncertainty, the positives (negatives) of the firm's CEO overconfidence outweigh its negatives (positives), the CEO overconfidence will be a significant mitigating (contrary) factor for the auditor's substantial doubt about the firm's ability to continue as a going concern. In addition, if an auditor perceives that the positives (negatives) of the firm's CEO overconfidence do not significantly dominate its negatives (positives), the CEO overconfidence will be insignificant to the auditors' GCO decision making.

Therefore, we hypothesize as follows (at the form of null):

Hypothesis: There is no association between managerial overconfidence and the likelihood of issuing first-time going-concern audit opinions to financially distressed firms.

RESEARCH DESIGN

We test the above hypothesis using the logit model below:

$$P(FGCO_{it}=1) = F(\beta_0+\beta_1*Managerial\ OC_{it}+\beta_2*Size_{it}+\beta_3*LEV_{it}+\beta_4*OCF_{it} +\beta_5*Prob(Bankz)_{it}+\beta_6*Lag\ Loss_{it}+\beta_7*Investments_{it}+\beta_8*Discon\ OP_{it} +\beta_9*Future\ Financing_{it+1}+\beta_{10}*Big4_{it}+\beta_{11}*Log(Age)_{it}+\beta_{12}*Return_{it} +\beta_{13}*Beta_{it}+\beta_{14}*Volatility_{it}+\beta_{15}*Log(Audit\ Fees)_{it})$$

where:

FGCO	=	coded 1 if a firm received a going-concern modified audit opinion on the current fiscal year's financial statements but an unqualified audit opinion on the previous fiscal year's financial statements.
Managerial OC	=	coded 1 if the sum of the following five dummy variables is equal to or greater than 3: 1) *Excess investment* is equal to 1 if excess investment is in the top quartile of firms within the industry for the year, where excess investment is measured as the residual from a regression of total asset growth on sales growth, and 0 otherwise; 2) *Net Acquisition* is equal to 1 if the net acquisitions from the statement of cash flows are in the top quartile of firms within the industry for the year, and 0 otherwise; 3) *Debt-to-Equity ratio* is equal to 1 if the debt-to-equity ratio is in the top quartile of firms within the industry for the year, where the debt-to-equity is measured as long-term debt plus short-term debt, deflated by the total market value of the firm measured as the sum of the market value of equity plus the book values of long-term debt and preferred stock and 0 otherwise; 4) *Risk Debt* is equal to 1 if either convertible debt or preferred stock is greater than zero, and 0 otherwise; 5) *Dividend Yield* is equal to 1 if the dividend yield is zero and 0 otherwise.
Size	=	natural logarithm of total assets at the end of the fiscal year.
LEV	=	debt-to-equity ratio, measured as the ratio of total liabilities to total assets at the end of the fiscal year.
OCF	=	operating cash flows, measured as the cash flows from operating activities deflated by total assets at the end of the fiscal year.
Prob(Bankz)	=	probability of bankruptcy score (Zmijewski, 1984), measured as -4.803-3.599* (net income/total assets)+5.406*(total liabilities/total assets)-0.100*(current assets/current liabilities).
Lag Loss	=	coded 1 if the firm reports net loss for the previous fiscal year and 0 otherwise.
Investments	=	the sum of cash and cash equivalents and short- or long-term investments deflated by total assets.
Discon OP	=	coded 1 if the firms report discontinued operation and 0 otherwise.
Future Financing	=	coded 1 if the firm issues equity or borrows in the subsequent fiscal year and 0 otherwise.
Big4	=	coded 1 if the firm's auditor is PWC, EY, Deloitte, or KPMG and 0 otherwise.

Log(Age)	=	natural logarithm of the number of years since the firm was listed on a stock exchange.
Return	=	the firm's buy-and-hold stock return over the fiscal year.
Beta	=	the firm's systematic risk, estimated using a market model, over the fiscal year.
Volatility	=	the standard deviation of the residual from the market model over the fiscal year.
Log(Audit Fees)	=	natural logarithm of audit fees over the fiscal year (in thousands).

P represents the probability of auditors issuing FGCOs to financially distressed firms and *F* denotes the normal cumulative distribution function. Following Dodd et al. (1984) and Loudder et al. (1992), we define FGCO as a firm's receipt of a going-concern audit opinion on the current fiscal year's financial statements but an unqualified audit opinion on the previous fiscal year's financial statements. We build *Managerial OC*, a proxy for managerial overconfidence, following Schrand and Zechman (2011). Also following Schrand and Zechman (2011), we measure *Managerial OC* at the firm level, coded 1 if the sum of the five dummy variables below is equal to or greater than three[5]:

Excess Investment	=	dummy variable equal to 1 if excess investment is in the top quartile of firms within the industry for the year, where excess investment is measured as the residual from a regression of total asset growth on sales growth and 0 otherwise.
Net Acquisition	=	dummy variable equal to 1 if net acquisitions from the statement of cash flows are in the top quartile of firms within the industry for the year and 0 otherwise.
Debt-to-Equity ratio	=	dummy variable equal to 1 if the debt-to-equity ratio is in the top quartile of firms within the industry for the year, where the debt-to-equity ratio is measured as long-term debt plus short-term debt divided by total market value (=the market value of equity + the book values of long-term debt + preferred stock) and 0 otherwise.
Risky Debt	=	dummy variable equal to 1 if either convertible debt or preferred stock is greater than zero and 0 otherwise.
Dividend Yield	=	dummy variable equal to 1 if dividend yield is zero and 0 otherwise.

Each of these criteria is based on the empirical findings of prior studies on the impact of managerial overconfidence on corporate policies such as investing and financing activities and dividend policies. For instance, overconfident CEOs are more likely to make excessive investments (e.g., Malmendier and Tate, 2005, 2008; Ben-David et al., 2010) and value-destroying acquisitions (e.g., Malmendier and Tate, 2008) and prefer debt to equity (e.g., Heaton, 2002; Hackbarth, 2008) and risky debt with longer terms (e.g., Malmendier et al., 2011; Ben-David et al., 2007) while being less likely to pay dividends (e.g., Ben-David et al., 2007). The first three criteria are measured by using a three-digit Standard Industrial Classification (SIC) code in a given year, each set equal to 1 if the value is in the top quartile of firms within the industry for the year and 0 otherwise.

Following the prior research, we control for a broad variety of client characteristics and mitigating factors affecting auditors' FGCO issuance. First, research shows that the likelihood of issuing GCOs is strongly associated with financial statement information, providing evidence that auditors are more likely to issue GCOs to firms of smaller size, higher leverage, lower liquidity, higher bankruptcy probability, and less profitability. Thus, we control for firm size (*Size*), debt-to-equity ratio (*LEV*), cash flows from operating activities (*OCF*), profitability (*Lag Loss*), and financial stability (*Prob(Bankz)*). We also consider the factors mitigating auditors' GCO decisions. DeFond et al. (2002) suggest that firms with more resources such as cash and investments are more likely to escape from financial difficulty. Behn et al. (2001) document that future financing plans or discontinued operations may help rescue financially distressed firms, thus mitigating auditors' GCO issuance. Thus, *Investments*, *Discon OP*, and *Future Financing* are included in the regression model as mitigating factors. Moreover, the Big Four auditors are more likely to issue GCO (Mutchler et al., 1997) and auditors are more likely to issue GCOs to younger firms (Dopuch et al., 1987; DeFond et al., 2002). Thus, *Big4* and *Log(Age)* are included. In addition to financial statement information, market information (i.e., non-financial statement information) is also correlated with the likelihood of

[5] Another prevalent proxy for CEO overconfidence is an option-based measure, which is based on CEO's option holding behavior (Malmendier and Tate, 2005, 2008). The relevant data for the option-based measure are obtained from Execucom database, which is composed of relatively large companies. However, the firms that received a going concern modified audit opinion are smaller with financial distress. Therefore, when using an option-based measure as a proxy for CEO overconfidence, we cannot obtain test sample firms (i.e., GCO firms) enough to test the hypothesis in our study. As a matter of fact, we tried the option-based measure based on Malmendier and Tate (2005, 2008), we could have only a few GCO firms. This measurement issue on CEO overconfidence could be a limitation of our study.

GCO issuance (DeFond et al., 2002). We thus include three market-based measures: stock return, systematic risk, and stock return volatility. *Return* and *Beta (Volatility)* are expected to be negatively (positively) correlated with auditors' GCO decisions. I also include *Log(Audit Fees)* to control for auditor independence and client importance.

SAMPLE AND DATA

The main sample in this study consists of firms that received GCOs or unqualified audit opinions between 2001 and 2011. As mentioned previously, the FGCO firms are defined as those that received GCOs for the current fiscal year's financial statements but unqualified audit opinions for the previous fiscal year's financial statements. CLEAN-opinion (non-GCO) firms are defined as those that received unqualified audit opinions for the financial statements of both the current and previous fiscal years.

We collected financial data from the Compustat Industrial Annual files, stock and market returns data from the Center for Research in Security Prices (CSRP) database, and audit opinion, auditor, and audit fee data from the Audit Analytics database. To identify FGCO firms, we start with a sample of 182,437 audit opinions drawn from the Audit Analytics database covering 2001 to 2011. Then, to identify firms that received qualified audit opinion or disclaimer of opinion on the current or previous financial statements, we merge the audit opinion sample above with the audit opinion sample from the COMPUSTAT database. We delete 90,191 firm-year observations with qualified audit opinions, disclaimers of opinions, or missing audit opinions on the current or previous financial statements. We also exclude 75,486 firm-year observations with missing managerial overconfidence, financial, market, auditor, or audit fee variables or on the utilities (SIC code 4900-4999) or financial (SIC code 6000-6999) industry because they concern regulatory industries with different operating environments. This process produces 16,760 firm-year observations. As in prior GCO issuance studies, we restrict the final sample to financially distressed firms, defined as firms with both a net loss and negative cash flows from operating activities. We thus identified 3,048 firm-year observations. We then excluded 306 financially distressed firm-year observations with GCOs on the firms' previous financial statements, generating 2,742 firm-year observations as a final sample, consisting of 192 FGCO firms and 2,550 CLEAN opinion firms. The sample selection procedure is described in detail in Table 1, Panel A.

Table 1, Panel B shows the industry distribution of the sample firms; 63 (32.8%) of 819 sample firms in the drug and medical equipment industry received FGCOs on their current financial statements (the highest number), followed by computers (19.3%), miscellaneous equipment (8.9%), and service (8.3%). Table 1 Panel C presents the yearly distribution of the full sample by audit opinion type (FGCO vs. CLEAN opinion). Table 1 Panel C shows that, post-SOX, fewer firms received FGCOs (30 in 2001 and 2002, down from 10 in 2003). Consistent with Xu et al. (2011, 2013), however, in 2005, FGCO firms increased to 16 and 18 in 2006. In 2008, during an economic recession, FGCO firms increased to 30. Up to 2011, finally, during the global economic recovery, FGCO firms decreased every year.[6]

Table Sample

Table 1. Sample

Panel A. Sample Selection Procedure

Description	Sample
Firms with an audit opinion on the financial statements between 01/01/2001 and 12/31/2011, from Audit Analytics	182,437
Firms with qualified audit opinion or disclaimer of opinion; Firms with missing lagged audit opinion, managerial overconfidence, financial, market, auditor, or audit fee variables; Firms in financial (SIC code 6000-6999) or utilities industry (SIC code 4900-4999)	(165,677)
Sub-Total	16,760
Firms with financial distress (Net income < 0 and Cash flows from operating activities < 0)	3,048
Firms with going-concern audit opinions on the previous financial statements	(306)
Final sample:	2,742
FGCO firms [a]	192
CLEAN opinion firms [b]	2,550

[6] Carey et al. (2012) document that while more GCOs have been issued by auditors since 2001, the GCOs' accuracy was not significantly changed, compared to pre-2001 period.

(Table 1 continued)

Panel B. Industry Distribution of Sample

Industry (SIC Codes)	Full Sample		*FGCO*		*CLEAN opinion*	
	N	%	N	%	N	%
Agriculture (100-999)	2	0.1	-	0	2	0.1
Mining and Construction (1000-1299, 1400-1999)	39	1.4	3	1.6	36	1.4
Food (2000-2199)	26	1.0	2	1.0	24	0.9
Textiles, Printing & Publishing (2200-2799)	56	2.0	2	1.0	54	2.1
Drugs & Medical Equipment (2830-2839)	819	29.8	63	32.8	756	29.7
Chemicals (2800-2829, 2840-2899)	52	1.9	3	1.6	49	1.9
Refining and Extractive (1300-1399, 2900-2999)	63	2.3	10	5.2	53	2.1
Rubber, Leather, and Metal (3000-3499)	43	1.6	4	2.1	39	1.5
Industrial Equipment (3500-3569, 3580-3659)	159	5.8	5	2.6	154	6.0
Electrical Equipment (3660-3669, 3680-3699)	154	5.6	10	5.2	144	5.7
Miscellaneous Equipment (3700-3839, 3852-3999)	217	7.9	17	8.9	200	7.8
Computers (3570-3579, 3670-3679, 7370-7379)	700	25.5	37	19.3	663	26.0
Transportation (4000-4899)	96	3.5	8	4.2	88	3.5
Retail (5000-5999)	116	4.2	6	3.1	110	4.3
Services (7000-7369, 7380-8999)	182	6.6	16	8.3	166	6.5
Miscellaneous (9000-9999)	18	0.7	6	3.1	12	0.5
Total	2,742	100.0	192	100.0	2,550	100.0

Panel C. Yearly Distribution of Sample

	FGCO [a]		*CLEAN opinion* [b]		*Total*
	N	*(%)*	*N*	*(%)*	
2001	30	(7)	371	(93)	401
2002	30	(8)	329	(92)	359
2003	10	(3)	290	(97)	300
2004	13	(5)	252	(95)	265
2005	16	(6)	238	(94)	254
2006	18	(8)	214	(92)	232
2007	15	(7)	203	(93)	218
2008	30	(14)	185	(86)	215
2009	16	(9)	163	(91)	179
2010	9	(6)	145	(94)	154
2011	5	(3)	160	(97)	165
N	192	(7)	2,550	(93)	2,742

[a] FGCO firms are defined as those that received going-concern modified audit opinions for the current fiscal year's financial statements but unqualified audit opinions for the previous fiscal year's financial statements.

[b] CLEAN opinion firms are defined as those that received unqualified audit opinions for the financial statements of both current and previous fiscal years.

EMPIRICAL RESULTS

Descriptive Analysis

Table 2 reports the test result for the mean difference of all the variables used in the empirical model between FGCO (*FGCO*=1) and CLEAN-opinion firms (*FGCO*=0). As shown in Table 2, the mean (0.23) of *Managerial OC* for FGCO firms is greater than that (0.19) for CLEAN opinion firms, but the mean difference is not significant (t-statistic=1.23). Concerning financial condition, as expected, FGCO firms have smaller firm size, higher debt-to-equity ratio, less operating cash flows, a higher probability of bankruptcy, and less profitability than do CLEAN-opinion firms, and all the mean differences are significant at the 1% level. Also as predicted, FGCO firms have lower stock return, lower systematic market risk, and higher stock return volatility than do CLEAN-opinion firms, and all mean differences are also significant at the 1% level. These results suggest that firms with poor financial condition, poor market performance, or higher market risk are more likely to receive GCOs on their current financial statements. Additionally, regarding mitigating factors deterring the issuance of GCOs, the mean (0.28 and 0.81, respectively) of *Investments* and *Future Financing* of FGCO firms are less than those (0.44 or 0.90, respectively) of CLEAN-opinion firms, and the mean differences are significant at the 1% level. These results

suggest that firms with more quickly disposable assets such as investments or future financing plans such as the issuance of debt or equity are less likely to receive GCOs. Contrary to our expectation, Table 2 reports that the Big Four auditors are less likely to issue GCOs. Also, FGCO firms have significantly less audit fees than do CLEAN-opinion firms, implying a possible impairment of auditor's independence in making GCO decision. The mean of the other control variables of *Discon OP* and *Log(Age)* is greater for FGCO firms but is insignificant.

Table 2. Descriptive Statistics for Variables relating to the Issuance of First-Time Going-Concern Audit Opinion (FGCOs vs. Unqualified Audit Opinions)

Variable	Mean		t-statistic
	FGCO =1	***FGCO =0***	
Managerial OC	0.23	0.19	1.23
Size	3.33	4.38	-9.58***
LEV	0.68	0.44	5.26***
OCF	-0.59	-0.22	-7.29***
Prob(Bankz)	0.60	0.25	12.99***
Lag Loss	0.90	0.83	2.90***
Investments	0.28	0.44	-6.89***
Discon OP	0.14	0.13	0.19
Future Financing	0.81	0.90	-2.07***
Big4	0.60	0.70	-2.69***
Log(Age)	2.25	2.20	1.06
Return	-0.18	0.08	-3.67***
Beta	1.01	1.41	-6.37***
Volatility	0.07	0.05	9.34***
Log(Audit Fees)	5.37	5.64	-3.32***
Number of observations	192	2,550	

Where:

FGCO	=	coded 1 if a firm received a going-concern audit opinion on the current fiscal year's financial statements but an unqualified audit opinion on the previous fiscal year's financial statements.
Managerial OC	=	coded 1 if the sum of following five dummy variables is equal to or greater than three: 1) Excess investment is equal to 1 if excess investment is in the top quartile of firms within the industry for the year, where excess investment is measured as the residual from a regression of total asset growth on sales growth, and 0 otherwise. 2) Net Acquisition is equal to 1 if net acquisitions from the statement of cash flows are in the top quartile of firms within the industry for the year, and 0 otherwise. 3) Debt-to-Equity ratio is dummy variable equal to 1 if debt-to-equity ratio is in the top quartile of firms within the industry for the year, and 0 otherwise. 4) Risk Debt is equal to 1 if either convertible debt or preferred stock is greater than zero, and 0 otherwise. 5) Dividend Yield is equal to 1 if dividend yield is zero, and 0 otherwise.
Size	=	natural logarithm of total assets at the end of fiscal year.
LEV	=	debt-to-equity ratio, measured as the ratio of total liabilities to total assets at the end of fiscal year.
OCF	=	operating cash flows, measured as cash flows from operating activities deflated by total assets at the end of fiscal year.
Prob(Bankz)	=	probability of bankruptcy score (Zmijewski, 1984), measured as -4.803-3.599*(net income/total assets)+5.406*(total liabilities/total assets)-0.100*(current assets/current liabilities)
Lag Loss	=	coded 1 if the firm reports net loss for the previous fiscal year, and 0 otherwise
Investments	=	cash and cash equivalents and short- or long-term investments deflated by total assets.
Discon OP	=	coded 1 if the firms report discontinued operation, and 0 otherwise
Future Financing	=	coded 1 if the firm issues equity or borrows in the subsequent fiscal year, and 0 otherwise
Big4	=	coded 1 if the firm's auditor is one of PWC, EY, Deloitte, KPMG, and 0 otherwise.
Log(Age)	=	natural logarithm of the number of years since the firm was listed on a stock exchange.
Return	=	the firm's buy-and-hold stock return over the fiscal year
Beta	=	the firm's systematic risk estimated using a market model over the fiscal year
Volatility	=	the standard deviation of the residual from the market model over the fiscal year.
Log(Audit Fees)	=	natural logarithm of audit fees over the fiscal year (in thousands)

***/**/* Significant at or below the 0.01/0.05/0.1 level (two-tailed).

Table 3 shows the correlations between the main variables used for the empirical analyses. As Table 3 shows, the correlation (0.02) between *FGCO* and *Managerial OC* is positive but low and insignificant. *FGCO* is significantly and positively correlated with *Prob(Bankz)* and *Volatility* and negatively correlated with *Size*,

Investments, *Future Financing*, *Big4*, *Return*, and *Log(Audit_Fees)* at the 1% level. All correlations except for that (0.67) between *Size* and *Log(Audit_Fees)* are below 0.5. Overall, the correlation results suggest that there is no significant multicollinearity problem in our research setting.[7]

Table 3. Correlation Matrix for the Variables used in the First-Time Going-Concern Audit Opinion Model

Variable	Managerial OC	Size	Prob (Bankz)	Investments	Future Financing	Big4	Return	Volatility	Log (Audit Fees)
FGCO	0.02	-0.18	0.08	-0.13	-0.07	-0.05	-0.08	0.21	0.06
	(0.22)	(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)
Managerial		0.29	0.18	-0.08	0.04	0.06	-0.04	-0.03	0.15
OC		(<0.01)	(<0.01)	(<0.01)	(<0.06)	(<0.01)	(0.04)	(0.13)	(<0.01)
Size			-0.07	-0.09	0.12	0.41	-0.10	-.035	0.67
			(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)	(<0.01)
Prob(Bankz)				-.014	0.00	-0.01	-0.11	0.28	0.08
				(<0.01)	(0.92)	(0.62)	(<0.01)	(<0.01)	(<0.01)
Investments					0.11	0.23	0.04	-0.08	-0.11
					(<0.01)	(<0.01)	(0.04)	(<0.01)	(<0.01)
Future						0.11	0.11	-0.08	0.06
Financing						(<0.01)	(<0.01)	(<0.01)	(<0.01)
Big4							-0.01	-0.09	0.32
							(0.46)	(<0.01)	(<0.01)
Return								0.18	-0.07
								(<0.01)	(<0.01)
Volatility									-0.30
									(<0.01)

Note: The table reports Pearson Correlations. P-values appear in parentheses.
See Table 2 for the definition of variables.

Multivariate Analysis

First-Time Going-Concern Audit Opinion Decision and Managerial Overconfidence

Table 4 reports the results of the logistic regression on the relationship between FGCO and managerial overconfidence after controlling for the factors affecting auditors' GCO decisions. The dependent variable is a dummy variable of *FGCO*, which is coded 1 if a firm receives a GCO on current financial statements but a clean opinion on the previous financial statements. Table 4, Column 3 shows the logistic regression results for the impact of managerial overconfidence on FGCO issuance, where *Managerial OC* is measured at the firm level, using the five variables of firm characteristics used in Schrand and Zechman (2011). According to the results in Table 4, Column 3, *Managerial OC*, the test variable, is positive and significant at the 5% level, suggesting that financially distressed firms with overconfident management are more likely to receive a FGCO. In other words, auditors consider overconfident management a going-concern factor in making GCO decisions. Consistent with the results in the univariate analysis in Table 2, *FGCO* is significantly and negatively correlated with *Size* and *OCF* at the 1% level, suggesting that firms that are smaller or have less operating cash flows are more likely to receive GCOs. Moreover, *FGCO* is significantly and positively associated with *Prob(Bankz)* at the 1% level, indicating that firms with a higher possibility of bankruptcy are more likely to receive GCOs. *Investments* and *Discon OP* as mitigating factors for GCOs are significantly and negatively associated with *FGCO* at the 1 and 5% levels, respectively, and *Future Financing* has the expected sign but is not significant. These results indicate that firms with disposable resources to use in avoiding financial distress are less likely to receive GCOs. All market variables have the expected signs and are significant at the 1% level. Contrary to the univariate results in Table 2, we find that firms with great leverage (*Big4* or high *Log(Audit_Fees)*) are less (more) likely to receive FGCOs.[8]

We thus find in the logistic regression results that managerial overconfidence is positively correlated with the issuance of FGCOs, suggesting that firms with overconfident CEOs are more likely to receive FGCOs after

[7] We test for multicollinearity among the independent variables and find that the highest individual VIF is 3.03, which is below 10, the conventional level.
[8] See footnote 7 for details on the potential multicollinearity problem.

controlling for the factors affecting auditors' GCO decisions. Overall, it is implied that for auditors, managerial overconfidence is a risk factor for financially distressed firms.

Table 4. Logistic regression results on the relation between FGCO and managerial overconfidence(FGCOs vs. Unqualified Audit Opinions)

Variable	Exp. Sign	Coefficients	t-statistics
Intercept	?	-4.52***	-6.11
Managerial OC	?	0.50**	2.27
Size	-	-0.43***	-3.99
LEV	+	-0.54	-2.65
OCF	-	-1.32***	-4.79
Prob(Bankz)	+	1.90***	5.69
Lag Loss	+	0.21	0.76
Investments	-	-3.02***	-7.40
Discon OP	-	-0.47**	-1.82
Future Financing	-	-0.22	-0.90
Big4	+	0.64***	3.01
Log(Age)	-	0.44	2.63
Return	-	-0.49***	-4.52
Beta	-	-0.37***	-3.54
Volatility	+	17.47***	5.71
Log(Audit Fees)	-	0.30	2.50
Max R-Square		34.29%	
Likelihood ratio		402.24***	
Number of observations		2,742	

***/**/* Significant at or below the 0.01/0.05/0.1 level (two-tailed).

First-Time Going-Concern Audit Opinion Decisions and Managerial Overconfidence Under Capital Markets Uncertainty

During a recession, many firms experience financial difficulties, and many go bankrupt. Thus, auditors may be more cautious about the going-concern issue during recessions, especially for small and financially distressed firms. Managerial overconfidence may also be a more critical going-concern factor affecting auditors' audit opinion decisions. Thus, we test the impact of capital market uncertainty such as high-profile accounting scandals and the global financial crisis on the association between auditors' FGCO decisions and managerial overconfidence.

For the test, we divide the sample period of 2001 to 2011 into four eras according to the U.S. capital market or the global economy: the 1) U.S. capital markets crisis era (2001–2002), 2) post-SOX era (2003–2006), 3) global financial crisis era (2007–2009), and 4) post-crisis era (2010–2011).

Since 2000, U.S. capital markets have undergone high-profile accounting scandals (e.g., Enron, WorldCom) and the subsequent demise of Arthur Anderson. In response, the U.S. Congress passed SOX on July 30, 2002, to restore investor confidence and enhance corporate governance and financial reporting quality. Despite the enactment of SOX, however, investors believe that it will take time for it to restore the damaged capital markets. Thus, we define 2001 to 2002 as the "U.S. capital markets crisis era" and the 2003 to 2006 period (from the SOX enactment to the global financial crisis) as the "post-SOX era." Next, following Badertscher et al. (2012), the 2007 to 2009 period is defined as the "global financial crisis era." Since 2007, a symptom of economic recession began appearing, and the recession spread worldwide at great speed. The recession culminated in 2008 and continued through 2009. Afterwards, the world economy began to slowly recover. Thus, the 2010 to 2011 period is the "post-crisis era." Based on the previous discussion, in the U.S. capital markets crisis (2001–2002) and global financial crisis (2007–2009) periods and the post-SOX (2003–2006) and post-crisis (2010–2011) periods, U.S. capital markets have high and low uncertainty, respectively.

For each of the four subsamples above, we re-conduct the regression analysis in Table 4. The results are shown in Table 5. Columns 3 and 4 in Table 5 present the regression results during the U.S. capital market crisis (2001–2002). The coefficient of *Managerial OC* is positive and significant at the 5% level. Columns 7 and 8 in

Table 5 present the regression results for the global financial crisis period (2007–2009). As shown in Columns 7 and 8 in Table 7, the coefficient of *Managerial OC* is positive and significant at the 5% level. Meanwhile, as shown in Columns 5, 6, 9, and 10 in Table 5, during the post-SOX (2003–2006) and post-crisis (2010–2011) periods, the coefficients of *Managerial OC* are insignificant. Collectively, the results above suggest that, during the periods of capital market uncertainty, auditors are more likely to regard overconfident management as a going-concern factor and issue FGCOs to financially distressed firms.

Table 5. Logistic regression results on the relation between FGCO and Managerial overconfidence under capital market uncertainty (FGCOs vs. Unqualified Audit Opinions)

		U.S. Capital markets crisis era		Post-SOX era		Global crisis era		Post-crisis era	
		2001-2002 High uncertainty		2003-2006 Low uncertainty		2007-2009 High uncertainty		2010-2011 Low uncertainty	
Variable	**Exp. Sign**	**Coef.**	**t-stat.**	**Coef.**	**t-stat.**	**Coef.**	**t-stat.**	**Coef.**	**t-stat.**
Intercept	?	-3.67**	-2.35	-4.77***	-3.19	-2.86*	-1.94	3.04	0.52
Managerial OC	?	0.79**	1.98	-0.10	-0.23	0.89**	2.25	-1.11	-0.59
Size	-	-0.12	-0.57	-0.53***	-2.64	-0.31*	-1.60	-2.10***	-2.85
LEV	+	-1.00	-1.62	-0.28	-0.97	-0.61	-1.26	-2.90	-1.38
OCF	-	-2.49***	-4.05	-0.67*	-1.38	-0.93**	-2.11	-0.62	-0.39
Prob(Bankz)	+	1.81**	2.30	2.45***	4.20	1.69***	2.49	3.85*	1.63
Lag Loss	+	0.42	0.76	-0.45	-0.93	0.71*	1.36	0.09	0.07
Investments	-	-3.85***	-4.28	-3.19***	-3.99	-2.44***	-3.67	-4.43**	-2.08
Discon OP	-	-0.51	-0.92	-0.63*	-1.30	-0.16	-0.35	0.44	0.39
Future Financing	-	-0.15	-0.31	-0.29	-0.60	-0.44	-1.09	0.57	0.45
Big4	+	-0.22	-0.48	0.41	1.05	1.05**	2.38	4.79***	3.31
Log(Age)	-	0.52	1.53	0.52	1.43	0.26	0.93	0.08	0.11
Return	-	-0.26	-1.24	-0.90***	-3.64	-0.39**	-2.02	-0.84	-1.23
Beta	-	-0.57***	-3.07	-0.34**	-1.82	0.14	0.52	0.53	0.63
Volatility	+	14.49**	1.87	20.68***	2.79	16.40***	3.57	4.69	0.26
Log(Audit Fees)	-	0.06	0.22	0.45	2.04	-0.10	-0.40	-0.30	-0.31
Max R-Square		41.06%		39.81%		29.29%		55.13%	
Likelihood ratio		145.55		154.80		92.14		58.19	
Number of observations		760		1,051		612		319	

***/**/* Significant at or below the 0.01/0.05/0.1 level (two-tailed).
See Table 2 for the definition of variables.

ADDITIONAL ANALYSES

FGCO Firms vs. Firms with Standard Unqualified Audit Opinion Reports

In the previous main regression analysis, the final sample is composed of two subsamples: 1) FGCO firms and 2) CLEAN opinion firms. we confined the CLEAN opinion firms to the firms with unqualified audit opinions. In this section, as a sensitivity analysis, we narrow down the CLEAN opinion firms into those with *standard* unqualified audit opinion reports. As a result, the sample decreases from 2,742 to 1,540 firm-year observations, consisting of 140 FGCO firms and 1,400 CLEAN opinion firms. First, we conduct a mean difference test between 140 FGCO firms and 1,400 CLEAN opinion firms. According to the (untabulated) results, compared to the results in Table 2, the t-statistics (1.88) of *Managerial OC* are positive and significant at the conventional level, suggesting that GCO firms are more likely to have overconfident management. The results of the mean difference test of the other variables are similar to those in Table 2.

Next, we re-run the regression model in Table 4 on the relationship between FGCO and management overconfidence. In the (untabulated) results, we find, consistent with those in Table 4, that *Managerial OC* is negative and significant at the 5% level, suggesting that overconfident management is a going-concern factor rather than a mitigating factor. This result reinforces the findings shown in Table 4 that, among financially distressed firms, those with overconfident management are more likely to receive FGCOs.

Finally, using the subsample of 1,540 firm-year observations above, we re-conduct the regression analyses in Table 5 on the impact of capital markets uncertainty (e.g., high-profile accounting scandals, global financial crisis) on the relationship between auditors' FGCO decisions and managerial overconfidence. The (untabulated) results show, consistent with the findings in Table 5, that, during the U.S. capital markets crisis era, *Managerial OC* is positive and significant at the conventional level. During the global financial crisis, the coefficient of *Managerial OC* is positive but insignificant. Finally, as in the findings in Table 5, there is no significant association between *FGCO* and *Management OC* during the post-SOX (2003–2006) or post-crisis (2010–2011) period. These results partially support the previous findings in Table 5 that capital market uncertainty reinforces the association between auditors' GCO decisions and management overconfidence.

CONCLUSION

Recently, academics have hotly debated the impact of managerial overconfidence on a variety of corporate decisions such as corporate investment, mergers and acquisitions, financing, dividend policies, earnings management, management forecasting, tax avoidance, financial misreporting, and accounting conservatism. However, few have studied how parties outside firms perceive managerial overconfidence. This study examines how auditors incorporate their perceptions of managerial overconfidence into their audit reporting decisions. We test the association between managerial overconfidence and the likelihood of issuing first-time going-concern audit opinions. We find that auditors are more likely to issue first-time going-concern audit opinions to financially distressed firms with overconfident CEOs, suggesting that auditors consider overconfident CEOs a going-concern factor rather than a mitigating factor. Further analyses reveal that the positive association between the likelihood of first-time going-concern audit opinion and managerial overconfidence is reinforced with capital market uncertainty (e.g., the global financial crisis period of 2007 to 2009).

In sum, consistent with the prior findings that CEO overconfidence negatively affects firm value, we provide evidence that auditors negatively value overconfident CEOs when making going-concern audit opinion decisions.

AUTHOR INFORMATION

Gayoung Ji is a Ph.D. student of accounting at Business School, SungKyunKwan University, South Korea. Her research areas include managerial characteristics, managerial compensation, cost stickiness, and disclosure quality. E-mail:jjsgmy@skku.edu.

Jong Eun Lee(Corresponding author) is an associate professor at Business School, SungKyunKwan University, South Korea. He received his Ph.D. from Temple University. His research areas include audit quality, internal control, and corporate governance. E-mail:jelee2012@skku.edu.

AUTHOR'S NOTE

The data used in this study are available from public sources.

REFERENCES

Ahmed, A. S., and S. Duellman, 2012, Managerial overconfidence and accounting conservatism, *Journal of Accounting Research* 51, 1-30.

Altman, E. I., and T. McGough, 1974, Evaluation of a company as a going concern, *Journal of Accountancy* 138 (6), 50–57.

American Institute of Certified Public Accountants (AICPA), 2012, The Auditor's Consideration of An Entity's Ability to Continue as a Going Concern, Statement on Auditing Standards (SAS) No. 126, New York, NY: AICPA.

Anderson, C., S. Brion, D. M. Moore, J. A. Kennedy, 2012, A status-enhancement account of overconfidence, *Journal of Personality and Social Psychology* 103, 718-735.

Badertscher, B. A., J. B. Jeffrey, and P. D. Easton, 2012, A convenient scapegoat: fair value accounting by commercial banks during the financial crisis, *The Accounting Review* 87(1), 59-90.

Bamber, L., J. Jiang, J., and I. Y. Wang. 2010. What's my style? The influence of top managers on voluntary corporate financial disclosure. *The Accounting Review* 85, 1131-1162.
Behn, B. K., S. E. Kaplan, and K. R. Krumwiede, 2001, Further evidence on the auditor's going-concern report: The influence of management plans, *Auditing: A Journal of Practice & Theory* 20 (1), 13–28.
Ben-David, I., J. Graham, and C. Harvey, 2007, Managerial Overconfidence and Corporate Policies, Unpublished Working Paper.
Ben-David, I., J. R. Graham, and C. R. Harvey, 2010. Managerial Miscalibration, National Bureau of Economic Research Working Paper Series No. 16215.
Bertrand, M., and A. Schoar, 2003, Managing with style: The effect of managers on firm policies, *Quarterly Journal of Economics* 118, 1169-1208.
Billett, M.T. and Y. Qian, 2008, Are Overconfident CEOs Born or Made? Evidence of Self-Attribution Bias from Frequent Acquirers, *Management Science*, 54(6), 1037–1051.
Blay, A. D., and M. A. Geiger, Forthcoming, Auditor fees and auditor independence: Evidence from going concern opinions, *Contemporary Accounting Research*.
Campbell, C., S. A. Johnson, J. Rutherford, and B. W. Stanley, 2009, CEO confidence and forced turnover, Working paper, Texas A&M University and Winthrop University.
Carcello, J., and Z. Palmrose, 1994, Auditor litigation and modified reporting on bankrupt clients, *Journal of Accounting Research* (Supplement), 1–30.
Carey, P., S. Kortum, and R. Moroney, 2012, Auditors' going-concern-modified opinions after 2001: measuring reporting accuracy, *Accounting and Finance* 52, 1041-1059.
Cordeiro, L, 2009, Managerial overconfidence and dividend policy, Working paper, London Business School. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1343805.
Dechow, P.M., 1994, Accounting earnings and cash fows as measures of _firm performance The role of accounting accruals, *Journal of Accounting and Economics* 18, 3-42.
DeFond, M. L., K. Raghunandan, and K. R. Subramanyam, 2002, Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions, *Journal of Accounting Research* 40(4), 1247-1274.
Deshmukh, S., A. M. Goel, and K. M. Howe, 2013, CEO overconfidence and dividend policy, *Journal of Financial Intermediation* 22, 440-463.
Dodd, P., N. Dopuch, R. Holthausen, and R. Leftwich,1984, Qualified audit opinions and stock prices: information content, announcement dates, and concurrent disclosures, *Journal of Accounting and Economics* 6, 3-38.
Dopuch, N., R. W. Holthausen, and R. W. Leftwich, 1987, Predicting audit qualifications with financial and market variables, *The Accounting Review* 62 (3), 431–454.
Dyreng, S., M. Hanlon, and E. Maydew, 2010, The effect of executives on corporate tax avoidance, *The Accounting Review* 85 (4), 1163-1189.
Fargher, N., A. Jiang, and Y. Yu, 2014, How do auditors perceive CEO's risk-taking incentives? *Accounting and Finance* 54, 1157-1181.
Frank, M., and V. Goyal, 2007, Corporate leverage: How much do managers really matter? University of Minnesota and Hong Kong University of Science and Technology, Working paper.
Galasso, A., and T. S. Simcoe, 2011, CEO overconfidence and innovation, *Management Science* 57 (8), 1469–1484.
Geiger, M. A., and D. V. Rama, 2003, Audit fees, nonaudit fees and auditor reporting on stressed companies, *Auditing: A Journal of Practice & Theory* 22 (2), 53–69.
Geiger, M. A., and K. Raghunandan, 2001, Bankruptcies, audit reports and the reform act, *Auditing: A Journal of Practice & Theory* 20 (1), 187–196.
Hackbarth, D, 2008, Managerial traits and capital structure decisions, *Journal of Financial and Quantitative Analysis* 43(4), 843–881.
Heaton, J. B., 2002, Managerial optimism and corporate finance, *Financial Management* 31 (2), 33–45.
Hilary, G. and C. Hsu, 2011, Endogenous overconfidence in managerial forecasts, *Journal of Accounting and Economics* 51, 300-313.
Hirshleifer, D., A. Low, and S. H. Teoh, 2012, Are overconfident CEOs better innovators?, *The Journal of Finance* 67 (4), 1457–1498.
Hribar, P., and H. Yang, 2011, CEO overconfidence, managerial earnings forecasts, and earnings management, University of Iowa and Cornell University, Working paper.
Kida, T, 1980, An investigation into auditors' continuity and related qualification judgments, *Journal of Accounting Research* 18 (2), 506–523.
Koh, H. C, 1991, Model predictions and auditor assessments of going concern status, *Accounting and Business Research* 21 (84), 331–338.

Koh, H. C., and L. Killough, 1990, The use of multiple discriminate analyses in the assessment of the going-concern status of an audit client, *Journal of Business Finance and Accounting* 17 (2), 179–192.
Lennox, C, 1999, The accuracy and incremental information content of audit reports in predicting bankruptcy, *Journal of Business, Finance and Accounting* 26 (5–6), 757–778.
Lin, Y., S. Hu, and M. Chen, 2005, Managerial optimism and corporate investment: some empirical evidence from Taiwan, *Pacific-Basin Finance Journal* 13, 523–546.
Loudder, M. L., I. K. Khurana, R. B. Sawyers, C. Cordery, C. Johnson, J. Lowe, and R. Wunderle, 1992, The information content of audit qualifications, *Auditing: A Journal Practice & Theory* 11(1), 69-82.
Malmendier, U. and G. Tate, 2005, CEO overconfidence and corporate investment, *The Journal of Finance* 60, 2661-2700.
Malmendier, U. and G. Tate, 2008, Who makes acquisitions? CEO overconfidence and the market's reaction, *Journal of Financial Economics* 89, 20-43.
Malmendier, U., G. Tate, and J. Yan, 2011, Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies, *The Journal of Finance* 66, 1687-1733.
McKeown, J. C., J. F. Mutchler, and W. Hopwood, 1991, Towards an explanation of auditor failure to modify the audit opinions of bankrupt companies, *Auditing: A Journal of Practice & Theory* 10 (Supplement), 1–13.
Menon, K., and K. Schwartz, 1987, An empirical investigation of audit qualification decisions in the presence of going concern uncertainties, *Contemporary Accounting Research* 3 (Spring), 302–315.
Mutchler, J. F., 1985, A multivariate analysis of the auditor's going-concern opinion decision, *Journal of Accounting Research* 23 (2), 668–682.
Mutchler, J. F., and D. D. Williams, 1990, The relationship between audit technology, client risk profiles and the going-concern opinion decision, *Auditing: A Journal of Practice & Theory* 9 (Fall), 39–54.
Mutchler, J. F., W. Hopwood, and J. McKeown, 1997, The influence of contrary information and mitigating factors in audit opinion decisions on bankrupt companies, *Journal of Accounting Research* 35 (2), 295–310.
Presley, J., and L. J. Abbott, 2013, CEO overconfidence and the incidence of financial restatement, *Advances in Accounting* 29, 74-84.
Raghunandan, K., and D. V. Rama, 1995, Audit reports for companies in financial distress: Before and after SAS No. 59, Auditing: *A Journal of Practice & Theory* 14 (1), 50–63.
Reynolds, J. K., and J. R. Francis, 2000, Does size matter? The influence of clients on office-level auditor reporting decisions, *Journal of Accounting and Economics* 30 (3), 375–400.
Schrand, C., and S. Zechman, 2011, Executive overconfidence and the slippery slope to financial misreporting, *Journal of Accounting and Economics* 53, 311-329.
Svenson, A., 1981, Are We all Less Risky than Our Fellow Drivers? *Acta Psychologica* 4, 143–148.
Xu, Y., A. L. Jiang, N. Fargher, and E. Carson, 2011, Audit reports in Australia during the Global Financial Crisis, *Australian Accounting Review* 21, 22–31.
Xu, Y., E. Carson, N. Fargher, and L. Jiang, 2013, Responses by Australian auditors to the global financial crisis, *Accounting and Finance* 53, 301-338.
Zmijewski, M., 1984, Methodological Issues relating to the Estimation of Financial Distress Prediction Models, *Journal of Accounting Research* 22 (Supplement), 59-82.

NOTES