Regulators in the USA and elsewhere have shown renewed interest in auditors’ judgments related to going-concern modified (GC) audit reports. Such judgments involve evaluating management’s plans, and prior research suggests that executive turnover is associated with significant organizational changes. Further, some recent studies posit that gender is associated with accounting and audit judgments. We examine audit opinions for two different samples: 2,089 financially stressed firms and 642 manufacturing firms that filed for bankruptcy. In both samples, we find that GC opinions are more likely for firms with a new CFO; however, we find no significant association between GC opinions and executives’ gender. The CFO tenure related result may arise from auditors’ professional skepticism related to a new executive. Our gender-related results differ from those of Gold et al. (2009) and suggest the need for additional research related to the role of client gender in auditing settings.

Keywords: Executive Gender, Going Concern, Audit Opinion, Audit Quality, Executive Tenure

JEL Code: A30, C12, G33, H32, M12, M42
contexts will manifest in auditors’ going-concern related judgments. The second objective of this research note is to provide empirical evidence about the association between executive gender and auditors’ GC opinion decisions.

We first examine audit opinions for 2,089 financially stressed firms. We find that after controlling for financial factors, client size, and auditor type, GC opinions are more likely for firms with a new CFO; however, we find no significant association between GC opinions and executives’ gender. Next, we examine the prior audit opinions issued for 642 US manufacturing firms (SIC 20-39) that file bankruptcy between the period from 2000-2007. We find that after controlling for probability of bankruptcy, default status, client size, bankruptcy lag, and auditor type, auditors were more likely to issue a going-concern modified audit opinion when there is a new CFO; however, we find no significant association between GC opinions and executives’ gender.

Overall, the results show that auditors’ GC opinion decisions are influenced by the appointment of a new CFO. This is consistent with the idea that perhaps due to professional skepticism, auditors are less likely to be persuaded by a new CFO. However, unlike Gold et al. (2009), we find no evidence that auditors’ judgments are influenced by client executives’ gender. One explanation for the differing results is that Gold et al. (2009) report findings from an experiment, while our study is based on archival data; an alternative explanation is that gender effects may arise in some audit judgments, but not in other (perhaps more significant) audit contexts. The differing results also suggest a need for further study on the role of gender in audit judgments.

The next section discusses the background and develops the research questions. This is followed by a description of the data, method and results. The paper concludes with a summary and implications.

2 Background and research questions

2.1 Going concern evaluation and reporting

Auditors’ reporting related to going-concern has long remained an issue of significant concern to the public (Carcello et al. 1995, 2003; Geiger and Raghunandan 2002; Carson et al. 2013). Legislators (U.S. House of Representatives 1985, 1990, 2002), regulators (Breeden 2002; Doty 2011; Harris 2011) and the media (Weil 2001; Bryan-Low 2002; Sikka 2009; McTague 2011) have often criticized auditors for not providing adequate warning in their audit reports about subsequent client bankruptcies. Consistent with such criticism, many prior studies show that only about half of bankrupt companies had a GC on the of financial statements filed prior to bankruptcy (Carson et al. 2013).

Accounting and auditing regulators in many countries have recently responded to such concerns. For example, the FASB has initiated (in 2008) and reconstituted (in 2011) a project about management’s evaluation of, and disclosures about, going concern (FASB 2008, 2011, 2012). The PCAOB has an ongoing project about auditor’s responsibility to evaluate and report on going-concern uncertainties (PCAOB 2009, 2011b, 2012b). Regulators in other countries and international standard setters have started similar projects related to going concern (c.f., IAASB 2012; FRC 2013).

Statement on Auditing Standard (SAS) No. 59 (AICPA 1988) provides the relevant professional guidance about the evaluation of going-concern related uncertainties. SAS No. 59 requires the auditor to evaluate the going concern status of the client in every audit. A crucial step in the auditor’s judgment process is evaluating management’s plans and other mitigating factors related to the going concern related uncertainties. If, after such consideration, the auditor continues to believe that there is “substantial doubt” about the ability of an entity to continue as a going-concern then the auditor must modify the audit opinion to indicate such doubt.

While many prior studies have examined the association between financial and non-financial factors related to GC opinions, there is limited research related to the association between mitigating factors and GC opinions. Behn et al. (2001) find that, after controlling for financial condition, size, default status, and the propensity to voluntarily disclose information, two mitigating factors (management plans to issue equity and/or borrow additional funds) are negatively correlated with GCOs. Bruyneels and Willekens (2012) find that both short-term cash flow potential and strategic growth are necessary for management’s turnaround initiatives to have a mitigating impact on the auditor’s GC opinion decision.

Thus, auditor decisions about GC opinions require significant professional judgment related to the evaluation of management’s plans related to the going concern uncertainty. As discussed below, it is likely that executive characteristics will influence such auditor judgments.

2.2 New executives and GC opinions

Many researchers in management and strategy have noted that new executives can be catalysts for change, since they are less likely to be bound by the status quo hence more likely to be agents of change (Greiner and
New executives may provide the spark needed in the face of organizational inertia (Tushman and Romanelli 1985; Miller 1993), and can change things without the embarrassment or costs associated with reversals of prior policies and actions (Salancik 1977). Prior research suggests that new executives significantly influence investments and divestments (Beatty and Zajac 1987; Wiersema 1995), and product development restructurings (Jacobs and Singhal 2011).

Thus, it is likely that the appointment of new executives will influence auditors’ judgments about the success of management’s plans related to mitigating going concern uncertainties. However, the direction of the effect is not obvious. If new executives are viewed as more likely to be successful in turning around a stressed company then, ceteris paribus, auditors would be less likely to issue a GC opinion; conversely, going concern related judgments are among the most difficult for auditors, and auditors may be more skeptical about a new executive. If auditors are less likely to give credence to a new executive, then it is likely that a GC opinion would be more likely following a new executive appointment. Ultimately, this is an empirical question and this paper provides some relevant empirical evidence.

In our study, we focus on the CEO and CFO. While the CEO may be more important in setting a tone for the organization as a whole, auditors have much more interaction with the CFO. In addition, in the context of going-concern issues, problems are mitigated through the issuance of debt or equity securities and/or plans to cut costs/increase revenues. Aier et al. (2005, 124) note that CFOs have become “key players in strategic planning, mergers and acquisitions ... and managing associations with venture capitalists and the investing public” and quote the then Chief Auditor of the PCAOB as stating that the CFO is “prized more for his ability to raise money than as an accounting officer.” Thus, the success of any management plans related to the viability of the company is critically dependent on the characteristics of the CEO and the CFO.

2.3 Gender and GC opinions

In recent years, a new stream of research has examined the impact of gender on different types of finance, accounting, and auditing related decisions. Auditing continues to remain a male-dominated profession, at least in the higher levels (manager and partner); conversely, the proportion of female C-level executives (CEO/CFO) in public companies continues to be quite low. Hence, client executives’ gender may have a significant effect on auditor judgments.

For example, Gold et al. (2009) examine, in an experiment, the judgments of male and female auditors in the context of an inventory write-down task. These authors find that both male and female auditors were persuaded more by a male than female client to change their initial adjustment recommendation. To the extent such results transfer to going concern related auditor judgments, one would expect that a GC opinion would be more likely for firms with female executives.

Conversely, other studies show that accounting and financial judgments may be more conservative for firms with female executives. Barua et al. (2010) find that companies with female CFOs have lower performance-matched absolute discretionary accruals and lower absolute accrual estimation errors. Such increased conservatism could lead to auditors having a higher level of trust in firms with female executives, and hence lead to a lower likelihood of GC opinions for such firms. Huang and Kisgen (2013) find that (a) male executives undertake more acquisitions and issue debt more often than female executives, but (b) acquisition announcements have lower returns for firms with male executives than for female executive firms.

Emerging interest in gender related research in the context of accounting and auditing judgments is also evidenced by recent studies in diverse settings. For example, Kumar (2010) finds that female analysts issue bolder and more accurate forecasts and that forecast revisions by female analysts elicits stronger market reaction. Srinidhi et al. (2011) show that gender diversity in boards improves the quality of reported earnings, while Gul et al. (2013) document a positive (negative) relation between gender diversity on boards and analysts’ earnings forecast accuracy (dispersion). Itonen et al. (2013) find that firms with female audit engagement partners are associated with smaller abnormal accruals.

This paper adds to the emerging research steam about the effects of gender in accounting and auditing settings. We examine if auditors’ GC opinions are correlated with the gender of client executives.

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1 See Giambatista et al. (2005) and Finkelstein et al. (2009) for detailed reviews of the research related to the determinants and consequences of executive turnover.

2 For example, prior research shows there is earnings management surrounding executive turnovers (Strong and Meyer 1987; Healy et al. 1992; Murphy and Zimmerman 1993; Denis and Denis 1995; Engel et al. 2003). Such propensity for increased earnings management may make auditors more likely to issue a GC opinion. One may question why a new executive would be appointed if this makes a GC opinion more likely, especially since a GC opinion could become a self-fulfilling prophecy (Carson et al. 2013). However, the other benefits from a new executive appointment may be viewed as compensating for any increased likelihood of a GC opinion.

3 For example, Barua et al. (2010) find that less than 10 (5) percent of CFOs (CEOs) in their sample of large public companies are female.
Method

3.1 Stressed company sample

In the first test, we examine audit opinions for financially stressed firms. We use the following logistic regression model, based on McKeown et al. (1991) and Hopwood et al. (1994):

\[
\text{GC} = \alpha_0 + \alpha_1 \cdot \text{LNSL} + \alpha_2 \cdot \text{NITA} + \alpha_3 \cdot \text{CASALE} + \alpha_4 \cdot \text{CACL} + \alpha_5 \cdot \text{CATA} + \alpha_6 \cdot \text{CASHTA} + \\
\alpha_7 \cdot \text{LTDA} + \alpha_8 \cdot \text{BIG4} + \alpha_9 \cdot \text{NEWCEO} + \alpha_{10} \cdot \text{NEWCFO} + \alpha_{11} \cdot \text{FEMCEO} + \alpha_{12} \cdot \text{FEMCFO} + \varepsilon
\]

(1)

Where

- \( \text{GC} = 1 \) if audit report is going concern modified, 0 otherwise;
- \( \text{LNSL} = \) Natural Log of Sales (in millions of dollars);
- \( \text{NITA} = \) Net Income/Total Assets;
- \( \text{CASALE} = \) Current Assets/Sales;
- \( \text{CACL} = \) Current Assets/Current Liabilities;
- \( \text{CATA} = \) Current Assets/Total Assets;
- \( \text{CASHTA} = \) Cash/Total Assets;
- \( \text{LTDA} = \) Long-Term Debt/Total Assets;
- \( \text{NEWCFO} = 1 \) if CFO is newly appointed during the fiscal year, 0 otherwise;
- \( \text{NEWCEO} = 1 \) if CEO is newly appointed during the fiscal year, 0 otherwise;
- \( \text{FEMCEO} = 1 \) if CEO is female, 0 otherwise;
- \( \text{FEMCFO} = 1 \) if CFO is female, 0 otherwise.

We begin with all public companies with available audit opinion data in Audit Analytics for 2005. We use a single year because we hand-collect data about the gender of the CEO and CFO; we use 2005 because we wanted a year that was after the enactment of SOX, but before the global financial crisis. Consistent with prior research, we delete observations in the financial sector (SIC codes 6000-6999) and foreign firms. We obtain financial data from Compustat, executive appointment data from Audit Analytics, and hand-collect data about executive gender from company filings available at the SEC website. Since GC opinions are rarely issued for non-stressed firms, we restrict the analysis to firms that met at least one of the following stress criteria: (1) negative working capital, (2) a loss from operations (3) negative retained earnings (4) a bottom line loss. This procedure yields us a sample of 2,089 firms with available data.

3.2 Bankrupt company sample

Any association between executive characteristics, such as gender, and GC opinions could be explained on the grounds that the same characteristics are also associated with other variables that proxy for factors that are not considered in our model. This explanation is less likely if we restrict the analysis to those firms that filed for bankruptcy. In such instances, the absence of a GC opinion is typically viewed as an error (McKeown et al. 1991; Geiger and Raghunandan 2002; Carson et al. 2013). For example, Geiger and Raghunandan (2002) note that “based on a literal interpretation of current auditing standards, an auditor’s failure to modify the audit report for a client that subsequently files for bankruptcy is not strictly considered an audit reporting failure, because auditors are not held to predict the future viability status of their clients. However, financial statement users and the public are likely to perceive a bankruptcy without a prior modification as an audit reporting failure, regardless of the technical reporting requirements.”

Hence, as our second test, we examine the prior audit opinion for companies that subsequently entered into bankruptcy. We use the following logistic regression model, based on Geiger and Raghunandan (2002) and Feldmann and Read (2010):

\[
\text{PGC} = \beta_0 + \beta_1 \cdot \text{PROB} + \beta_2 \cdot \text{LNSALES} + \beta_3 \cdot \text{BIG4} + \beta_4 \cdot \text{DEFAULT} + \beta_5 \cdot \text{BKTLAG} + \beta_6 \cdot \text{REPLAG} + \\
\beta_7 \cdot \text{NEWCEO} + \beta_8 \cdot \text{NEWCFO} + \beta_9 \cdot \text{FEMCEO} + \beta_{10} \cdot \text{FEMCFO} + \varepsilon
\]

(2)

Where

- \( \text{PGC} = 1 \) if audit report prior to bankruptcy is going concern modified, 0 otherwise;
- \( \text{PROB} = \) bankruptcy probability score, calculated from Zmijewski’s (1984) model;\(^4\)
- \( \text{BIG4} = 1 \) for Big 4 auditor, 0 otherwise;
- \( \text{DEF} = 1 \) if a company is in payment default or technical default of loan covenants, 0 otherwise;
- \( \text{BKTLAG} = \) square root of days from the date of the audit report to the bankruptcy date;
- \( \text{REPLAG} = \) square root of days from the fiscal year-end to audit report date.

\(^4\) We calculate the probabilities based on the 40:800 ratio of bankruptcies:non-bankrupt firms used in Zmijewski (1984).
The audit opinion immediately preceding bankruptcy is the dependent variable in our logistic regression model. Based on earlier research, we expect positive association between GC opinions and (a) financial stress, (b) default, and (c) audit report lag; we expect a negative association between GC opinions and firm size and bankruptcy lag.3

We obtain a list of public companies that filed for bankruptcy from 2000-2007. Data related to audit opinions and executive appointments were obtained from Audit Analytics database, while relevant financial statement data are obtained from Compustat database. Default data are obtained from 10-K filings available at the SEC’s website. Consistent with prior research, we delete companies in the banking, financial, and real estate sectors (SIC 6000-6999). Consistent with prior research (e.g., Geiger and Raghunandan 2002; Feldmann and Read 2010), we also exclude any observation where the audit report is dated subsequent to the bankruptcy filing.

4 Results

4.1 Stressed company sample

Table 1 provides descriptive data about the sample of financially stressed companies. Of the 2,089 observations, only 373 (17.86%) firms received a GC opinion. The univariate analysis shows that GC firms are smaller in size and more likely to have executive turnover than no-GC firms; however, there are no significant differences in terms of executive gender.

Table 2 provides results from the logistic regression with GC opinion as the dependent variable. The overall model is significant (Chi-square = 775.9, p < 0.01; pseudo-\( R^2 \) = 0.31). Consistent with expectations, GC opinions for (a) larger companies, (b) more profitable companies, (c) higher current ratios. Conversely, clients of Big4 auditors are less likely to receive a GC opinion. Considering the variables of interest, the coefficient of NEWCFO is positive and significant, indicating that companies with a new CFO are more likely to receive a GC opinion. Neither of the gender variables is significant at conventional levels.

4.2 Bankrupt company sample

Table 3 shows that 331 (51.6%) of the 642 bankrupt companies received a GC opinion on the last set of financial statements prior to bankruptcy. This proportion is consistent with the results documented in prior studies that approximately half of the bankrupt firms receive a prior GC opinion. The companies that received a prior GC opinion are smaller, have higher bankruptcy probability scores, shorter bankruptcy lags, and longer audit report lags. In addition, firms with a prior GC opinion are more likely to have been in default and new executive appointments but less likely to have a Big 4 auditor. However, there are no significant differences between the GC and NGC firms in terms of executive gender.

Results from the multivariate logistic regression are presented in Table 4. The overall model is significant (Chi-square = 299.4, \( p < 0.01 \); pseudo-\( R^2 \) = 0.37). Larger firms and those with a higher bankruptcy lag are less likely to have received a prior GC opinion; higher bankruptcy probability scores and presence of default are more likely to result in a GC opinion. Clients with a Big 4 auditor are less likely to have a prior GC opinion, consistent with the (univariate) findings in Geiger et al. (2014). The coefficient for NEWCFO variable is positive and significant (\( p < .01 \)), indicating that a GC opinion is more likely to be issued following the appointment of a new CFO. The result shows no significant association between executive gender and GCM opinion.

4.3 Additional analysis

Given the evidence from prior studies, as well as the results in Tables 2 and 4, about the differences between Big 4 and non-Big 4 firms, we separately analyze both the stressed and bankrupt sample firms based on auditor type partitions. We separately examine clients with Big 4 and non-Big 4 auditors. We find that the results related to the NEWCFO hold in both groups, for both types of auditors; further, neither of the gender variables is significant in either regression.

5 Summary and discussion

Regulators in the USA and elsewhere have recently renewed their interest in going concern reporting by auditors (PCAOB 2009, 2011a; FASB 2008, 2011, 2012; IAASB 2009, 2012; FRC 2013). Both professional standards and prior studies have noted that going-concern evaluation involves significant professional judgment. An important part of such judgment involves evaluating management’s plans related to mitigating going-concern related problems. Research in the management and strategy areas suggests that executive turnover is associated with significant organizational changes. Hence, we posit that the appointment of new executives will influence auditors’ judgments related to management’s plans to mitigate the going-concern problems and, thus, the audit opinion. The first objective of this research note is to provide empirical evidence about the association between going-concern modified audit (GC) opinions and the appointment of new executives.

5 Summary and discussion

Regulators in the USA and elsewhere have recently renewed their interest in going concern reporting by auditors (PCAOB 2009, 2011a; FASB 2008, 2011, 2012; IAASB 2009, 2012; FRC 2013). Both professional standards and prior studies have noted that going-concern evaluation involves significant professional judgment. An important part of such judgment involves evaluating management’s plans related to mitigating going-concern related problems. Research in the management and strategy areas suggests that executive turnover is associated with significant organizational changes. Hence, we posit that the appointment of new executives will influence auditors’ judgments related to management’s plans to mitigate the going-concern problems and, thus, the audit opinion. The first objective of this research note is to provide empirical evidence about the association between going-concern modified audit (GC) opinions and the appointment of new executives.

3 Studies find that Big 4 firms were significantly more likely to issue a GC opinion prior to bankruptcy during 1990-2000 (Carson et al. 2013), but Feldmann and Read (2010) find that there is no significant Big 4 effect after SOX. Using more recent data, Geiger et al. (2014) and Kaplan and Williams (2012) find that GC opinions are less likely for Big 4 clients. Hence, we do not have a prediction for the Big4 variable given inconsistent results from prior studies.
Table 1. Financially stressed sample: descriptive data

<table>
<thead>
<tr>
<th>Variable</th>
<th>Not modified (GC=0) (n=1716)</th>
<th>Going-concern modified (GC=1) (n=373)</th>
<th>p-value (from T-test or Chi-sq. test)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuous Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNSL</td>
<td>4.53</td>
<td>1.14</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>NITA</td>
<td>-0.13</td>
<td>-11.89</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>CASALES</td>
<td>53.91</td>
<td>9.82</td>
<td>0.19</td>
</tr>
<tr>
<td>CACL</td>
<td>3.62</td>
<td>1.22</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>CATA</td>
<td>0.51</td>
<td>0.55</td>
<td>0.04</td>
</tr>
<tr>
<td>CASHTA</td>
<td>0.17</td>
<td>0.20</td>
<td>0.05</td>
</tr>
<tr>
<td>LTDA</td>
<td>0.22</td>
<td>0.45</td>
<td>&lt;.01</td>
</tr>
<tr>
<td><strong>Binary Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIG4</td>
<td>67.25%</td>
<td>19.03%</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>NEWCEO</td>
<td>12.59%</td>
<td>21.18%</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>NEWCFO</td>
<td>20.51%</td>
<td>30.83%</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>FEMCEO</td>
<td>2.39%</td>
<td>1.61%</td>
<td>0.36</td>
</tr>
<tr>
<td>FEMCFO</td>
<td>8.51%</td>
<td>6.17%</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Note: This table presents the mean values and proportions for the variables for a sample of 2,089 financially stressed U.S. public companies for fiscal years ending 12-31-2005. The variables are defined as follows. LNSL = Natural Log of Sales (in millions of dollars); NITA = Net Income/Total Assets; CASALE = Current Assets/Sales; CACL= Current Assets/Current Liabilities; CATA = Current Assets/Total Assets; CASHTA = Cash/Total Assets; LTDA = Long-Term Debt/Total Assets; BIG4 =1 for Big 4 auditor, 0 otherwise; NEWCFO =1 if CFO is newly appointed during the fiscal year, 0 otherwise; NEWCEO =1 if CEO is newly appointed during the fiscal year, 0 otherwise; FEMCEO =1 if CEO is female, 0 otherwise; FEMCFO =1 if CFO is female, 0 otherwise.

Table 2. Logistic Regression Results for Financially Stressed Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
<th>Chi-sq.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.075</td>
<td>10</td>
<td>.75</td>
</tr>
<tr>
<td>LNSL</td>
<td>-.407</td>
<td>86.58</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>NITA</td>
<td>-.571</td>
<td>24.86</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>CASALES</td>
<td>-.003</td>
<td>4.38</td>
<td>.04</td>
</tr>
<tr>
<td>CACL</td>
<td>-.370</td>
<td>47.72</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>CATA</td>
<td>.520</td>
<td>2.51</td>
<td>.11</td>
</tr>
<tr>
<td>CASHTA</td>
<td>-.469</td>
<td>.99</td>
<td>.32</td>
</tr>
<tr>
<td>LTDA</td>
<td>.317</td>
<td>2.49</td>
<td>.11</td>
</tr>
<tr>
<td>BIG4</td>
<td>-.660</td>
<td>12.62</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>NEWCEO</td>
<td>.295</td>
<td>2.22</td>
<td>.14</td>
</tr>
<tr>
<td>NEWCFO</td>
<td>.590</td>
<td>11.60</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>FEMCEO</td>
<td>-.289</td>
<td>.26</td>
<td>.61</td>
</tr>
<tr>
<td>FEMCFO</td>
<td>-.434</td>
<td>2.01</td>
<td>.16</td>
</tr>
</tbody>
</table>

Model chi-sq. = 775.9; p < .01; pseudo- R-sq. =0.31

Note: The sample includes 2,089 U.S. public companies that were in financial stress for the fiscal year ended 12-31-2005. The dependent variable is GC, which equals 1 if audit report is going concern modified, 0 otherwise; other variables are defined as in Table 1.

Many recent studies suggest that gender is associated with a variety of judgments in finance, accounting and auditing. For example, Gold et al. (2009) show that auditors are persuaded more by a male than female client to change their initial judgments; this suggests that auditors may be more likely to issue GC opinions for firms with female executives. However, other studies show that male executives exhibit greater overconfidence in corporate decision making, and that this is recognized by at least some capital market participants (Huang and Kisgen 2013; Francis et al. 2013). The second objective of this research note is to provide empirical evidence about the association between executive gender and auditors’ GC opinion decisions.
Table 3. Bankrupt sample: descriptive data

<table>
<thead>
<tr>
<th>Variable</th>
<th>Not modified (GC=0) (n=311)</th>
<th>Going-concern modified (GC=1) (n=331)</th>
<th>p-value (from T-test or Chi-sq. test)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuous Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNSL</td>
<td>10.99</td>
<td>9.00</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>PROB</td>
<td>0.47</td>
<td>0.79</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>BKTLAG</td>
<td>16.18</td>
<td>12.54</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>REPLAG</td>
<td>8.36</td>
<td>9.81</td>
<td>&lt; .01</td>
</tr>
<tr>
<td><strong>Binary Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEFAULT</td>
<td>28.3%</td>
<td>62.3%</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>BIG</td>
<td>81.1%</td>
<td>68.9%</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>NEWCEO</td>
<td>18.0%</td>
<td>29.9%</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>NEWCFO</td>
<td>20.2%</td>
<td>36.3%</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>FEMCEO</td>
<td>2.3%</td>
<td>3.0%</td>
<td>0.36</td>
</tr>
<tr>
<td>FEMCFO</td>
<td>6.1%</td>
<td>8.2%</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Note: This table presents the mean values and proportions for the variables used to predict the audit opinion on the last set of financial statements prior to bankruptcy. The sample includes 642 U.S. public companies that filed for bankruptcy between 2001 and 2007. The variables are defined as follows. LNSL = Natural Log of Sales (in millions of dollars); PROB = financial stress score, calculated from Zmijewski’s (1984) model; BKTLAG = Square root of days from the date of the audit report to the bankruptcy date; REPLAG = Square root of days from the fiscal year-end to audit report date.; BIG4 = 1 for Big 4 auditor, 0 otherwise; DEF = 1 if a company is in payment default or technical default of loan covenants, 0 otherwise; NEWCFO = 1 if CFO is newly appointed during the fiscal year, 0 otherwise; FEMCEO = 1 if CEO is female, 0 otherwise; FEMCFO = 1 if CFO is female, 0 otherwise.

Table 4. Logistic regression results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
<th>Chi-sq.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.405</td>
<td>2.74</td>
<td>.10</td>
</tr>
<tr>
<td>LNSALE</td>
<td>-1.157</td>
<td>23.74</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>PROB</td>
<td>2.169</td>
<td>58.52</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>1.245</td>
<td>34.41</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>BIG</td>
<td>-.554</td>
<td>4.09</td>
<td>.04</td>
</tr>
<tr>
<td>BKTLAG</td>
<td>-.174</td>
<td>43.71</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>REPLAG</td>
<td>.110</td>
<td>3.34</td>
<td>.07</td>
</tr>
<tr>
<td>NEWCEO</td>
<td>.025</td>
<td>.01</td>
<td>.92</td>
</tr>
<tr>
<td>NEWCFO</td>
<td>.836</td>
<td>11.67</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>FEMCEO</td>
<td>-.161</td>
<td>.05</td>
<td>.82</td>
</tr>
<tr>
<td>FEMCFO</td>
<td>.429</td>
<td>.97</td>
<td>.33</td>
</tr>
</tbody>
</table>

Chi-square= 299.4, p < 0.01; pseudo-R sq. = 0.37

Note: The sample includes 642 U.S. public companies that filed for bankruptcy between 2001 and 2007. The dependent variable is PGC, which equals 1 if audit report prior to bankruptcy is going concern modified, 0 otherwise; other variables are defined as in Table 3.

We first examine audit opinions for 2,089 financially stressed firms, and find that GC opinions are more likely for firms with a new CFO; however, we find no significant association between GC opinions and executives’ gender. Next, we examine the prior audit opinions issued for 642 US manufacturing firms that file for bankruptcy between the period from 2000-2007, and find that auditors were more likely tissue going-concern modified audit opinion when there is a new CFO; however, we find no significant association between GC opinions and executives’ gender.

Overall, the results show that auditors’ GC opinion decisions are influenced by the appointment of a new CFO. One explanation for this finding is that due to professional skepticism, auditors are less likely to be persuaded by a new CFO. The results also suggest that it may be worthwhile to examine the impact of a new CFO appointment on other audit-related judgments, including those related to client acceptance and continuation, audit fees, and the nature and extent of audit testing.

We also find that executive gender is not associated with GC opinions. Thus, our results differ from those of Gold et al. (2009) who find, in an experimental setting, that auditors are more likely to be persuaded by male client executives. One explanation for the differing results is that the results
found in an experimental setting may not hold true in archival settings. Another explanation is that any such gender related differences may manifest in some settings, but not in other settings; that is, to the extent GC related judgments are more consequential than inventory related judgments, any gender bias may not manifest in the more consequential audit judgments. These conjectures provide interesting avenues for future research.

References