

The Auditor's Going-Concern Opinion Decision

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Abstract

In this study, we expand on several previous studies related to the materiality judgments and the auditor's propensity to issue a going-concern opinion to financially troubled but non-bankrupt companies. We test the auditor's materiality thresholds by investigating whether there is any significant difference in accuracy among audit firms, especially between Big Six (Five) and non-Big Six (Five) audit firms. Binary logit regression is used to analyze 1,332 firms that were non-bankrupt but financially stressed between 1997 and 1999. This study finds that Big Six (Five) firms had higher materiality thresholds and were less likely to issue a going-concern opinion to their clients with financial problems than non-Big Six (Five) firms. Our results are consistent with previous research findings in that the materiality threshold levels are statistically different between the two groups of auditors. The results of this study provide a basis for comparing audit performance between Big Six (Five) and non-Big Six (Five) firms.

Key words: going-concern opinion; auditing; auditor's propensity

JEL classification: M41; M42

1. Introduction

Materiality is a basic accounting concept related to the minimum amount of omission or misstatement that would affect the judgment of reasonable accounting users. Since the auditor's responsibility is to determine whether financial statements are materially misstated, materiality plays a significant role in auditing. The concept of materiality is especially important in auditing because it influences decisions regarding the scope of the audit and the extent of audit tests. In spite of substantial research on the concept of materiality, the current position of the Financial Accounting Standards Board (FASB) is that "no general standards of materiality

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could be formulated to take into account all the considerations that enter into an experienced human judgment” (FASB, 1980). As a result, materiality decisions should be left to the individual making the judgment, and guidance and support for individual materiality judgments must come from other non-authoritative sources such as empirical research on materiality judgments due to the absence of generalized standards for materiality (Holstrum and Messier, 1982).

Several researchers have conducted experiments and surveys to examine the materiality judgments of auditors (Chewning et al., 1989; Messier, 1983; Woolsey, 1973). These studies tested auditors’ materiality judgments on financial ratios such as the ratio of error to current net income (Woolsey, 1973), inventory writedowns (Messier, 1983), and changes in accounting principles (Chewning et al., 1989). According to these studies, an item’s percentage effect on income is the single most important factor in materiality judgments. Their results also indicate significant differences between the materiality thresholds of Big Eight and non-Big Eight auditors. More importantly for our research, Holstrum and Messier (1982) point out that auditors from large national CPA firms have higher materiality thresholds than auditors from smaller firms.

Auditing is a necessary monitoring device because potential conflicts of interest may arise between owners and managers and among different classes of security holders (DeAngelo, 1981). The going-concern qualification can have consequences for both the audited company and the auditor, and it can greatly increase the auditor’s conflict with the client. For example, because the auditor is responsible for assessing the effects of going-concern uncertainties for a period of approximately one year, it may not avoid a lawsuit if a client goes bankrupt with (allegedly) little or no warning from audit reports issued within a year of bankruptcy. In contrast, the auditor’s relationship with the client may deteriorate, and the likelihood the auditor will lose the client will increase if a going-concern opinion is issued and the client remains healthy. When there is a conflict between the interests of the financial statement users and those of the audited company, the auditor’s primary responsibility is to the users. In light of the incentive structure (audit fees), however, the auditor obviously wants to avoid getting a reputation as a hard-liner that routinely loads audit reports with qualified opinions. Therefore, the auditor may attempt to cooperate with the audited company to present financial results as favorably as possible, to the potential detriment of the outside users (Steven and Crockett, 1979). This is an important accounting issue because information certified by the auditor is valuable to accounting users only to the extent that it is accurate, relevant, and reliable.

In the present study, we expand on several previous studies related to the materiality judgments and the auditor’s propensity to issue a going-concern opinion. We attempt to connect auditors’ materiality judgments to their tendency to issue an opinion. We test the auditor’s materiality thresholds by investigating whether there is any significant difference in accuracy among audit firms, especially between Big Six (Five) and non-Big Six (Five) audit firms. Using a sample of 1,332 firms, we found that Big Six (Five) firms have higher materiality thresholds and are less likely

to issue a going-concern opinion to clients with financial problems than non-Big Six (Five) firms. Our results are consistent with previous research, which found that materiality thresholds are statistically different between the two groups of auditors.

2. Previous Research

Regulators have argued that an audit firm's size does not affect the quality of the audit because there is little or no product differentiation in the audit profession. For example, the American Institute of Certified Public Accountants (AICPA) stated in the 1978 Cohen Report that "Public accounting firms go to considerable lengths to develop superior services for their clients, but there is little effective product differentiation in the audit profession from the viewpoint of the present buyer of the service, that is, the management of the corporation" (p. 111).

The Derieux Committee Report (AICPA, 1980), however, criticized that smaller audit firms may be replaced simply because they are less well known, even though they may provide equally high-quality services. The key point of these reports is that audit firm size should be irrelevant in the selection of an auditor because the firm's size does not affect the quality of its audit services.

Contrary to this view, DeAngelo (1981) presented arguments that, all else being equal, larger audit firms have less incentive to behave opportunistically, and investors perceive them as providing higher-quality audits than small audit firms. She suggests that audit quality is not independent of firm size, even when auditors possess identical technological capabilities. Dopuch and Simunic's (1980) arguments are consistent with that of DeAngelo in that product differentiation is reflected in the credibility associated with the auditor's name.

Shockley and Holt (1983) evaluated the Cohen Commission's assertion by demonstrating that the chief financial officers of banks can at least discriminate between Big Eight firms and can do so in a systematic fashion. They pointed out that if differentiation among audit firms is assumed to be equivalent to differentiation of firms' services, then product differentiation exists in the auditing profession, at least within the Big Eight. Messier (1983) investigated the effects of auditors' experience and firm type on materiality and disclosure judgments. He found that less experienced auditors have lower materiality and disclosure thresholds than more experienced auditors and, more relevant to our research, that non-Big Eight partners have lower materiality thresholds than Big Eight partners, so they are more willing to modify their opinions than their Big Eight counterparts. Chewning et al.'s (1989) results are consistent with Messier's (1983) findings. Those authors examined the audit reports of companies that had changed accounting principles to provide evidence on how auditors interpret the materiality concept. They found limited evidence that Big Eight firms are less likely to issue a consistency modification than non-Big Eight firms.

Mutchler et al. (1997) tested the influence of contrary information and mitigating factors on audit opinion decisions for soon-to-be-bankrupt companies. In their multiple regression model, they included auditor type (Big Six versus non-Big

Six) as a control variable. This variable was not statistically significant, suggesting there is no difference between Big Six and non-Big Six firms in issuing going-concern opinions to companies that go bankrupt within one year of the issuance of financial statements (i.e., there is no difference in the Type II error). Carcello and Neal (2000) examined the relationship between the composition of firms' audit committees and the likelihood of receiving going-concern opinions using sample firms that were non-bankrupt but financially stressed (i.e., a test of the Type I error).

More recently, Geiger and Rama (2006) investigated both types of errors for Big Four and non-Big Four audit firms based on the argument that lower reporting error rates from going-concern modifications are a good indicator of higher audit quality. They found that both Type I and II error rates for Big Four audit firms are significantly lower than the error rates for non-Big Four firms.

3. Research Design

Main Hypothesis

Consistent with previous research on audit product differentiation and auditors' materiality and disclosure judgments (Chewning et al., 1989; DeAngelo, 1981; Dopuch and Simunic, 1980; Geiger and Rama, 2006; Holstrum and Messier, 1982; Messier, 1983; Nogler, 1995; Shockley and Holt, 1983), our main hypothesis is as follows:

All else being equal, Big Six (Five) audit firms have higher materiality thresholds than non-Big Six (Five) audit firms, and therefore they are less likely to issue a going-concern modified opinion to financially troubled but non-bankrupt firms than non-Big Six (Five) audit firms.

Companies may receive a going-concern opinion as a result of uncertainties from two sources: financial distress and litigation. As in the aforementioned studies, we consider only companies that received a going-concern opinion as a result of financial distress.

Control Variables

To examine the main hypothesis, it is necessary to control for variables already known to be related to auditors' opinion decisions. We selected 10 control variables from several previous studies.

- PROP Prior year's opinion indicator (1 if a firm received a going-concern opinion in a prior year and 0 otherwise).
- CACL One-year change in the current ratio.
- RLSS Recurring loss from operations indicator (1 if net income was negative in both the current year and prior year and 0 otherwise).
- CURR Current ratio.
- CFTL Ratio of cash flows from operations to total liabilities.

LDTA	Ratio of long-term debt to total assets.
NITA	Ratio of net income to total assets.
SIZE	Total sales (on logarithmic scale).
ALAG	Number of days from the date of the financial statements to the date of the audit report.
DFLT	Default indicator (1 if a firm was in default or in the process of restructuring debt and 0 otherwise).

Mutchler (1985) and Carcello and Neal (2000) found that the issuance of a going-concern report in the previous year significantly increased the auditor's tendency to issue another going-concern opinion in the current year. Financial variables such as CACL, RLSS, CURR, CFTL, LDTA, NITA, and SIZE have been used in many previous studies (e.g., Carcello and Neal, 2000; Carcello et al., 1995; Chen and Church, 1992; Dopuch et al., 1987; Geiger and Rama, 2006; Mutchler, 1985; Mutchler et al., 1997; Raghunandan and Rama, 1995). The variable DFLT was initially developed by Chen and Church (1992) and was included as a control variable in the opinion decision models of Carcello and Neal (2000), Mutchler et al. (1997), and Carcello et al. (1995, 1997).

As a measure of audit effort, ALAG was found to be a highly significant variable by Geiger and Rama (2006), Mutchler et al. (1997), Carcello et al. (1995, 1997), and McKeown et al. (1991), suggesting that greater audit effort results in a higher probability of detecting going-concern problems. Auditors are expected to spend more time auditing problem companies because they may need to meet with management several times when a going-concern opinion is probable.

Model Specification

The specific form of the logit model is as follows:

$$Y_i = \beta_0 + \beta_1 \text{AUDT}_i + \beta_2 \text{PROP}_i + \beta_3 \text{CACL}_i + \beta_4 \text{RLSS}_i + \beta_5 \text{CURR}_i \\ + \beta_6 \text{CFTL}_i + \beta_7 \text{LDTA}_i + \beta_8 \text{NITA}_i + \beta_9 \text{SIZE}_i + \beta_{10} \text{ALAG}_i \\ + \beta_{11} \text{DFLT}_i + \varepsilon_i,$$

where $Y_i = 1$ if a firm received a going-concern opinion (0 otherwise) and $\text{AUDT}_i = 1$ if the firm was a Big Six (Five) auditor (0 otherwise).

Sample Selection

A total of 1,332 non-bankrupt, financially stressed firms were chosen from the PC Compustat active firm files for 1997 (498 firms) and 1999 (834 firms). Consistent with the literature, we focused on distressed companies because auditors virtually never issue going-concern opinions to healthy companies (McKeown et al., 1991). Thus, our sample includes only companies whose level of financial distress was high enough to prompt auditors to question the company's going-concern status.

Also, in order to avoid any serial correlation or serial dependence in data, we used data for 1997 and 1999 rather than data for two consecutive years.

The level of financial distress was determined by the Z score (ZSCO), a measure developed by Altman (1968) based on a discriminant analysis of five financial ratios:

$$\begin{aligned} ZSCO = & 1.2 \times WCAP/AT + 1.4 \times RE/AT + 3.3 \times EBIT/AT \\ & + 0.6 \times MKTEQUITY/TL + 0.999 \times SALE/AT, \end{aligned}$$

where WCAP denotes working capital, AT is total assets, RE is retained earnings, EBIT is earnings before interest and taxes, MKTEQUITY is the market value of equity, TL is total liabilities, and SALE represents total sales.

Although the model is not based on any rigorously derived theoretical foundation, it has performed very well in predicting bankruptcies. As the equation shows, the model does not consider the size of the firm in determining bankruptcy, but it has the advantage of including a stock market variable (market value of equity) to derive the score. A higher Z score indicates greater financial strength, whereas a lower Z score indicates financial distress; by this measure, 2.675 is the cutoff point for discriminating between bankrupt and non-bankrupt firms. Only firms with Z scores below 2.675 were included in our sample.

As in previous bankruptcy research (e.g., Chen and Church, 1992), only industrial firms were retained in the sample; utilities, banks, and other financial service firms were excluded. Although several bankruptcy prediction or financial distress prediction models have been developed based on financial ratios (Hopwood et al., 1989; Mutchler et al., 1997; Zmijewski, 1984), we use the Z score model here because it is now readily available from PC Compustat (mnemonic = ZSCORE).

We began our sample selection with more than 1,500 firms from the 1999 PC Compustat file; the deletion of firms because of the unavailability of audit opinions in the 10-K or annual report resulted in 834 sample firms. Additionally, 498 firms were selected from the 1997 PC Compustat file. Out of 1,332 distressed firms, 957 firms (71.8%) were audited by Big Six (Five) auditors and 375 firms (28.1%) were audited by non-Big Six (Five) auditors.

4. Results

The distribution of audit opinions by auditor is given in Table 1. Non-Big Six (Five) auditors issued going-concern opinions to 248 (66.1%) of 375 firms, whereas Big Six (Five) auditors issued going-concern opinions to only 254 (26.5%) of 957 firms. The difference is statistically significant at the 1% level. Consistent with our main hypothesis, non-Big Six (Five) firms issued more going-concern opinions to non-bankrupt clients than Big Six (Five) firms. With the exception of Arthur Andersen and Coopers & Lybrand, which merged with Price Waterhouse in 1998, there did not seem to be any significant difference among the Big Six (Five)

auditors' shares of going-concern opinions, which ranged from 19.7% (Deloitte & Touche) to 26.1% (Peat, Marwick & Main).

Table 1. Distribution of Audit Opinions

	1997			1999			Total		
	UNQ	GC	Total	UNQ	GC	Total	UNQ	GC	Total
ARTH	56 (61.5%)	35 (38.5%)	91 (100%)	93 (75.6%)	30 (24.4%)	123 (100%)	149 (69.6%)	65 (30.4%)	214 (100%)
CPRS	23 (51.1%)	22 (48.9%)	45 (100%)	0 (0%)	0 (0%)	0 (0%)	23 (51.1%)	22 (48.9%)	45 (100%)
ERST	42 (66.7%)	21 (33.3%)	63 (100%)	121 (77.1%)	36 (22.9%)	157 (100%)	163 (74.1%)	57 (25.9%)	220 (100%)
DELT	40 (75.5%)	13 (24.5%)	53 (100%)	78 (83.0%)	16 (17.0%)	94 (100%)	118 (80.3%)	29 (19.7%)	147 (100%)
PEAT	42 (65.6%)	22 (34.4%)	64 (100%)	77 (79.4%)	20 (20.6%)	97 (100%)	119 (73.9%)	42 (26.1%)	161 (100%)
PRCE	27 (71.1%)	11 (28.9%)	38 (100%)	104 (78.8%)	28 (21.2%)	132 (100%)	131 (77.1%)	39 (22.9%)	170 (100%)
BIG 6	230 (65.0%)	124 (35.0%)	354 (100%)	473 (78.4%)	130 (21.6%)	603 (100%)	703 (73.5%)	254 (26.5%)	957 (100%)
NON- BIG 6	35 (24.3%)	109 (75.7%)	144 (100%)	92 (39.8%)	139 (60.2%)	231 (100%)	127 (33.9%)	248 (66.1%)	375 (100%)
TOTAL	265 (53.2%)	233 (46.8%)	498 (100%)	565 (67.7%)	269 (32.3%)	834 (100%)	830 (62.3%)	502 (37.7%)	1,332 (100%)

Notes: ARTH is Arthur Andersen, CPRS is Coopers & Lybrand (merged with Price Waterhouse in 1998), ERST is Ernst & Young, DELT is Deloitte & Touche, PEAT is Peat, Marwick & Main, and PRCE is Price Waterhouse. UNQ denotes unqualified opinion and GC denotes going-concern opinion.

Descriptive statistics and univariate tests for the variables of interest, including the Z score, are presented in Table 2. The mean difference is statistically significant in most variables, except for the one-year change in the current ratio (CACL), the ratio of cash flows from operations to total liabilities (CFTL), and the ratio of net income to total assets (NITA). The main variable of interest, AUDT (auditor type), is highly significant at the 1% level, supporting our main hypothesis. The Z score (ZSCO) is also highly significant, providing significant explanatory power for auditors' opinion decisions.

The correlation analysis is provided in Table 3. Significant correlations, measured by Pearson correlation coefficients, exist between several pairs of variables. These correlations suggest that multivariate analysis is necessary to examine the simultaneous effects of the variables. The degree of multicollinearity, however, does not seem to present any serious problems in the multivariate analysis. According to Judge et al. (1980, 459), a rule of thumb for serious multicollinearity problems is a correlation coefficient higher than 0.8, which is not the case in our analysis.

Table 2. Descriptive Statistics and Univariate Tests

Variable	Hypothesis	Unqualified Opinion (n = 830)		Going-Concern Opinion (n = 502)		t
		Mean	SD	Mean	SD	
AUDT	U > G	0.87	0.34	0.54	0.50	3.26^{***}
PROP	U < G	0.33	0.47	0.87	0.34	-3.19 ^{***}
CACL	U > G	-0.39	2.28	-0.69	2.42	-0.72
RLSS	U < G	0.33	0.47	0.76	0.43	-5.38 ^{***}
CURR	U > G	1.90	1.86	1.02	0.96	2.27 ^{**}
CFTL	U > G	-0.09	0.62	-0.50	1.14	-0.07
LDTA	U < G	0.33	0.25	0.30	0.65	1.82 [*]
NITA	U > G	-0.13	0.38	-1.02	2.99	1.15
SIZE	U > G	1.94	0.99	0.88	1.03	2.91 ^{***}
ALAG	U < G	55.61	27.32	79.49	41.04	-8.28 ^{***}
DFLT	U < G	0.29	0.45	0.43	0.53	-0.99 ^{***}
ZSCO	U > G	0.83	2.62	-8.76	21.00	7.32 ^{***}

Notes: U and G represent unqualified and going-concern opinions. ^{***}, ^{**}, and ^{*} denote significance at the 1%, 5%, and 10% levels.

There are statistically significant correlations between Z score and the financial ratios (except for CACL), suggesting the Z score can measure much of what other financial ratios measure. Due to this correlation, we conducted three multiple regression analyses with and without the Z score.

Table 3. Pearson Correlation Coefficient

	AUDT	PROP	CACL	RLSS	CURR	CFTL	LDTA	NITA	SIZE	ZSCO	ALAG
PROP	0.19 ^{***}										
CACL	-0.02	-0.04									
RLSS	-0.24 ^{***}	0.19 ^{***}	-0.09 ^{***}								
CURR	0.15 ^{***}	-0.12 ^{***}	0.13 ^{***}	-0.05							
CFTL	0.07 ^{**}	-0.13 ^{***}	0.20 ^{***}	-0.36 ^{***}	-0.12 ^{***}						
LDTA	-0.01	0.04	0.03	-0.01	-0.02	0.11 ^{***}					
NITA	0.15 ^{***}	-0.14 ^{***}	0.09 ^{***}	-0.30 ^{***}	0.11 ^{***}	0.28 ^{***}	-0.20 ^{***}				
SIZE	0.49 ^{***}	-0.26 ^{***}	0.11 ^{***}	-0.51 ^{***}	0.01	0.43 ^{***}	0.04	0.35 ^{***}			
ZSCO	0.18 ^{***}	-0.22 ^{***}	0.02	-0.23 ^{***}	0.13 ^{***}	0.17 ^{***}	-0.18 ^{***}	0.61 ^{***}	0.37 ^{***}		
ALAG	-0.26 ^{***}	0.16 ^{***}	-0.04	0.23 ^{***}	-0.14 ^{***}	-0.03	-0.01	-0.13 ^{***}	-0.31 ^{***}	-0.15 ^{***}	
DFLT	-0.09 ^{***}	0.09 ^{***}	0.02	0.15 ^{***}	-0.06 ^{**}	-0.00	-0.05 [*]	-0.03	-0.08 ^{***}	0.00	0.22 ^{***}

Notes: ^{***}, ^{**}, and ^{*} denote significance at the 1%, 5%, and 10% levels.

Estimation results for three dichotomous logit models (1997 and 1999 combined) are reported in Table 4. In model 1, all financial ratios are included but Z score is excluded. In model 2, Z score is included but all financial ratios are excluded. Model 3 contains both Z score and the financial ratios.

The chi-squared statistics indicate that all three models are significant at the 0.01% level. The percentage of firms correctly classified is around 90% in all three models. In addition, the pseudo R^2 level of 39.0%-44.4% is fairly high compared to previous studies.

Consistent with our main hypothesis, in all three models, AUDT has a negative sign and is statistically significant (at the 1% level). There is a clear difference in the audit judgments of Big Six (Five) and non-Big Six (Five) firms in terms of issuing a going-concern opinion to financially distressed but non-bankrupt firms. All else being equal, non-Big Six (Five) auditors are more likely to issue a going-concern opinion than Big Six (Five) auditors. Our results provide evidence that is consistent with the finding of Messier (1983) and Chewning et al. (1989) that non-Big Six (Five) auditors have lower materiality thresholds than their Big Six (Five) counterparts.

Among the control variables, PROP (prior year's opinion), RLSS (recurring losses), CURR (current ratio), CFTL (ratio of cash flows from operations to total liabilities), SIZE (firm size), ALAG (audit lag), and DFLT (default status) are consistently significant with the expected signs. Although LDTA (ratio of long-term debt to total assets) was a significant variable in explaining auditors' opinion decisions in some previous studies, it is insignificant in our study.

Table 4. Estimation Results of Logistic Regressions, 1997 and 1999 (Aggregate)

Variable	Expected Sign	Model 1	Model 2	Model 3
Constant	?	-0.81 ^{***}	-1.74 ^{**}	-1.12 ^{***}
AUDT	-	-0.59^{***}	-0.69^{***}	-0.63^{***}
PROP	+	0.25 ^{***}	0.24 ^{***}	0.20 ^{***}
CACL	-	-0.04		-0.05
RLSS	+	0.73 ^{***}		0.71 ^{***}
CURR	-	-0.75 ^{***}		-0.66 ^{***}
CFTL	-	-0.39 ^{***}		-0.32 ^{***}
LDTA	+	0.13		-0.19
NITA	-	-0.28 ^{**}		-0.01
SIZE	-	-0.60 ^{***}	-0.47 ^{***}	-0.40 ^{***}
ALAG	+	0.02 ^{***}	0.02 ^{***}	0.02 ^{***}
DFLT	+	10.04 ^{***}	1.20 ^{***}	1.10 ^{***}
ZSCO	-		-0.15 ^{***}	-0.10 ^{***}
Pseudo R^2		42.5%	39.0%	44.4%
Chi-square		346.2 ^{***}	310.8 ^{***}	335.8 ^{***}
Concordant pairs		90.1%	89.1%	90.8%

Notes: ^{***}, ^{**}, and ^{*} denote significance at the 1%, 5%, and 10% levels.

The Z score is also highly significant in both models 2 and 3, indicating that it has some incremental explanatory power over other financial ratio variables. At the least, the Z score could be used as a substitute for many financial ratios; model 2 is not much different from model 1 in terms of the overall model significance, pseudo R^2 , percentage of correctly classified firms, and, most important, the significance of other variables, including AUDT. Auditors can use this readily available variable to help identify clients that are likely to receive a going-concern opinion or to screen potential clients.

Table 5 provides the estimation results for 1997 and 1999. Because Z score is highly correlated with the financial ratio variables, we tested the model's significance using two models: (1) with financial ratios and without Z score (model 1), and (2) without financial ratios and with Z score (model 2). The results are similar to those reported in Table 4, but the p -value of AUDT is slightly lower (significant at the 5% level).

Table 5. Estimation Results of Logistic Regression, 1997 and 1999 (Separate)

Variable	Expected Sign	1997 ($n = 498$)		1999 ($n = 834$)	
		Model 1	Model 2	Model 1	Model 2
Constant	?	-2.17***	-1.27***	-3.14***	-3.59***
AUDT	-	-0.75**	-0.74**	-0.68**	-0.58**
PROP	+	2.51***	2.34***	0.86***	0.76***
CACL	-	-0.24		-0.15***	
RLSS	+	0.57*		0.68**	
CURR	-	-0.67***		-0.66**	
CFTL	-	-0.36*		-0.35**	
LDTA	+	-0.16		-0.04	
NITA	-	-0.41**		-0.34**	
SIZE	-	-0.54***	-0.58***	-0.42***	-0.40***
ALAG	+	0.02***	0.02***	0.02***	0.02***
DFLT	+	1.04***	1.20***	2.21***	2.41***
ZSCO	-		-0.11***		-0.14***
Pseudo R^2		47.4%	39.0%	60.5%	57.5%
Chi-square		130.0***	123.7***	224.3***	224.5***
Concordant pairs		91.9%	90.1%	95.5%	94.9%

Notes: ***, **, and * denote significance at the 1%, 5%, and 10% levels.

5. Summary and Conclusions

As an intermediary between preparers and users of financial statements, the auditor's most fundamental judgment is in the evaluation of a client's ability to

continue to operate as a going concern. Financial statement users have long questioned whether auditors take enough responsibility for evaluating going concern. There is an expectation gap—that is, a difference between what the users believe auditors are responsible for and what the auditors believe their responsibilities are. The AICPA issued its Statement on Auditing Standards No. 59 to bridge this gap, but this auditing standard has also expanded the auditor's traditional role of reporting on the entity's ability to continue to exist beyond the effect on assets and liabilities (Ellingsen et al., 1989).

Auditing is a necessary monitoring device because potential conflicts of interest may arise between owners and managers and among different classes of security holders (DeAngelo, 1981). Thus, the information certified by the auditor must be valuable to the financial community—and it is valuable only to the extent that it is complete, accurate, and reliable.

In this study, we investigate auditors' materiality judgments concerning the issuance of going-concern opinions by testing whether materiality thresholds differ between Big Six (Five) and non-Big Six (Five) auditors. Specifically, we address the issue of Type I errors, the situation in which firms that ultimately survive as independent entities are mistakenly identified as failing. Using 1,332 financially troubled but non-bankrupt sample firms, we find that non-Big Six (Five) auditors are more likely to issue going-concern opinions than their Big Six (Five) counterparts because they have lower materiality thresholds.

Previous studies revealed differences in the materiality thresholds between large national public accounting firms and non-national firms: auditors from large national accounting firms have higher materiality thresholds than other auditors in many judgment situations (Messier, 1983; Woolsey, 1973). One reason may be, as shown in Messier (1983), that more experienced auditors have higher materiality and disclosure thresholds than less experienced auditors. Big Six (Five) audit firms have made substantial investments in improving the quality of their services by providing extensive training to their professional staff. Our study is an attempt to empirically confirm the previous study's results using the context of the issuance of going-concern opinions. The results of this study provide a basis for properly evaluating the audit performance of Big Six (Five) and non-Big Six (Five) firms.

It would be interesting to investigate whether or not there are self-selections of auditors by clients: clients with some financial problems may select Big Six (Five) auditors to lower the probability of receiving a going-concern opinion. Prior studies point to several benefits from engaging Big Six (Five) firms, including lower litigation rates (Palmrose, 1988), higher rates of compliance with Generally Accepted Accounting Principles (Krishnan and Schauer, 2000), and lower interest rates (Pittman and Fortin, 2004). In addition to these benefits, financially-troubled firms may expect another benefit: receiving a clean opinion. Further research is needed to examine this possibility.

References

- Altman, E. I., (1968), "Financial Ratios, Discriminant Analysis and Prediction of Corporate Bankruptcy," *Journal of Finance*, 23(4), 589-609.
- American Institute of Certified Public Accountants, (1978), *Report, Conclusion, and Recommendation of the Commission on Auditors' Responsibilities* (Cohen Report), New York: AICPA.
- American Institute of Certified Public Accountants, (1980), *Report of the Special Committee on Small and Medium Sized Firms* (Derieux Committee Report), New York: AICPA.
- American Institute of Certified Public Accountants, (1988), *The Auditor's Consideration of an Entity's Ability to Continue in Existence* (Statement on Auditing Standards, No. 59), New York: AICPA.
- Bolten, S. E. and J. H. Crockett, Jr., (1979), "How Independent Are the Independent Auditors?" *Financial Analysts Journal*, 35(6), 76-78.
- Carcello, J. V. and T. L. Neal, (2000), "Audit Committee Composition and Auditor Reporting," *Accounting Review*, 75(4), 453-467.
- Carcello, J. V., D. R. Hermanson, and H. F. Huss, (1995), "Temporal Changes in Bankruptcy-Related Reporting," *Auditing: A Journal of Practice and Theory*, 14(2), 133-143.
- Carcello, J. V., D. R. Hermanson, and H. F. Huss, (1997), "The Effect of SAS No. 59: How Treatment of the Transition Period Influences Results," *Auditing: A Journal of Practice and Theory*, 16(1), 114-123.
- Chen, K. and B. K. Church, (1992), "Default on Debt Obligations and the Issuance of Going-Concern Opinions," *Auditing: A Journal of Practice and Theory*, 11(2), 30-49.
- Chewning, G., K. Pany, and S. Wheeler, (1989), "Auditor Reporting Decisions Involving Accounting Principle Changes: Some Evidence on Materiality Thresholds," *Journal of Accounting Research*, 27(1), 78-96.
- DeAngelo, L. E., (1981). "Auditor Size and Audit Quality," *Journal of Accounting and Economics*, 3(3), 183-199.
- Dopuch, N. and D. Simunic, (1980), "The Nature of Competition in the Auditing Profession," in *Regulation and the Accounting Profession*, J. W. Buckley and J. F. Weston eds., New York: Lifetime Learning, 77-94.
- Dopuch, N., R. Holthausen, and R. Leftwich, (1987), "Predicting Audit Qualifications with Financial and Market Variables," *Accounting Review*, 62(3), 431-454.
- Ellingsen, J. E., K. Pany, and P. Fagan, (1989), "SAS No. 59: How to Evaluate Going Concern," *Journal of Accountancy*, 167(1), 51-57.
- Financial Accounting Standards Board, (1980), *Qualitative Characteristics of Accounting Information* (Statement of Financial Accounting Concepts, No. 2), Stamford, CT: FASB.

- Geiger, M. A. and D. V. Rama, (2006), "Audit Firm Size and Going-Concern Reporting Accuracy," *Accounting Horizons*, 20, 1-17.
- Holstrum, G. L. and W. F. Messier, Jr., (1982), "A Review and Integration of Empirical Research on Materiality," *Auditing: A Journal of Practice and Theory*, 2(2), 45-65.
- Hopwood, W., J. C. McKeown, and J. F. Mutchler, (1989), "A Test of the Incremental Explanatory Power of Opinions Qualified for Consistency and Uncertainty," *Accounting Review*, 64(1), 28-48.
- Judge, G., W. Griffiths, R. C. Hill, and T. Lee, (1980), *The Theory and Practice of Econometrics*, New York: Wiley.
- Krishnan, J. and P. C. Schauer, (2000), "The Differentiation of Quality among Auditors: Evidence from the Not-for-Profit Sector," *Auditing: A Journal of Practice and Theory*, 19(2), 9-25.
- Levitan, A. and J. Knoblett, (1985), "Indicators of Exceptions to the Going-Concern Assumption," *Auditing: A Journal of Practice and Theory*, 5(2), 26-39.
- 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 and Theory*, 10, 1-24.
- Messier, W. F., (1983), "The Effect of Experience and Firm Type on Materiality/Disclosure Judgments," *Journal of Accounting Research*, 21, 611-618.
- Mutchler, J. F., (1985), "A Multivariate Analysis of the Auditor's Going-Concern Opinion Decision," *Journal of Accounting Research*, 23, 668-682.
- Mutchler, J., W. Hopwood, and J. McKeown, (1997), "The Influence of Contrary Information and Mitigating Factors on Audit Opinion Decisions on Bankrupt Companies," *Journal of Accounting Research*, 35(2), 295-310.
- Nogler, G., (1995), "The Resolution of Auditor Going Concern Opinions," *Auditing: A Journal of Practice and Theory*, 15(2), 54-73.
- Palmrose, Z. V., (1988), "An Analysis of Auditor Litigation and Audit Service Quality," *The Accounting Review*, 63(1), 55-73.
- Pittman, J. A. and S. Fortin, (2004), "Auditor Choice and the Cost of Debt Capital for Newly Public Firms," *Journal of Accounting and Economics*, 37, 113-136.
- 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 and Theory*, 14(1), 50-63.
- Shockley, R. A. and R. N. Holt, (1983), "A Behavioral Investigation of Supplier Differentiation in the Market for Audit Services," *Journal of Accounting Research*, 21(2), 545-564.
- Woolsey, S. M., (1973), "Approach to Solving the Materiality Problem," *Journal of Accountancy*, March, 47-50.
- Zmijewski, M. E., (1984), "Methodological Issues Related to the Estimation of Financial Distress Prediction Models," *Journal of Accounting Research*, 22, 59-82.