

8-1998


# A Note on Going-Concern Modified Audit reports and Subsequent Bankruptcies Before and After SAS No. 59

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## Recommended Citation

Geiger, Marshall A., K. Raghunandan, and Dasaratha V. Rama. "A Note on Going-Concern Modified Audit Reports and Subsequent Bankruptcies Before and After SAS No. 59." *Accounting Enquiries* 8, no. 1 (August 1998): 1-34.

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A NOTE ON GOING-CONCERN MODIFIED AUDIT REPORTS  
AND SUBSEQUENT BANKRUPTCIES  
BEFORE AND AFTER SAS NO. 59

Marshall A. Geiger,\* K. Raghunandan,\*\* and  
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ABSTRACT

*Several papers have examined the proportion of bankrupt companies which did not have a prior going-concern modified report (a type II reporting error) before and after Statement on Auditing Standards No. 59 became effective. This paper contributes to the debate by examining the subsequent viability status for companies that received a first-time going-concern modified audit report (type I reporting errors) before and after SAS No. 59. The results indicate that 13.6 (10.1) percent and 24.3 (20.2) percent of companies receiving a first-time going-concern modified audit report in the post-SAS No. 59 (pre-SAS No. 59) period entered bankruptcy within one year and two years, respectively. After controlling for financial stress and company size, there were no significant differences in the proportion of companies with first-time going-concern modified audit reports filing for bankruptcy before and after SAS No. 59, in both the one-year and two-year subsequent time frames.*

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*Acknowledgements:* This paper has benefited from the comments of two anonymous reviewers. We also thank Stephen Griffin and Christine Yap for their research assistance.

## INTRODUCTION

Several papers have examined the proportion of bankrupt companies without a prior going-concern modified audit report (type II reporting errors) in context of audit reporting for going-concern uncertainties before and after Statement on Auditing Standards No. 59 (SAS 59), *The Auditor's Consideration of an Entity's Ability to Continue as a Going-Concern*, [AICPA, 1988] became effective [Raghunandan and Rama, 1995; Carcello et al., 1995 and 1997]. Raghunandan and Rama [1995] concluded that there was a significant reduction in type II errors after SAS 59 became effective, which is consistent with the assertion that auditors were more willing to issue going-concern modified audit reports to financially troubled companies after SAS 59.<sup>1</sup> However, Carcello et al. [1995] did not find any significant difference in the occurrence of type II reporting errors between the pre- and post-SAS 59 periods. Carcello et al. [1997] reconciled the disparate results of the two prior papers, and show that if the transition period for SAS 59 is ignored, there are no differences in type II audit reporting errors across the two time periods.

While these earlier studies provide some insight into the issuance of going-concern modified reports before and after SAS 59, their focus was exclusively on bankrupt companies and, therefore, type II reporting errors. Since SAS 59 addresses

auditor reporting on companies where going concern is at question, these earlier studies, then, have examined only part of the SAS 59 reporting issues. This paper provides further evidence on the effects of SAS 59 on auditor reporting on distressed companies by examining the proportion of companies receiving a going-concern modified audit report that remained viable both before and after SAS 59. Therefore, this study focuses on the potential impact of SAS 59 on type I reporting errors. This reporting aspect is important because a thorough analysis of audit reporting, including consideration of both type I and type II errors, is required before beginning to draw inferences about the overall impact of SAS 59.

Additionally, both types of reporting errors may lead to costs for auditors. Specifically, type II errors may increase the likelihood of litigation against auditors and attendant costs. Carcello and Palmrose [1994,p.3] found that in a sample of bankruptcy related litigation involving auditors, observations with prior modified reports had “the highest dismissal rate and the lowest payments (mean and median) by auditors; observations with no modified reports have the highest auditor payments.” Conversely, type I reporting errors may lead to an increased likelihood of losing the audit client, and the related revenues that would have been received from the now former client, due to a higher probability of bankruptcy or due to switching to a new

auditor [Kida, 1980; Mutchler, 1984; Chen and Church, 1992; Krishnan, 1994; Geiger et al., 1998].

Strictly speaking, under the guidelines presented in SAS 59, a bankruptcy without a prior going-concern modified audit report cannot be considered an "error." Similarly, a going-concern modified report under the new standard followed by non-failure of the company cannot strictly be considered an "error" [Carmichael and Pany, 1993]. This is because the auditor makes her/his report decision based on facts available at the time of the audit, and the audit report is not required to be a forecast of subsequent events. Since auditors are not charged by professional standards with the prediction of the future success or failure of a client, a strict interpretation of SAS 59 would not consider it to be an error if an auditor issues a going-concern modified audit report but the company remains viable. However, McKeown et al. [1991b] and Chen and Church [1992] have argued that such situations may be construed as reporting "errors" by shareholders and other interested outsiders.

Thus, given the position by McKeown et al. [1991b] and Chen and Church [1992], this paper contributes to the research regarding reporting errors and the change in reporting standards by providing evidence about the frequency of type I reporting errors before and after SAS 59. Accordingly, this study complements and extends the earlier research that focused only on type II errors by specifically assessing type I reporting errors.

## BACKGROUND AND RELATED RESEARCH

Prior to the issuance of SAS 59, SAS 34, *The Auditor's Considerations When A Question Arises About An Entity's Continued Existence*, [AICPA, 1981] provided guidance to auditors with respect to evaluating a client's ability to continue in existence. Auditors under SAS 34 were formerly required to consider the going-concern issue only when the results of other audit procedures indicated contradictory information regarding the assumed ability of the entity to continue. In fact, paragraph 3 of SAS 34 noted that "in an examination of financial statements in accordance with generally accepted auditing standards, the auditor does not search for evidential matter relating to the entity's continued existence because, in the absence of information to the contrary, an entity's continuation is usually assumed..."

In SAS 59, although the auditor is not responsible for predicting future conditions or events, paragraph 2 states that "the auditor has a responsibility to evaluate whether there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the date of the financial statements being audited." Thus SAS 59 has increased the requirements which now constitute an active duty on the part of the auditors to explicitly look for going concern related uncertainties and to document their conclusions in every engagement.

Additionally, legislators have historically focused on instances of companies filing for bankruptcy shortly after receiving a standard unqualified report, and have criticized such instances as either audit failures or reporting inadequacies on the part of the public accounting profession [Ellingsen et al., 1989; Carmichael and Pany, 1993]. Such perceptions have prompted numerous congressional hearings about the public accounting profession and its role in financial reporting [cf., U.S. House of Representatives, 1985 and 1990]. Additionally, as a manifestation of this concern and a reflection of the importance of auditor reporting in this area, the recently enacted *Private Securities Litigation Reform Act* [1995] has an audit requirement section specifically related to going concern reporting. The act requires that:

“Each audit ... of the financial statements of an issuer by an independent public accountant shall include, in accordance with generally accepted auditing standards, as may be modified or supplemented from time to time by the Commission [SEC]...an evaluation of whether there is substantial doubt about the ability of the issuer to continue as a going concern during the ensuing fiscal year.”<sup>2</sup>

This new act essentially restates the audit requirements under SAS 59, which was issued by the Auditing Standards Board partially in response to external criticisms that the public

accounting profession was not providing an adequate early warning signal for company failures. Accordingly, SAS 59 and the *Private Securities Litigation Reform Act* [1995] explicitly require auditors to evaluate the continued existence of the client in every audit for a period of one year from the date of the financial statements.

Within the context of audit reporting for going-concern uncertainties, two types of “reporting errors” are relevant. A “type II error” occurs when a client files for bankruptcy but the immediately preceding audit report was not modified for a going-concern uncertainty. A “type I error” occurs when a going-concern modified report is issued for a client but the client subsequently remains viable.

It has been suggested that SAS 59 increased auditors’ responsibility vis-à-vis going concern [Ellingsen et al., 1989; Bell and Tabor, 1991]. SAS 59 was issued as an expectation gap standard “to better serve financial statement users,” and to demonstrate the Auditing Standard Board’s belief that “auditors can and should take more responsibility for assessing the ability of their clients to continue as going concerns” [Ellingsen et al., 1989]. Accordingly, one view is that SAS 59 would have increased auditors’ propensity to issue going-concern modified reports. This increased propensity, then, may have altered the type I error rate subsequent to the implementation of SAS 59.



Since legislative pressure and professional standards have apparently focused more on the instances of type II errors, auditors may have become more likely to issue a going-concern modified audit report to avoid giving a "clean" opinion to a subsequently failed client. Thus, SAS 59 may have increased auditors' propensity to issue going-concern modified audit reports in identical situations to marginal clients in the post-SAS 59 time frame. This increase in issuance, and based on earlier research findings that significant portions of bankrupt companies did not receive prior going-concern modified reports, might lead one to expect that the type I error rate might decrease. That is, more of the marginal companies that subsequently file for bankruptcy might be more likely to receive a prior going-concern modified report, thus reducing the type I error rate.

However, SAS 59 also changed the report category for going-concern uncertainties from qualified to modified unqualified. Thus, if auditors increased their propensity to issue the new modified audit reports under SAS 59, as opposed to the former "subject-to" qualified reports, then the overall type I error rate may actually increase because more firms may receive a going-concern modified audit report and not subsequently go bankrupt.<sup>3</sup>

However, still others have suggested that SAS No. 59 only codified existing practice in this area and has had little impact other than to increase documentation requirements of auditors [Carmichael and Pany, 1993]. This latter view suggests that there

would be no significant change in the auditor's procedures or his/her decision making with respect to going-concern reporting after SAS 59. Thus, one would expect no change in type I reporting error rates after the new standard.

The intent of this research is to ascertain whether there was a significant change in the type I reporting error rate after SAS 59. The findings of this study, then, provide some initial empirical information on which of these competing views is supported by actual audit reports and subsequent failure rates for the period before and after SAS 59 was implemented.

### **Prior Research**

As noted above, two types of "reporting errors" pertaining to going-concern uncertainties are relevant. A discussion of prior research related to each of these two types of reporting errors is presented below.

*Type II Errors.* Many studies prior to SAS 59 have documented that less than half of all bankruptcies had a prior going-concern modified audit report in the immediately preceding financial statements.<sup>4</sup> Three recent studies have examined the association between bankruptcies and prior audit reports before and after SAS 59. Raghunandan and Rama [1995] found that in the pre-SAS 59 period, consistent with the results reported in prior studies, less than 40 percent of bankruptcies had a prior going-concern modified audit report. They also found an

increased propensity to issue going-concern modified audit reports after SAS 59 became effective. Specifically, 62 percent of bankruptcies had a prior going-concern modified report in the post-SAS 59 period.

Carcello et al. [1995] used data from a longer time frame for the pre-SAS 59 period, and found that the proportions of bankruptcies with a prior going-concern modified reports were 52 percent and 55 percent in the pre- and post-SAS 59 periods, respectively. In a follow-up study, Carcello et al. [1997] suggested that the differences between the two prior SAS 59 studies were attributable to the differences in the treatment of the transition period. They showed that if the transition period (after the issuance of SAS 59 but before the required implementation date) is ignored, there are no discernible SAS 59 effects on the association between bankruptcies and prior going-concern modified audit reports.

In summary, there is a body of prior literature about the frequency of type II errors, covering periods both before and after SAS 59 became effective. Further, the evidence also suggests that if the transition period is ignored, the proportion of bankruptcies without a prior going-concern report has not changed subsequent to SAS 59.

*Type I Errors.* SAS 59, as well as its predecessor SAS 34, is not explicit with respect to what constitutes a “going-concern” and does not specify what conditions must exist for a company

not to be considered a going concern. In fact, Carmichael and Pany [1993,p.53] have argued that SAS 59 may need to be “revisited to clarify the relationship between going-concern status and the concepts of bankruptcy and solvency.” Notwithstanding this lack of clarity on the part of the reporting standards, prior studies which have examined the viability status of companies receiving a going-concern audit report have followed two approaches.

The first approach (used by Mutchler and Williams [1990]) is to examine the bankruptcy status of the company one year after the date of the financial statements on which a going-concern modified audit report was received. This approach is justified by the fact that SAS 59 (as well as the *Private Securities Litigation Reform Act*) specifically note that the auditor makes his/her judgment under the constraint of a “reasonable period of time,” which is defined as not to exceed one year from the date of the financial statements.

However, to the extent auditors use a multi-year horizon in their report decisions, this approach overstates the type I error rates by understating the proportion of companies ultimately resolving the uncertainty through a bankruptcy (or other adverse resolution). Mutchler and Williams [1990] found that 8 of 87 (9 percent) companies receiving a going-concern qualified audit report failed within a one-year period. Garsombke and Choi [1992] found that 16 of 130 (12 percent) companies that received

a going-concern report during the period 1982 to 1985 entered into bankruptcy within one year.

The second approach (used by Altman [1982] and Nogler [1995]) is to examine the ultimate resolution of the going-concern uncertainty, irrespective of the time it takes for the resolution. The advantage of this approach is that it gives information about the eventual predictive success of the audit opinion because the time horizon is lengthened to encompass the eventual resolution of the going concern uncertainty. This approach allows for the inclusion of subsequent information/conditions that have a significant impact, on both reporting decisions and company viability, regardless of time frame. However, the disadvantage of this approach is that a uniform time period is not used for all companies. Thus, a company declaring bankruptcy six months after the financial statement date and a company declaring bankruptcy six years after the financial statement date (on which a first-time going-concern modified report is issued) are both classified similarly.

Altman [1982] found that 53 of 213 (25 percent) companies receiving a going-concern qualified audit report subsequently filed for bankruptcy. Nogler [1995] found that 27 of 125 (22 percent) of manufacturing firms with a going-concern modified report ultimately filed for bankruptcy. The subsequent time period examined in Altman [1982] ranged from one to seven years and the period examined in Nogler [1995] extends up to eight years.<sup>5</sup>

While Nogler's sample covers the period up to June 1990, SAS 59 became effective only for financial statements with fiscal year-ends on or after December 31, 1989. Thus, Nogler's sample includes only a brief period covered by SAS 59.<sup>6</sup>

In this study, the first research approach has been adopted. Since SAS 59 specifically states a one-year reporting horizon for considering continued viability, this study uses a consistent time frame for the pre-post-SAS 59 reporting periods in the analysis of subsequent viability and type I reporting errors.

### METHOD

In SAS 59, the phrase "going concern" is not defined, and bankruptcy is not specifically identified as the only condition indicating violation of the going-concern assumption. However, many previous researchers have examined bankruptcy because, as noted by Carcello and Palmrose [1994], bankruptcy is a clearly defined legal event, and it is accompanied, typically, with loss of control and financial losses for existing shareholders. Furthermore, the focus of the media and legislators questioning auditors' performance has been largely on bankruptcies. Consequently, bankruptcies are examined in this paper.

The focus of this study is on bankruptcy status for specific time periods after the financial statement date of the initial going-concern audit report surrounding SAS 59. Since SAS 59 and the

*Private Securities Litigation Reform Act* [1995] both specifically indicate a one-year reporting horizon for rendering going-concern modified audit reports, this study initially examines bankruptcy status one year after the financial statement date for companies receiving first-time going-concern modified reports.<sup>7</sup> To further extend the analyses, this study also examines the bankruptcy status two years after the relevant financial statement date. The subsequent two-year time period assessed, although longer than the period specified by SAS 59, is an attempt to better identify truly viable companies using an expanded time horizon.

To compare the bankruptcy proportions of the pre- and post-SAS 59 companies, a chi-square test is used. Subsequently, a multivariate logistic regression, with variables based on financial statement data as control factors, is used. Specifically, companies in greater financial stress may be more likely to enter into bankruptcy. Accordingly, financial stress, as measured by Zmijewski's [1984] PRB score, is used as a control factor.<sup>8</sup>

Prior research also indicates that client size is negatively correlated with the issuance of a going-concern modified report, even after controlling for other factors [McKeown et al., 1991a]. Further, while company size has generally been shown to be negatively associated with bankruptcy filing, research by Johnsen and Melicher [1994] found a non-significant size relationship between bankruptcy and already financially stressed companies similar to the sample of companies used in this study. Therefore,

to control for and evaluate the impact of company size on bankruptcy filing for financially stressed companies already receiving a going-concern modified audit report, company size is included as a control factor.

The relationship between subsequent bankruptcy and the factors discussed above is examined using a logistic regression to estimate the coefficients in the following model:

$$BK | GC = a_0 + a_1*PRB + a_2*LNSL + a_3*SAS59, \quad (1)$$

where:

- BK | GC = Bankrupt (1 if yes, 0 if not), given a first-time going-concern modified audit report,  
 PRB = Probability of bankruptcy, as calculated from Zmijewski's [1984] model,  
 LNSL = Logarithm of sales (in thousand of dollars), and  
 SAS59 = 1 if post-SAS 59, 0 if pre-SAS 59.

### Data Collection

To examine the issues of interest in this study, companies receiving first-time going-concern modified audit reports are needed. In an attempt to alleviate any potential cross-industry reporting effects [Anandarajan and LaSalle, 1995], this study is limited to manufacturing firms. Accordingly, the Compact Disclosure-SEC database was searched for all manufacturing firms (SIC 2000 to 3999) receiving going-concern reports for pre- and post-SAS 59 periods. Since SAS 59 was effective for fiscal year



ends on or after December 31, 1989, data from 1990 and 1991 financial statements were used for the post-SAS 59 period. In light of the results documented in Carcello et al. [1997] about audit reports issued during the transition period, audit reports issued during 1988 and 1989 were excluded. Consequently, data from 1987 financial statements (the earliest available in the authors' libraries) are used in this study for the pre-SAS No. 59 period.<sup>9</sup>

The following sources were used to identify the subsequent resolutions of going-concern uncertainties: (1) *Wall Street Journal Index*, (2) *Compact-Disclosure*, (3) Predicast's *Index of Corporate Change*, (4) New Generation Research's *Database of Bankrupt/Distressed Securities*, and (5) the *Bloomberg Financial Markets Database*. Only firms for which subsequent financial statements were found, and not in bankruptcy, were designated as non-failed firms. The data screening resulted in 109 (236) useable companies in the pre- (post-) SAS 59 periods.

SAS 59 specifically noted that the auditor's evaluation of going concern was for a "reasonable period of time," which was defined as a period not to exceed one year from the date of the financial statements. However, it is quite possible that auditors may be conservative in their judgments and issue a going-concern modified report if they believe that the client may fail in a reasonable period of time, even if such time period was greater than one year. Further, companies which receive first-time going-concern modified audit reports may be able to survive for one

year, but fail shortly thereafter. Hence, this study also examines subsequent resolutions of the going-concern uncertainty up to two years after the relevant financial statements. Restricting the sample to companies with two years of available subsequent resolution data resulted in 89 (218) usable firms in the pre- (post-) SAS 59 period.

## RESULTS

**P**anel A of Table 1 presents results regarding bankruptcy status within one year for the sample of first-time going-concern modified report companies in the pre- and post-SAS 59 periods. The proportion of companies filing for bankruptcy within one year of the financial statements is 12.5 percent, with 10.1 percent (11/109) in the pre-SAS 59 period and 13.6 percent (32/236) in the post-SAS 59 period. The chi-square test of association indicates that there are no significant differences ( $p=.37$ ) in the propensity to file for bankruptcy for a firm that received a first-time going-concern modified audit report before and after the implementation of SAS 59.

TABLE 1

**BANKRUPTCY STATUS OF COMPANIES WITH FIRST-TIME  
GOING-CONCERN MODIFIED AUDIT REPORTS  
BEFORE AND AFTER SAS NO. 59**

**Panel A: One Year Subsequent to Financial Statement Date**

<u>Time Period</u>	<u>Bankrupt</u>	<u>Not Bankrupt</u>
Pre-SAS 59 (n=109)	11 (10.1%)	98 (89.9%)
Post-SAS 59 (n=236)	32 (13.6%)	204 (86.4%)
Overall (n=345)	43 (12.5%)	302 (87.5%)

Chi-square = 0.82; p = .37

**Panel B: Two Years Subsequent to Financial Statement Date**

<u>Time Period</u>	<u>Bankrupt</u>	<u>Not Bankrupt</u>
Pre-SAS No. 59 (n=89)	18 (20.2%)	71 (79.8%)
Post SAS No. 59 (n=218)	53 (24.3%)	165 (75.7%)
Overall (n=307)	71 (23.1%)	236 (76.9%)

Chi-square = 0.59; p = .44

Panel B (Table 1) presents bankruptcy status of companies two years from the date of the financial statements. Overall, 23.1 percent of the companies filed for bankruptcy within two years. In the pre-SAS 59 period, 20.2 percent of companies receiving a first-time going-concern modified audit report entered into bankruptcy within two years. The corresponding proportion for the post-SAS 59 period is 24.3 percent. As in Panel A, the chi-square test indicates no significant differences ( $p=.44$ ) in the pre- and post-SAS 59 periods exist for the two-year assessment as well.<sup>10</sup>

Table 2 presents descriptive details about mean PRB scores and firm size (LNSL). The mean PRB scores for companies receiving a first-time going-concern modified report in the pre and post-SAS 59 periods were 0.63 and 0.72, respectively. The mean LNSL measure for the samples were 8.38 and 8.62 for the pre- and post-SAS 59 periods.

As seen in Panel B of Table 2, the mean PRB score of the subsequently bankrupt firms was 0.77; the corresponding mean score for the non-bankrupt firms was 0.68. The mean LNSL measure for the firms that declared bankruptcy one year later was 9.81, while the mean LNSL measure for the firms which did not enter into bankruptcy was 8.36.<sup>11</sup>

**TABLE 2**  
**DESCRIPTIVE STATISTICS**

<b><u>Panel A: Time Periods</u></b>		
<u>Time Period</u>	<u>PRB</u>	<u>LNSL</u>
Pre-SAS 59 (n=109)	0.63	8.38
Post-SAS 59 (n=236)	0.72	8.62
p-value (from t-test)	0.03	0.40
<b><u>Panel B: Subsequent Resolution - Bankruptcy, One Year Later</u></b>		
<u>Subsequent Status</u>	<u>PRB</u>	<u>LNSL</u>
Bankrupt (n=43)	0.77	9.81
Not Bankrupt (n=302)	0.68	8.36
p-value (from t-test)	0.11	0.001

Results from the logistic regression for both resolution time frames are presented in Table 3. For the subsequent one-year time frame, Panel A indicates that the overall regression is significant ( $p=.0003$ ) and that the PRB variable is statistically significant ( $p=.046$ ) and positive. Thus, as might be expected, companies in greater financial distress were more likely to enter into bankruptcy.

**TABLE 3**  
**LOGISTIC REGRESSION ONE YEAR SUBSEQUENT**  
**BK | GC = a0 + a1 \*PRB + a2\*LNSL + a3\*SAS 59**

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**Panel A: One-Year Out**

<u>Variable</u>	<u>Coefficient</u>	<u>Chi-square</u>	<u>p-value</u>
Intercept	-5.48	34.68	.000
PRB	1.08	3.98	.046
LNSL	0.29	14.18	.001
SAS59	0.18	0.23	.631

Model Chi-square = 19.02; p < .0003; c-stat == .69

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**Panel B: Two-Years Out**

<u>Variable</u>	<u>Coefficient</u>	<u>Chi-square</u>	<u>p-value</u>
Intercept	-5.07	39.26	.000
PRB	1.23	7.27	.007
LNSL	0.32	22.94	.000
SAS59	0.10	0.10	.753

Model Chi-square = 31.19; p < .0001; c-stat == .71

Legend:

- BK/GC = Bankrupt later (1 if yes, 0 if not), given a first-time going-concern modified report
- PRB = Financial distress measure, based on Zmijewski's (1984) model
- LNSL = Log of sales (in thousands of dollars)
- SAS59 = 1 if post-SAS 59, 0 if pre-SAS59
-

The coefficient on the size variable is also positive and statistically significant ( $p=.001$ ), indicating that larger companies are more likely to enter into bankruptcy given the study's sample of first-time going-concern modified report recipients. However, the SAS 59 variable is not significant in the logistic regression ( $p=.631$ ). This result indicates that the period in which the audit report was issued (pre- or post-SAS 59) was not significant in explaining the tendency for a firm to file for bankruptcy within one year of receiving their initial going-concern modified audit report.

Panel B presents the results of the logistic regression using subsequent resolution status two years from the date of the financial statements on which a first-time going-concern modified report was issued. These results are substantially the same as those presented in Panel A for the one-year time period, and also indicate that there were no significant differences ( $p=.753$ ) in the propensity to file for bankruptcy within two years before and after SAS 59.

### **Additional Analyses**

Argenti [1976] and Zavgren [1983] indicate that there are three general models of firm cessation. The first model is that of a firm that displays a continual slide into financial distress over a period of time and eventually is forced to seek protection from creditors and others. The second model is that of a start-up

company struggling to establish markets and obtain financing. The third model is that of a reasonably financially healthy firm that undergoes a sudden decline or a disastrous event (for example, loss of a lawsuit) that causes an unforeseen quick cessation of activity. This last model, however, is not relevant in the context of the current paper because the focus is on those companies deemed by the auditor to be in sufficient financial stress so as to warrant substantial doubt about their ability to continue as a going-concern at the audit report date.

It is possible, then, that the results are being driven by a majority of smaller, start-up companies. Such companies, especially those in the development stage, may continue to receive venture capital for a few years before they fail. To ensure that the results are not being driven by smaller, development stage companies, all companies (by examining the footnotes and financial comments section of the CD-SEC database) classified as being in the development stage were deleted. The logistic regression analyses discussed earlier were repeated for this sub-sample of companies excluding the 8 (17) pre- (post-) SAS 59 companies in the development stage. The results remained substantively similar for this sub-sample. Specifically, the SAS 59 variable continued to remain insignificant in both the one-year regression analysis ( $p=.432$ ) and the two-year regression analysis ( $p=.705$ ), and the control variables remained essentially unaltered.



## SUMMARY AND DISCUSSION

**A**udit reporting for going-concern uncertainties remains an important issue facing the public accounting profession. This study represents an initial assessment of the subsequent bankruptcy status of companies receiving first-time going-concern modified audit reports before and after SAS 59 became effective. The overall results indicated that 13.6 percent (10.1 percent) of the companies receiving a first-time going-concern modified audit report entered bankruptcy within one year of the financial statements on which a going-concern modified audit report was issued. Considering two subsequent years, the proportion of companies entering bankruptcy increases to 24.3 (20.2) percent in the post-SAS 59 (pre-SAS 59) period. After controlling for financial stress and company size, there were no significant differences in the likelihood of a company entering bankruptcy before and after SAS 59 when bankruptcy status was assessed either after one year or after two years of the receipt of the initial going-concern report.

Earlier research has examined the frequency of bankrupt companies without a prior going-concern modified audit report (type II errors), before and after SAS 59. Such research has indicated that, if the transition period for SAS 59 is excluded, there are no differences in the proportion of bankruptcies without a prior going-concern modified audit report before and after SAS

59 [Carcello et al., 1997]. Similarly, the results of this study, which also exclude the transition period, indicate that there were no significant differences in the proportion of type I errors before and after SAS 59, after controlling for financial factors. The results of this study add support to the contention of Carcello et al. [1997] that SAS 59 did not significantly change audit reporting for going-concern uncertainties. Further, when coupled with the prior research on type II errors, this study's results appear to reinforce the claim of Carmichael and Pany [1993] that SAS 59 may have merely codified existing practice as opposed to substantially altering auditor responsibilities or changing auditor decision-making in the presence of going-concern uncertainties. Thus, based on the cumulative results of the research to date, SAS 59 appears to have, in effect, only modified the going-concern report wording and increased the documentation requirements for auditors, but has not substantively altered auditor reporting behavior on financially troubled clients.

Consistent with the results documented in this study, evidence from prior studies also indicates that, as the subsequent time period examined is lengthened, many more companies tend to fail and file for bankruptcy. One possible interpretation of these results is that auditors are conservative and do not focus only on the subsequent one-year, despite the guidance in SAS 59.

Additionally, auditors have consistently issued going-concern modified audit reports to large numbers of companies that do not

subsequently fail within one or two years, both before and after SAS No. 59. This conservative posturing of auditors regarding reporting on distressed companies is supported by the findings of Carcello and Palmrose [1994,p.22] who find that "...the small number of observations with modified reports as the only reports at issue in auditor litigation and the nonroutine nature of plaintiffs' allegations about these reports suggest a defensive role for timely modified reporting." Accordingly, auditors appear to be consistently using this knowledge and adopting a defensive (i.e., conservative) posture with respect to going-concern report modifications by issuing them to more companies than those that actually eventually end up filing for bankruptcy, regardless of the actual wording of the report.

The findings of this study also indicate a positive relationship between company size and bankruptcy filing for these first-time going-concern report recipients. This study's resolution results, combined with the findings of prior research by McKeown et al. [1991a] that found a negative reporting relationship between company size and receipt of a going-concern report modification, suggest that large companies need to be highly stressed before they receive a going-concern modification; however, once receiving a going-concern modified report, larger companies have a higher tendency to fail, even after controlling for the higher level of financial distress. Another possible explanation for the observed positive association between company size and the

likelihood of entering bankruptcy is that creditors may be more likely to give troubled small companies greater time to work out their problems because there is less wealth at risk to the creditors. In contrast, creditors who have a greater wealth at risk in larger companies may be more likely to force larger companies into bankruptcy to minimize their losses or recover their investments more quickly.

Prior researchers have examined the economic consequences of not issuing a going-concern modified audit report to bankrupt firms [Carcello and Palmrose, 1994]. However, the consequences to auditors of issuing a going-concern modified audit report when the client does not subsequently fail (e.g., loss of clients or loss of reputation) has not yet received requisite research attention. In an initial study of the costs to the auditor of a type I reporting error, Geiger et al. [1998] found that voluntary client turnover substantially increases for these viable going-concern report recipients. Thus, a worthwhile area for future research on type I reporting errors would be to examine the various consequences to auditors when they issue a going-concern modified audit report but the client continues to remain viable.

## ENDNOTES

1. Another interpretation is that auditors encountered the same number of troubled companies and were, as a result of SAS 59, simply more effective.
2. This is the only instance since the enactment of the 1934 Exchange Act where Congress has mandated into law a specific auditing standard for financial statement audits.
3. Note that these arguments assume that audit methods and techniques do not substantially change do to the reporting and audit requirement changes adopted in SAS 59. To the extent that audit methods and techniques have improved subsequent to SAS 59, possibly because the auditor is specifically required to assess going concern issues in every audit, then one may expect to see a decrease in both type I and type II error rates. However, the assessment of improved audit techniques subsequent to SAS No. 59 is beyond the scope of this study.
4. See, for example, Altman [1982]; Menon and Schwartz [1987]; Hopwood et al. [1989]; McKeown et al. [1991a]; and, Chen and Church [1992].
5. In his analysis, Nogler also examined the proportion of companies which resolved the uncertainty through other adverse outcomes such as a liquidation or merger. He excluded companies which continued to receive a going-concern modified report from his analysis; and the resolution was classified as successful only if the company continued to operate, without a going-concern modified report for at least one subsequent year.
6. Nogler [1995] classified reports issued after April 1988 as reports issued in the SAS 59 period. However, Carcello et al. [1997] provide evidence indicating that auditor reporting behavior during the transition period (the period primarily included in their study) was substantially different from audit reporting before or after the transition period. Additionally, Nogler's [1995] results also have to be interpreted with caution because his sample was restricted to firms appearing in the NAARS database. The NAARS database has a systematic bias by excluding smaller companies, and smaller companies may in general have greater financial problems and be more likely to file for bankruptcy.

7. The use of a set time period (i.e., one year from the date of the financial statements) is also an arbitrary period established by the professional and legal standards. However, such an established and consistent time-frame across companies and for both the pre- and post-SAS 59 time periods allows for a controlled comparison of type I error rates, similar to prior studies focusing on error rates and not overall eventual going-concern modification resolution patterns.
8. Zmijewski's [1984] model was derived using NYSE and AMEX companies while this study has many companies not listed in either the NYSE or the AMEX. However, there are many different distress prediction models and almost all of them find that the financial factors having statistical significance are: liquidity, profitability and leverage (financial structure), which are included in Zmijewski's [1984] model. Further, the differences in the predictive ability of many of these models are immaterial [Jones, 1987]. Zmijewski's [1984] model has recently received wide use because it is (a) relatively free of the problems associated with choice based dependent variable sampling approaches, and (b) a parsimonious model [Bamber et al., 1993; Chen and Wei, 1993; Wheeler et al., 1993]. It also has recently been used in research related to going-concern modified audit reports [Carcello et al., 1995; 1997].
9. While the current study's pre-SAS 59 period covers only one year, the sample size is substantively similar to that of prior studies which have examined type I errors related to going-concern modified audit reporting. One possible reason is that the authors of the current study relied on CD-SEC which includes a more exhaustive coverage of companies than some other databases. Further, as noted later, the proportion of companies entering bankruptcy within one year in the study's sample was not substantively different from those reported in prior studies covering longer time periods in the pre-SAS 59 period. CD-SEC may not be a complete source for identifying companies receiving a going-concern modified audit report. However, the authors verified that all companies identified from CD-SEC, which were used in the sample, did receive a going-concern modified audit report by examining copies of the relevant 10-K or Annual Report (primarily from the Laser Disclosure database and Q-file microfiche service).

10. The findings regarding the proportions of bankruptcies one year and two years subsequent to the receipt of a going-concern report are also consistent with the proportions found in earlier research for one year time periods (i.e. Mutchler and Williams [1990], Garsombke and Choi [1992]) and eventual bankruptcy rates (i.e. Altman [1982], Garsombke and Choi [1992], Nogler [1995]).
11. Descriptive statistics for the sub-sample of 307 firms for which resolution data are available for the subsequent two-year period is almost identical to those of the full sample, and thus are not presented separately.

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