The Incremental Information Content of SAS No. 59 Going-Concern Opinions

Lori M. Holder-Webb
Michael S. Wilkins
Trinity University, mike.wilkins@trinity.edu

Follow this and additional works at: https://digitalcommons.trinity.edu/busadmin_facyulty

Part of the Business Commons

Repository Citation

This Article is brought to you for free and open access by the School of Business at Digital Commons @ Trinity. It has been accepted for inclusion in School of Business Faculty Research by an authorized administrator of Digital Commons @ Trinity. For more information, please contact jcostanz@trinity.edu.
The Incremental Information Content of SAS No. 59 Going-Concern Opinions

LORI M. HOLDER-WEBB AND MICHAEL S. WILKINS*

1. Introduction

The purpose of this paper is to evaluate whether the expanded requirements of SAS No. 59 (AICPA [1988]), which requires auditors to actively evaluate and report on a client's going-concern status for the coming year, have allowed investors to make more accurate ex ante assessments of firms that eventually file for bankruptcy. We extend Chen and Church [1996] (hereafter CC), who conclude that SAS No. 34 (AICPA [1981]) "subject to" going-concern opinions have information value because they reduce the surprise associated with bankruptcy announcements. We hypothesize that if SAS No. 59 has achieved what was intended, going-concern opinions issued under SAS No. 59 should further reduce investor surprise at bankruptcy announcements. While we do not believe SAS No. 59 was issued for the specific purpose of helping users to predict bankruptcy, we do suggest that the increased auditor responsibility and improved communication should provide users with information that is of relatively higher quality. This argument is based on a number of important differences between SAS No. 34 and SAS No. 59.

Under SAS No. 34, the auditor's responsibility to evaluate a firm's ability to continue as a going concern was passive. Although auditors were

*Texas A&M University. We are grateful to an anonymous referee, Neil Fargher, Gary Braun, Merle Erickson, James Flagg, Gary Giroux, Audrey Gramling, David Kerr, Mark Taylor, and workshop participants at Texas A&M University for many helpful comments and suggestions.

Copyright ©, Institute of Professional Accounting, 2000
not expected to ignore information relevant to the firm’s going-concern status, SAS No. 34 states that auditors need not search for this information because “in the absence of information to the contrary, an entity’s continuation is usually assumed in financial accounting” (AU §340, SAS No. 34). SAS No. 34 also offers no specific guidelines regarding the time period to be evaluated in going-concern investigations. In contrast, SAS No. 59 states that the auditor “must 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 audited financial statements” (AU §341, SAS No. 59). Although SAS No. 59 notes that the auditor is not required to design audit procedures solely for the purpose of evaluating the going-concern assumption, it does state that the assumption itself must explicitly be evaluated in each audit. Also, under SAS No. 34, “substantial doubt” about a firm’s continued existence resulted in a modified report only if material uncertainties existed regarding the recoverability and classification of assets and liabilities. In contrast, SAS No. 59 makes substantial doubt about a firm’s continued existence, by itself, the “triggering point” for report modification (Carmichael and Pany [1993]). To the extent that increased auditor responsibilities and the improved communication of those responsibilities provide better information regarding future firm viability, we predict that investors should be less surprised when bankruptcy filings follow going-concern opinions issued under SAS No. 59.

Our results show that price responses to bankruptcy announcements are, as predicted, less negative for firms receiving SAS No. 59 going-concern opinions than for firms receiving SAS No. 59 clean opinions, and are less negative for firms receiving SAS No. 59 going-concern opinions than for firms receiving SAS No. 34 “subject to” going-concern opinions. We also show that the difference between the going-concern bankruptcy surprise and the clean opinion bankruptcy surprise under SAS No. 59 is greater than the corresponding difference under SAS No. 34. Our results, which hold after controlling for macroeconomic conditions, firm-specific levels of financial distress, and the predictability of certain types of bankruptcy filings, suggest that investors have benefited from the implementation of SAS No. 59.

Section 2 presents our sample selection procedure and summary statistics. In sections 3 and 4 we present our hypotheses and empirical results and in section 5 we provide concluding remarks.

---

1 Due to the similarities involving going-concern evaluations under SAS No. 34 and its predecessor, SAS No. 2 [1974], we categorize all pre-SAS No. 59 audit opinions as SAS No. 34 audit opinions. When we eliminate the 28 filings occurring prior to SAS No. 34 our inferences with respect to the incremental value of SAS No. 59 are unchanged.
2. Sample Characteristics

The initial sample consisted of 251 firms identified by NAARS or the Wall Street Journal as having filed for bankruptcy between 1975 and 1996. Like CC, we define the bankruptcy filing date as the day preceding the Wall Street Journal's disclosure that the bankruptcy filing has occurred, or the date when the Wall Street Journal states the filing is imminent. Of the original sample of 251 firms, 217 had audit reports available and had sufficient CRSP and Compustat data for the empirical tests. Similar to CC, we find that 41% of the 109 firms filing for bankruptcy prior to the adoption of SAS No. 59 received going-concern opinions. In contrast, 57% of the 108 firms filing for bankruptcy after the adoption of SAS No. 59 received going-concern opinions. These results, which are consistent with the findings of Raghunandan and Rama [1995], suggest that auditors have made more accurate ex ante assessments of financially distressed firms under the expanded requirements of SAS No. 59.

Summary statistics for the sample of 217 firms, presented in table 1, show that firms receiving going-concern opinions are more highly leveraged and less profitable than firms receiving clean opinions. To draw inferences regarding bankruptcy probabilities, we use the revised Altman [1983] Z-score model. This model predicts bankruptcy for firms with scores less than 1.20 and suggests a "gray area" for scores between 1.20 and 2.90. The mean Z-score of -0.06 for the 107 going-concern firms is significantly lower than the mean of 1.51 for the 110 clean opinion firms, suggesting that going-concern opinions are more likely to be issued to firms in severe financial distress (see also McKeown, Mutchler, and Hopwood [1991]). This result obtains both across the entire sample and within the SAS No. 34 and SAS No. 59 partitions. It is consistent with previous research (e.g., Mutchler [1985] and Hopwood, McKeown, and Mutchler [1989; 1994]) which shows that going-concern opinions can often be predicted through ratio analysis and can themselves be useful in predicting bankruptcy.

3. Hypotheses and Univariate Tests

Our empirical tests, which compare share price responses (i.e., investor responses to bankruptcy news) both within and across time periods, are based on the following four hypotheses:

---

2 Financial and audit opinion data were taken from the set of annual financial statements corresponding to the nearest fiscal year-end prior to the bankruptcy filing date.

3 The difference in proportions is significant at the 1% level. When we eliminate the SAS No. 59 "transition period," as suggested by Carcello, Hermanson, and Huss [1997], our findings do not change.
TABLE 1
Mean Values of Selected Summary Measures for 217 Firms Filing for Bankruptcy between 1975 and 1996

<table>
<thead>
<tr>
<th>Partition</th>
<th>N</th>
<th>Total Assets</th>
<th>Debt-to-Assets</th>
<th>Return on Assets</th>
<th>Z-Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Going-Concern Firms</td>
<td>107</td>
<td>423.73</td>
<td>0.98</td>
<td>-0.33</td>
<td>-0.06</td>
</tr>
<tr>
<td>All Clean Opinion Firms</td>
<td>110</td>
<td>886.03</td>
<td>0.71</td>
<td>-0.10</td>
<td>1.51</td>
</tr>
<tr>
<td>P-Value for Difference</td>
<td></td>
<td>(0.20)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>SAS No. 34 Firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going-Concern Firms</td>
<td>45</td>
<td>578.53</td>
<td>0.88</td>
<td>-0.26</td>
<td>0.69</td>
</tr>
<tr>
<td>Clean Opinion Firms</td>
<td>64</td>
<td>968.52</td>
<td>0.70</td>
<td>-0.09</td>
<td>1.54</td>
</tr>
<tr>
<td>P-Value for Difference</td>
<td></td>
<td>(0.58)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>SAS No. 59 Firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going-Concern Firms</td>
<td>62</td>
<td>313.88</td>
<td>1.06</td>
<td>-0.38</td>
<td>-0.61</td>
</tr>
<tr>
<td>Clean Opinion Firms</td>
<td>46</td>
<td>768.70</td>
<td>0.73</td>
<td>-0.12</td>
<td>1.46</td>
</tr>
<tr>
<td>P-Value for Difference</td>
<td></td>
<td>(0.08)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>Clean Opinion Firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS No. 34 Clean Firms</td>
<td>64</td>
<td>968.52</td>
<td>0.70</td>
<td>-0.09</td>
<td>1.54</td>
</tr>
<tr>
<td>SAS No. 59 Clean Firms</td>
<td>46</td>
<td>768.70</td>
<td>0.73</td>
<td>-0.12</td>
<td>1.46</td>
</tr>
<tr>
<td>P-Value for Difference</td>
<td></td>
<td>(0.74)</td>
<td>(0.45)</td>
<td>(0.49)</td>
<td>(0.83)</td>
</tr>
</tbody>
</table>

Rank-sum tests for median differences yield directly comparable results. Debt-to-assets is defined as total liabilities/total assets. Return on assets is defined as net income/total assets. Z-score is calculated using the method of Altman (1983). All values are taken from the last set of financial statements preceding the bankruptcy filing.

H1: Bankruptcy surprises are smaller for firms receiving SAS No. 34 going-concern opinions than for firms receiving SAS No. 34 clean opinions.

H2: Bankruptcy surprises are smaller for firms receiving SAS No. 59 going-concern opinions than for firms receiving SAS No. 59 clean opinions.

H3: The difference between the going-concern and clean opinion bankruptcy surprise is larger under SAS No. 59 than it was under SAS No. 34.

H4: Bankruptcy surprises are smaller for firms receiving SAS No. 59 going-concern opinions than for firms receiving SAS No. 34 going-concern opinions.

H1 is a replication of CC, who show that share prices of firms receiving “subject to” going-concern qualifications respond less negatively to bankruptcy announcements than prices of firms receiving SAS No. 34 clean opinions. H2 extends the CC findings into the post-1989 period by comparing price responses associated with SAS No. 59 going-concern opinions to price responses associated with SAS No. 59 clean opinions. H3 and H4 examine whether SAS No. 59 has allowed investors to make more accurate assessments of firms that are financially distressed. H3
examines the degree to which bankruptcy surprises in general are mitigated under SAS No. 59 relative to SAS No. 34. In other words, in H3 we suggest that if users are able to make better ex ante judgments under SAS No. 59, the difference between the going-concern price response and the clean opinion price response under SAS No. 59 should be greater than the corresponding difference under SAS No. 34. With H4, we propose that bankruptcy surprises associated with SAS No. 59 going-concern opinions should be smaller than bankruptcy surprises associated with SAS No. 34 going-concern opinions. That is, given a going-concern opinion, the price response to a bankruptcy filing announcement should be less negative under SAS No. 59 than it was under SAS No. 34.4

We define the announcement-period excess return as the difference between the sample firm's return and the return for the sample firm's CRSP size decile portfolio from day -1 to day +1, relative to the bankruptcy filing announcement. Across the complete sample of firms the mean excess return for firms receiving going-concern opinions is -23%, significantly smaller (p < 0.01) than the mean excess return of -33% for firms receiving clean opinions. Therefore, consistent with CC, going-concern opinions in general do appear to reduce the surprise associated with bankruptcy filings. Our univariate analysis also suggests that the surprise is reduced more under SAS No. 59 than it was under SAS No. 34. Specifically, the mean excess return for SAS No. 59 going-concern firms of -19% is smaller (p < 0.01) than the mean excess return of -35% for SAS No. 59 clean opinion firms and is also smaller (p = 0.04) than the mean response of -28% for SAS No. 34 going-concern firms. However, we detect no statistically significant difference (p = 0.30) between going-concern and clean opinion price responses (-28% and -33%, respectively) under SAS No. 34. Our univariate findings support H2, H3, and H4 but not H1.

4. Multivariate Tests

4.1 Model Development

To investigate the relation between bankruptcy surprises and audit opinions in a multivariate setting, we estimate the following model:

\[ ER_j = \gamma_0 + \gamma_1 SAS59_j + \gamma_2 GC_j + \gamma_3 SAS59_j \times GC_j + \gamma_4 BKPROB_j \\
+ \gamma_5 RUNUP_j + \gamma_6 PREDICT_j + \gamma_7 CPI_j + \gamma_8 GDP_j + \varepsilon_j \]  

(1)

In equation (1), ER is the firm's three-day decile-adjusted excess return, SAS59 is an indicator variable equal to 1 (0) for firms announcing bankruptcy filings under SAS No. 59 (SAS No. 34), and GC is an indicator variable equal to 1 (0) for firms receiving a going-concern (clean)
audit opinion in either period. These two indicator variables in combination with the interaction term are used to test Hypotheses 1–4.

The remaining variables are control measures. Mutchler [1985] shows that going-concern opinions often can be predicted through ratio analysis. To control for the possibility that the reduced bankruptcy surprise is attributable to financial measures rather than the going-concern opinion, we incorporate a ratio-based measure of financial distress (BKPROB), defined as Altman's [1983] Z-score multiplied by -1 and calculated as of the last financial statement date prior to the bankruptcy filing. We include RUNUP to control for price changes occurring prior to the issuance of the audit report. RUNUP is equal to the firm's decile-adjusted excess return calculated from day -240 to day -10, relative to the release of the last 10-K preceding the bankruptcy filing.

In addition to BKPROB and RUNUP, we include PREDICT, CPI, and GDP to further control for factors that could influence the surprise associated with bankruptcy filing announcements. With PREDICT we model the reduction in bankruptcy surprise that may be attributable to the predictability of certain types of filings or to the richness of the firm's information environment (in the spirit of McNichols and Manegold [1983]). Specifically, PREDICT is an indicator variable taking the value of one if the firm's bankruptcy is prepackaged or is due to union disputes or litigation, or if the firm is in the top half of the CRSP market capitalization distribution during the bankruptcy announcement year. If investors are less surprised by filings that are inherently more predictable or by filings made by firms with greater media coverage, the coefficient for PREDICT should be positive.

With CPI and GDP we attempt to control for broad changes in the macroeconomic environment occurring across our sample period. CPI and GDP represent the percentage change in the Consumer Price Index and Gross Domestic Product, respectively, for the year of the bankruptcy filing. To the extent that higher rates of inflation or lower rates of economic growth are indicative of an unfavorable macroeconomic environment, we expect investors to be less surprised by bankruptcy filings in general when these conditions obtain. Therefore, we expect the coefficient for CPI to be positive and the coefficient for GDP to be negative.

---

6 We multiply the Z-score by -1 to simplify interpretation of the regression coefficient. Higher values of BKPROB (i.e., the transformed Z-score) correspond to higher probabilities of bankruptcy.

7 Prepackaged bankruptcies or bankruptcies resulting from union disputes or litigation are more likely to be priced prior to the actual filing announcement. Furthermore, McConnell, Lease, and Tashjian [1996] show that prepacks typically are less costly than other types of bankruptcies, which likely would decrease the magnitude of the measured response.

8 RUNUP should control for some of these effects as well, given that it is defined in terms of deviations from market (i.e., decile-adjusted) returns.

9 Our results are unchanged when CPI and GDP are defined in terms of lagged percentage changes.
As previously mentioned, our primary test coefficients are $\gamma_1$, $\gamma_2$, and $\gamma_3$. These coefficients, taken individually and in subsets, are used to test Hypotheses 1–4. To illustrate more formally how the multivariate model addresses our hypotheses, Table 2 summarizes the tests we propose. Positive estimates for $\gamma_2$ and ($\gamma_2 + \gamma_3$) would support $H_1$ and $H_2$, respectively, while positive estimates for $\gamma_3$ and ($\gamma_1 + \gamma_3$) would support $H_3$ and $H_4$.

### 4.2 Empirical Results

Table 3 presents the results associated with OLS estimation of equation (1). \(^\text{10}\) Like CC, we find a significant ($p = 0.05$) negative relation between

---

\(^\text{10}\) We remove nine observations having studentized residuals with absolute values higher than 2.00. Alternative screens suggested by Belsley, Kuh, and Welch [1980] produce directly comparable results. If no outliers are removed, the model’s adjusted $R^2$ decreases but the individual coefficient estimates remain significant.
Table 3

Regression of Bankruptcy Surprises on SAS No. 34 and SAS No. 59 Audit Opinion Variables and Selected Firm-Specific and Macroeconomic Controls

\[ ER_j = \gamma_0 + \gamma_1 SAS59_j + \gamma_2 GC_j + \gamma_3 GC_j \times SAS59_j + \gamma_4 BKPROB_j + \gamma_5 RUNUP_j + \gamma_6 PREDICT_j + \gamma_7 CPI_j + \gamma_8 GDP_j + \epsilon_j \]

Panel A: The Model

<table>
<thead>
<tr>
<th>Coefficient Estimate</th>
<th>( \gamma_0 )</th>
<th>( \gamma_1 )</th>
<th>( \gamma_2 )</th>
<th>( \gamma_3 )</th>
<th>( \gamma_4 )</th>
<th>( \gamma_5 )</th>
<th>( \gamma_6 )</th>
<th>( \gamma_7 )</th>
<th>( \gamma_8 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( p )-Value</td>
<td>0.015</td>
<td>0.053</td>
<td>0.139</td>
<td>-0.011</td>
<td>-0.007</td>
<td>0.130</td>
<td>0.029</td>
<td>-0.003</td>
<td>0.147</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.147</td>
</tr>
</tbody>
</table>

Panel B: Joint Tests

<table>
<thead>
<tr>
<th>Coefficient Estimate</th>
<th>( \gamma_0 + \gamma_3 )</th>
<th>( \gamma_1 + \gamma_3 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( p )-Value</td>
<td>0.192</td>
<td>0.154</td>
</tr>
</tbody>
</table>

\( p \)-values are one-tailed. \( ER \) = cumulative excess decile-adjusted return from day -1 to day +1 relative to the bankruptcy announcement date. SAS59 = 1 (0) if the firm filed for bankruptcy after (before) SAS No. 59 was adopted. \( GC \) = 1 (0) if the firm received a going-concern (clean) audit opinion. \( BKPROB \) = Altman's [1983] Z-score multiplied by -1. \( RUNUP \) = cumulative excess decile-adjusted return from day -250 to day -10 relative to the last financial statement filing date prior to bankruptcy. \( PREDICT \) = 1 if bankruptcy is prepackaged or due to union disputes or litigation, or if firm is in the top half of CRSP market capitalization distribution; = 0 otherwise. \( CPI \) = % change in the Consumer Price Index in the bankruptcy filing year. \( GDP \) = % change in the Gross Domestic Product in the bankruptcy filing year.
bankruptcy probability (BKPROB) and excess returns. Two of the three additional control variables not modeled by CC are significant as well. The positive estimate for PREDICT indicates that investors are less surprised by bankruptcy announcements that are more predictable. Similarly, the positive estimate for CPI and the negative, albeit insignificant, estimate for GDP suggest that bankruptcy shocks are smaller when the macroeconomic environment is relatively unfavorable.\textsuperscript{11}

The coefficients associated with SAS No. 34 and SAS No. 59 going-concern opinions support three of our four hypotheses.\textsuperscript{12} In contrast to CC, we do not find that SAS No. 34 going-concern opinions reduce, relative to SAS No. 34 clean opinions, the surprise associated with bankruptcy filings. Therefore, we do not find support for H1. When our macroeconomic controls are excluded from the model, however, the findings are generally consistent with CC (the coefficient for GC is significant at $p = 0.07$). We conjecture that a portion of the SAS No. 34 going-concern effect documented by Chen and Church [1996] may be attributable to correlated, omitted economic factors that we model more fully.

In contrast to the minimal SAS No. 34 effect, table 3 reveals that SAS No. 59 going-concern opinions result in smaller bankruptcy surprises than SAS No. 59 clean opinions. The significant ($p < 0.01$) estimate for $\gamma_2 + \gamma_3$ illustrates that SAS No. 59 going-concern opinions decrease the bankruptcy surprise by 19.2 percentage points relative to SAS No. 59 clean opinions, supporting H2.

H3 and H4 compare share price effects under SAS No. 59 to share price effects under SAS No. 34. H3 is tested with $\gamma_3$, which is positive and significant ($p = 0.02$) in table 3. As is shown in table 2, a positive value for $\gamma_3$ indicates that the difference (i.e., the spread) between the going-concern bankruptcy surprise and the clean opinion bankruptcy surprise under SAS No. 59 is greater than the corresponding difference under SAS No. 34. More specifically, $\gamma_3$ reveals that after controlling for BKPROB, RUNUP, PREDICT, CPI, and GDP, the difference between the going-concern and clean opinion price response is 13.9 percentage points greater under SAS No. 59 than it was under SAS No. 34. Similar conclusions can be drawn from $(\gamma_1 + \gamma_3)$, which measures the difference between going-concern price responses under SAS No. 59 and going-concern price responses under SAS No. 34. The significant ($p = 0.01$) positive estimate for $(\gamma_1 + \gamma_3)$ reveals that given a going-concern opinion, bankruptcy shocks

\textsuperscript{11}Chen and Church [1996] document a significant negative relationship between RUNUP and ER during the SAS No. 34 period. We find RUNUP to be negative and significant during the SAS No. 34 period as well; however, this effect does not persist across the entire sample period.

\textsuperscript{12}We estimate additional models where the dependent variable is defined, alternatively, as the excess return calculated from day $-3$ to day $+1$ and from day $-5$ to day $+1$. These models produce directly comparable results.
are 15.4 percentage points smaller under the new standard. Thus, SAS No. 59 does appear to have allowed investors to better assess companies that are financially distressed.

6. Conclusions

With the adoption of SAS No. 59, the Auditing Standards Board replaced a passive responsibility with an active responsibility imposed on auditors to assess the likelihood of a client’s continued existence for one year from the date of the financial statements. If the increased auditor responsibilities have allowed users to make more accurate ex ante judgments regarding firms that ultimately file for bankruptcy, we should observe smaller bankruptcy shocks for announcements that follow SAS No. 59 going-concern opinions than for announcements that follow SAS No. 34 going-concern opinions.

Our results indicate that bankruptcy surprises associated with SAS No. 59 going-concern opinions are significantly smaller than bankruptcy surprises associated with both SAS No. 59 clean opinions and SAS No. 34 going-concern opinions, and that the difference between the going-concern bankruptcy surprise and the clean opinion bankruptcy surprise under SAS No. 59 is greater than the corresponding difference under SAS No. 34. These results hold after controlling for the predictability of the bankruptcy filing, the macroeconomic environment during the announcement year, and firm-specific levels of financial distress.

REFERENCES


---

13 Table 1 reveals that firms were significantly more distressed prior to filing for bankruptcy under SAS No. 59 than they were under SAS No. 34. To control for the possibility that inherently higher levels of financial distress could be responsible for the reduced SAS No. 59 bankruptcy surprise, we eliminated SAS No. 59 firms having Z-scores in the bottom quartile of the SAS No. 59 Z-score distribution. Even with the more distressed SAS No. 59 firms removed, the SAS No. 59 going-concern opinion effect remains significant (p < 0.01). Our conclusion, therefore, is that the reduced bankruptcy surprise associated with SAS No. 59 going-concern opinions is not driven by higher levels of financial distress during the SAS No. 59 time period.


