Going Concern Opinions and the Market’s Reaction to Bankruptcy Filings

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ABSTRACT: This study investigates the association between going concern opinions and the market’s reaction to bankruptcy filings. The results of prior studies indicate that going concern opinions are useful in predicting bankruptcy and provide some explanatory power in predicting bankruptcy resolution. As such, going concern opinions may reduce the surprise associated with bankruptcy. Our results are consistent with this assertion. Firms receiving going concern opinions experience less negative excess returns in the period surrounding bankruptcy filings than those receiving unqualified opinions. These results hold after controlling for the probability of bankruptcy, the market’s reaction to news announcements occurring prior to bankruptcy, and changes in stock price prior to the issuance of the auditor’s report. Overall, our results are consistent with going concern opinions having information value.

Key Words: Going concern, Bankruptcy, Audit qualifications, Capital markets.

Data Availability: A list of sample firms is available from the authors upon request. All other data are available from public sources.

I. INTRODUCTION

Researchers and practitioners alike contend that market participants are interested in the auditor’s assessment of going concern, particularly in light of the increasing number of bankruptcies occurring over the past decade.1 Although the auditor is not responsible for

1 See for example Connor (1986), Campbell and Mutchler (1988), Eilingsen et al. (1989), and Boritz (1991)

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predicting bankruptcy and the issuance of a going concern opinion is by no means a prediction of bankruptcy (AICPA 1993, section 341.04), investors appear to expect the auditor to provide them with a warning of approaching financial failure. Indeed Altman (1982, 7) suggests that financial-statement users often perceive the issuance of a going concern opinion as a prediction of bankruptcy.

Prior studies (e.g., Campbell and Mutchler 1988) suggest that the issuance of a going concern opinion may increase investors' assessments of the firm's probability of financial failure. If financial failure subsequently occurs, therefore, the surprise associated with the failure event would differ between firms receiving a going concern opinion and those receiving an unqualified opinion. The purpose of this study is to examine the association between going concern opinions and the market's reaction to bankruptcy filings.

Other studies (Clark and Weinstein 1983; Eberhart et al. 1990) show that bankruptcy announcements produce a significant negative excess stock return. The magnitude of decline in share prices would be affected by the market's a priori assessment of a firm's probability of bankruptcy as well as the expected resolution of bankruptcy. Previous studies report that going concern opinions are useful in predicting bankruptcy (Hopwood et al. 1989, 1994) and provide some explanatory power in predicting bankruptcy resolution (Kennedy and Shaw 1991). Hence, the presence of a going concern opinion may reduce the surprise associated with bankruptcy filings. In this study, we test whether firms receiving going concern opinions experience less negative excess returns in the period surrounding bankruptcy filings than those receiving unqualified opinions.

Our results indicate that going concern opinions are useful in explaining the market's reaction to bankruptcy filings. After controlling for the probability of bankruptcy, the market's reaction to the media's disclosures of financial difficulties and the changes in stock price prior to the issuance of the auditor's report, we find that the unexpected drop in share prices is less negative for firms that have received a going concern opinion as compared to those that have received an unqualified opinion. This finding is consistent with going concern opinions having information value.¹

The remainder of this paper is organized as follows. The selection of sample firms is described in section II and the empirical results are presented in section III. The concluding remarks are provided in section IV.

II. SAMPLE SELECTION

Initially, we identify firms filing for bankruptcy court protection (i.e., Ch. 11 filings) using the F&S Index of Corporate Changes (1981 through 1988 editions). Firms satisfying the following criteria are retained in the sample.

1. Financial data and the auditor's report are available from Compustat or microfiche.
2. The annual report and 10-K filing dates are available for the last set of financial statements issued prior to bankruptcy filing from the SEC public reference room in Washington, D.C.

² Strategic reporting considerations may affect whether the auditor issues a going concern opinion. Kida (1980) finds that auditors are more likely to issue a going concern opinion if they have a strong belief that the client's creditors will sue if the client fails. In contrast, auditors are less likely to issue a going concern opinion if they have a strong belief that the opinion will hurt the client's relations with the auditor. Others (Mutchler 1984; Matsumura et al. 1994) suggest that the decision to issue a going concern opinion is affected by the auditor's belief about whether the opinion will be self-fulfilling.

³ Other studies (e.g., Elliott 1982; Dodd et al. 1984; Dopuch et al. 1986; Fleaak and Wilson 1994) examine the market's reaction to the issuance of going concern opinions in order to assess information value. The results of these studies are inconclusive (see Asare 1990 for a review).
3. Returns data are available from the CRSP NYSE/ASE and NASDAQ tapes for the period starting from 240 trading days (about one year) preceding the earlier of the 10-K or annual report filing dates to one day after bankruptcy filing.

The resulting sample consists of 106 bankrupt firms. We classify these firms by the type of the audit report received in the fiscal year immediately prior to the bankruptcy filing. The results are summarized in table 1, which shows that 42 firms (40 percent of the 106 sample firms) have uncertainties involving going concern.4 Eight other firms (seven percent) have uncertainties involving either asset realization or contingent liabilities. The remaining 56 firms (53 percent) received unqualified opinions.

We delete the eight firms receiving qualified opinions involving either asset realization or contingent liabilities. These firms are excluded from the sample because the focus of this paper is on comparisons between firms receiving going concern opinions (GC) and those receiving unqualified opinions (UQ).5 The yearly breakdown of the resulting sample of 98 firms is as follows: 1 in 1980, 6 in 1981, 13 in 1982, 13 in 1983, 15 in 1984, 17 in 1985, 9 in 1986, 9 in 1987, and 14 in 1988.6 At the time of the bankruptcy filing, 40 sample firms were listed on NYSE/ASE and 58 were listed on NASDAQ. Thirty-five two-digit SIC industries are represented in the sample, with no one industry providing more than 14 firms.

For the 98 sample firms, we identify the earlier of the annual report or 10-K filing date for the last set of financial statements issued prior to bankruptcy. The earlier of the two dates is used as a proxy for the date that the auditor's report becomes publicly available.

We define the bankruptcy filing date as the day before the date on which the Wall Street Journal disclosed the bankruptcy filing, or the date on which the Wall Street Journal reported that the filing was imminent.7 For six firms that are not covered by the Wall Street Journal, we use the date provided by the F&I Index of Corporate Changes. The bankruptcy filings occurred from 11 to 281 trading days after the filing of the last set of financial statements (i.e., the earlier of the annual report or 10-K filing date).

III. EMPIRICAL RESULTS

Univariate Tests

In this subsection, we present univariate tests to investigate excess returns occurring around the date of bankruptcy filing. We compute excess returns occurring between day -10 and day +10 (relative to the bankruptcy filing date) and we examine GC and UQ firms separately.

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4 Of the 42 firms, 31 are first-time going concern opinions (i.e., a going concern opinion was not received in the preceding year).
5 Another reason for dropping the eight firms is that the sample size is too small to analyze separately and draw meaningful conclusions. Although not reported, the results described throughout the paper are largely unchanged if the eight firms are retained in the sample and included in the group of firms receiving going concern opinions. The nature of uncertainties surrounding asset realization and contingent liability opinions, however, is quite different from that surrounding going concern opinions. Therefore, it is reasonable to exclude the eight firms from our sample.
6 We do not identify firms filing for bankruptcy subsequent to 1988 because auditing standards changed, with changes taking effect January 1, 1989. The primary change being that 'subject to' opinions are no longer allowed. Presently, audit reports may be modified for going concern (and other) uncertainties, through the use of an explanatory paragraph following the opinion paragraphs, but the opinions are no longer qualified.
7 For 16 out of 98 sample firms, the Wall Street Journal reported that bankruptcy filing was imminent a few days before the actual filing. For these firms, the market's reaction, if any, should arise around the time of the media disclosure as opposed to the filing date.
TABLE 1
Sample Selection and Type of Opinion Received

Sample Selection
Bankrupt firms on CRSP tapes 250
Returns data not available around bankruptcy filing <110>
Returns data not available 240 days prior to 10-K or annual report filing dates <11>
10-K or annual report filing dates not available <10>
Financial data and/or auditor’s report not available <13>
Total firms 106

Type of opinion received
Unqualified 56
Going Concern 42
AR/CL* 8
Total firms 106

* AR/CL indicates firms receiving qualified opinions involving asset realization or contingent liability uncertainties.

We calculate excess returns, ER, for each firm using a raw return adjusted for size (see Han et al. 1992, 70, n.8). All firms on the CRSP data tapes (NYSE/AOSE and NASDAQ) are divided into ten groups each year based on their market value of equity on the last day of the preceding year. For each firm, we compute the difference between the return of the firm and the return of the portfolio of firms in the same decile. In order to combine excess returns for individual firms in each group, we calculate average excess returns, AER.

Panel A of table 2 shows the AER over various trading days beginning 10 days before bankruptcy filing and ending 10 days after. Panel A also shows the percentage of firms experiencing negative ER. All data are presented separately for GC and UQ firms. As can be seen from panel A of table 2, both groups of firms experience a drop in stock price in excess of 13 percent on the day of bankruptcy filing (day 0), with the drop being smaller for the GC firms (13.84 percent) than the UQ firms (17.04 percent). Both groups of firms also experience negative AER on most days from –10 to +1: the AER is negative ten out of 12 days in each group. From days +2 to +10, the AERs become less negative and on many days the AERs are positive. Further, the percentage of firms experiencing negative ER is greatest on the day of bankruptcy filing. Between day –10 and day +10, 48 to 76 percent of the GC firms experience negative ER, and 36 to 79 percent of the UQ firms experience negative ER.

Next we compare the differences in daily AERs between GC and UQ firms. Both parametric and nonparametric tests are conducted because the AERs are not normally distributed. In the parametric t-tests, the standard deviations are computed cross-sectionally using individual firms’ ERs. The cross-sectional standard deviations, instead of the time-series standard deviations

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8 Fama and French (1992) show that, during the 1963-1990 period, no significant relation exists between average returns and market beta, but a strong relation exists between size and average returns. These findings justify our use of size-adjusted excess returns.
### TABLE 2
Excess Returns Around the Bankruptcy Filing Date

<table>
<thead>
<tr>
<th>Trading day</th>
<th>Going concern(^a)</th>
<th>Unqualified(^b)</th>
<th>Mean</th>
<th>Wilcoxon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.(^c)</td>
<td>%&lt;0</td>
<td>Mean</td>
</tr>
<tr>
<td>Panel A: daily returns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-10</td>
<td>-2.54</td>
<td>7.86</td>
<td>67</td>
<td>-2.60</td>
</tr>
<tr>
<td>-9</td>
<td>-2.82</td>
<td>7.67</td>
<td>62</td>
<td>-2.27</td>
</tr>
<tr>
<td>-8</td>
<td>-0.93</td>
<td>6.06</td>
<td>64</td>
<td>-0.29</td>
</tr>
<tr>
<td>-7</td>
<td>-0.10</td>
<td>10.04</td>
<td>48</td>
<td>0.03</td>
</tr>
<tr>
<td>-6</td>
<td>-2.43</td>
<td>8.63</td>
<td>64</td>
<td>-1.36</td>
</tr>
<tr>
<td>-5</td>
<td>0.14</td>
<td>7.91</td>
<td>50</td>
<td>-2.53</td>
</tr>
<tr>
<td>-4</td>
<td>0.11</td>
<td>13.02</td>
<td>55</td>
<td>-2.11</td>
</tr>
<tr>
<td>-3</td>
<td>-1.32</td>
<td>10.32</td>
<td>60</td>
<td>-3.29</td>
</tr>
<tr>
<td>-2</td>
<td>-0.83</td>
<td>14.07</td>
<td>62</td>
<td>0.09</td>
</tr>
<tr>
<td>-1</td>
<td>-5.10</td>
<td>8.40</td>
<td>74</td>
<td>-5.29</td>
</tr>
<tr>
<td>0</td>
<td>-13.84</td>
<td>17.16</td>
<td>76</td>
<td>-17.04</td>
</tr>
<tr>
<td>1</td>
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<td>24.71</td>
<td>57</td>
<td>-10.57</td>
</tr>
<tr>
<td>2</td>
<td>-0.11</td>
<td>17.93</td>
<td>52</td>
<td>3.50</td>
</tr>
<tr>
<td>3</td>
<td>2.08</td>
<td>14.14</td>
<td>52</td>
<td>-0.96</td>
</tr>
<tr>
<td>4</td>
<td>2.98</td>
<td>24.31</td>
<td>52</td>
<td>0.33</td>
</tr>
<tr>
<td>5</td>
<td>0.79</td>
<td>16.12</td>
<td>60</td>
<td>0.75</td>
</tr>
<tr>
<td>6</td>
<td>0.27</td>
<td>10.07</td>
<td>64</td>
<td>-3.00</td>
</tr>
<tr>
<td>7</td>
<td>-1.21</td>
<td>8.26</td>
<td>64</td>
<td>2.24</td>
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<tr>
<td>8</td>
<td>4.44</td>
<td>15.57</td>
<td>62</td>
<td>-0.02</td>
</tr>
<tr>
<td>9</td>
<td>-2.28</td>
<td>10.57</td>
<td>67</td>
<td>2.98</td>
</tr>
<tr>
<td>10</td>
<td>-0.08</td>
<td>14.24</td>
<td>69</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Panel B: window returns

<table>
<thead>
<tr>
<th>Window</th>
<th>Mean</th>
<th>S.D.</th>
<th>%&lt;0</th>
<th>Diff</th>
<th>t-value</th>
<th>z-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-10, -2]</td>
<td>-12.57</td>
<td>14.85</td>
<td>81</td>
<td>-14.94</td>
<td>19.10</td>
<td>84</td>
</tr>
<tr>
<td>[-1, +1]</td>
<td>-24.28</td>
<td>20.54</td>
<td>88</td>
<td>-32.29</td>
<td>22.18</td>
<td>89</td>
</tr>
<tr>
<td>[+2, +10]</td>
<td>2.19</td>
<td>27.39</td>
<td>48</td>
<td>3.70</td>
<td>34.08</td>
<td>45</td>
</tr>
</tbody>
</table>

\(^a\) The numbers of firms in the portfolio are 42 for trading days -10 through 3 and between 36 and 40 for the remainder of trading days.

\(^b\) The numbers of firms in the portfolio are 56 for trading days -10 through 3 and between 51 and 55 for the remainder of trading days.

\(^c\) The cross-sectional standard deviations of individual firms’ excess returns (ER) or window cumulative excess returns (WCEER) are used to compute standard deviations for each group.

\(^d\) Significance at the 0.05 level.

(based on past returns), are used in the t-tests because Morse and Shaw (1988) show that the standard deviation of a firm's returns increases after bankruptcy filing.

The mean differences between groups, the standard deviations of AERs, the t-values, and the Wilcoxon z-values are reported in panel A of table 2. As can be seen, from day -10 to day +1, the AER of GC firms is greater (less negative on most days) than that of UQ firms seven out of twelve
days. The parametric and nonparametric tests, however, indicate that in general the differences are insignificant at conventional levels.

Panel B of table 2 summarizes the daily AERs of GC and UQ firms across three windows (WCER): [−10, −2], [−1, +1], and [+2, +10]. We compute the WCER as the return of a firm for the cumulation period less the return of the same size decile portfolio for the cumulation period. As can be seen, in the [−1, +1] window, the GC firms experience less negative WCER than the UQ firms, and the difference is significant in both parametric and nonparametric tests.

To obtain additional insight, we calculate the cumulative excess returns (CER) each day from day −10 to day +10. The CERs are measured as each group’s average return for the cumulation period less the return of the same size decile portfolio for the cumulation period. We plot the CERs by group as well as the difference in CERs between the two groups (GC and UQ) in figure 1 over the entire 21-day period. For both groups, the CERs become increasingly negative through day +1. Thereafter, the CERs of GC firms increase slightly (becoming less negative), whereas the CERs of UQ firms flatten out. A comparison of the two groups (GC and UQ) indicates that GC firms experience less negative CERs from day −5 onward.

The findings presented in this subsection provide evidence that GC firms experience less negative returns around bankruptcy filings than UQ firms. This result suggests that the surprise associated with bankruptcy filings is smaller for GC firms than UQ firms.

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9 We consider whether this result could be caused by some firms having low share prices (see Dopuch et al. 1986). For the NYSE and ASE firms in our sample, we investigate share prices and find that GC firms generally have lower share prices than UQ firms. The low-price effect would lead GC firms to have larger negative excess returns in the period surrounding bankruptcy filing; however, our findings suggest that GC firms have less negative excess returns in this period. Hence, our results do not appear to be caused by a low-price effect.

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FIGURE 1
Cumulative Excess Returns (CERs) From Day −10 through +10 for the Going Concern (GC) and Unqualified (UQ) Groups (Day 0 is the Bankruptcy Filing Date)
Regression Test

We perform a regression test to control for other factors that could explain the difference between the bankruptcy filing date excess returns of going concern opinion firms and unqualified opinion firms. The nature of the auditor’s report is included as an independent variable in this test: the variable (denoted GC) is one if a GC opinion is received and zero otherwise. We expect the coefficient for this variable to have a positive sign. We investigate whether the GC variable provides incremental explanatory power beyond that provided by the other independent variables. We also conduct the regression test to provide insight into the effects of other variables on the market’s reaction to the bankruptcy filing.

As a starting point in identifying control variables, we consider factors that may affect the market’s a priori assessment of the probability of bankruptcy as well as the expected resolution of bankruptcy. Investors can use financial ratios to form assessments of the probability of bankruptcy (denoted BKPROB). Such assessments, in turn, may affect the surprise associated with bankruptcy filings. Empirically, we estimate BKPROB using Ohlson’s (1980, 121) bankruptcy prediction model. We choose to use Ohlson’s model because (1) a conditional logit approach is employed which provides a probabilistic measure of financial failure, (2) the model is estimated from a large sample of firms (105 failed firms and 2,058 non-failed firms) and it predicts well and (3) differences in predictive ability between Ohlson’s model and competing bankruptcy prediction models are not readily apparent (Foster 1986).

In addition to providing a composite measure of the probability of bankruptcy, BKPROB also may be useful in predicting the outcome of bankruptcy. The results of Kennedy and Shaw (1991) indicate that firms with higher BKPROB are more likely to liquidate than reorganize, which suggests that shareholders of firms with higher BKPROB receive less after bankruptcy proceedings than shareholders of firms with lower BKPROB.

The preceding discussion suggests that BKPROB may serve a dual role in explaining negative excess returns in the period surrounding bankruptcy. As an indicator of approaching bankruptcy, BKPROB may be positively correlated with excess returns (i.e., higher BKPROB is associated with less negative excess returns). As an indicator of the resolution of bankruptcy, BKPROB may be negatively correlated with excess returns (i.e., higher BKPROB is associated with more negative excess returns).

In addition, we control for the market’s reaction to the media’s disclosure of financial difficulties (e.g., quarterly losses, suspension of dividends, default on debt, etc.) occurring subsequent to the issuance of financial statements but prior to bankruptcy (denoted MKTNEWS). Such disclosures may affect the market’s assessment of a firm’s future prospects. We identify media disclosures for sample firms by reference to the Wall Street Journal Index. For each disclosure, we compute a window cumulative excess return (WCER) for the three days surrounding the disclosure. We sum up the WCERs for each firm to obtain a measure that reflects the overall effect of the media’s disclosure of financial difficulties.

Finally, we consider changes in stock price prior to the issuance of the auditor’s report (denoted CHPRICE). The market may react to events that trigger financial demise, and in fact, such events may underlie the issuance of going concern opinions. However, we are interested in assessing whether the

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10 A drawback of using MKTNEWS is that news announcements must be disclosed in the Wall Street Journal to be reflected in this measure. Yet information may be disseminated through other sources. Thus, we consider an alternative measure of MKTNEWS, denoted MKTER. This variable is defined as the compounded, cumulative excess return from two days after the issuance of financial statements to two days prior to bankruptcy. The results are unaffected if MKTER is substituted for MKTNEWS.
opinions, as opposed to the underlying causal event(s), are associated with the market’s reaction to bankruptcy filings. Hence, we use CHPRICE as a proxy to control for events occurring prior to the issuance of the auditor’s report. We compute CHPRICE as the compounded, cumulative excess return from day -240 to day -2 (where day 0 is the day that the auditor’s report is issued).

For descriptive purposes, we test whether BKPROB, MKTNEWS, and CHPRICE are significantly different among firms receiving GC and UQ opinions. The results are presented in panel A of table 3. The results show that the GC firms have a significantly higher probability of bankruptcy (BKPROB) and a larger change in stock price prior to the issuance of the auditor’s report (CHPRICE). By comparison, the market’s reaction to the media’s disclosure of financial difficulties occurring subsequent to the issuance of financial statements but prior to bankruptcy (MKTNEWS) is not significantly different between the two groups.

The finding for BKPROB suggests that GC firms have a much worse financial profile than UQ firms (see also McKeown et al. 1991). A weakened financial profile could very well be one of the reasons that a GC opinion is issued. The finding for CHPRICE suggests that GC firms experience a greater decline in stock price in the year preceding the issuance of the auditor’s report than UQ firms (see also Elliott 1982; Dodd et al. 1984). The presence of significant differences between the two groups of firms suggests that we should control for such differences in our tests.

Next, we present a correlations matrix to examine associations between the variables of interest. In addition to the three control variables, the matrix includes the GC variable, which is of primary interest. The correlations matrix is presented in panel B of table 3.

We estimate the following regression model:

\[
WCER_{it} = a_0 + a_1 GC_{it} + a_2 BKPROB_{it} + a_3 MKTNEWS_{it} + a_4 CHPRICE_{it} + u_{it},
\]

where WCER_{it}, GC_{it}, BKPROB_{it}, MKTNEWS_{it}, and CHPRICE_{it} are as defined previously for the ith firm; \(a_0, a_1, a_2, a_3\) and \(a_4\) are the regression parameter estimates; and \(u_{it}\) is a mean zero stochastic disturbance term.\(^{11}\) We estimate the model for three different event windows: a three-day window (one day before bankruptcy to one day after), a five-day window (three days before bankruptcy to one day after) and a seven-day window (five days before bankruptcy to one day after). We present the regression results in table 4, with the results of each event window presented separately in panels A, B and C.\(^{12}\) Several findings are worth noting.

The coefficient of the GC variable is significant at \(p < 0.01\) in each panel. This result indicates that GC opinions have incremental explanatory power beyond that provided by other independent variables. The positive sign of the coefficient indicates that GC firms experience less negative excess returns (as compared to UQ firms).

The coefficient of the BKPROB variable is significant at \(p < 0.01\) in each panel. The negative sign of the coefficient indicates that excess returns become more negative as the probability of bankruptcy increases. The negative sign suggests that shareholders of firms with weaker financial profiles are expected to receive less in bankruptcy proceedings (Kennedy and Shaw 1991), thus encountering greater sell-offs on bankruptcy filing dates.

\(^{11}\) The independent variables in (1) could be those used by auditors in their decisions to issue GC opinions. Thus, (1) is part of a recursive regression system consisting of (1) and an equation with GC as a dependent variable and all other independent variables appearing in (1) as independent variables. As shown by Johnston (1972, 377–378), there is no bias in applying ordinary least squares estimation to (1) alone.

\(^{12}\) We perform two model checks to ensure the robustness of the regression results. First, we test for heteroskedasticity among the residuals and find that it is not a problem (see White 1980). Second, we examine the data to determine the presence of outliers. Following the approach of Belsley et al. (1980), a few extreme observations are identified. We perform another set of regressions excluding these observations and find that the overall model results are improved: when the outliers are excluded, the significance level of the coefficient of the GC variable is increased. Thus, the presence of extreme observations tends to obscure the relation between GC opinions and excess returns occurring around bankruptcy
TABLE 3
Descriptive Statistics for the Independent Variables*

<table>
<thead>
<tr>
<th></th>
<th>BKPROB</th>
<th>CHPRICE</th>
<th>MKTNEWS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: mean statistics by group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Going concern (GC)</td>
<td>0.87</td>
<td>-68.03</td>
<td>-11.78</td>
</tr>
<tr>
<td>Unqualified (UQ)</td>
<td>0.61</td>
<td>-47.02</td>
<td>-15.00</td>
</tr>
<tr>
<td><strong>t-test between UQ and GC groups</strong></td>
<td>5.63</td>
<td>-2.91</td>
<td>0.63</td>
</tr>
<tr>
<td>(prob &gt; t)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.27)</td>
</tr>
<tr>
<td><strong>Panel B: correlation coefficients with</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHPRICE</td>
<td>-0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKTNEWS</td>
<td>0.11</td>
<td>-0.15</td>
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</tr>
<tr>
<td>GC</td>
<td>0.48</td>
<td>-0.28</td>
<td>0.36</td>
</tr>
</tbody>
</table>

*Variable definitions:

- **BKPROB** = probability of bankruptcy, calculated from model 3 of Ohlson (1980, 121),
- **CHPRICE** = the size-adjusted cumulative excess return computed from 240 to two days prior to the filing of the last annual report prior to bankruptcy,
- **MKTNEWS** = the cumulation of three-day excess returns surrounding the media's disclosure of financial difficulties occurring subsequent to the filing of the last annual report but prior to bankruptcy, and
- **GC** = one if the firm received a going concern opinion prior to bankruptcy and zero otherwise.

The coefficient of the CHPRICE variable is significant at p < 0.01 in each panel. The negative sign of the coefficient indicates that excess returns around the bankruptcy filing date are less negative for firms that experience a greater decline in stock price prior to the issuance of the auditor’s report.

Lastly, the coefficient of the MKTNEWS variable is not significant at any conventional level, regardless of the length of the window. This result indicates that the market’s reaction to the media’s disclosure of financial difficulties prior to bankruptcy is not associated with security returns occurring around bankruptcy.\(^{11}\)

**IV. CONCLUSIONS**

In this paper, we investigate the association between going concern opinions (GC) and the market’s reaction to bankruptcy filings. After controlling for other variables such as the

\(^{11}\)We also examine the effect of the probability of receiving a going concern opinion, (denoted GCPROB), on WCER. We compute GCPROB from model 1 of Chen and Church (1992, 41). This variable is excluded from equation (1) because it is highly correlated with BKPROB (p = 0.77). The results, however, are unaffected if GCPROB is substituted for BKPROB. In addition, the size variable (measured as the natural logarithm of the market value of stock at the end of the year prior to bankruptcy) is not found to be significant in the regressions.
TABLE 4
Regression Results

Model: \( WCER_i = a_0 + a_1 GC_i + a_2 BKPROB_i + a_3 CHPRICE_i + a_4 MKTNEWS_i \)

<table>
<thead>
<tr>
<th>( a_0 )</th>
<th>( a_1 )</th>
<th>( a_2 )</th>
<th>( a_3 )</th>
<th>( a_4 )</th>
<th>( \text{adj. } R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.21</td>
<td>0.13</td>
<td>-0.33</td>
<td>-0.18</td>
<td>0.02</td>
<td>0.129</td>
</tr>
<tr>
<td>(-3.41(^{b}))</td>
<td>(2.73(^{b}))</td>
<td>(-3.53(^{b}))</td>
<td>(-2.81(^{b}))</td>
<td>(0.25)</td>
<td></td>
</tr>
</tbody>
</table>

Panel A: Window for WCER one day before bankruptcy to one day after

<table>
<thead>
<tr>
<th>( a_0 )</th>
<th>( a_1 )</th>
<th>( a_2 )</th>
<th>( a_3 )</th>
<th>( a_4 )</th>
<th>( \text{adj. } R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.20</td>
<td>0.14</td>
<td>-0.41</td>
<td>-0.22</td>
<td>-0.01</td>
<td>0.138</td>
</tr>
<tr>
<td>(-2.87(^{b}))</td>
<td>(2.65(^{b}))</td>
<td>(-3.81(^{b}))</td>
<td>(-2.95(^{b}))</td>
<td>(-0.15)</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: Window for WCER three days before bankruptcy to one day after

<table>
<thead>
<tr>
<th>( a_0 )</th>
<th>( a_1 )</th>
<th>( a_2 )</th>
<th>( a_3 )</th>
<th>( a_4 )</th>
<th>( \text{adj. } R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.32</td>
<td>0.15</td>
<td>-0.28</td>
<td>-0.24</td>
<td>0.09</td>
<td>0.145</td>
</tr>
<tr>
<td>(-4.49(^{b}))</td>
<td>(2.77(^{b}))</td>
<td>(-2.61(^{b}))</td>
<td>(-3.13(^{b}))</td>
<td>(0.97)</td>
<td></td>
</tr>
</tbody>
</table>

Panel C: Window for WCER five days before bankruptcy to one day after

Variable definitions:

- \( WCER \) = size-adjusted window cumulative excess return;
- \( GC \) = one if the firm received a going concern opinion prior to bankruptcy and zero otherwise;
- \( BKPROB \) = probability of bankruptcy, calculated from model 3 of Ohlson (1980, 121);
- \( CHPRICE \) = the size-adjusted cumulative excess return computed from 240 to two days prior to the filing of the last annual report prior to bankruptcy; and
- \( MKTNEWS \) = the cumulation of three-day excess returns surrounding the media's disclosure of financial difficulties occurring subsequent to the filing of the last annual report but prior to bankruptcy

\(^{b}\) Significance at the 0.01 level.

probability of bankruptcy, the market's reaction to the media's disclosure of financial difficulties prior to bankruptcy and changes in stock price prior to the issuance of the auditor's report, we find that GC opinions are useful in explaining excess returns occurring around bankruptcy filings. Regression results indicate that GC firms experience less negative excess returns than other firms in three-, five-, and seven-day windows surrounding bankruptcy filings.

Our findings may be considered in light of prior research on the usefulness of going concern opinions. Several studies have examined the information value of GC opinions by investigating excess returns occurring around the issuance of the auditor's report. The results of these studies have been mixed. The results of the present study are consistent with GC opinions having information value.

Our findings should be interpreted in light of potential limitations, which in turn point toward avenues for future research. First, common factors may underlie the issuance of a going concern opinion and the occurrence of bankruptcy. Audit qualification and bankruptcy filing are both choice variables. Both variables could be based in part on common factors which have been
omitted in our tests. In addition, the market may examine the financial information of the firm and assess a higher probability of bankruptcy for going concern firms, independent of the auditor. Although we attempt to identify the appropriate control variables in the regression test, it is still possible that our results could be confounded by omitted variables.

Second, our sample consists entirely of firms filing for bankruptcy. Obviously, the vast majority of firms do not face bankruptcy proceedings. While a sample of bankrupt firms is necessary for the present study, future research may investigate situations in which auditors issue GC opinions to firms that do not subsequently fail. A different methodology would be required from that used in the present study.

Finally, bankruptcy is not the only form of financial difficulty. Other forms of financial difficulty include default on debt obligations and negotiation with creditors to resolve financial problems. The association between going concern opinions and the market’s reaction to these alternative forms of financial distress is an interesting issue that could be examined in future research.

REFERENCES


