FIRMS' FINANCIAL CONDITIONS AND INVESTORS' PERCEPTION OF AUDITOR CHANGES

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INTRODUCTION

Investors' perception of auditor changes is an important issue for policy makers and practitioners alike. This topic has broad implications for understanding the dynamics of the market for audit services and the degree of competition in the auditing profession. Several academicians have conducted research in this topic. These research studies include Fried and Schiff (1981), Nichols and Smith (1983), Johnson and Lys (1990) and Klock (1994). They find no significant security price reactions to auditor changes.

A potential explanation for the insignificant results of these studies is that they investigate market reaction to auditor changes across *all* sample firms. One question of interest is whether there are significant systematic cross-sectional differences in security price reactions to auditor changes among firms that are associated with specific firm characteristics. The characteristic focused on in this study is a firm's financial condition measured by Z score (Altman & McGough, 1974).[1]

[1]This study uses Z score because the data are readily available, it is relatively easy to use, it seems to be reasonably understood, and it has been widely used in empirical research.

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This study proposes that market reaction to an auditor change depends on a firm's financial condition. Investors revise their expectations about a firm's future value based on a relation between a firm's financial condition and three perceived changes signalled by a change in auditor. These perceived changes are: (a) a change in audit quality, (b) a change in an auditor's ability to provide additional insurance, and (c) a change in a firm's future prospects.[2]

This study tests the following three hypotheses.

1. Financially troubled firms which change from a non-Big Eight auditor to a Big Eight auditor (NB) are hypothesized to experience more favorable stock price reactions than financially healthy firms that change auditors in the *same* direction.
2. Financially troubled firms which change of a Big Eight auditor to a non-Big Eight auditor (BN) are hypothesized to experience more unfavorable stock price reactions than financially healthy firms that change auditors in the *same* direction.
3. Financially troubled firms which make lateral auditor changes are hypothesized to experience no differential stock price reactions relative to financially healthy firms.

These hypotheses are tested using cross-sectional regression analysis. The dependent variable of the regression is a cumulative standardized prediction error. The independent variables are a financial condition variable and three control variables. These control variables are firm size, disagreement with a predecessor auditor, and management equity ownership. Results strongly support the hypotheses.

The next section develops a conceptual framework to support the hypotheses. Sample selection and announcement date identification are presented in the third section. The fourth section describes methodology. Results are presented in the fifth section and conclusions are stated in the sixth section.

CONCEPTUAL FRAMEWORK

This section is divided into two parts: (1) a relation between financial condition and investors' perception of an auditor change as a change in audit quality, in ability to provide insurance and in firm's future prospects and (2) control variables that may affect market reaction to an auditor change.

[2]Based on prior empirical evidence, a Big Eight auditor is used as a proxy for investors' perception of an auditor that (a) provides a higher quality audit, (b) is more able to provide additional insurance, and (c) provides a positive signal to investors about a firm's future prospects. For details, see Dopuch and Simunic (1982), Balver, McDonald, and Miller (1988), Francis and Wilson (1988), Palmrose (1988), Slovin, Sushka, and Hudson (1990), and Menon and Williams (1991). The Big Eight still existed during this study's sample period. Recently, the Big Eight have become the Big Six due to two mergers: Ernst & Whinney and Arthur Young (Ernst & Young), and Deloitte Haskins & Sells and Touche Ross & Co. (Deloitte & Touche).

A Relation Between Financial Condition and Investors' Perception of an Auditor Change

This study proposes that market reaction to an auditor change differs for firms with different financial conditions. This differential market reaction may be explained by a relationship between financial condition and the three aspects perceived to be changed. These aspects are perceived audit quality, perceived ability to provide additional insurance and a signal of a firm's future prospects.

Financial Condition and A Change in Perceived Audit Quality

Auditing is widely viewed as a means of reducing agency costs (Dopuch & Simunic, 1982; Watts & Zimmerman, 1983; Simunic & Stein, 1986; Defond, 1992). Differences in the levels of agency costs imply differences in the demand for audit quality. Audit quality is defined as the investor-assessed probability that an auditor will detect and report material financial statement errors or misrepresentations. Investors of firms with potentially higher agency costs may have greater demand for and greater benefits from higher quality audits than investors of firms with lower agency costs. One type of agency cost which concerns financial statement users and regulatory bodies is management's concealing the consequences of their self-serving behavior through misrepresentations in financial statements.

Several prior studies suggest that investors may assess higher prior probability that the financial statements are materially in error or misrepresented when firms are in financial difficulties. Kreutzfeldt and Wallace (1986) find that companies with liquidity or profitability problems have significantly more errors in their financial statements than do other companies. Kinney and McDaniel (1989, p.74) state that "management of firms in weak financial condition are more likely to window dress in an attempt to disguise what may be temporary difficulties."

The Report of the National Commission on Fraudulent Financial Reporting (1987, p.159) reveals that most instances of fraudulent financial reporting are detected when the company is experiencing financial difficulties. The Commission posits that fraudulent activities may be discovered more frequently during financial difficulties because investors increase their scrutiny over a company at those times.

Based on Simunic and Stein's (1986) analysis and the above empirical evidence, investors' demand for and benefits from higher quality audits should be greater among financially troubled firms than among financially healthy firms.[3] Therefore, a change from a perceived-higher-quality auditor (a Big Eight) to a perceived-lower-quality auditor (a non-Big Eight) is perceived as

[3]Simunic and Stein's analysis suggests a positive relation between the demanded level of auditor quality and investor-assessed probability that the financial statements are materially in error or misrepresented.

worse news for financially troubled firms than for financially healthy firms. As a result, financially troubled firms are hypothesized to experience more unfavorable market reaction to the change than financially healthy firms. On the contrary, a change from a perceived-lower-quality auditor (a non-Big Eight) to a perceived-higher-quality auditor (a Big Eight) is perceived as better news for financially troubled firms than for financially healthy firms. Thus, financially troubled firms are hypothesized to experience more favorable market reaction to the change than financially healthy firms. No differential price reaction should be observed among firms that make lateral changes because of no change in perceived audit quality.

Financial Condition and A Change in Perceived Ability to Provide Additional Insurance

Generally, investors perceive an auditor as a provider of additional insurance against the risk of loss due to business failure. This view is supported by both practitioners (e.g., Osharow, 1986, p.101) and academicians (e.g., Menon & Williams, 1994; Wallace, 1987; Schwarz & Menon, 1985).[4] Schwartz and Menon argue that failing firms may change auditors in order to obtain additional insurance against potential claimants in the event of financial loss from business failure. Larger CPA firms such as the Big Eight may be viewed by investors as having "deeper pockets" when it comes to providing this additional insurance (Schipper, 1991).

Because of their ability to distribute client risk over a greater number of clients, larger auditors can have comparative advantage over smaller audit firms in providing insurance in the eyes of investors. Investors would, therefore, view a change from a less-able-to-provide-insurance auditor (a non-Big Eight) to a more-able-to-provide-insurance auditor (a Big Eight) as good news, especially among financially troubled firms. As a result, price reactions to the change among financially troubled firms are hypothesized to be more favorable than among financially healthy firms. On the other hand, a change from a Big Eight to a non-Big Eight would be viewed as especially bad news for financially troubled firms. Therefore, financially troubled firms are hypothesized to experience more unfavorable price reactions to such change than financially healthy firms. No differential price reaction should be observed among firms that make lateral changes because there is no change in perceived ability to provide insurance of predecessor and successor auditors.

Financial Condition and A Perceived Change in Firms' Future Prospects

Prior studies (e.g., Eichenscher, Hagigi, & Shields, 1989; Johnson & Lys, 1990) argue that firms purchase audit services from the least-cost auditor and that an auditor change represents an efficient response to changes in clients' operations and activities over time. Because an audit fee is small compared to

[4]Recent court decisions suggest that the insurance role of auditors is increasing in importance (e.g., Schuetze, 1993; O'Malley, 1993; Lochner, 1993).

a client's equity value, any contemporaneous stock price reaction to an auditor change is likely to result from factors other than fee saving. One possibility is that an auditor change may convey information about a firm's future prospects. According to this argument, investors may perceive a change from a non-Big Eight to a Big Eight as a positive signal about a firm's future prospects. A change from a non-Big Eight to a Big Eight auditor among financially troubled firms may be unexpectedly good news for investors. This change signals to investors that these financially troubled firms have better future prospects than expected, and that the financial difficulties surrounding these firms will soon be over. Therefore, market reaction to this change among financially troubled firms is hypothesized to be more favorable than reaction to the change among financially healthy firms.

On the other hand, a change from a Big Eight to a non-Big Eight auditor among financially troubled firms may be viewed by investors as especially bad news. The change conveys to investors that these financially troubled firms have much dimmer future prospects than expected. Investors may perceive that a Big Eight auditor is not willing to accept these firms. Therefore, financially troubled firms are hypothesized to have more unfavorable market reaction to this auditor change than financially healthy firms.

For lateral auditor changes, no differential price reaction should be observed between financially troubled vs. financially healthy firms because investors may not perceive lateral auditor changes to convey any information about firms' future prospects.

Control Variables

In the earlier discussion, a firm's financial condition is hypothesized to be a potential explanatory variable for the cross-sectional variation in market reactions to auditor changes. However, other factors may also contribute to the variation in the market reactions. In order to test the relationship between financial condition and market reactions to auditor changes, it is necessary to control for these factors. Because there is no existing theory as to which variables are to be controlled, the selection of control variables is based on arguments in previous studies or prior empirical evidence. These control variables are firm size, disagreement with a predecessor auditor and management equity ownership.

Firm Size

The use of firm size is based on the insurance role of auditor (e.g., Wallace, 1987; Schwartz & Menon, 1985). Size is likely to be positively related to the amount of alleged damages. Larger firms are likely to face larger dollar amount of damages than smaller firms because the damages are based on stock value (Kellogg, 1984). This suggests that investors may expect larger firms to associate with more-able-insurance-provider auditors, i.e., the Big Eight auditors, rather than non-Big Eight auditors. This implies that larger firms should experience more favorable (more unfavorable) price reactions to

NB (BN) auditor changes than smaller firms. For lateral auditor changes, an estimated coefficient of this variable is not expected to differ from zero because of no perceived significant changes in the ability to provide insurance between predecessor and successor auditors.

Disagreement with A Predecessor Auditor

Using matched-pair design, Smith and Nichols (1982) find a significant negative market reaction in the week that form 8-K's were filed with the SEC for firms that had disagreements with their predecessor auditors. This suggests that the disagreements can negatively affect stock prices of firms that changed auditors in any direction (NB, Lateral or BN).

Management Equity Ownership

Two contrasting arguments related to management equity ownership are offered. The first one is the control feature of management ownership advanced by Demsetz (1983), and Fama and Jensen (1983a, 1983b). They point out that high levels of management ownership can lead to management "entrenchment" because control challenges are difficult to mount by outside stockholders. Eichenseher et al. (1989) test this argument in the context of auditor changes. They find that firms with higher levels of management ownership (≥50%) have less favorable price reactions to auditor changes than firms with lower levels of management ownership (<50%).

The second argument is the incentive feature of management ownership, which is fundamental to the contemporary theory of the firm (e.g., McConnell & Servaes, 1990; Morck, Shleifer, & Vishny, 1988). This argument predicts that management's interests will align more closely with those of outside shareholders as management's equity ownership increases. In other words, more management equity ownership leads to more incentive for managers to pursue value-maximizing behavior. The finding of Warfield, Wild, and Wild (1993) regarding a positive relationship between the informativeness of earnings and managerial ownership supports this argument. Thus, from an incentive perspective, one would expect firms with higher level of management ownership to comply more with residual value maximization regarding an auditor selection than firms with lower level of management ownership. Consequently, firms with higher level of management ownership should have more favorable price reaction to an auditor change than firms with lower level of management ownership.

Since the predictions of these two management ownership arguments are different, the sign of the management ownership variable depends on investors' perception of the relative importance of the control feature versus the incentive feature. This variable is expected to have a positive (negative) sign if the incentive (control) feature outweighs the control (incentive) feature. Since earlier studies (e.g., Morck et al., 1988) find a nonlinear relationship between management ownership and cumulative abnormal return, this study also investigates this issue. Our finding is consistent with prior studies.

To account for this nonlinear relationship, the logarithm of managerial ownership is used.

SAMPLE SELECTION AND ANNOUNCEMENT DATES

Sample Selection

A sample of firms that changed auditors between January 1980 and December 1988 was collected from *Who Audits America* (Data Financial Press, 5th. Ed. thru 21st Ed.). The final sample is comprised of 158 firms (26 listed firms and 132 OTC firms) that changed from a Big Eight auditor to a non-Big Eight auditor (BN), 163 firms (27 listed firms and 136 OTC firms) that made lateral auditor changes, and 174 firms (29 listed firms and 145 OTC firms) that changed from a non-Big Eight to a Big Eight auditor (NB). For the BN and the NB groups, all BN and NB firms during the period were collected and the sample selection criteria below were applied. For the lateral group, firms were randomly collected over the nine-year period and then screened by the sample selection criteria.[5] These criteria are listed below.

1. A firm has its daily security returns available on CRSP tape during the announcement of auditor changes and for at least 100 days in the market model estimation period (to be described).
2. The auditor change involves a firm's principal auditor rather than an auditor of a subsidiary.
3. The auditor change is not a result of an acquisition, i.e., a firm is excluded if it was acquired by another firm in the year of the auditor change and the new auditor is the acquiring firm's auditor.
4. There were no contemporaneous 8-K disclosures other than financial statements and exhibits. Contemporaneous 8-K disclosures were identified through the SEC News Digest.
5. A firm must have an 8-K report and must report the name of its successor auditor on the 8-K.
6. A firm did not disclose its earnings, dividends, stock splits or any other material events during the announcement period.[6]

Announcement Dates

An identification of the announcement date (the date that investors are *first* aware of an auditor change) is described in four steps.

[5]Because 8-K reports about auditor changes were purchased for each firm that passed the selection criteria #1 thru #5 below, the cost of purchasing the reports would have been unaffordable if *all* lateral firms during the period had been collected.

[6]Material events are events that may significantly affect stock prices, e.g, management forecast of earnings, a change in bond rating, a proposal to acquire another firm, news about research and development, etc. The WSJ Index and the Predicasts F & S Index are used to identified these potentially confounding events.

1. The Wall Street Journal (WSJ) Index was examined for auditor change news.
2. 8-K reports describing changes in the registrants' certified accountants are used to identify the dates that firms engaged new auditors and the dates firms filed the reports with the Securities and Exchange Commission (SEC). The engagement date always precedes the 8-K filing date.[7]
3. If the engagement date is the date the auditor change was ratified at an annual stockholders' meeting, a proxy statement distributed prior to the 8-K filing date was examined for auditor change. The announcement date is the *earlier* between the WSJ date and the proxy statement filing date.
4. If the engagement date is other than the annual stockholders' meeting date, e.g., the date an auditor was hired or a board of directors meeting date, the announcement date is the *earlier* between the WSJ date and the 8-K filing date.[8]

The announcement date identification indicates that: (a) most announcement dates (94%) are the 8-K filing dates, (b) proxy statement filing dates are announcement dates of 22 firms (4.4%), and (c) firms rarely disclose auditor changes in the WSJ (only eight firms, 1.6%, have auditor-change news in the WSJ). These eight firms with auditor change news in the media have higher rate of auditor disagreements (50%) than other sample firms (6%). No significant difference in other aspects exists among these three groups of sample firms.

METHODOLOGY

Hypothesis testing is performed at an individual-firm level by using cross-sectional regression analysis. The dependent variable of the regression is a cumulative standardized prediction error and the independent variables are a financial condition variable (Z score) and three control variables.

This section is divided into two parts. The first part describes a measurement of the cumulative standardized prediction error. The regression model is presented in the second part.

[7]Since 1971, the SEC has required publicly-held companies to file 8-K reports within 15 calendar days after a change in the registrant's certified accountant. Recently, the SEC adopted a rule to cut the time period for filing an 8-K report to 5 business days after the change, effective May 1, 1989.

[8]The engagement date is not used as an announcement date because the public is not aware of this date until firms file 8-K reports with the SEC.

Measurement of the Cumulative Standardized Prediction Error

The cumulative standardized prediction error is calculated based on daily excess returns generated from the single-factor market model (Fama, 1976). The market model is estimated by ordinary least-squares (OLS) method over the period from t= –10 to t = –129 where day t = 0 is the auditor-change announcement date. The estimated coefficients are used to form the expected security returns with resulting prediction errors (PE_{it}) during the announcement period, day t= –1 and day t= +1.

$$PE_{it} = R_{it} - (a_i + b_i R_{mt}) \qquad t = -1, +1 \qquad (1)$$

where:

R_{it} = CRSP daily returns of firm i at day t.
R_{mt} = CRSP daily returns on the value-weighted market index at day t.
a_i, b_i = estimated market model coefficients.

Following Patell (1976), the prediction error, PE_{it}, is standardized by the square root of the estimated residual variance to form a standardized prediction error, SPE_{it}, which is distributed as a Student t-statistic with T-2 degrees of freedom:

$$SPE_{it} = PE_{it} \Big/ \left(S_i * (C_{it})^{.5} \right) \sim t(T-2) \qquad (2)$$

where:

$$S_i = \left(\left(\sum_{t=1}^{T} e_{it}^2 \right) \Big/ (T-2) \right)^{.5}$$

$$C_{it} = 1 + 1/T + (R_{mt} - R_m)^2 \Big/ \sum_{t=1}^{T} (R_{mt} - R_m)^2$$

$$R_m = (1/T) \sum_{t=1}^{T} R_{mt}$$

e_{it} = residual of firm i at day t from the estimated market model.
T = number of days in the estimation period (120 days)

For each security i, the standardized prediction errors during the announcement period (–1, +1) are summed to form a cumulative standardized prediction error $CSPE_{iL}$, where L is a number of days in the announcement period (three days). $CSPE_{iL}$ is also distributed as a Student t statistic with t-2 degrees of freedom:

$$CSPE_{iL} = \sum_{t=1}^{L} PE_{it} \Big/ \left(S_i * (LC_{it})^{.5} \right) \sim t(T-2) \qquad (3)$$

Regression Model

A regression model is estimated by the OLS method for each of the three groups of auditor changes (NB, Lateral and BN).[9] The regression model is specified below.

$$CSPE_{iL} = a + b_1(FIN_i) + b_2(SIZE_i) + b_3(DIS_i) + b_4(OWN_i) + u_i \qquad (4)$$

where:

$CSPE_{iL}$ = cumulative standardized prediction error for firm i over the announcement period L,
FIN_i = Financial condition measured by Z score,[10]
$SIZE_i$ = natural log of the market value of common stock for firm i,[11]
DIS_i = disagreement with predecessor auditor, 1 if a firm had the disagreement and 0 otherwise,
OWN_i = natural log of management equity ownership,[12]
u_i = an error term.

Based on earlier discussion, b_1 is expected to be negative for the NB change and positive for the BN change, b_2 is expected to be positive for the NB change and negative for the BN change. For the lateral change, b_1 and b_2 are not expected to be significantly different from zero. For all three groups of auditor change, b_3 is expected to be negative, and b_4 is expected to be positive if the incentive feature outweigh the control feature and negative otherwise.

[9]The OLS method is likely to produce inconsistent cross-sectional estimators due to the truncated residual problem if these three conditions exist: (a) an economic event is voluntary, (b) investors are rational, and (c) managers can be reasonably assumed to maximize their stock's true value (Eckbo, Maksimovic, & Williams, 1990). An alternative to the OLS is a model of limited dependent variables which relies on the maximum likelihood estimation to derive consistent estimators. Although, an auditor change is a voluntary event and investors are likely to be rational, it may not be reasonable to assume that managers maximize their stock's true value in this context. This is because auditor changes are frequently motivated by factors unrelated to stock's true value maximization. These factors include personal relationship between managers and auditors, regular rotation policy, disputes over accounting principles, failure to pay audit fees and audit opinion shopping (Schwartz & Menon, 1985). Because this important condition is not met, the use of OLS in the context of auditor changes should not produce inconsistent estimators and inferences based on these estimators should not be affected.

[10]Lower Z score means worse financial condition. The elements of Z score with their associated weightings (in parentheses) are as follow: working capital/total assets (.012), retained earnings/total assets (.014), earnings before interest and taxes/total assets (.033), market value of equity/book value of total debt (.006), and sales/total assets (.010).

[11]The market value of common stock is computed as the number of common shares outstanding times the stock price per share. There are two reasons for using the market value of stock rather than the total assets to measure firm size. First, the market value of stock is widely used in prior studies as a proxy for firm size (see Cho & Jung, 1991, p. 97 for a list of these studies). Second, as discussed in the control variables section, size is likely to be positively related to the amount of alleged damages in class action lawsuits, and these damages are based on stock prices. Therefore, the market value of stock is likely to be a better proxy for firm size in the context of auditor changes.

[12]Sources of management equity ownership are 10-K reports and proxy statements.

RESULTS

Table 1 presents frequencies and means of the variables in the cross-sectional regression model for the three groups of auditor changes (NB, lateral and BN). The results indicate a positive but insignificant market reaction (CSPE) to the NB changes and a negative but insignificant market reaction to the lateral changes. Market reaction to the BN changes is negative and statistically significant. Although the market reaction to the NB changes is, on average, greater than the reaction to the lateral and the BN changes, these reactions are not statistically different from one another. This finding is consistent with prior studies. In addition, there is no significant difference among these three groups with respect to financial condition, firm size, and management equity ownership. The only significant difference is that the BN group has more incidents of disagreements with auditors than the NB and the lateral groups.[13]

Table 2 reports the estimated cross-sectional regression model for each of the three groups of auditor changes. The coefficients of the financial condition variable for both NB and BN firms have expected signs and are statistically significant at < 0.01 level. Thus, the hypotheses that financially troubled NB (BN) firms experience more favorable (more unfavorable) price reactions than financially healthy NB (BN) firms are confirmed. The financial condition coefficient for lateral firms is not statistically different from zero. This confirms the hypothesis that financially troubled firms which make lateral auditor changes experience no differential stock price reactions relative to financially healthy firms.

Results with respect to the control variables suggest that size has statistically significant coefficient of NB and BN firms (at < 0.05 level). These results suggest that the market seems to consider firm size in assessing the relative insurance-providing ability of predecessor vs. successor auditors. Another control variable which is statistically significant is management equity ownership. Firms which have higher management ownership seem to have more favorable price reactions than firms with lower management ownership (statistically significant at < 0.05 level for all three groups). These findings imply that, in the context of auditor changes, the incentive feature of management ownership seems to outweigh the control feature. The findings do not confirm those in Eichenseher et al. (1989). Results with respect to disagreement also do not confirm the findings of Smith and Nichols (1982). These result differences may be due to differences in control variables. Smith and Nichols employ matched-pair design based on the direction of auditor change (BN, Lateral or NB). Eichenseher et al. does not control for any variables. Both studies do not control for financial condition which is significantly related to investors' perception of an auditor change.

[13]Nonparametric (Kruskal-Wallis) tests provide virtually the same inferences.

TABLE 1

Frequencies or Means of Variables in Equation (4)

Variables	NB (174 firms)	Lateral (163 firms)	BN (158 firms)	F-Statistic
CSPE[a]	0.0517	-0.0383	-0.1421	2.0261
FIN[b]	1.2188	1.2065	1.0733	1.8782
SIZE[c]	16.3070	16.5041	15.8703	1.7643
DIS[d]	6 (3%)	6 (4%)	20 (13%)	5.3321***
OWN[e]	3.2632	3.3102	3.3862	1.4539

[a]Mean three-day cumulative standardized prediction error.
[b]Mean of financial condition measured by Z-score.
[c]Mean of firm size (natural log).
[d]A number and a percentage of firms having disagreement with predecessor auditors.
[e]Mean of natural log of percentage of management equity ownership.
***Two-tail test: statistically significant at < 0.01.

TABLE 2

Estimated Coefficients of Equation (4)
for the Three Groups of Auditor Changes.

$$CSPE_{iL} = a + b_1(FIN_i) + b_2(SIZE_i) + b_3(DIS_i) + b_4(OWN_i) + u_i$$

Variables	NB (174 firms)	Lateral (163 firms)	BN (158 firms)
INTERCEPT	-0.6676	0.6754	0.7226
	(-0.542)	(0.735)	(0.679)
FIN	-0.5841	-0.2522	0.5463
	(-2.437)***	(-1.291)	(2.767)***
SIZE	0.4177	0.2058	-0.4226
	(1.981)**	(1.013)	(-1.995)**
DIS	-0.0565	-0.1532	-0.1280
	(-0.090)	(-0.309)	(-0.244)
OWN	0.5912	0.4821	0.5638
	(2.187)**	(1.684)**	(2.049)**
R2	0.0982	0.0573	0.0924
F statistic	4.6008****	2.4011**	3.8941****

**One-tail test: statistically significant at < 0.05.
***One-tail test: statistically significant at < 0.01.
****One-tail test: statistically significant at < 0.005.

Three diagnostic tests are performed to check the robustness of the regression results. The first two tests investigate outliers and collinearity among independent variables. Both tests are based on Belsley, Kuh, and Welsch (1980). These tests indicate no outlier or collinearity problems. The third test uses the mean-adjusted return model to measure the abnormal returns. Brick, Statman and Weaver (1989) find that the magnitude of abnormal returns and their statistical significance are sensitive to the specification of return models. They suggest that the mean-adjusted return model can serve as an independent check on the results obtained from the other models because it does not depend on any measure of the market portfolio. Inferences based on the mean-adjusted return model are virtually the same as those reported earlier.

CONCLUSIONS

This study investigates the relationship between financial condition and investors' perception of an auditor change as a change in audit quality, a change in an auditor's ability to provide additional insurance and a change in signal of firms' future prospects. Subject to limitations that may be due to sample sizes, selection criteria, and assumptions underlying the model specifications, empirical results suggest that financially troubled firms which change auditor from a Big Eight (a non-Big Eight) to a non-Big Eight, (a Big Eight) experience more unfavorable (more favorable) price reaction than financially healthy firms that change auditors in the *same* direction. These results suggest that investors consider a firm's financial condition in reacting to an auditor change. This differential market reaction with respect to financial condition exists only when predecessor and successor auditors are perceived to differ in terms of their audit quality, their ability to provide additional insurance, and their signal about a firm's future prospects.

The evidence provided in this study should add to our understanding about the dynamics of the market for audit services. A basic implication is that future empirical research related to investors' perception of auditor changes should control for sample firms' financial conditions.

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