

Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)

Volume 2
Number 1 *Journal of Business & Leadership*

Article 5

1-1-2006

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Recommended Citation

Grover, Jeff and Lavin, Angeline (2006) "Opinion On Independent Auditors' Opinions of Substantial Doubt: A Nasdaq Non-Compliance Evaluation," *Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)*: Vol. 2: No. 1, Article 5.

DOI: 10.58809/RDLQ2647

Available at: <https://scholars.fhsu.edu/jbl/vol2/iss1/5>

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OPINION ON INDEPENDENT AUDITORS' OPINIONS OF SUBSTANTIAL DOUBT: A NASDAQ NON-COMPLIANCE EVALUATION

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Allegations of ethical conduct in violation of Sarbanes-Oxley (SOX)-2002 continue. As the investment community and the public witness the trials and convictions of several corporate executives, the impact of the Independent Auditor's Opinion (IAO) cannot be understated. This source of unbiased evaluation of a firm's ability to remain as a going-concern is clearly essential. This paper assumes that the IAO contains new information that is useful in evaluating the sustainability of a firm. In this paper, an event study is performed to assess the information content in stock returns prior to and following the IAO announcement week for a group of firms that received non-compliance notification from the NASDAQ. The empirical results strongly suggest that there was minimal information content contained in the stock returns of the firms studied in the period prior to the IAO announcement week. However, significant information content was evident following the announcement. Our results empirically suggest that the information content contained in equity returns did not suggest de-capitalization effects were occurring prior to independent auditor evaluation of the firm's financial information.

INTRODUCTION

Allegations of ethical conduct in violation of Sarbanes-Oxley (SOX)-2002 continue. As the investment community and the public witness the trials and convictions of several corporate executives, the impact of the Independent Auditor's Opinion (IAO) cannot be understated. This source of unbiased evaluation of a firm's ability to remain as a going-concern is clearly essential. This paper assumes that the IAO contains new information that the investment research community can use to assist in evaluating business sustainability and market effects. The purpose of this study is to determine if a firm's equity market value suggests de-capitalization effects prior to the release of the IAO. If de-capitalization is occurring, the auditors should take it into account when the IAO is issued. The motivation behind this empirical research is to evaluate one potential source of bias in IAOs and to continue to further the development of the important but sparse literature evaluating the credibility of the IAO post-SOX-2002.

The contribution of this study is its unique examination of the role of the IAO in evaluating non-compliant NASDAQ firms that are subject to delisting due to low liquidity standards. We evaluate the period of time prior to the publication of the respective IAO to determine if de-capitalization effects were significant. An event study is performed to assess the information content in stock returns prior to and following the IAO announcement week for a group of firms that received

non-compliance notification from the NASDAQ. The empirical results strongly suggest that there was minimal information content contained in the stock returns in the period prior to the IAO announcement week. However, significant information content was evident following the IAO announcement. This is plausible due to the fact that in this post announcement period these firms received non-compliance notification from the NASDAQ. This does not affect the findings of this study because the purpose of this research is to determine if de-capitalization effects occurred in the pre-announcement period.

Our conclusions empirically suggest that the information content contained in equity returns did not suggest de-capitalization effects were occurring prior to the independent auditors' evaluations of these firms' fundamental financial information. Independent auditors did evaluate four firms with opinions of substantial doubt and 20 with going concern opinions. Their success factor in determining the ability of these types of firms to remain as going concerns and not receive NASDAQ non-compliance notification for bid price infractions was 16.67%.

LITERATURE REVIEW

Literature evaluating the credibility of the Independent Auditors' Opinion (IAO) post-Sarbanes-Oxley is sparse but developing. This study attempts to expand this specific body of knowledge with a goal of

evaluating the continued effects of the implementation of SOX-2002 as a warning tool to business stakeholders. As corporate ethical issues continue to occur, there is an obligation on the academic community to ensure that stockholders are being properly warned of impending firm liquidity issues. To ensure this occurs, the independent auditor should continue to provide unbiased firm evaluations.

Role of the IAO

This literature review will briefly discuss research conducted on the role of the IAO prior to SOX-2002 and following SOX-2002 as well as recent applicable work on the event study methodology. Prior to the passage of Sarbanes-Oxley in 2002, research conducted on the role of the IAO evaluated the Statement of Auditing Standards (SAS) No. 59. Koh (1991) found that management ability and future plans as well as misclassification costs, which were introduced by SAS No. 59, could affect the probability of a firm continuing as a going concern. Grice (2000) supported this and found that prediction models continued to outperform auditors at signaling impending failure post-SAS No. 59. In addition, he found that the increased responsibility imposed by SAS No. 59 did not affect the efficiency or accuracy of an auditor's opinion of the going concern issue. Raghunandan and Rama (1995), Carmichael and Pany (1993), and Ellingsen, Pany, and Fagan (1989) justified the use of SAS No. 59 as a screening criterion for auditor opinions. These studies reported the effects of the guidance provided by the Auditing Standards Board (ASB) and reported on Congressional criticisms of the relationship between the auditor and management. Raghunandan and Rama (1995) suggested that going concern modified reports were significantly more likely to be issued in the post-SAS No. 59 period than pre-SAS No. 59 and suggested that SAS No. 59 had a significant positive effect on the auditor's report of firms in financial distress. In addition, they concluded that the efforts of the ASB in issuing SAS No. 59, which contained additional guidance to auditors in identifying firms having substantial doubt, were successful. LaSalle and Anandarajab (1996) found differences in the evaluation of partners from Big 6 accounting firms versus those of non-Big 6 firms regarding the importance given to good and bad news characteristics, internal control items, and financial ratios. Geiger, Raghunandan, and Rama (1998) found no differences in bankruptcy probability during the period prior to and after the issuance of SAS No. 59. This brief discussion illustrates that the research regarding the

effectiveness of SAS No. 59 yields mixed results about the impact of SAS No. 59 on the IAO issuance.

After SOX-2002 was passed, the focus of the research on the role of the IAO changed to evaluation of the effectiveness of the SOX-2002 legislation. Citron and Taffler (2004) found that the language required when issuing a going concern opinion impacted the willingness of auditors to issue going-concern opinions. Grover and Lavin (2005) evaluated the post-IAO period to determine whether the probability that a firm with a substantial doubt rating would actually file for bankruptcy was greater than by chance occurrence. The results suggested that a substantial doubt opinion is an effective tool for signaling bankruptcy migration. Grover (2005) evaluated the cumulative abnormal returns (CARs) of NASDAQ and NYSE firms post-IAO. Firms with substantial doubt ratings were found to experience no significant abnormal returns for a 23-week event period subsequent to the IAO of substantial doubt. However, the results showed that returns became significant during the following 12-week period, from week 23 until week 35. These results suggest that there was no significant information effect associated with a substantial doubt opinion during the first 23-week period following the IAO issuance.

Event Studies

According to Bhagat and Romano I (2002), event studies are among the most successful uses of econometrics in policy analysis because they allow for the measurement of the impact of an event. The methodology, which was first used to study the efficient markets hypothesis, is well accepted and extensively used in financial research. It has been used to study a variety of corporate finance issues, from the impact of stock splits and earnings releases on investor wealth to the relation between stock price and accounting information. The current study falls into the latter category because it is a study of the relationship between changes in stock price and issuance of the IAO.

Bhagat and Romano II (2002) discuss the application of the event study methodology to corporate law and corporate governance issues in an attempt to illustrate how the methodology can be applied to other fields of law. They suggest that there have been more event studies on takeovers than on any other topic. Indeed there has been much recent event study work in the area of mergers and acquisitions. Campa and Hernando (2004) analyze shareholder value creation associated with merger and acquisition announcements in the European Union from 1998-2000 and find that target firm

shareholders receive a positive cumulative abnormal average return during a one-month window following the announcement date while acquirers' returns are null or average. Kohers and Kohers (2000) find that acquirers of high-tech firms in the US experience positive abnormal returns. Event studies have also been used to study the market reaction to product recalls, such as the recall of Firestone Tires by the Bridgestone, which were linked to rollover accidents of Ford Explorers. Govindaraj and Jaggi (2004) found that the market initially overreacts negatively to recall news, and the reaction is corrected as more information becomes available.

The event study literature continues to evolve, and researchers are continually applying the methodology to study new questions including policy and regulatory questions, such as corporate governance issues. The literature with respect to the role of the IAO is sparse but developing. This study attempts to expand the specific body of knowledge with a goal of evaluating the continued effects of the implementation of SOX-2002 as a warning tool for firm stakeholders using the event study methodology. As corporate ethical issues continue to occur, there is an obligation on the academic community to ensure that the stockholder is being properly warned of impending firm liquidity issues. To ensure this occurs, the independent auditor must continue to provide unbiased evaluations.

METHODOLOGY

Event study methodology enables one to use stock market data to measure changes in firm value surrounding a specific event that releases new information to the market. The method allows for measurement of the immediate effect on a security's price following the event and extending across a relatively short period of time. Mackinlay (1997) surveyed the event study literature and proposed a concise protocol for its implementation, which this study follows.

This study defines the announcement event as the end of a firm's fiscal year prior to NASDAQ delisting notification. This is the event week. The event evaluation period begins 12 weeks prior to and extends for 12 weeks past the end of fiscal year. During this event period, IAOs will have been filed. We use the end of the week closing stock prices, adjusted for stock splits and dividends, to calculate natural log returns. To capture the price effects of the announcement, the event window includes the cumulative available stock prices prior to the announcement week to allow for evaluation of periods surrounding the event. The period prior to the

announcement will also be evaluated to determine if there was information leakage. The goal of this work is to seek insights that will help both researchers and practitioners better understand the sources and causes of the effects (or lack of effects) during the period following an announcement event.

Data

The NASDAQ publishes a List of Non-Compliant Companies each trading day. This list is cumulative and includes all listed NASDAQ companies that are currently non-compliant with continued listing standards such as current market value, equity, net income, filing delinquency status, committee composition, bid price, etc. We randomly selected May 11, 2006 as the study date and evaluated the listed companies with non-compliant bid prices as of that date. The list of non-compliant companies can be found at <http://www.nasdaq.com/about/LegalCompliance.stm> under the "List of Non-Compliant Companies" heading. The date that each firm received notification of non-compliance is included in this document. The report is cumulative and the selection date for the study (May 11, 2006) is not significant. Once a firm appears on the List of Non-Compliant Companies, it remains there until it regains compliance or no longer trades on the NASDAQ.

Bid prices were selected to evaluate de-capitalization/liquidity issues. De-capitalization constraints can be captured through statistical (event study) methodology by evaluating negative abnormal returns surrounding the event week. The event week is defined to be the last week of the firm's fiscal year, and the IAO announcement occurs during that week. The information content in the 12 weeks preceding the published dates of the IAOs was of interest. Only firms that had been cited for possible delisting due to de-capitalization potential prior to the end of the fiscal year IAO announcement were selected. The limitation of this data set is that the List of Non-Compliant Companies is updated on a daily basis and historical records are not publicly available from the NASDAQ. In essence, the data set represents the population of NASDAQ firms that, as of May 11, 2006, had been notified as having bid price deficiencies but were still listed on the NASDAQ. If a firm is subsequently de-listed or regains compliance, it will no longer be reflected in the reporting process. A potential bias inherent in this data set is that only firms that have been cited for possible de-listing due to the potential for de-capitalization prior to the end of the fiscal year announcement event are included in the data.

Method

Abnormal returns (ARs) are defined as the ex-post security return over the event window minus the normal return on the firm across the event window. The normal return is defined as the expected return without conditioning on the event. The ARs are used to evaluate the impact of equity market capitalization effects. For firm i , the AR is:

$$AR_{it} = R_{it} - E(R_{it} | X_t) \quad (1)$$

where AR_{it} , R_{it} , and $E(R_{it} | X_t)$ are the abnormal, actual, and normal returns, respectively for the time period t ; and X_t is the conditional information for the normal return model.

The estimation window is the period preceding the event window. We estimate the market model parameters over 12 weeks prior to the event, over the event week, and then 12 weeks following the announcement week. The event week is not included in the estimation period to prevent the event from influencing the normal performance model parameter estimation. These estimates are used to calculate ARs.

The empirical question of this study is to determine if de-capitalization occurred during the period prior to the event, which is defined as the appearance of the firm on the Listing of Non-Compliant firms. The goal is to determine if the auditors were correct in assessing the firm's ability to remain as a going concern for 12-18 months subsequent to the filing of the respective 10-K reports. The existence or lack of significant abnormal returns over the proposed event window will determine the effects, if any, during this time period. The null hypotheses are that these ARs are zero across each time period, t .

Current Event Study

As previously explained, the NASDAQ publishes a list of Non-Compliant companies each trading day. We randomly selected May 11, 2006 as the study date and evaluated those companies with non-compliant bid prices as of the respective notification date indicated in the NASDAQ report. The information content in the 12 weeks prior to the published dates of the IAOs is of interest. The question is, do significant equity de-capitalization effects exist during this event window and prior to the release of NASDAQ notification? Event studies provide an excellent and proven tool for

examining the information content contained in the proposed post end of fiscal year period.

Filing of 10-K Annual Reports and Independent Auditor Opinions

The objective is to investigate the information content of the event window to determine if IAOs of these firms are as "going-concerns" or of "substantial doubt" and if the market is aware of these events prior to the release of the IAO. If the market was aware of these events, the next question is whether these firms were losing equity capitalization prior to and during the event window. The third question is whether the independent auditor realized the effects of the market de-capitalization at the time of the release of their opinions. If de-capitalization was occurring, was it reflected in the IAO opinions? Thus, this paper focuses on the event window beginning with the IAO and preceding 24 months.

As explained previously, there are 24 firms and 24 announcements in the available 2006 data. For each firm, two pieces of information are compiled: (1) the date of the end of fiscal year and (2) the closing weekly stock prices, adjusted for dividends and splits. From this information, stock returns are computed using the natural log format. The source of the stock data is Fasttrack.

If an independent auditor gives a firm a going concern opinion, we would not expect stock de-capitalization effects prior to this announcement. If de-capitalization were occurring simultaneously, then one would also expect the independent auditor to observe this effect and investigate its origin. To facilitate the examination of the impact of the IAO of substantial doubt, it is essential to posit the relationship between the information present during the three months following the end of the fiscal year, during which time annual 10-K reports are being prepared and completed, on the change in the firm's equity capitalization. To capture this association, each IAO must be determined as either having substantial doubt or as a going concern. There were four substantial doubt and 20 going concern opinions in the 24-firm data set. The next step is specification of the parameters of the empirical design to analyze the equity return, or the change in the value of equity. It is also necessary to specify a length of observation interval, an event window, and an estimation window. The interval is set to one week, and weekly stock returns are the unit of measurement.

The approach taken to calculate the normal return is statistical in lieu of econometric, i.e., using the capital asset pricing model. This statistical category follows from

statistical assumptions concerning the behavior of asset returns and does not depend on econometric variables. We assume that asset returns are jointly multivariate normal and independently and identically distributed through time.

Market Model

The market model is a statistical model that relates a security's return to a market portfolio return. Its linear specifications follow from the assumed joint normality of asset returns. Given, for any security i , the market model is:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (2)$$

where $E(\varepsilon_{it} = 0)$ and $\text{var}(\varepsilon_{it}) = \sigma_{\varepsilon_i}^2$ and where R_{it} and R_{mt} are the period- t returns on security i and the market portfolio, respectively, and ε_{it} is the zero mean disturbance term. α_i , β_i , and $\sigma_{\varepsilon_i}^2$ are market model parameters. Because the study uses data on NASDAQ listed firms, the NASDAQ Composite Index is used to compute the normal market model performance return.

Measuring and Analyzing Abnormal Returns

Returns are indexed in event time using τ . Defining $\tau = 0$ as the event week, $\tau = T_1 + 1$ to $\tau = T_2$ represents the event window, and $\tau = T_0 + 1$ to $\tau = T_1$ represents the estimation window. The estimation and event lengths are $L_1 = T_1 - T_0$ and $L_2 = T_2 - T_1$, respectively. This approach facilitates the use of ARs around the event week. Figure 1 diagrams this system. It is typical for the estimation window and the event window to not overlap because this provides estimators for the parameters of the normal return model which are not influenced by returns surrounding the event. The goal is to increase the robustness of the normal market return measure to gradual changes in its performance.

Market Model Estimation

Generally, ordinary least squares (OLS) is a consistent and effective estimation procedure for market model parameters. For the i th firm in event time, the OLS estimators (beta, alpha and variance) of the market model parameters for an estimation window of observations are:

$$\hat{\beta}_i = \frac{\sum_{\tau=T_0+1}^{T_1} (R_{i\tau} - \hat{u}_i)(R_{m\tau} - \hat{u}_m)}{\sum_{\tau=T_0+1}^{T_1} (R_{m\tau} - \hat{u}_m)^2} \quad (3)$$

$$\hat{\alpha}_i = \hat{u}_i - \hat{\beta}_i \hat{u}_m \quad (4)$$

$$\hat{\sigma}_{\varepsilon_i}^2 = 1/L_1 - 2 \sum_{\tau=T_0+1}^{T_1} (R_{i\tau} - \hat{\alpha}_i - \hat{\beta}_i R_{m\tau})^2 \quad (5)$$

where $\hat{u}_i = 1/L_1 \sum_{\tau=T_0+1}^{T_1} R_{i\tau}$ is the average return on the security (6)

and $\hat{u}_m = 1/L_1 \sum_{\tau=T_0+1}^{T_1} R_{m\tau}$ is the average return on the market (7)

$R_{i\tau}$ and $R_{m\tau}$ are the returns in the event period τ for security i and the market model, respectively.

Statistical Properties of Abnormal Returns

Given the market model parameters in Equations (3) – (7), we measure and evaluate ARs. Given, $AR_{i\tau}$, $\tau = T_1 + 1, \dots, T_2$ as the sample of L_2 ARs for firm i in the event window and using the market model to measure the normal return, the sample AR is given as:

$$AR_{i\tau} = R_{i\tau} - \hat{\alpha}_i - \hat{\beta}_i R_{m\tau} \quad (8)$$

The AR is the disturbance term of the market model calculated on a sample basis. Under the null hypothesis, conditional on the event window market returns, the ARs are jointly normally distributed with a zero conditional mean and conditional variance $\sigma^2(AR_{i\tau})$ where:

$$\sigma^2(AR_{i\tau}) = \sigma_{\varepsilon_i}^2 + 1/L_1 \left[1 + \frac{(R_{m\tau} - \hat{u}_m)^2}{\hat{\sigma}_m^2} \right] \quad (9)$$

The conditional variance (9) has two components; the first is the disturbance variance $\sigma_{\varepsilon_i}^2$ from equation (2) and the second is the additional variance due to sampling error in α_i and β_i , which is common for all the event window observations and leads to serial correlation of the ARs irrespective of the fact that the true disturbances are independent through time. As the length of L_1 becomes

large, the second term approaches zero as the sampling error of the parameters vanishes. The variance of the AR will be $\sigma_{\varepsilon_i}^2$ and the observations become independent across time. In practice, the estimation window can usually be chosen to be large enough to make it reasonable to assume that the contribution of the second component to the variance of the AR is zero. Given the null hypothesis, H_0 , the distribution of the sample ARs of a given observation in the event window is:

$$\hat{A}R_{it} \sim N(0, \sigma^2(\hat{A}R_{it})) \quad (10)$$

The individual security's ARs are aggregated using $\hat{A}R_{it}$ from Equation (8) for each event period, $\tau = T_1 + 1, \dots, T_2$. Given N events, the sample aggregated AR for period τ is:

$$\bar{A}R_{\tau} = 1/N \sum_{i=1}^N \hat{A}R_{it} \quad (11)$$

and for large L_1 , its variance is:

$$\text{var}(\bar{A}R_{\tau}) = 1/N^2 \sum_{i=1}^N \sigma_{\varepsilon_i}^2 \quad (12)$$

Using the estimates, we aggregate over the event window for each security i and for any interval in the event window:

$$\bar{C}AR(\tau_1, \tau_2) = \sum_{\tau_1}^{\tau_2} \bar{A}R_{\tau} \quad (13)$$

$$\text{VAR}(\bar{C}AR(\tau_1, \tau_2)) = \sum_{\tau_1}^{\tau_2} \text{VAR}(\bar{A}R_{\tau}) \quad (14)$$

We set the covariance term to zero. For the variance estimators, by assuming that the event windows of the N securities do not overlap, we can draw inferences about the CARs using:

$$\bar{C}AR_i(\tau_1, \tau_2) \sim N[0, \text{VAR}(\bar{C}AR(\tau_1, \tau_2))] \quad (15)$$

And test the null hypothesis that the ARs are zero. Because $\sigma_{\varepsilon_i}^2$ is unknown, we use the usual sample variance measure from the market model regression as the estimator to calculate the variance of the AR as in

Equation (13). Using this to calculate $\text{VAR}(\bar{A}R_{\tau})$, we test H_0 using theta:

$$\theta_1 = \frac{\bar{C}AR(\tau_1, \tau_2)}{\sqrt{\text{var}(\bar{C}AR(\tau_1, \tau_2))}} \sim N(0,1) \quad (16)$$

Here, the distributional results are asymptotic with respect to the number of securities, N , and the length of the estimation window L_1 .

Empirical Results

The information content of stock returns surrounding the end of the fiscal year time periods is reported in this section. Table 1 presents the abnormal returns averaged across the 24 event observations (end of fiscal year for each of 24 firms) and respective aggregated CARs considering the normal return market model. Plots of the ARs, respective CARs and associated variances are also included in figure 2.

The results are largely consistent with the existing CAR literature evaluating stock returns prior to the event. The empirical evidence strongly supports the hypothesis that CARs do not exist in the period prior to the announcement week of the IAOs. Hence, they do not convey useful information that would be expected to be included in the auditor's evaluation of the firm when the IAO is issued. Focusing on the period prior to the announcement week (week 0), the sample CAR values are not significant from Week -12 through Week -1. Beginning on Week +1, though, they become significant and continue through the event window to Week +12, which strongly supports the hypothesis that CARs do exist during the latter part of the event window, after the IAO has been issued. If the post event-day bid de-listing criteria existed, it would certainly cause de-capitalization effects during the post-event period. Given this, we selected to only evaluate pre-event week CARs for de-capitalization effects.

DISCUSSION

The empirical results strongly suggest that minimal information content is contained in stock returns during the period prior to the IAO announcement week. However, following the IAO announcement, significant information content is evident. This is plausible due to the fact that in this post announcement period, the firms received non-compliance notification from the NASDAQ. This does not affect the findings of this study

because our goal was to determine if de-capitalization effects occurred in the pre-announcement period.

Our conclusions empirically suggest that the information content contained in equity returns did not suggest de-capitalization effects were occurring prior to independent auditor evaluation of the firms' fundamental financial information. The purpose of this research was to evaluate whether the independent auditor had any prior knowledge of liquidity constraints for the firm prior to release of the IAO. If liquidity constraints were present and the auditors gave a going concern opinion, then the auditor's credibility would be in question. This study found no evidence of significant liquidity constraints in the form of de-capitalization statistics during the period prior to the time the IAOs for this group of non-compliant NASDAQ firms was issued by the auditors. Of the 24 firms in this sample, auditors did evaluate four firms with opinions of substantial doubt and 20 with going concern opinions. Given that all 24 firms were on the List of Non-Compliant NASDAQ Companies, the auditors' success factor in determining the ability of these firms to remain as going concerns and not receive NASDAQ non-compliance notification for bid price infractions was 16.67%.

Recommendations for Further Research

Research regarding IAOs in the post SOX-2002 era is still in its infancy, which provides many opportunities for further study in this area. The data sample used in this study was relatively small because it is difficult to obtain historical data on non-compliant firms. However, it may be possible to expand the sample by collecting data from more exchanges.

The study could also be enhanced by repeating the event study using the Fama French three factor model to compute abnormal returns and comparing the Fama French and CAPM results. Fama and French (1993, 1996) found that the average return premium on small stocks versus large stocks (SMB) and high book-to-market versus low book-to-market stocks (HML) is positive but volatile. We expect that two additional factors in the Fama French model, which improve model specification, will help to produce better estimates of expected return, and, therefore, abnormal returns. Better specified abnormal returns may assist in identifying de-capitalization effects more readily, but we do not expect a material change in the results using the Fama French model because the CAPM results are largely consistent with the existing CAR literature evaluating stock returns prior to an event.

A third potential avenue for future research is the impact of trading volume on abnormal returns. Logically, one would expect that trading volume might change significantly after the issuance of a substantial doubt IAO. However, trading volume should be examined to determine if it has predictive power prior to IAO issuance.

REFERENCES

- American Institute of Certified Public Accountants. 1981. The auditor's consideration when a question arises about an entity's continued existence. **Statement on Auditing Standards No. # 34**. (March). New York: AICPA.
- American Institute of Certified Public Accountants. 1988a. Analytical procedures. **Statement on Auditing Standards No. # 56**. (April). New York: AICPA.
- American Institute of Certified Public Accountants. 1988b. The auditor's consideration of an entity's ability to continue as a going concern. **Statement on Auditing Standards No. # 59**. (April). New York: AICPA.
- Bhagat, S., & Romano, R. 2002. Event studies and the law: Part II: Empirical studies of corporate law. **American Law and Economics Review**, 4: 141-167.
- Bhagat, S., & Romano, R. 2002. Event studies and the law: Part I: Technique and corporate litigation. **American Law and Economics Review**, 4: 380-423.
- Campa, J., & Hernando, I. 2004. Shareholder value creation in European M&As. **European Financial Management**, 10: 47-81.
- Carmichael, D., & Pany, K. 1993. **Reporting on uncertainties, including going concern. The expectation gap standards: Progress, implementation issues, and research opportunities**. AICPA: Jersey City.
- Citron, D., & Taffler, R. 2004. The comparative impact of an audit report standard and an audit going-concern standard on going-concern disclosure rates. **Auditing: A Journal of Practice and Theory**, 23: 119-130.
- Ellingsen, J., Pany, K., & Fagan, P. 1989. SAS No. 59: How to evaluate going concerns. **Journal of**

Accountancy, January: 24-31.

Fama, E., & French, K. 1993. Common risk factors in the returns on stocks and bonds. **Journal of Financial Economics**, 33: 3-56.

Fama, E., & French, K. 1996. Multifactor explanations of asset pricing anomalies. **Journal of Finance**, 51: 55-84.

Geiger, M., Raghunandan, K., & Rama, D. 1998. Going-concern audit report recipients before and after SAS No. 59. **National Public Accountant**, 43: 24-26.

Govindaraj, S., & Jaggi, B. 2004. Market overreaction to product recall revisited - The case of firestone tires and the Ford Explorer. **Review of Quantitative Finance and Accounting**, 23: 31-54.

Grice, S. 2000. Bankruptcy prediction models and going concern audit opinion before and after SAS No. 59. **Business Quest**, A Journal of Applied Topics in Business and Economic.

Grover, J. 2005. Independent auditor's opinions of substantial doubt: A SOX-2002 markets efficiency evaluation. **Journal of Business and Leadership: Research, Practice, and Teaching**, 1: 30-36.

Grover, J., & Lavin, A. 2005. An opinion on independent auditors opinions of substantial doubt: A SOX-2002 efficiency evaluation. **Journal of Business and Economics Research**, 3: 41-50.

http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html#Research

Fasttrack. <http://www.fasttrack.com>.

Koh, H. 1991. Model predictions and auditor assessments of going concern status. **Accounting and Business Research**, 21: 331-338.

Kohers, N., & Kohers, T. 2000. The value creation potential of high-tech mergers. **Financial Analysts Journal**, 53: 40-48.

LaSalle, R., & Anandaragan, A. 1996. Auditor's views on the type of audit report issued to entities with going concern uncertainties. **Accounting Horizons**, June: 51-72.

Mackinlay, C. 1997. Event studies in economics and finance. **Journal of Economic Literature**, 35: 13-39.

NASDAQ Non-Compliant Companies. <http://www.nasdaq.com/about/LegalCompliance.stm>.

Raghunandan, K., & Rama, D. 1995. Audit reports for companies in financial distress: Before and after SAS No. 59. **Auditing: A Journal of Practice and Theory**, Spring: 50-63.

Sarbanes-Oxley Act of 2002, PL107-204, 116 Stat 745 (2005).

U.S Securities and Exchange Commission. www.sec.gov/edgar/searchedgar/companysearch.html.

Veronesi, P. 1999. Stock market overreaction to bad news in good times: A rational expectations equilibrium model. **Review of Financial Studies**, 12: 975-1007.

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Table 1: Cumulative Abnormal Returns

Time	AR	CAR	Theta	VAR(AR)	VAR(CAR)
D-12	-1.434	-1.434	-1.039	1.907	1.907
D-11	1.908	0.474	0.258	1.462	3.369
D-10	-3.472	-2.998	-1.271	2.196	5.565
D-9	1.498	-1.500	-0.504	3.297	8.862
D-8	-0.691	-2.191	-0.691	1.206	10.068
D-7	-1.044	-3.236	-0.957	1.356	11.424
D-6	-0.948	-4.183	-1.173	1.284	12.709
D-5	1.037	-3.146	-0.810	2.380	15.089
D-4	-0.887	-4.033	-0.951	2.915	18.004
D-3	-2.210	-6.243	-1.424	1.219	19.223
D-2	-0.454	-6.697	-1.476	1.352	20.575
D-1	-1.290	-7.988	-1.711	1.221	21.796
D	-2.159	-10.146	-2.073*	2.170	23.966
D+1	-4.222	-14.369	-2.827*	1.869	25.836
D+2	-2.366	-16.735	-3.220*	1.171	27.007
D+3	0.272	-16.463	-3.093*	1.331	28.338
D+4	0.592	-15.871	-2.910*	1.411	29.749
D+5	2.618	-13.253	-2.334*	2.504	32.253
D+6	-7.990	-21.243	-3.398*	6.831	39.084
D+7	1.283	-19.961	-3.104*	2.273	41.357
D+8	-0.147	-20.107	-2.874*	7.575	48.932
D+9	-3.071	-23.179	-3.253*	1.849	50.781
D+10	-2.596	-25.775	-3.564*	1.510	52.290
D+11	4.511	-21.264	-2.822*	4.487	56.777
D+12	0.955	-20.310	-2.645*	2.189	58.966

* Denotes significant at the 0.05 level.

Figure 1: Estimation and event widow time line specification for an event study.

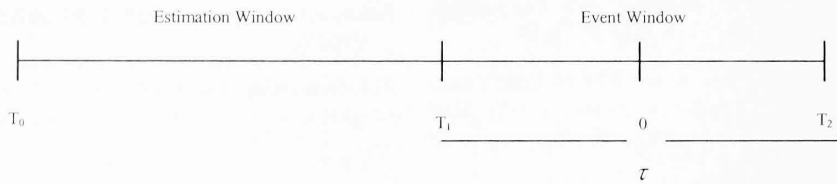


Figure 2: Cumulative abnormal returns of the event study.

