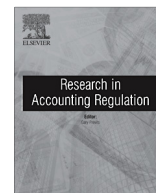




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Voluntary disclosure of reasons for auditor changes and the capital market reaction to information disclosure [☆]

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ABSTRACT

This study examines the association between firm attributes and management's voluntary disclosure of the reason(s) for auditor changes and evaluates the capital market reaction to information disclosure of the auditor change events accompanied by preexisting red flag and non-red flag issues. We find that managers are more likely to disclose the reason(s) for auditor changes when those changes occurred because of benign business reasons or if the reasons do not indicate the presence of any underlying operating or financial reporting problem. On the other hand, managers are less likely to disclose the reason(s) for auditor changes when those changes are preceded by red-flag situations. Furthermore, auditor changes accompanied by preexisting red-flag situations are viewed negatively by the capital market, implying that the full disclosure of reasons for auditor changes is informative to investors. This observation is supported further by our market-based analyses, which consistently show that auditor changes accompanied by prevailing red flag issues are valued incrementally in the market above and beyond the reportable events (under FRR No. 31) and auditor-initiated changes. The study contributes to the recent policy debate related to mandating the disclosure of the reason(s) for auditor switches. Specifically, the results support the recent debates that the current voluntary disclosure regime results in selective disclosure practices that are likely to contribute to the general lack of transparency with respect to auditor changes.

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1. Introduction

Under the current Securities and Exchange Commission (SEC) form 8-K disclosure rules relating to auditor changes,

firms are required to file Form 8-K notifying investors of a change in the firm's external auditor. While the SEC encourages firms to disclose the reason(s) for all auditor changes, companies are not mandated to disclose the reasons for changing their auditors.³ Companies are required only to

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³ Form 8-K is required to be filed by SEC registrants if certain significant events occur, including auditor changes. In (SEC, 1977), the SEC issued Release No. 34-13989 to amend form 8-K filing requirements to mandate that registrants be required to disclose the reason(s) for auditor changes. However, after due deliberation, the SEC decided not to incorporate the proposed amendment when the final rules were issued in Securities Exchange Act Release No. 34-14808 (SEC, 1978). As a result, the decision as to whether or not to disclose the reason(s) for an auditor change continued to be in the hands of management.

disclose the reason(s) for an auditor change in limited circumstances where such a change is associated with auditor–client disagreements over certain reportable issues.⁴ This reporting flexibility has led to inconsistencies among firms in their disclosure practices relating to auditor switches, and in the absence of an SEC mandate, an overwhelmingly large proportion of companies that switched auditors chose not to disclose the reason(s) for the changes.⁵ Only a small fraction of companies (hereinafter, disclosing firms) voluntarily disclosed the reasons for their auditor changes.

Investor advocacy groups have long expressed dissatisfaction with the current rules relating to firms' disclosure of the reason(s) for auditor changes. For example, in its most recently adopted "best practices" polices for corporate governance and disclosure, the Council of Institutional Investors (CII), an investor advocacy group, includes the following recommendation (12g) relating to the disclosures they recommend that firms provide in the case of auditor changes:

The audit committee should publicly provide to shareholders a plain-English explanation of the reasons for a change in the company's external auditors. At a minimum, this disclosure should be contained in the same Securities and Exchange Commission (SEC) filing that companies are required to submit within four days of an auditor change. (Recommendation No. 12g; CII, 2007, p. 6)

Accounting firms have also expressed dissatisfaction with the current regulations relating to firms' disclosures of the reason(s) for auditor changes. For example, in a March 2006 press release, Grant Thornton urged the SEC to revise its form 8-K disclosure rules requiring firms to specifically disclose the reason(s) for auditor changes in their 8-K filings. In its press release, Grant Thornton argued that mandating such disclosures would serve to improve transparency surrounding the event of auditor changes for outside stakeholders (Grant Thornton, 2006).

The U.S. Treasury Department's *Advisory Committee on Auditing Profession* has recently added fresh impetus to this disclosure policy debate. Among its many recommendations, the Treasury Department's *Advisory Committee on*

Auditing Profession recommended that the SEC amend its disclosure of auditor change requirements to mandate that all firms be required to disclose the reason(s) for all auditor changes (see Treasury Department, 2008). In response to this recommendation, in a *Petition for Rulemaking*, the CII has twice written to the SEC (CII, 2008a, 2008b) urging the Commission to "pursue rule-making that require public companies to... provide shareowners with a plain-English descriptive narrative of the reasons for a change in external auditors in all cases of such a change [emphasis added]" (CII, 2008a, p. 1). In its letters to the SEC, the CII expresses the view that the current voluntary disclosure regime fails to provide investors with adequate information associated with auditor changes. In particular, the CII observed that there are potentially worrisome reasons for auditor changes but, because of the lack of disclosure, investors find it challenging to identify such auditor changes. To date, the SEC has not proposed new rules to enact this recommendation of the Treasury Department's report.

As evident from their comments, the CII believes that the current selective disclosure practice in this setting contributes to the lack of transparency with respect to firms' auditor changes. This could arise, in part, if firms are selective in making their disclosures, i.e., the firms make these disclosures only when it is convenient for them to do so. In this study, we evaluate this presumption and examine the relationship between various firm characteristics indicating the presence of red-flag and non red-flag situations and the firm's voluntary disclosure of reasons for their auditor changes. Specifically, in the first stage, we investigate if the switching firm's attributes that indicate serious underlying issues accompanying auditor changes (i.e., so called "red-flag" issues), are associated with a decreased likelihood that management voluntarily discloses the reason(s) for auditor changes. In the second stage, we examine stock market reaction to auditor change events when they are associated with pre-existing red flag or non-red flag issues. These analyses may potentially provide new insights to the current policy debate as to whether the SEC should expand its current form 8-K disclosure requirements with the additional mandate that firms report the reason(s) for all auditor changes. The study thus adds to the growing disclosure literature that examines the relationship between firm characteristics and voluntary disclosure decisions, and how the capital market participants factor the information in pricing stock in absence of inadequate disclosures.

The disclosure of reasons for auditor changes is not mandated by the SEC except for its enacted Financial Reporting Release No. 31 of 1988 (FRR 31), which requires that certain reportable events about internal control quality and financial statement reliability issues be disclosed in the 8-K filings relating to auditor changes.

Three types of information are to be furnished to the 8-K filings with the SEC:

- 1) Initiating party to auditor change;
- 2) Auditor–client disagreement; and
- 3) Reportable events concerning internal control weakness and financial reporting quality issues.

⁴ In 1988, the SEC enacted Financial Reporting Release (FRR) No. 31, in which certain reportable events about internal control and financial statement reliability issues became mandatory disclosures to be included in 8-K filings relating to auditor changes. In terms of FRR No. 31, the reportable events are as follows: the internal controls necessary for the registrant to develop reliable financial statements do not exist; information has been obtained that suggests that the auditor can no longer rely on management's representations or has made the auditor unwilling to be associated with the financial statements prepared by management; information that potentially impacts the reliability of financial statements requires an expansion of audit scope; information materially impacts the fairness and reliability of prior or current financial statements. The SEC (1988) notes that reportable events and auditor–client disagreement that are mandated to be disclosed in the 8-K filings for auditor changes are "similar in that each involves situations where the position of management may be considered to be generally at odds with that of the auditor."

⁵ During the period 2003–2006, almost 65-percent of the firms that changed auditors did not disclose the reason(s) for their auditor switches (e.g., Grothe & Weirich, 2007; Turner, Williams, & Weirich, 2005).

In terms of FRR 31, the reportable events are as follows:

- 1) Internal controls necessary for the registrant to develop reliable financial statements do not exist;
- 2) Information has been obtained that suggests the auditor can no longer rely on management's representations or has made the auditor unwilling to be associated with the financial statements prepared by management;
- 3) Information that potentially impacts the reliability of financial statements requires an expansion of audit scope;
- 4) Information materially impacts the fairness and reliability of prior or current financial statements.

The SEC (1988) notes that reportable events and auditor–client disagreement that are mandated to be disclosed in the 8-K filings for auditor changes are “similar in that each involves situations where the position of management may be considered to be generally at odds with that of the auditor.” However, the reportable events do not always suggest auditor–client disagreement because management might not have expressed a different opinion from the auditor; but nonetheless, those events should be disclosed.⁶

Companies switch auditors for a variety of reasons. Some auditor changes are related to “red-flag situations,” whereas in other cases, auditors are changed for benign business reasons. Red-flag issues indicate problems associated with management's operating credibility, a firm's financial status, and/or the reliability of a firm's financial reporting processes. Significant red-flag issues include the violation of generally accepted accounting principles (GAAP) and aggressive accounting policy choices. In this study, we use the following firm attributes as proxies for the presence of red-flag issues: (1) the type of auditor switch (i.e., upward, downward or lateral auditor switches)⁷; (2) the level of discretionary accrual adjustments; (3) the presence of a going concern audit opinion; (4) restatements of financial statements; and (5) and whether a firm is subject to SEC investigation. Presumably, these red-flag issues make managers more hesitant to disclose the reason(s) for auditor changes, in order to avoid creating a negative perception among investors. A critical element supporting the reliability of financial reporting is the assurance of the external auditors that the company's financial statements fairly present, in all material respects, the firm's financial status, operating performance, and cash flows. As a result, managers are less likely to disclose the

reason(s) for auditor changes when firms are confronted by red-flag situations because such disclosure may create skepticism and uncertainty about firms' operating efficiency and financial reporting quality. However, several benign business factors, termed non-red-flag factors, can also induce firms to change auditors. Because of their apparent innocuous effect on investors' sentiment, these factors may not act as a deterrent to management's decision to report the reason(s) behind auditor changes. For example, auditor changes may be caused by a change in a firm's size, by a change in a firm's growth, or by a structural change such as a merger or a diversification. In addition, the auditor's environment may also change if a firm's auditor merges with another audit firm.

Companies might also change auditors because of audit fee-related issues. If the current auditor has become a high cost provider of services, the client is likely to switch to an audit firm that can provide similar services at a lower cost (Johnson & Lys, 1990). This may result in “downward” auditor switches (switching from a Big-4 auditor to a non Big-4 auditor) or “lateral” auditor switches (switching from one Big-4 auditor to another Big-4 auditor). A firm may also switch its auditor to obtain the services of an industry-specialist auditor consistent with the firm's growing business needs for specialized audit service. This type of change will most likely result in “upward” auditor switches (switching from a non Big-4 auditor to a Big-4 auditor) or “lateral” auditor switches within the Big-4 group. Also, an increase in firm size/or the complexity of a firm's operations could result in the need for an auditor switch if the current auditor is no longer able to provide adequate engagement resources to perform an effective audit.⁸ In these cases, there is a greater likelihood that a firm will report the reason(s) for the auditor change, as long as the firm does not face one or more concurrent red-flag issues as described above.

Investigating the effect of firm characteristics on firms' voluntary disclosure of reasons for auditor changes becomes more worthwhile in the post-SOX period as the Big 4 audit firms are dropping more of their riskier clients to minimize their risk exposure, and those clients are mainly picked up by the second-tier national firms (Public Accounting Report, September 30, 2004). Furthermore, there is also anecdotal evidence that a nontrivial number of client firms are delisting because they can no longer afford the regulatory burden imposed by SOX Section 404 (DeFond & Francis, 2005).

In the first stage of our analysis, we use a sample of 3355 auditor changes that occurred (only once) between 2004 and 2010, and employ a logistic regression approach to investigate the association between firm-characteristic variables and the likelihood that management voluntarily discloses the reason(s) for auditor changes. Specifically, we test if the firm-specific factors that indicate the presence of “red-flag” issues are associated with a decreased likelihood that management voluntarily discloses the reason(s) for auditor changes. Similarly, we also test if the

⁶ Whisenant, Sankaraguruswamy and Raghunandan – (WSR) (2003) have examined the valuation implication of the reportable events disclosed in the 8-K pursuant to auditor changes and found that those events have information content and thus, are value relevant in pricing stock. They further noted that reportable events about the financial statement reliability issues (information in 2, 3 and 4 combined) are more informative than reportable events about internal control weaknesses. Besides FRR 31, there is no other regulation that requires companies to make detailed disclosure of reasons for their auditor changes.

⁷ For example, downward auditor switches (i.e. switching to lower tier auditors, e.g., from Big-4 to non Big-4) could be interpreted as a red flag issue by investors.

⁸ Johnson and Lys (1990) provide evidence that clients will switch to auditors of higher quality due to structural reasons such as growth, changes in capital structure, or better operating performance.

firm-specific factors that indicate the presence of benign business reasons for auditor changes are associated with an increased likelihood that management voluntarily discloses the reason(s) for auditor changes.

Our results show that managers are more likely to disclose the reason(s) for auditor changes when those changes are accompanied by benign business reasons or reasons that do not indicate the presence of any underlying operating or financial reporting problem. On the other hand, managers are less likely to disclose the reason(s) for auditor changes when those changes are preceded by red-flag situations. For example, we find that management is more likely to voluntarily report the reason(s) for an auditor change when there is an upward auditor switch, i.e., a switch from a non-Big 4 auditor to a Big-4 auditor. We, however, notice that managers are less likely to disclose the reasons for auditor changes when there are pre-existing red-flag situations indicating potentially serious financial reporting problems such as a higher level of discretionary accruals, the restatement of financial statements, ongoing SEC investigations, going-concern audit opinions, or financially distressed situations. Our results indicate that given a choice, managers prefer to disclose information selectively when it is convenient to do so without any adverse effect but the practice may not be beneficial for other stakeholders.

In the second stage of our analysis, we evaluate the capital market reaction to the information disclosure relating to auditor changes especially when such changes are accompanied by red-flag situations. This analysis would potentially indicate the usefulness of mandating full disclosure of auditor change information including the underlying reasons in the 8-K filing. In absence of proper disclosures, investors and other stakeholders are more likely to speculate and become skeptical about the circumstances that surround the termination of auditor–client relationships. Our analyses using various return windows consistently demonstrate that the auditor changes accompanied by preexisting red-flag situations are viewed negatively by the capital market implying that the disclosure of reasons for auditor changes in these situations would be informative to investors. We further document that this information has value-relevance incremental to the reportable events (under FRR No. 31) and auditor-initiated changes. For all return windows, we find that the capital market reacts negatively when auditor switches are accompanied by preexisting red-flag issues. Our analyses show that red-flag issues accompanying auditor changes have valuation consequence suggesting that proper disclosure of reasons for auditor changes would be incrementally more informative to the market. We suggest that proper disclosure reduces opacity surrounding auditor change events, minimizes the probability of the market's speculation and enable it to analyze the related information in right perspective.

Our study demonstrates that in absence of comprehensive mandate regarding the disclosure of reasons for auditor changes, the companies selectively make disclosures. They are less likely to disclose the reasons when the auditor changes are accompanied by red-flag issues. However, the market in anticipation of worst-possible scenarios is more likely to speculate, become skeptical

and respond significantly negatively to auditor change information. Our findings underscore the necessity for a comprehensive regulation mandating disclosure of reasons for all types of auditor changes. We suggest that properly disclosed reasons may also potentially eliminate any misgiving that the market is likely to have for switching firms in absence of proper disclosure.

The remainder of the paper is organized as follows. In Section 2, we discuss background of the study and variable selections. Section 3 includes a discussion on research design and sample followed by a discussion on descriptive data, correlations and results in Section 4. Section 5 concludes the paper.

2. Background and variable selection

Firms change auditors for a number of reasons, some of which might be associated with red-flag issues, i.e., issues that are indicative of questionable operational efficiency and/or financial reporting integrity. On the other hand, firms also switch auditors for benign business reasons (e.g., to obtain lower-cost audit services). Firms may change auditors because of red-flag issues such as, the violation of GAAP, restatement of financial statements, internal control problems, ongoing SEC investigation for violating GAAP, or auditor–client disagreement over accounting policy choice. [Grothe and Weirich \(2007\)](#) suggest that auditor changes are frequently linked to restatements of financial statements and the discovery of weak accounting controls. When a firm has pre-existing red-flag issues associated with its operating and financial reporting process, its management may become less willing to report the reason(s) for an auditor change in the 8-K filing with the SEC. On the other hand, if a firm changes its auditor for benign business-related reasons such as organizational changes in the auditor's or client's business, e.g., a merger between the incumbent and another audit firms, or the merger between the company and another company- its management is more likely to disclose the reason(s) for the auditor change.

Alternatively, managers may voluntarily disclose the reason(s) for auditor changes, even if a firm has experienced one or more red-flag issues in its operations and financial reporting processes. Previous studies demonstrate that firms sometimes have strong incentives to disclose bad news in order to reduce transaction and legal costs (e.g., [Ajinka & Gift, 1984](#); [Dye, 1985](#); [McNichols, 1989](#)). [Healy, Hutton, and Palepu \(1999\)](#) find that the disclosure of financial information is positively associated with stock prices, which is consistent with [Palepu and Healy's \(1993\)](#) finding that managers are motivated to voluntarily disclose information to maximize firm market value. Thus, managers may want to report the reasons for auditor switches, even in the presence of “red-flag” issues in order to minimize their expected transaction and legal costs. Additionally, according to the “disclosure principle,” managers are motivated to disclose both good and bad news. This effect can arise if investors know that managers have valuable information but are withholding its disclosure. They will interpret nondisclosure as an indication that the information is bad and thus, react negatively to such nondisclosure (see [Scott, 2003, p. 420](#)). In this

context, it seems reasonable to conjecture that there is a general presumption among market participants that managers know the reason(s) for their auditor changes. Second, investors will observe the 8-K filing notifying the incidence of auditor change. If the 8-K does not include disclosure of the reasons for auditor changes, investors may infer that management is withholding some important and relevant information. Therefore, nondisclosure of the reason(s) for an auditor switch may potentially elicit a negative market reaction rather than simply disclosing the bad news. To avoid such a negative market reaction, management may choose to report the reason(s) for auditor changes in all cases, including those changes that are associated with the presence of red-flag issues.

2.1. Red-flag issues and auditor changes

Red-flag issues indicate situations that raise questions about management's efficiency and/or the integrity of the operating and financial reporting process. In this study, we use a number of proxies for such red-flags situations that are more likely to be associated with low managerial efficiency and/or integrity, and a lower-quality financial reporting process. Specifically, we use the following variables as the proxies for the presence of a red-flag situation: (1) the type of auditor switches (downward, lateral and upward switches); (2) the level of performance-based discretionary accruals; (3) restatements of financial statements; (4) going concern audit opinions; (5) firms under SEC investigation (Grothe & Weirich, 2007; Turner et al., 2005); and (6) firms' financial distress.

Some studies argue that audit quality is determined by whether a company is audited by a larger (i.e., Big-4) or a smaller (i.e., non Big-4) audit firm (e.g., see Bedard & Johnstone, 2004).⁹ Larger audit firms have greater audit engagement resources, and more experienced and efficient audit staff. These larger audit firms are in a better position to provide higher-quality audits that can identify and remediate problems associated with biased financial reporting. Consistent with larger audit firms supplying higher quality audits, Francis, Maydew, and Sparks (1999) document that, compared to smaller audit firms, larger audit firms more effectively constrain companies' opportunistic reporting of accruals.

Higher-quality audits are likely to be more expensive. As audit fees include the costs of audit engagement resources, the greater the audit efforts the higher the audit fees. Moreover, larger audit firms are likely to charge a premium for their brand name reputation and for their industry-specialization and expertise (Craswell, Francis, & Taylor, 1995). These factors will result in larger audit firms, on average, charging higher audit fees than smaller audit firms. As a result, a "downward" auditor change (i.e., a switch from a large Big-4 auditor to a smaller non Big-4 auditor) may be driven by a company's plan to reduce its audit cost commensurate with its financial capability and business needs. Auditor switches from larger (i.e., Big-4) to smaller (i.e., non Big-4) audit firms may thus be viewed

by outside stakeholders as either leading to a decline in audit quality or leading to a decline in audit costs commensurate with the company's financial capability, or both.¹⁰ Considering this conflicting situation, it is hard to predict how the market will react to such information disclosure, and thus, how the companies will disclose the reasons for such changes. The lateral auditor changes (i.e., a switch from one Big-4 auditor to another Big-4 auditor) may also be driven by cost-related factors and, as a result, may not be viewed adversely by investors. However, if the changes are driven by the clients' desire to appoint an industry-specialist Big 4 auditor in place of a non-specialist Big 4 auditor, the market is more likely to react positively to such information. In this case, the firms may be more inclined to disclose the reason(s) for these changes.

Upward auditor switches, i.e., switching from smaller audit firms to larger audit firms (i.e., from non Big-4 auditors to Big-4 auditors) may be driven by the firms' plan to obtain more industry-specialized expert service from their auditors, or their plans to engage larger audit firms with adequate engagement resources suitable to service the growing complexity of their business operations. Thus, upward auditor switches are most likely to be positively viewed by investors and, as a result, management would be more inclined to voluntarily disclose the reason(s) for these types of auditor changes.¹¹ We use an auditor switch variable (*AUDSW*), which proxies for the type of auditor switch; *AUDSW* takes a value of zero for a downward auditor switch, one for a lateral auditor switch, and two for an upward auditor switch.

An auditor may resign or be dismissed by its client as a result of accounting disagreements over one or more of the following red-flag issues: (1) violations of generally accepted accounting principles (GAAP); (2) going concern problem; or (3) if the firm is being investigated by the SEC (Grothe & Weirich, 2007; Turner et al., 2005).¹² Dye (1991) and Antle and Nalebuff (1991) argue that auditor switches could occur when managers and auditors hold divergent beliefs about the appropriate application of GAAP. If the incumbent auditor is not in agreement with management's current accounting practice, management has an incentive to replace the incumbent auditor with an alternative auditor who may acquiesce to management's accounting policies. In such a situation, it is reasonable to expect that management will be less inclined to voluntarily disclose the reason(s) for auditor changes.

¹⁰ In the post-SOX period, there is some evidence that the Big-4 audit firms are dropping more of their riskier clients that are mainly picked up by second-tier national firms (DeFond & Francis, 2005).

¹¹ Ettredge, Heintz, Li, and Sholz (2011) document that the companies that received adverse reports on internal control over financial reporting (ICFR) audits intend to dismiss their incumbent auditors in an effort to improve their overall financial reporting. They are more likely to switch to higher-quality auditors as proxied by Big 4 membership and industry specialization. Subsequent to the changes to specialist auditors, the companies are more likely to receive an improved ICFR reports in the next year.

¹² Sometimes because of disagreement with the existing auditor, client companies might dismiss the current auditor and hire a new auditor who would endorse the company's flawed financial reporting. This practice is commonly known as "opinion shopping." This is largely the case of client-initiated change.

⁹ See also Simunic and Stein (1996), Gul and Tsui (1998), and Gul, Chen, and Tsui (2003).

The probability of a GAAP violation, a red-flag situation, is higher for the firms that report large discretionary accruals adjustments (Beneish, 1997; Defond & Subramanyam, 1998; Francis et al., 1999) and for the firms that restate their financial statements. As a result, we argue that the firms that aggressively manage their accruals by reporting higher discretionary accruals and the firms that restate their financial statements are more likely to have a disagreement with their incumbent auditor over accounting policies.¹³

We expect that when an auditor is changed as a result of an auditor–client disagreement over the application of GAAP, management would be less inclined to voluntarily report the reason(s) for the auditor change. We argue that auditor changes by the firms with a higher level of discretionary accruals (represented by *PBDACC* in our model) or by the firms that restate their financial statements (represented by the variable *RESTATE* in our model) are more likely to be the changes that are associated with auditor–client disagreements over the application of GAAP. It is also likely that those changes are auditor-initiated changes as the auditors are more inclined to shed those risky clients off their audit portfolios in order to reduce their overall business risk exposure. As a result, we expect that the firms with higher levels of discretionary accruals, or the firms that restate their financial statements are less likely to disclose the reasons for their auditor changes.

The above discussion suggests that some changes are initiated by company auditors while others are initiated by clients. In our analysis, we also include a dummy variable, *AUDITOR* which is set equal to one for the changes that are initiated by auditors and zero for the changes that are initiated by client companies. *AUDITOR* is also expected to incrementally capture the impact of both auditor–client disagreement and resulting auditor resignation on management's propensity to voluntarily disclose the reason(s) for auditor changes.

When a firm receives a going concern audit opinion from its auditor, and the auditor resigns on the basis of its assessment that the client firm lacks the ability to survive in the long-run, we predict that management is less willing to voluntarily disclose the reason(s) for its auditor change. We use a dummy variable, *GCO* which is set equal to one for the firms that receive a going-concern audit opinion, and zero otherwise to capture this situation in the analysis. Incumbent auditors would also be reluctant to continue auditing their clients if the client companies are found to be under investigation by the SEC for GAAP violations. In such a situation, management would be less willing to voluntarily disclose reasons for auditor changes. We include a dummy variable, *SEC* that is set equal to one for the firms that are under SEC investigation and zero otherwise.

Ashbaugh-Skaife, LaFond, and Mayhew (2007) suggest that poorly performing and financially distressed firms are less likely to invest in systems and controls, and suffer

from understaffing problem that lead to internal control weaknesses. Ashbaugh-Skaife, Collins, Kinney, and LaFond (2008) document that distressed firms are more likely to have internal control problems (thus, having greater risk of financial misreporting). We suggest that when the auditor changes occur in financially distressed firms (may be the changes are driven by the auditors to reduce their risk exposures), it is more likely that those firms would not voluntarily disclose the reasons for such auditor switches. We use the variable, *DISTRESS* as the probability measure of bankruptcy based on Zmijewski's (1984) bankruptcy model, to evaluate the effect of such situation in the analysis.

2.2. Non-red-flag issues and auditor changes

In many cases, firms switch auditors for benign business reasons, i.e., business decisions that are not related to the presence of red-flag issues. For instance, mergers between two audit firms, or mergers between two audit clients (e.g. see Ashbaugh-Skaife et al., 2007) will result in auditor switches that are more related to structural issues (Grothe & Weirich, 2007; Turner et al., 2005). We employ a number of proxies for these types of auditor changes that are associated with benign business reasons. These are auditor switches that are less likely to be associated with the presence of “red-flag” issues.

We suggest that when a firm or its incumbent auditor is involved in a merger or acquisition that also coincides with an auditor switch, managers would be more likely to voluntarily disclose the reason(s) for such an auditor change because such a disclosure is unlikely to damage management's reputation. We include two proxy variables that capture these auditor changes that are likely driven by benign business reasons: (1) *M&A_CLIENT* is a dummy variable for instances where the firm being audited merges with another firms; and (2) *M&A_AUDITOR* is a dummy variable equal to one when the firm's auditor merges with another audit firm.

The firms that operate in industries which are characterized by relatively high levels of litigation risk are likely to have different disclosure policies than the firms that operate in lower litigation risk industries. Because of potentially high litigation loss liability, auditors may also find it more risky to continue working with clients in such industries. If an auditor resigns from such clients as a part of its effort to reduce its ex-post litigation risk exposure, management may not be reluctant to voluntarily disclose the reason(s) for this type of auditor change. Following Francis, Philbrick, and Schipper (1994), Ashbaugh, LaFond, and Mayhew (2003), and Ashbaugh-Skaife et al. (2008), we include a dummy variable *LITIGATION* which is set equal to one for the firms operating in highly litigious industries and zero otherwise to capture the effect of this situation on voluntary disclosure of reasons for auditor changes.

As previously indicated, one of the reasons that firms may want to change their current auditors is for audit fees as they switch to a low-cost provider of audit services due to financial reasons. Such a change is driven by innocuous business decisions (i.e., to reduce cost) and not accompanied by red-flag issues. So, we include a variable, *AFEE*, in the analysis as a proxy for another non-red flag situation.

¹³ We use the absolute value of discretionary accruals in our analysis. The absolute value of discretionary accruals captures the combined effect of both income-increasing and income-decreasing accruals. It measures the extent to which management exercises its discretion to manage earnings through accruals (e.g., Chung & Kallapur, 2003; Warfield, Wild, & Wild, 1995).

2.3. Control variables

The firm-specific characteristics may influence management's disclosure decisions. We identify and include a group of firm-specific variables as the controls in our analysis. These variables are expected to proxy for a number of firm attributes, such as growth, firm size, free cash flow, and profitability measured by return on assets that have an impact on management's voluntary disclosure decisions. High growth firms are relatively riskier and, as a result, are more likely to have financial reporting problems (e.g., see Ashbaugh-Skaife et al., 2007). As a result, managers of high growth firms (represented by the variable *GROWTH*) have less incentive to voluntarily disclose the reason(s) for auditor changes. High-growth firms may also have greater accounting complexity and risk associated with their business transactions, which, in turn, may increase the probability for accounting disagreements between management and auditors leading to an auditor change. Alternatively, the firms with higher growth opportunities also face higher agency costs; as a result, high growth firms may have a greater incentive to voluntarily report the reason(s) for auditor changes. Further, Lang and Lundholm (1993) suggest that larger firms have greater agency costs and, as a result, have a greater incentive to voluntarily disclose information. Consistent with this argument, both Clarkson, Kao, and Richardson (1999) and Lang and Lundholm (1993) find that larger firms are more likely to disclose specific news voluntarily. Since larger firms are more likely to be motivated to voluntarily report firm-specific information than smaller firms, we expect that larger firms (proxied by the variable *SIZE* in our model) are more willing to voluntarily disclose the reason(s) for their auditor changes.¹⁴

Ashbaugh-Skaife et al. (2007) find that firms with poor financial performance are more likely to suffer from internal control problems.¹⁵ Following them, we predict that managers of poorly performing firms are less likely to disclose the reason(s) for auditor changes. To capture this effect, we include an additional control variable for firm performance, *ROA*, return on assets. Furthermore, the firms that have large amounts of discretionary cash, as measured by free cash flows (the variable *FCF* in our model), are expected to have stronger liquidity position. The firms with better liquidity position are viewed more positively by investors and other stakeholders. Those firms are more likely to voluntarily disclose the reason(s) for their auditor changes. Finally, the firms are mandated to disclose the reason(s) for auditor changes caused by any events to be reported under the SEC's FRR No. 31 at the time such changes are made known in the 8-K filings. Thus, we include a dummy variable, *REPORTABLE* which is set equal to one for the auditor changes associated with the reportable events and zero otherwise.

¹⁴ Moreover, "political cost hypothesis" suggests that larger firms are more closely watched by various government agencies. Therefore, those firms have greater incentives to voluntarily provide more disclosures to increase transparency and reduce political costs.

¹⁵ Ashbaugh-Skaife et al. (2007) argue that poorly performing and financially distressed firms are less likely to invest in systems and controls, and suffer from an understaffing problem that lead to internal control weaknesses.

3. Research design and sample selection

3.1. Research design

In the first stage, we examine the association between the likelihood that management voluntarily discloses the reason(s) for auditor changes and the presence of various red flag and non-red flag situations in the year immediately prior to the year in which the firms change their auditors by applying the following logistic regression model.¹⁶

$$\begin{aligned} \text{Logit } P(\text{DISCLOSE}) = & \beta_0 + \beta_1 \text{AUDSW} + \beta_2 \text{PBDACC} \\ & + \beta_3 \text{RESTATE} + \beta_4 \text{GCO} + \beta_5 \text{SEC} \\ & + \beta_6 \text{AUDITOR} + \beta_7 \text{DISTRESS} \\ & + \beta_8 \text{M\&A_CLIENT} \\ & + \beta_9 \text{M\&A_AUDITOR} \\ & + \beta_{10} \text{LITIGATION} + \beta_{11} \text{AFEE} \\ & + \beta_{12} \text{GROWTH} + \beta_{13} \text{SIZE} \\ & + \beta_{14} \text{ROA} + \beta_{15} \text{FCF} \\ & + \beta_{16} \text{REPORTABLE} + \varepsilon \end{aligned} \quad (1)$$

where,¹⁷

DISCLOSE = A dummy variable of 1 if the firms disclose reasons for their auditor changes and 0 otherwise;

Red-flag issues

AUDSW = A dummy variable of 0 for downward auditor changes, 1 for lateral auditor changes and 2 for upward auditor changes;

PBDACC = Performance adjusted discretionary accruals¹⁸;

RESTATE = A dummy variable of 1 if the firms restate their financial statements, and 0 otherwise;

¹⁶ The underlying notion is that management's decision to voluntarily disclose reason(s) for auditor changes is influenced by pre-existing red-flag and/or non red-flag firm circumstances.

¹⁷ All explanatory variables in the regression are measured at the beginning of the year in which auditors are changed and the 8-K filings are submitted by the companies to the SEC.

¹⁸ Consistent with DeFond and Subramanyam (1998), we develop an industry-event period-matched portfolio for each firm to estimate the regression parameters from the following equation:

$$\begin{aligned} TACC_{jt}/TA_{jt-1} = & \beta_1 (1/TA_{jt-1}) + \beta_2 \Delta REV_{jt}/TA_{jt-1} + \beta_3 REV_{jt}/TA_{jt-1} \\ & + \beta_4 PPE_{jt}/TA_{jt-1} + \beta_5 BM_{jt} + \beta_6 CFO_{jt} + \varepsilon \end{aligned}$$

where $TACC_{jt}$ = total accruals for firm j in year t , defined as the difference between income before extraordinary items and operating cash flows; ΔREV_{jt} = the difference between changes in sales for firm j in period t from the previous year to the current year and changes in accounts receivable for firm j from the start to the end of the year t ; PPE_{jt} = firm j 's end of the year t property, plant, and equipment; BM_{jt} = firm j 's book-to-market ratio for the year t ; CFO_{jt} = firm j 's current operating cash flows for the year t ; TA_{jt-1} = total asset for firm j at the beginning of year $t - 1$. Discretionary accruals are the residuals from estimating the above equation. Following Kothari et al. (2005), we compute performance-matched discretionary accruals (*PBDACC*) as the difference between estimated discretionary accruals from the above equation for firm j in year t minus discretionary accruals of firm i at year t where firm i belongs to the same industry as firm j and has the closest return on assets (*ROA*).

GCO = A dummy variable of 1 if the firms receive going-concern audit opinions from their auditors, and 0 otherwise;

SEC = A dummy variable of 1 if the firms are subject to SEC investigations and 0 otherwise;

AUDITOR = A dummy variable of 1 if the change is an auditor-initiated change, and 0 for the client-initiated change¹⁹;

DISTRESS = Probability of bankruptcy estimated by applying Zmijewski's (1984) bankruptcy prediction model.²⁰

Non-red flag issues

M&A_CLIENT = A dummy variable of 1 if the client companies are engaged in mergers and acquisitions and 0 otherwise;

M&A_AUDITOR = A dummy variable coded one if the incumbent auditors engage in merger or acquisition activities with another audit firms, and 0 otherwise;

LITIGATION = A dummy variable of 1 if the firms operate in high-litigation risk industries, and 0 otherwise²¹;

AFEE = Natural log of audit fees;

Control variables

GROWTH = Change in total assets calculated as total assets in year t divided by total assets in year $t - 1$;

SIZE = Natural log of equity market values;

ROA = Return on total assets computed as net income before extraordinary items divided by average total assets;

FCF = Free cash flows computed as: [Cash flow from operations – capital expenditures – dividend paid]/total assets;

REPORTABLE = A dummy variable of 1 for the presence of FRR No. 31 reportable events, 0 otherwise.

In the second stage, we use the event study methodology to examine the stock price reaction to auditor change events (as reported in the 8-K filings) that are accompanied by red-flag issues, non-red flag issues and both. Following Whisenant, Sankaraguruswamy, and Raghunandan (2003), we compute daily abnormal stock returns using a size (market capitalization) portfolio return index. The portfolio return indices are the realized stock returns from decile

rankings of market capitalization-based portfolios obtained from CRSP (see, Whisenant et al., 2003 for further discussion). The abnormal stock return is the actual stock return of j th firm on the day t minus the size portfolio return index for that security on day t . We cumulate the abnormal stock returns over three return windows, namely, 3-day (–1, 0, +1), 7-day (–3, 0, +3) and 11-day (–5, 0, +5) windows surrounding the public release date of the 8-K information (day 0) based on the assumption that the public release of 8-K information occurs on the trading days surrounding the 8-K filing date.²² The cumulative abnormal stock return (CAR) is the dependent variable of interest in the analysis.

We apply the following multivariate regression to examine the capital market reaction to voluntarily disclosed reason(s) for auditor changes.

$$\begin{aligned} \text{CAR} = & \beta_0 + \beta_1 \text{CHANGE_1} + \beta_2 \text{CHANGE_2} + \beta_3 \text{BOTH} \\ & + \beta_4 \text{REPORTABLE} + \beta_5 \text{AUDITOR} \\ & + \beta_6 \text{GROWTH} + \beta_7 \text{SIZE} + \beta_8 \text{ROA} + \beta_9 \text{FCF} + \varepsilon \end{aligned} \quad (2)$$

$$\begin{aligned} \text{CAR} = & \beta_0 + \beta_1 \text{CHANGE_1} + \beta_2 \text{CHANGE_2} + \beta_3 \text{BOTH} \\ & + \beta_4 \text{REPORTABLE} + \beta_5 \text{AUDITOR} \\ & + \beta_6 \text{REPORTABLE} * \text{CHANGE_1} \\ & + \beta_7 \text{REPORTABLE} * \text{CHANGE_2} \\ & + \beta_8 \text{REPORTABLE} * \text{BOTH} + \beta_9 \text{AUDITOR} \\ & * \text{CHANGE_1} + \beta_{10} \text{AUDITOR} * \text{CHANGE_2} \\ & + \beta_{11} \text{AUDITOR} * \text{BOTH} + \beta_{12} \text{GROWTH} \\ & + \beta_{13} \text{SIZE} + \beta_{14} \text{ROA} + \beta_{15} \text{FCF} + \varepsilon \end{aligned} \quad (3)$$

Where,²³

CHANGE_1 = A dummy variable of 1 for auditor changes accompanied by the prevailing red-flag issues; 0 otherwise.

CHANGE_2 = A dummy variable of 1 for auditor changes accompanied by the prevailing non red-flag issues; 0 otherwise.

BOTH = A dummy variable of 1 for auditor changes accompanied by both prevailing red-flag and non-red flag issues; 0 otherwise.

REPORTABLE = A dummy variable of 1 for auditor changes accompanied by the presence of reportable events (via FRR No. 31); 0 otherwise.

AUDITOR = A dummy variable of 1 if it is auditor-initiated change, and 0 otherwise;

GROWTH = Change in total assets in year t divided by total assets at the end of year $t - 1$;

SIZE = Natural log of equity market values;

¹⁹ This variable also includes the situations of auditor–client disagreement leading to auditor resignations, and compare with the situations of auditor–client disagreement leading to client-initiated change (auditor dismissal).

²⁰ The probability of bankruptcy, based on Zmijewski's weighted probit bankruptcy prediction model, has been estimated as follows:

$$\begin{aligned} \text{Pr ob(Bankruptcy)} = & -4.803 - 3.6(\text{Net Income/Total Assets}) \\ & + 5.4(\text{Debt/Total Assets}) \\ & - 0.1(\text{Current Assets/Current Liabilities}) \end{aligned}$$

²¹ High litigation risk industries have the following SIC codes: 2833–2836 (biotechnology), 3570–3577 (computer equipment), 3600–3674 (electronics), 5200–5961 (retailing) and 7371–7374 (computer services) (Ashbaugh et al., 2003; Ashbaugh-Skaife et al., 2008; Francis et al., 1994).

²² The use of different return windows accounts for the possibility that information may be disseminated well before the 8-K filing date. If this happens, the longer return interval (either 7-day or 11-day) may better capture the information content of disclosures than the shorter return intervals (3-day).

²³ CHANGE_1, CHANGE_2 and BOTH variables proxy for situations where the firms have preexisting red-flag issues and/or non-red-flag issues. The firms may mention them as a part of the disclosure of reasons for auditor changes or may refrain from doing so. It is assumed that the presence of such issues impact investors' assessment of the auditor change event; thus, they are deemed to have information content.

ROA = Return on total assets computed as net income before extraordinary items divided by average total assets;

FCF = Free cash flows computed as: [Cash flow from operations – capital expenditures – dividend paid]/total assets.

Using the model (2), we examine the information content of CHANGE_1, CHANGE_2 and BOTH in terms of stock returns in presence of reportable events and auditor initiated change in the analysis. This will validate our effort to investigate the incremental information content of CHANGE_1, CHANGE_2 and BOTH above and beyond REPORTABLE and AUDITOR in the next stage using the model (3), and justify the argument in favor of making full and detailed disclosure of the reasons for auditor changes mandatory. We specifically suggest that if pre-existing red-flag issues increase the information content of reportable events and with respect to auditor initiated changes (which are likely to be of more concern to investors), the detailed and mandatorily disclosed reasons for auditor changes are more warranted.

3.2. Sample selection

From Audit Analytics database, we initially select a sample of 6526 firm-years where a firm changed auditors during the period 2004 through 2010. We matched this sample with data from the Compustat and CRSP, and Audit Analytics databases that are required to measure the variables for analyses. We exclude 718 observations with missing data from the Audit Analytics database and 485 observations with missing data from the Compustat and CRSP databases. We further exclude 353 observations relating to the financial firms and 1615 observations for firms that changed auditors more than once during the seven-year sample period. Applying these filters, we arrive at a final sample of 3355 auditor switches where firms changed their auditors once during the period 2004 through 2010. We review all related 8-K filing information and determine that the reported 1358 auditor changes are accompanied by disclosure of reasons for such changes (termed as disclosing firms). The remaining 1997 auditor changes are not accompanied by any disclosure of reasons for such changes (termed as nondisclosing firms).²⁴ The sample selection process is described in Table 1.

4. Descriptive data, correlations and results

Table 2 reports the comparative descriptive data for the disclosing and the non-disclosing firms and the univariate statistics for the mean differences between the firms' variables. Some statistics are noteworthy. PBDACC is significantly larger for the non-disclosing firms than the disclosing firms. There is greater likelihood for the non-disclosing firms to restate their financial statements (RESTATE) and to receive going concern audit opinions

(GCO) than the disclosing firms. The non-disclosing firms are more financially distressed (DISTRESS), and have significantly more reportable events associated with their auditor changes than the disclosing firms (REPORTABLE). Furthermore, a larger proportion of the non-disclosing firms operate in high litigious-risk industries than the disclosing firms (LITIGATION). Finally, the disclosing firms have significantly higher profitability (ROA) and better cash flow situation (FCF) than the non-disclosing firms.

Table 3 presents Pearson correlation statistics among the variables used in the analyses. Though many variables are correlated to each other, we do not encounter any problem of multicollinearity in the regressions as the variance inflation factors do not in any case exceed 4.0.

Table 4 presents the logistic regression results from estimating the Eq. (1). We find that most of the variables that proxy for red-flag issues accompanying auditor changes are significant. The probability of disclosing reasons for auditor changes is positively associated with AUDSW and negatively associated with PBDACC, RESTATE, GCO and AUDITOR. The result suggests that the firms are more likely to report reasons for auditor changes when they switch to higher quality auditors, but are less likely to report the reasons when the changes are accompanied by the presence of a large magnitude of discretionary accruals, and/or restatement of financial statements, when the firms receive a going-concern audit opinion, and/or the change is initiated by incumbent auditors. The firms are also less likely to disclose reasons when the changes are initiated by their auditors. We further observe that some non red-flag variables such as M&A_CLIENT, AFEE and LITIGATION are associated with the disclosure of reasons for changing auditors. The firms are more likely to disclose the reasons for auditor changes if they are caused by clients' mergers and acquisitions, and/or if the changes relate the firms' decision to switch to a low-cost audit service provider. The firms are, however, less likely to disclose reasons for auditor switches if they operate in high litigation-risk industries.

Among the firm-specific control variables, GROWTH, SIZE and FCF are positively related to the likelihood of disclosing reasons for auditor switches. Moreover, consistent with prior studies, we find that the reportable events per FRR No. 31, REPORTABLE are significantly positively associated with the firms' disclosure of reasons for auditor switches.

Table 5 (Panels A and B) reports regression results for market reaction tests with respect to the disclosure of reasons for auditor changes from estimating Eqs. (2) and (3). The test results would show whether the capital market actually reacts to the auditor changes that are accompanied by pre-existing red-flag and non-red flag issues, and whether auditor changes accompanied by red-flag and non-red flag issues have incremental information content for the market above and beyond REPORTABLE and AUDITOR. This analysis is complementary to our previous analysis and may reinforce justification for making full disclosure of reasons relating to auditor changes mandatory. We suggest that properly disclosed reasons may also potentially eliminate any misgiving that the market is likely to have for switching firms in absence of proper disclosure.

²⁴ Approximately 35% of the firms disclosed reasons for their auditor changes whereas 65% did not. These percentages are mostly consistent with those of Grothe and Weirich (2007) and Turner et al. (2005).

Table 1
Sample selection.

Number of firm observations associated with auditor changes in the years 2004 through 2010 with appropriate ticker and SIC codes (from Audit Analytics)	6526
Number of firm years without required data in Audit Analytics	(718)
Less: Number of firm years without required data in Compustat and CRSP	(485)
Less: Firm years belonging to financial industries	(353)
Total number of remaining firm observations	4970
Number of observations associated with changing auditors more than once	(1615)
Number of firms that changed their auditors only once during the sample period	3355
Number of firms disclosing reasons for auditor change (Disclosing firms)	1358
Number of firms not disclosing reasons for auditor change (Non-disclosing firms)	1997

Note: After excluding firm-years associated with more than one auditor changes, the resulting final sample comprises firms that changed their auditors only once during the sample period.

Table 2
Descriptive data ($N = 3355$).

	Disclosing Firms			Non-disclosing Firms			t-statistics
	Minimum	Maximum	Mean	Minimum	Maximum	Mean	
AUDSW	0.00	2.00	0.82	0.00	2.00	0.23	18.22***
PBDACC	0.00	1.38	0.28	0.00	1.72	0.39	-8.11***
RESTATE	0.00	1.00	0.21	0.00	1.00	0.16	11.39***
GCO	0.00	1.00	0.41	0.00	1.00	0.45	-2.04***
AUDITOR	0.00	1.00	0.23	0.00	1.00	0.60	29.333***
DISTRESS	-1.14	4.57	0.87	-2.01	3.49	0.94	-2.65***
M&A_CLIENT	0.00	1.00	0.38	0.00	1.00	0.10	11.396***
M&A_AUDITOR	0.00	1.00	0.05	0.00	0.12	0.04	1.22
LITIGATION	0.00	1.00	0.38	0.00	1.00	0.44	-3.06***
AFEE	6.63	17.21	12.39	2.56	15.38	10.58	5.913***
GROWTH	-0.38	3.01	0.09	-0.78	12.94	0.17	-2.42**
SIZE	11.28	24.45	19.55	3.41	26.32	14.43	8.61***
ROA	-17.49	16.32	-0.28	-9.65	14.81	-0.42	2.76***
FCF	0.00	0.29	0.39	0.00	0.72	0.14	11.36***
REPORTABLE	0.00	1.00	0.24	0.00	1.00	0.49	-12.82***

Variable definition: AUDSW = A dummy variable of 0 for downward auditor changes, 1 for lateral auditor changes and 2 for upward auditor changes; PBDACC = Performance adjusted discretionary accruals; RESTATE = A dummy variable of 1 if the firms restate their financial statements, and 0 otherwise; GCO = A dummy variable of 1 if the firms receive going-concern audit opinions from their auditors, and 0 otherwise; AUDITOR = A dummy variable of 1 if it is auditor-initiated change, and 0 otherwise; DISTRESS = Probability of bankruptcy estimated by applying Zmijewski's (1984) bankruptcy prediction model; M&A_CLIENT = A dummy variable of 1 if the client companies are engaged in mergers and acquisitions and 0 otherwise; M&A_AUDITOR = A dummy variable coded one if the incumbent auditors engage in merger or acquisition activities with another audit firms, and 0 otherwise; LITIGATION = A dummy variable of 1 if the firms operate in high-litigation risk industries, and 0 otherwise; AFEE = Natural log of audit fees; GROWTH = Change in total assets in year t divided by the total assets at the end of year $t - 1$; SIZE = Natural log of equity market values; ROA = Return on total assets computed as net income before extraordinary items divided by average total assets; FCF = Free cash flows computed as: [Cash flow from operations – capital expenditures – dividend paid]/total assets; and REPORTABLE = A dummy variable of 1 for the presence of FRR No. 31 reportable events, 0 otherwise.

Panel A reports the regression results from estimating Eq. (2) using five different return intervals for computing CAR. The results consistently show that though CHANGE_1 is significantly negative at the conventional level, CHANGE_2 is not significant. We also find that BOTH is significantly negative for the 7-day return interval. The investors react negatively when auditor change is accompanied by preexisting red-flag situations but do not react when the change is accompanied by non red-flag or benign issues. Consistent with prior studies, REPORTABLE is significantly negative in all cases. Furthermore, AUDITOR is consistently negative at the 10% level indicating that the market responds more adversely to the changes initiated by auditors than by clients. Panel B reports regression results from estimating Eq. (3) where we specifically exam-

ine the incremental effect of CHANGE_1, CHANGE_2 and BOTH on pricing stocks above and beyond the effect of REPORTABLE and AUDITOR. CHANGE_1, REPORTABLE and AUDITOR are all significantly negative at different levels. Furthermore, the interaction between REPORTABLE and CHANGE_1, and between AUDITOR and CHANGE_1 are also significantly negative implying that the capital market reacts more adversely to auditor changes when they are accompanied by red-flag issues, incrementally to the reportable events and auditor initiated changes. The results are mostly consistent across different return intervals. Our analyses suggest that full disclosure of reasons for auditor change in red-flag situations in addition to the reportable events under FRR No. 31 would significantly enhance the information environment surrounding auditor

Table 3

Correlation statistics (N = 3355).

Variables	DISCLOSURE	AUDSW	PBDACC	RESTATE	GCO	AUDITOR	DISTRESS	M&A_CLIENT	M&A_AUDITOR
DISCLOSURE	1.000								
AUDSW	0.309	1.000							
PBDACC	-0.197	-0.039	1.000						
RESTATE	-0.212	-0.150	0.102	1.000					
GCO	-0.409	-0.233	0.096	0.151	1.000				
AUDITOR	-0.295	-0.269	0.363	0.064	0.060	1.000			
DISTRESS	0.252	-0.162	-0.103	-0.090	-0.211	-0.002	1.000		
M&A_CLIENT	0.179	0.117	-0.035	-0.012	-0.037	-0.047	0.119	1.000	
M&A_AUDITOR	0.109	0.034	-0.209	-0.219	-0.394	-0.612	0.003	0.114	1.000
LITIGATION	0.119	0.060	-0.094	-0.028	-0.095	-0.078	0.131	-0.114	0.013
AFE	0.303	0.229	-0.191	-0.086	-0.033	-0.097	0.022	0.008	0.101
GROWTH	0.321	0.148	-0.152	-0.064	0.139	-0.137	-0.019	-0.170	0.224
SIZE	0.119	0.306	-0.055	0.022	-0.077	0.017	-0.201	-0.063	0.031
ROA	-0.153	0.087	-0.077	0.021	-0.054	-0.052	-0.038	0.017	0.111
FCF	0.176	0.098	-0.299	-0.070	-0.135	-0.069	-0.110	0.131	0.013
REPORTABLE	0.158	0.005	-0.081	-0.004	-0.099	-0.045	-0.071	0.026	0.141
	LITIGATION	AFE	GROWTH	SIZE	ROA	FCF	REPORTABLE		
LITIGATION	1.000								
AFE	-0.009	1.000							
GROWTH	-0.162	0.147	1.000						
SIZE	-0.006	0.069	0.161	1.000					
ROA	-0.219	0.016	-0.123	0.070	1.000				
FCF	0.169	0.011	0.348	-0.360	0.110	1.000			
REPORTABLE	0.108	0.023	0.409	0.026	-0.224	-0.320	1.000		

Table 4

Multivariate logistic regression results. Model: $\text{Logit } P(\text{DISCLOSE}) = \beta_0 + \beta_1 \text{ AUDSW} + \beta_2 \text{ PBDACC} + \beta_3 \text{ RESTATE} + \beta_4 \text{ GCO} + \beta_5 \text{ SEC} + \beta_6 \text{ AUDITOR} + \beta_7 \text{ DISTRESS} + \beta_8 \text{ M\&A_CLIENT} + \beta_9 \text{ M\&A_AUDITOR} + \beta_{10} \text{ LITIGATION} + \beta_{11} \text{ AFEE} + \beta_{12} \text{ GROWTH} + \beta_{13} \text{ SIZE} + \beta_{14} \text{ ROA} + \beta_{15} \text{ FCF} + \beta_{16} \text{ REPORTABLE} + \varepsilon$.

Variables	Coefficients	Wald chi-square
Intercept	-6.691	129.719***
<i>Red-flag issues</i>		
AUDSW	2.082	177.601***
PBDACC	-2.493	14.336**
RESTATE	-2.331	13.368**
GCO	-3.118	11.363***
AUDITOR	-1.719	39.633***
DISTRESS	1.581	1.050
<i>Non-red-flag issues</i>		
M&A_CLIENT	0.917	4.813*
M&A_AUDITOR	0.401	0.869
LITIGATION	-1.218	2.715*
AFE	3.093	18.408***
<i>Control variables</i>		
GROWTH	2.105	16.753***
SIZE	0.238	124.382***
ROA	0.391	0.316
FCF	0.709	4.713**
REPORTABLE	6.015	153.774***
Pseudo R ²	0.614	
N	3355	

Note: ***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively. All variables are defined in previous sections.

changes, and this disclosure would be incrementally informative for the market especially when changes are

initiated by auditors and accompanied by pre-existing red flag issues.

Table 5

Market reaction tests on auditor changes accompanied by prevailing red-flag and non-red flag issues.

Variables	3-day return interval (−1, 0,+1)		7-day return interval (−3, 0,+3)		7-day return interval (−5, 0,+1)		11-day return interval (−5, 0,+5)		11-day return interval (−9, 0,+1)	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Panel A: With alternative specification of return windows (N = 3355)										
Model: CAR = $\beta_0 + \beta_1$ CHANGE_1 + β_2 CHANGE_2 + β_3 BOTH + β_4 REPORTABLE + β_5 AUDITOR + β_6 GROWTH + β_7 SIZE + β_8 ROA + β_9 FCF + ε										
Intercept	0.089	0.000***	0.083	0.000***	0.075	0.030**	0.079	0.015**	0.095	0.000***
CHANGE_1	−0.052	0.045**	−0.055	0.044**	−0.053	0.043**	−0.045	0.059*	−0.043	0.066*
CHANGE_2	0.001	0.982	0.013	0.409	0.020	0.115	0.012	0.288	0.018	0.159
BOTH	−0.011	0.160	−0.034	0.083*	−0.036	0.077*	−0.024	0.109	−0.020	0.122
REPORTABLE	−0.082	0.005***	−0.090	0.000***	−0.087	0.000***	−0.091	0.000***	−0.089	0.000***
AUDITOR	−0.044	0.052*	−0.033	0.089*	−0.031	0.095*	−0.041	0.060*	−0.038	0.073*
GROWTH	0.070	0.020**	0.062	0.040**	0.065	0.029**	0.064	0.033**	0.065	0.038**
SIZE	0.044	0.050**	0.047	0.056*	0.040	0.069*	0.043	0.056*	0.040	0.061*
ROA	0.055	0.038**	0.050	0.045**	0.048	0.077**	0.055	0.038**	0.052	0.040**
FCF	0.009	0.516	0.010	0.211	0.006	0.414	0.003	0.785	0.012	0.105
Adjusted R ²	0.026		0.029		0.028		0.026		0.028	
Panel B: Testing interaction effect (N = 3355)										
Model: CAR = $\beta_0 + \beta_1$ CHANGE_1 + β_2 CHANGE_2 + β_3 BOTH + β_4 REPORTABLE + β_5 AUDITOR + β_6 REPORTABLE * CHANGE_1 + β_7 REPORTABLE * CHANGE_2 + β_8 REPORTABLE * BOTH + β_9 AUDITOR * CHANGE_1 + β_{10} AUDITOR * CHANGE_2 + β_{11} AUDITOR * BOTH + β_{12} GROWTH + β_{13} SIZE + β_{14} ROA + β_{15} FCF + ε										
Intercept	0.088	0.000***	0.096	0.000***	0.089	0.000***	0.091	0.000***	0.090	0.000***
CHANGE_1	−0.048	0.051*	−0.056	0.040**	−0.063	0.028**	−0.043	0.069*	−0.046	0.058*
CHANGE_2	0.011	0.196	0.015	0.149	0.005	0.681	0.002	0.913	0.013	0.182
BOTH	−0.012	0.175	−0.025	0.102	−0.026	0.099*	−0.014	0.228	−0.012	0.264
REPORTABLE	−0.077	0.022***	−0.089	0.005***	−0.085	0.008***	−0.093	0.000***	−0.098	0.000***
AUDITOR	−0.040	0.058*	−0.038	0.069*	−0.035	0.080*	−0.030	0.082*	−0.036	0.078*
REPORTABLE * CHANGE_1	−0.048	0.055*	−0.063	0.031**	−0.062	0.030**	−0.040	0.056*	−0.044	0.051*
REPORTABLE * CHANGE_2	−0.008	0.410	−0.006	0.550	−0.004	0.611	−0.001	0.994	−0.005	0.492
REPORTABLE * BOTH	−0.015	0.191	−0.026	0.094*	−0.028	0.085*	−0.002	0.889	−0.009	0.317
AUDITOR * CHANGE_1	−0.045	0.056*	−0.049	0.050**	−0.046	0.053*	−0.039	0.075*	−0.035	0.088*
AUDITOR * CHANGE_2	0.005	0.239	0.002	0.805	0.006	0.318	0.010	0.133	0.008	0.221
AUDITOR * BOTH	−0.020	0.119	−0.031	0.077*	−0.029	0.083*	−0.014	0.206	−0.010	0.253
GROWTH	0.070	0.024**	0.065	0.030**	0.068	0.022**	0.072	0.015**	0.078	0.015**
SIZE	0.049	0.054*	0.055	0.041**	0.056	0.044**	0.040	0.063*	0.034	0.083*
ROA	0.058	0.035**	0.042	0.059*	0.040	0.065**	0.045	0.056**	0.046	0.059*
FCF	0.003	0.802	0.011	0.204	0.019	0.115	0.006	0.395	0.013	0.198
Adjusted R ²	0.033		0.036		0.038		0.034		0.035	

Note: ***, ** and * indicate significance at the 1%, 5% and 10% levels respectively based on two-tailed tests. All variables are defined in previous sections.

The results imply that the market does function more efficiently when full disclosure of reasons associated with auditor changes above and beyond reportable events are made in the 8-K filings.²⁵ This would also be beneficial for companies because full and transparent disclosure practice would significantly reduce uncertainty and investor skepticism with respect to auditor switching events especially when there are accompanying preexisting red-flag issues.

5. Conclusions

While it is mandatory for public companies to notify the SEC of a change in firms' auditors via 8-K filings, firms are not required to disclose the reason(s) for such changes except for some reportable events under FRR No. 31. Under the current regulation concerning firms' disclosures associated with auditor changes, the firms that choose to disclose the reason(s) for their auditor changes in the 8-K filings do so voluntarily. This voluntary disclosure regime has been criticized, however, by various interest groups, e.g., the Council of Institutional Investors (CII) have long criticized the current voluntary disclosure regime as adding to a lack of transparency associated with auditor switches.

Using a sample of 3355 auditor switches over a period from 2004 through 2010, we find that the firms are significantly less likely to disclose the reasons for their auditor switches when, the switches are accompanied by red-flag issues. We document that several firm-specific attributes, especially those that indicate "red-flag" issues concerning management's integrity and financial reporting quality, are negatively associated with the likelihood that the switching firms choose to voluntarily report the reason(s) for their auditor changes. We further show that when such changes are accompanied by red-flag issues, these are negatively priced into stock by the capital market. Further, the changes accompanied by red-flag issues are incrementally informative above and beyond FRR 31 reportable events and auditor-initiated changes, and have incremental pricing implication for the investing community. The result also implies that in absence of adequate disclosure, the market tends to speculate worst-possible scenarios espe-

²⁵ In the second stage analysis, we include two variables CHANGE_1 (which is the change accompanied by red-flag situation) and CHANGE_2 (which is accompanied by non-red flag benign situation). Our first stage analysis shows that the firms are less likely to disclose reasons for their auditor changes when they are preceded or accompanied by red-flag issues. Hence, CHANGE_1 essentially reflects the market's concern about those pre-existing issues accompanying auditor changes and provides justification to our arguments for making the full disclosure of reasons mandatory making the event more informative to investors. Our analyses further show (as reported in Panel A of Table 5) that in presence of both REPORTABLE and AUDITOR, CHANGE_1 is significantly negative for all return intervals. The result indicates the pricing implication of those red-flag issues, and if the reasons for auditor changes are disclosed properly, the market would be better equipped with information to interpret the situation. This is also beneficial for the switching firms as the full disclosure reduces the market's speculation and skepticism about unknowns. This conjecture is further reinforced by the result reported in Panel B of Table 5 where we show that CHANGE_1 has incremental information content above and beyond REPORTABLE and AUDITOR. So, our model 2 and 3 analyses are complementary to our model 1 analysis and provide justification for the calls for making the disclosure of reasons for auditor changes mandatory.

cially when the changes are accompanied by red-flag issues and reacts negatively.²⁶ The evidence suggests that the regulators mandate the full disclosure of reasons for auditor changes for the SEC registrants to reduce the opacity, which would enable the market participants to evaluate the switching firms in proper perspectives by reducing the market speculation and skepticism. Our study contributes to the recent regulatory policy debate associated with firms' disclosure of the reason(s) for auditor switches. Specifically, our results support the arguments made by the CII that the current voluntary disclosure regime results in selective disclosure practices and are likely contribute to the general lack of transparency with respect to auditor changes.

References

- Ajinka, B., & Gift, M. (1984). Corporate managers' earnings forecasts and symmetrical adjustments of market expectations. *Journal of Accounting Research*, 22(2), 425–444.
- Antle, R., & Nalebuff, B. (1991). Conservatism and auditor–client negotiations. *Journal of Accounting Research*, 3, 31–54.
- Ashbaugh, H., LaFond, R., & Mayhew, B. (2003). Do non-audit services compromise auditor independence? Further evidence. *The Accounting Review*, 78(3), 611–639.
- Ashbaugh-Skaife, H., Collins, D., Kinney, W., & LaFond, R. (2008). The effect of internal control deficiencies and their remediation on accrual quality. *The Accounting Review*, 83(1), 217–250.
- Ashbaugh-Skaife, H., LaFond, R., & Mayhew, B. (2007). Institutional investors and firms' financial reporting. Working paper, University of Wisconsin-Madison.
- Bedard, J., & Johnstone, K. (2004). Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review*, 79(2), 277–304.
- Beneish, M. (1997). Detecting GAAP violation, implications for assessing earnings management among firms with extreme financial performance. *Journal of Accounting and Public Policy*, 16(3), 271–309.
- Chung, H., & Kallapur, S. (2003). Client importance, nonaudit services, and abnormal accruals. *The Accounting Review*, 78(4), 931–955.
- Council of Institutional Investors (CII). (2007). The council of institutional investors corporate governance policies. <<http://www.cii.org/UserFiles/file/council%20policies/CII%20Full%20Corp%20Gov%20Policies%205-7-09.pdf>>.
- Council of Institutional Investors (CII). (2008a). Petition for rulemaking letter to U.S. Securities and Exchange Commission, January 25, 2008. <<http://www.sec.gov/rules/petitions/2008/petn4-555.pdf>>.
- Council of Institutional Investors (CII). (2008b). Re: rulemaking petition file no. 4-555. <[http://www.cii.org/UserFiles/file/resource%20center/correspondence/2008/October%20202008%20Letter%20to%20Chairman%20Cox%20regarding%20auditor%20departure%20policy%20\(final%20with%20letterhead\).pdf](http://www.cii.org/UserFiles/file/resource%20center/correspondence/2008/October%20202008%20Letter%20to%20Chairman%20Cox%20regarding%20auditor%20departure%20policy%20(final%20with%20letterhead).pdf)>.
- Clarkson, P., Kao, J., & Richardson, G. (1999). Evidence that management discussion and analysis (MD&A) is a part of a firm's overall disclosure package. *Contemporary Accounting Research*, 16(1), 111–134.
- Craswell, A. T., Francis, J. R., & Taylor, S. L. (1995). Auditor brand name reputations and industry specializations. *Journal of Accounting and Economics*, 20(3), 297–322.
- DeFond, M., & Francis, J. R. (2005). Audit research after Sarbanes–Oxley. *Auditing: A Journal of Practice and Theory*, 24(Suppl.), 5–30.
- DeFond, M., & Subramanyam, K. R. (1998). Auditor changes and discretionary accruals. *Journal of Accounting and Economics*, 25(1), 35–67.
- Dye, R. (1985). Disclosure of nonproprietary information. *Journal of Accounting Research*, 23(1), 123–145.
- Dye, R. (1991). Informationally motivated auditor replacement. *Journal of Accounting and Economics*, 14(4), 347–374.

²⁶ If there is information opacity and lack of transparency in disclosure practice especially in red flag situation, the market is more likely to react based on speculation and skepticism, and not based on rationality because the market do not have full information about the change events. That is why selective disclosure practice is so detrimental not only for investors and other stakeholders but also for the switching firms.

- Ettredge, M., Heintz, J., Li, C., & Sholz, S. (2011). Auditor realignments accompanying implementation of SOX 404 ICFR reporting requirements. *Accounting Horizons*, 25(1), 17–39.
- Francis, J., Maydew, E. L., & Sparks, H. (1999). The role of Big 6 auditors in the credible reporting of accruals. *Auditing: A Journal of Practice and Theory*, 18(2), 17–34.
- Francis, J., Philbrick, D., & Schipper, K. (1994). Shareholder litigation and corporate disclosures. *Journal of Accounting Research*, 32(2), 137–164.
- Grant Thornton. (2006). Grant Thornton LLP calls for increased transparency to correct negative assumptions in reporting auditor change. <<http://www.grantthornton.com/portal/site/gtcom/menuitem.550794734a67d883a5f2ba40633841ca/?vgnnextoid=32825833f3d4a010VgnVCM100000308314acRCD&vgnnextchannel=4695d1dec1439010VgnVCM10000308314acRCD>>.
- Grothe, M., & Weirich, T. (2007). Analyzing auditor changes. *The CPA Journal*, 77(12), 14–23.
- Gul, F., Chen, C., & Tsui, J. (2003). Discretionary accounting accruals, managers' incentives, and audit fees. *Contemporary Accounting Research*, 20(3), 441–464.
- Gul, F., & Tsui, J. (1998). A test of the free cash flow and debt monitoring hypotheses, evidence from audit pricing. *Journal of Accounting and Economics*, 24(2), 219–237.
- Healy, P., Hutton, A., & Palepu, K. (1999). Stock performance and intermediation changes surrounding sustained increase in disclosure. *Contemporary Accounting Research*, 16(3), 485–520.
- Johnson, B., & Lys, T. (1990). The market for audit services: Evidence from voluntary auditor changes. *Journal of Accounting and Economics*, 12(January), 281–308.
- Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analysts' ratings of corporate disclosures. *Journal of Accounting Research*, 31(2), 246–271.
- McNichols, M. (1989). Evidence of informational asymmetric from management earnings forecasts and stock returns. *The Accounting Review*, 64(1), 1–27.
- Palepu, K., & Healy, P. (1993). The effect of firms' financial disclosure strategies on stock prices. *Accounting Horizons*, 7(2), 1–11.
- Scott, W. (2003). *Financial accounting theory* (3rd ed.). Englewood Cliffs, NJ: Pearson, Prentice Hall.
- Securities and Exchange Commission (SEC). (1988). Disclosure amendments to Regulation S-K, Form 8-K and Schedule 14A regarding changes in accountants and potential opinion shopping situations. Financial Reporting Release No. 31. Washington DC, U.S. Government Printing Office.
- Security and Exchange Commission (SEC). (1977). *Report of the advisory committee on corporate disclosure*. Washington, DC, US: Government Printing Office.
- Securities and Exchange Commission (SEC). (1978). *Exchange Act Release No 34-14808*. Washington, DC, US: Auditor Changes, Final Rule.
- Simunic, D., & Stein, M. (1996). The impact of litigation risk on audit pricing: A review of the economic and the evidence. *Auditing: A Journal of Practice and Theory*, 15(2), 119–134.
- U.S. Treasury Department. (2008). Advisory Committee on the Future of the Auditing Profession Final Report. <<http://www.treas.gov/offices/domestic-finance/acap/docs/final-report.pdf>>.
- Turner, L., Williams, J., & Weirich, T. (2005). An insider look at auditor changes. *The CPA Journal* (November), 12–21.
- Warfield, T., Wild, J., & Wild, K. (1995). Management ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), 61–92.
- Whisenant, J. S., Sankaraguruswamy, S., & Raghunandan, K. (2003). Market reaction to disclosure of reportable events. *Auditing: A Journal of Practice and Theory*, 22(1), 181–194.
- Zmijewski, M. (1984). Methodological issues related to the estimation of financial distress prediction models. *Journal of Accounting Research*, 22(Suppl.), 59–82.