

On the Timing of Director Departures

Murali Jagannathan
School of Management
Binghamton University
Binghamton NY 13850
(607) 777-4639
MuraliJ@binghamton.edu

Srinivasan Krishnamurthy*
Poole College of Management
North Carolina State University
Raleigh, NC 27695
919-515 0156
Srini_Krishnamurthy@ncsu.edu

Joshua Spizman
College of Business Administration
Loyola Marymount University
Los Angeles, CA 90045
(310) 338-2902
joshua.spizman@lmu.edu

April 2015

* Corresponding author. We thank Ayca Altintig (discussant), Joe Brazel, Chuck Knoeber, Erik Lie, Michelle Lowry, Felix Meschke, Micah Officer, Christine Panasian (discussant), Luigi Zingales, and seminar participants at the California Corporate Finance Conference, Financial Management Association Annual Meeting, Binghamton University (SUNY), Loyola Marymount University, and North Carolina State University for helpful comments.

Abstract

Recent literature has expressed concerns that directors may exit the firm when they expect the firm to perform poorly, in order to protect their reputation in the market for directors. In this paper, we examine (i) whether directors utilize private information obtained from their directorships to time their departures, and (ii) whether departing prior to poor performance helps them maintain their reputation in the labor market. Consistent with directors using information from their directorships, we find that audit committee directors, particularly those who serve on multiple boards, depart just prior to a significant deterioration in earnings quality. But, leaving prior to poor performance does not help managers preserve their reputation. We find that directors who leave in advance of poor performance do not sit on more new boards than directors who stay through the poor performance. Overall, the director labor market seems to recognize that directors may leave early to avoid being associated with poorly performing firms, and penalizes them if they do leave.

Shareholders elect the board of directors with the expectation that the directors would provide advice and effectively monitor managerial actions. The literature documents that directors who gain reputation as effective directors are rewarded by the labor market with additional board seats (Ferris, Jagannathan, and Pritchard (2003), Yermack (2004)) while directors who are considered to be lax in their duties are penalized by the labor market and retain fewer directorships (Gilson (1990), Harford (2003), Fich and Shivdasani (2007)).¹ But, recent corporate governance literature expresses concern that directors concerned about the reputational penalty arising from serving on poorly performing firms may decide to leave the firm early when they anticipate a decline in firm performance, rather than focusing their efforts in resolving the problems within the firm (Fahlenbrach, Low, and Stulz (2013), Masulis and Mobbs (2014)). In this paper, we examine two questions related to these concerns: (a) Do directors use information obtained from their committee membership to quit early, and (b) Does departing prior to poor performance help preserve the director's reputation in the labor market?

To investigate the first question, we focus on audit committee directors and examine whether they time their departures when earnings quality declines. Audit committee members have the overall responsibility over the firm's external auditors and are more likely to have early access to earnings quality-related information than other directors. Further, they have, on average, more accounting and financial expertise to better understand the earnings process. So, it is possible that audit committee members time their departures prior to the release of information that indicates a deterioration in earnings quality.² Directors who are more in demand in the

¹ In addition to losing board seats, directors may also face direct financial losses from being associated with fraud firms. Adams, Hermalin, and Weisbach (2010) give the example of WorldCom, where the directors had to pay \$18 million out of pocket (not covered by insurance).

² While one can trace a direct link between directors who serve on the audit committee and the information that may be related to their committee membership (e.g., earnings quality), it is harder to do so for directors who serve on other board committees.

directorial labor market are more likely to have other directorship opportunities. Hence, audit committee members who serve on multiple boards (audit multiple directors, hereafter) are more likely to depart when earnings quality declines.³ We address the second question by examining whether audit multiple directors who leave prior to decreases in earnings quality are able to preserve their reputation in the director labor market. If they are able to do so, then we would expect them to retain more their other existing directorships and/or obtain more new directorships, relative to the other directors.

Examination of these two questions is important for the following reasons. Under the business judgement rule, directors do not just have an obligation to protect shareholders but also to refrain from actions that may not be in the firms' or shareholders' best interests. If directors decide to depart based on the information provided to them in good faith, they will be failing in their fiduciary duties to act in shareholders' interests. The firm loses the service of a director at a time when their expertise may be particularly valuable – when the firm faces a potential decline in performance. Unexplained director departures may also make it difficult for the firm to replace the departing director, even without an immediate disclosure of poor performance.

It is also important to know whether directors are rewarded in the labor market when they leave prior to poor performance. A large literature (discussed in more detail later) documents that directors serving on boards of poorly performing firms are penalized in the director labor market, but we are not aware of any paper that examines whether leaving early helps preserve their reputation in the labor market. Nominating a director who left quietly before poor performance in previous directorships could cast doubt on the independence of the appointed directors. The independence would be compromised by appointing compliant directors who 'did not rock the

³ Similar arguments are made in Masulis and Mobbs (2011), who consider inside directors with outside directorships as directors with large reputational capital.

boat' in their prior directorships. Whether the nominating committee was aware of such departures and still nominated them or the departing directors were able to disassociate themselves from the performance of the departing firm, nominating such directors questions the ability of the nominating committee to select appropriate candidates to serve on the board.

We conduct our analysis using a large sample of over 142,000 directorships during 1999-2012 that includes nearly 12,600 director departures involving 2,786 unique firms, identified from the Corporate Library and the IRRC databases. Consistent with audit multiple directors using information from their audit committee membership to time their departure, we find that relative to directors who stay, the departure of audit multiple directors is associated with a concurrent increase in the level of accruals and a decline in the cash flow component of earnings. Prior research documents that high levels of accruals are a leading indicator of poor subsequent stock performance (Sloan (1996)). The directors may believe that high accruals indicate that the earnings and stock performance is not sustainable and decide that it is an appropriate time to leave. However, we find that the departure of the other types of outside directors – audit non-multiple directors and non-audit directors – is not associated with a decrease in earnings quality. This suggests that audit multiple directors are better able to interpret the information related to accruals, likely because of their superior access to earnings quality-related information via their position on the audit committee and/or because of their superior financial expertise. We conduct several robustness tests and verify these results. Overall, our analysis suggests that audit multiple directors actively process the accounting information available to them and leave when the potential for adverse future revelations increases.

In the second part of the analysis, we examine whether directors who leave early are able to avoid the reputational penalty of being associated with poorly performing firms, and lose

fewer directorships than those who continue to serve the firm. We find that audit multiple directors who leave the firm lose directorships over the next three years, and the losses are greater than the losses for directors who remain with the firm during this period. As a more specific test, we examine departures that occur prior to instances that indicate poor audit committee performance. So, we examine the change in directorships when directors leave before an earnings restatement. We find that audit multiple directors who leave prior to earnings restatements also lose significantly more directorships over the subsequent three years than those who stay through the restatement. This result holds both in univariate and multivariate settings and suggests that audit multiple directors who leave firms before earnings problems arise are not able to preserve their reputation in the labor market. Rather, our results indicate that such directors may be flagged as shirking their responsibilities towards shareholders. We further confirm this finding by documenting that the other directorships that they lose are more prestigious than the other directorships that they gain over the subsequent three years. This evidence is suggestive of a market penalty rather than the audit multiple directors voluntarily relinquishing less valuable directorships to ease their workload.

Our research has implications for regulators, auditors, and investors. If audit multiple directors are likely to leave in advance of the revelation of potential financial reporting problems, then regulations (e.g., SOX/SEC/Stock exchange guidelines on audit committees) that expect audit committee members to be stewards of the firm's accounting process who act to mitigate, uncover, and rectify improper accounting, may be ineffective in achieving their objective. If reputed audit committee members leave when they suspect potential problems (our results suggest that they do), they would be unlikely to provide an effective forum where "... auditors and other interested parties can candidly discuss concerns", at a time when such discussions may

be particularly valuable.⁴ Hence, it appears that imposing requirements on audit committee member expertise may have only a limited influence in resolving earnings related problems when they arise. However, our results also suggest that audit multiple directors who leave in advance of a decline in earnings quality are unable to preserve their reputation and suffer adverse consequences in the director labor market.

The remainder of the paper is organized as follows: In section 2, we discuss the related literature and develop our testable hypotheses. Section 3 discusses the sample and methodology and Section 4 presents our main results. We conclude in Section 5.

2. Theory and related research

Fama (1980) and Fama and Jensen (1983) conjecture that outside directors have incentives to develop a reputation as experts, and that the market for their services prices them according to their performance. Consistently, Ferris et al. (2003) document that additional directorship appointments are directly related to the performance of the director's firms. Yermack (2004) estimates that during the fifth year of the directorship, the director's incentives (e.g., from compensation and additional board seats) increases by 11 cents per \$1,000 increase in firm value. Other papers examine the reputational penalties for directors who serve on boards of poorly performing firms and document a loss of directorships. Gilson (1990) documents that directors of restructuring firms not only lose their directorship in the firm, but also lose a significant number of their other directorships. Harford (2003) documents a similar result in poorly performing firms that rebuff a takeover attempt. Fich and Shivdasani (2007) document that the loss in the number of other directorships held by a firm's directors is higher when the

⁴ U.S. Securities and Exchange Commission, Standards relating to listed company audit committees. Available at <http://www.sec.gov/rules/final/33-8220.htm>

misconduct alleged in class action lawsuits is more severe. Srinivasan (2005) documents that audit committee members of firms that restate their financial statements lose directorships soon after their restatement. The argument implicit in these papers is that the poor performance of the firm is at least partially due to the firm's directors shirking their monitoring duties.⁵

But, Adams, Hermalin, and Weisbach (2010) note that a director concerned about her reputation in the labor market for directors may attempt to develop a reputation as someone unlikely to rock the boat, because such directors are favored by powerful CEOs who can influence director appointments. Since directors associated with poor monitoring lose a significant number of their directorships, directors who are in demand in the labor market may quietly leave the firm before problems are revealed publicly to investors, while still maintaining a reputation as someone who may not openly dissent with management. Dyck, Morse, and Zingales (2010) find that employees face significant costs when they are whistleblowers, and suggest that "... the best way to avoid the reputation loss is to change jobs as soon as possible, without whistleblowing." Studies on monitoring by institutional investors (Parrino, Sias and Starks (2003)) and by blockholders (Edmans (2009)) suggest that monitors use the "Wall Street rule" of selling off their ownership when they become dissatisfied with the firms' management, rather than staying on and attempting to force changes. Consistent with these arguments, Fahlenbrach, Low, and Stulz (2013) document that surprise departures of directors are more often followed by extreme negative events.⁶ It is also possible that a director is required to exert

⁵ Other papers find evidence that is inconsistent with a reputational penalty after poor performance. Agrawal, Jaffe, and Karpoff (1999) find that outside director turnover is unchanged after fraud. Helland (2006) finds that outside directors of firms facing class action lawsuits actually experience an increase in the number of other board seats held following the lawsuit.

⁶ They also consider and reject the reverse causality explanation, i.e., the departure of a valuable director causes the subsequent poor performance rather than directors anticipating and leaving before the onset of poor performance.

extra effort when firms perform poorly (Vafeas (1999)), and they may quit and avoid the extra effort.

The discussion above suggests that directors have an incentive to leave in advance of poor performance. A priori, it is not clear what informational advantage directors have that may have contributed to this decision. It is probable that they have advance information about the company's prospects from their role in board committees, but is difficult to identify the nature of the informational advantage from serving on most committees, because the information is not observable, even ex-post. One exception could be the informational advantage that audit committee members have.

The Sarbanes Oxley Act of 2002 (SOX) requires that the audit committee set the agenda relating to accounting issues and requires these directors to be independent from the influence of management. Further, it requires the auditor to report directly to the audit committee.⁷ Thus, audit committee members are likely to have better access to information about the earnings process via their position on the audit committee and through their interactions with internal and external auditors.⁸ Since the stock exchanges have provisions that require at least one financial expert in the audit committees for listed firms, the audit committee members are also likely to be knowledgeable or have prior experience in evaluating financial information.⁹ In particular, they may perceive that the current earnings performance is not sustainable in the future if they observe that the firm is using income increasing accruals to boost reported current performance. Other directors, i.e., those who do not serve on the audit committee, would be less likely to be

⁷ See Coates (2007) for a summary of the changes instituted by the Sarbanes Oxley Act.

⁸ For example, the directors who serve on the audit committee would observe the audit adjustments proposed by the external auditor and the adjustments actually incorporated in the reported earnings, and could rely on this information in assessing earnings quality.

⁹ Engel, Hayes, and Wang (2010) note that the compensation paid to audit committee members is higher than that of the members in the compensation committee.

privity to such information and/or would have less expertise in evaluating this information. Hence, we focus on whether audit committee members use information relating to earnings quality in deciding when to leave.

A further consideration is the departure decisions of audit committee members holding multiple directorships. While the literature is conflicted about their value to firms, it is likely that only multiple directors have the opportunity to quit certain boards and join others.¹⁰ The evidence in Masulis and Mobbs (2014) suggests that directors holding multiple directorships exert more effort in firms that are important to preserve their reputation in the labor market and quickly leave firms that may suffer a drop in performance. Multiple directors may benefit from information spillovers from their other directorships (e.g., about industry trends) that may help them identify whether or not the current level of performance is sustainable in the future. If such factors enable them to more accurately recognize the extent to which the reported earnings diverge from the true underlying economic performance, they may elect to resign rather than blow the whistle or act to correct the reported earnings. Actions to correct such issues may often require co-ordination with other directors and such actions may be viewed negatively in the labor market (Warther (1998)). The finding in Larker, Richardson, Tuna (2007) that multiple directors are not associated with more restatements is also consistent with these directors leaving prior to poor performance. Hence, we classify reputed audit committee directors as those who hold three or more directorships, and examine whether they are more likely to depart when earnings quality declines. Also, while the threat that directors may quit could constrain earnings management (e.g., Edmans (2009)), they may leave when the threat is not sufficient to constrain managers.

¹⁰ For example, Fich and Shivdasani (2006) argue that busy boards are detrimental, while Fama and Jensen (1983), Ferris et al. (2003), and Field, Lowry, and Mkrtychyan (2013) argue in favor of the positive effects of busy boards.

To summarize, audit multiple directors may leave when declines in earnings quality suggest poor future performance. They may leave quietly without “rocking the boat” in advance of poor performance, expecting to preserve their reputation in the labor market for directors. If such departures help them preserve their reputation, we expect them to be rewarded with more directorships than directors who continue to serve when the poor performance becomes public. This suggests the following two hypotheses that we test empirically in the paper:

H1: The departure of audit (multiple) directors is more likely to be associated with a decrease in earnings quality, compared to the other directors.

H2: Audit (multiple) directors are able to obtain/maintain more directorships by leaving the firms when there is a decrease in earnings quality.

3. Sample and descriptive statistics

3.1 Data

We begin with the sample of actively serving directors from the Corporate Library (CL) database from 2003 to 2012.¹¹ We augment this sample with director data from the IRRC database starting from 1997, and merge the combined director sample with CRSP, retaining only domestic firms with a CRSP share code of ‘10’ or ‘11’. Next, we classify a director-firm-year as a departure year if the director was listed as active in a given year and was listed as inactive in subsequent years. We require the firm to be covered by either Corporate Library or IRRC for at least one year subsequent to the departure so that instances where the firm is either de-listed or no longer covered by the director databases are not classified as departures. We combine the

¹¹ This database has been used in prior research (e.g., DeFond, Hann, and Hu (2005)). In 2004, the director status variable is missing in the Corporate Library database so we classify directors as active in 2004 if the director was active in both 2003 and 2005. We verified the accuracy of the director status variable by manually checking the status of a randomly selected subsample of fifty directors and found no errors.

active director sample and director departures, giving us an initial sample of 237,771 observations at the firm-director-year level (Table 1). We exclude inside directors and only retain outside directors. We also exclude financial firms (SIC code between 6000 and 6999), resulting in a final sample of 155,082 directorships over 23,839 firm-years during 1999-2012. There are 12,638 departures of outside directors (8,697 firm-years) during this period.

We use slightly differing methodologies to determine departure dates depending on the source of the data. For observations coming from the Corporate Library, the departure date is determined in one of two ways. First, if the date retiring variable is available, we use that date as the director departure date. If the variable is missing, we use the first subsequent proxy date from when a director is no longer listed as active as the departure date. For data that comes from the IRRC dataset, we use the earliest annual meeting date subsequent to when a director is no longer listed as active as the departure date, since IRRC database does not have specific departure dates. Audit committee membership information is available in both sources. We classify directors as a multiple director based on whether the multiple director variable is greater than or equal to three (we note that this variable in the IRRC database lists the number of outside public boards, whereas the same variable in Corporate Library includes non-public firms).

3.2 Summary statistics

Panel A of Table 2 presents the characteristics of firms with at least one outside director departure.¹² Firms with director departures are significantly larger than firms that do not have

¹² We define all variables used in the paper in Appendix Table A.

any director departure. The mean total assets for firms with departures is \$6.2 billion, compared to \$4.0 billion for firms with no departures. The medians are considerably smaller, even though we find a similar pattern (\$1.4 billion vs. \$0.9 billion). The same pattern is also apparent when we examine total sales. The firms where multiple directors (both audit and non-audit) depart are especially large, with mean assets of over \$10 billion. This evidence is consistent with prior studies that multiple directorships is a large firm phenomenon (Ferris et al. (2003), Field et al. (2012)). The average financial performance (operating return on assets) is lower for firms with departures than for firms with no departures (7.1% vs. 8.2%). The prior sales growth is also significantly lower for firms with departures (9.0% vs. 11.8%). Consistent with this poorer performance, they also have higher leverage (0.54 vs. 0.50) and higher book-to-market ratios (0.69 vs. 0.65). A similar trend is observed across the different subgroups of director departures - audit and non-audit, for both multiple and non-multiple directors.

Panel B of Table 2 presents characteristics of the departing directors. Compared to the population of active directors, the departing directors are older by about two years (62.3 years vs. 60.5 years), hold about the same number of directorships (1.98 vs. 1.97) and have a longer tenure on the board (9.3 years vs. 7.7 years). These patterns are similar for the different director subgroups, except for a shorter tenure for audit-multiple departures (8.2 years).

4. Results

The hypotheses in the paper are based on the notion that audit committee members in general, and audit committee members who hold multiple directorships in particular, time their

departure before a decline in the firm's performance, at least partially by being able to infer whether the reported earnings accurately capture the underlying performance.

We first document whether director departures in our sample are followed by poor stock performance (as in Fahlenbrach et al. (2013)). We then compute various accrual measures to test whether audit directors leave when accruals are low and are expected to increase in the near future (hypothesis H1). Finally, we test hypothesis H2 by examining whether the departing directors are able to retain their other directorships and obtain new directorships.

4.1 Abnormal stock returns subsequent to director departures

We examine the short-term market reaction around director departures. The mean buy and hold market adjusted abnormal return over days (-1, +1) for the full sample of departures is a statistically significant 0.25%, but the economic magnitude is small. The abnormal return over days (-1, +1) for the audit multiple departure sub-sample is similar in magnitude (0.30%). This is consistent with the directors leaving quietly and inconsistent with the notion that director departures are a public expression of disagreement with the management.

To check whether directors depart prior to poor performance, we compute the long-run buy and hold market model-adjusted abnormal returns following their departures.¹³ We find that the abnormal return averages a statistically significant -2.3% in months (+1 to +12) subsequent to the departure. The poor performance persists in years 2 and 3 (months +13 to +24, and months +25 to +36), confirming the findings in Fahlenbrach et al. (2013).

When we examine the departures of different types of directors separately, we find that over the subsequent three years, the performance is consistently negative and significant only

¹³ These results are not separately tabulated but are available from the authors upon request.

following the departures of audit multiple directors. The mean abnormal return is -3.1% in year 1, -3.2% in year 2, and -4.8% in year 3, and all three estimates are statistically significant at the ten-percent significance level or better. However, the abnormal return is not consistently negative and significant following the departures of the other three types of outside directors – audit non-multiple directors, non-audit multiple directors, and non-audit non-multiple directors. For example, the average market model-adjusted abnormal return following departures of audit non-multiple directors is a statistically insignificant -1.25% over months (+1 to +12). The mean abnormal return of 0.61% is not statistically significant in year 2 either, but the mean of -3.0% in year 3 is significantly negative. This suggests that compared to other outside directors, audit multiple directors are more likely to time their departures and leave before poor performance.

4.2. Earnings quality and director departures

In Section 4.1 we have documented that audit multiple directors leave prior to poor firm performance. In this section, we present the results of analyses that address whether audit committee directors use their informational advantage about earnings quality to make their departure decisions. We posit that they will time their decisions when there is a decrease in earnings quality, indicating poor future performance (Hypothesis 1). We describe the measures we use to measure earnings quality and the results from our tests below.

4.2.1. Univariate results

Following Richardson, Sloan, Soliman, and Tuna (2005, RSST hereafter), we decompose operating income into accruals and cash flow (detailed definitions are in Appendix Table A). Hypothesis H1 predicts that directors who serve on the audit committee, especially multiple

directors, will depart when the earnings quality declines, since low earnings quality (i.e., high accruals) signals that the future performance would not be good (e.g., Sloan (1996)).

Panel A in Table 3 presents the statistics for the last fiscal year ending prior to the director departure date (year (-1)) and Panel B presents statistics for the change in performance from year (-1) to year (0) (fiscal year end of the departure year). The departures occur during the fiscal year. So the director could have information about firm performance through his or her membership in the audit committee. We find that total accruals, scaled by average total assets, average a significantly positive 1.6% in the year prior to an outside director departure. Among the four sub-groups of director departures – audit non-multiple, audit multiple, non-audit non-multiple, and non-audit multiple – the average accruals in year (-1) is positive and significant in three instances, with the point estimates ranging between 1.4% and 1.7%. The only subgroup where the accruals prior to the departure is not significantly positive is the audit multiple directors. This is also the only sub-group where the mean change in accruals from year (-1) to year (0) is non-negative. Not surprisingly, we find the opposite pattern for cash flows – audit multiple departure is the only subgroup where the point estimate for the change in cash flows is negative, even though it is not statistically significant at the usual levels. This provides initial evidence consistent with Hypothesis H1 that the departure of audit multiple directors coincides with a decrease in earnings quality, indicating that the future performance is unlikely to be strong (consistent with the negative abnormal stock returns documented in Section 4.1). This pattern in accruals is not observed with the departures of the other director types. We test this finding more formally in a multivariate setting, as explained below.

4.2.2 Multivariate results

In this section, we report results from formal tests of hypothesis H1, that audit multiple directors depart when earnings quality, measured by the level of accruals, declines. We use logistic regressions and compare audit multiple departures both with non-departing directors and with the departure of other sub-groups of directors. The dependent variable is a dummy variable that takes the value ‘1’ for departures of audit multiple directors and ‘0’ otherwise. We use two control variables that we expect may explain director turnover - director age and their tenure on the board. We expect older directors to be more likely to depart since they may be closer to the retirement age. In order for a director to invest in acquiring firm specific monitoring skills, they should expect to serve for an extended period of time so that they can amortize the fixed costs of information acquisition over a longer time period. So, we expect new members of the board to commit themselves to serve for a many years and hence will be less likely to leave the firm. All regressions include year fixed effects and robust standard errors clustered at the firm level.

Our main independent variable of interest in Table 4 is the change in operating income from year (-1) to year (0) (Panel A), change in total accruals (Panel B), or change in cash flows (Panel C). In model 1 in Panel A, the co-efficient of director age is positive, suggesting that *ceteris paribus*, older audit multiple directors are more likely to leave the firm compared to non-departing directors. The coefficient on director tenure is negative, indicating that relative to non-departing directors, audit multiple directors have fewer years of service at the time of their departure. However, the coefficient on change in operating income is not statistically significant at the usual levels. In model 2 (model 3), we replicate model 1 except that we compare the departure of audit multiple directors with the departure of non-audit directors (audit non-multiple directors). Our results are similar to that in model 1, the coefficient on change in operating

income is not statistically significant at the usual levels. So, the departure of audit multiple directors is not coincident with any particular change in the firm's reported current performance.

However, a different pattern emerges in Panel B when we replicate the analysis in Panel A, except that we use the accrual component of earnings instead of total income. The results in model 1 indicate that compared to non-departing directors, the departure of audit multiple directors coincides with an increase in the level of accruals. The coefficient on the change in accruals is positive and significant at the five-percent level. A similar pattern emerges when we compare departures of audit multiple directors with departures of non-audit directors. The coefficient on the change in accruals is not statistically significant in model 3, where we compare the departures of audit multiple directors with the departures of audit non-multiple directors ($t = 1.54$). For completeness, we present the results using change in cash flows instead of change in operating income in Panel C. As expected, the coefficient on the change in cash flows is negative and significant in models 1 and 2. This evidence is consistent with Hypothesis H1 and suggests that audit multiple directors depart when earnings quality declines, which is a leading indicator of poor performance.

We have argued in hypothesis H1 that audit multiple directors have the opportunity and the ability to better interpret the information in earnings quality and time their departure when earnings quality declines. The results in Table 4 offer support for this argument. However, support for hypothesis H1 may be weakened if the other directors also time their departures when earnings quality declines. For example, it is possible that compared to non-departing directors, the departure of non-audit multiple directors may also be associated with a decline in earnings quality. To investigate this further, we replicate Panel B in Table 4 except that we

examine the departures of the other three subgroups – audit non-multiple directors, non-audit multiple directors, and non-audit non-multiple directors.

The results of this analysis are presented in Table 5. The first three models compare the departure of audit non-multiple directors with non-departing directors (model 1), all non-audit departures (model 2) and audit multiple departures (model 3). The coefficient on the change in accruals is not significantly positive in any of the three models, indicating that audit non-multiple directors do not time their departures based on earnings quality. Models 4-6 and models 7-9 present the results for non-audit multiple departures and non-audit non-multiple departures, respectively. The coefficient on change in accruals is not positively significant in any of the models. In fact, it is significantly negative in model 8, the opposite of what would be expected if the non-audit non-multiple directors also departed when the level of accruals increases. Taken together, the results in Tables 4 and 5 show that while audit multiple directors time their departures in a manner consistent with hypothesis H1, the other directors do not.

4.2.3 Robustness tests

In this section, we describe the results of tests that replicate the main analysis in Table 4 using several alternative specifications. Our results documented in Section 4.2.2 continue to hold in virtually all these tests. We discuss them below, but do not present them in separate tables for brevity.

(i) Initial decomposition of accruals

We use the balance sheet approach of RSST and examine the explanatory power of the two accrual components - working capital accruals (WC) and net non-current operating asset

accruals (NCO) - that are considered to be indicators of poor earnings quality and to lead to lower earnings persistence and poorer stock performance. We expect that the departure of audit multiple directors would be positively related to changes in these less reliable accrual components. Consistent with our expectations and with the results documented in Table 4, we find that relative to non-departing directors (model 1) and non-audit departures (model 2), the departure of audit multiple directors are associated with a significant increase in NCO accruals. However, changes in working capital accruals do not have any explanatory power.

(ii) Extended decomposition of accruals

Following RSST, we use the extended decomposition where each accrual component is further divided into their asset and liability accruals. The current asset accruals (COA) and non-current operating asset accruals (NCOA) are considered to have low reliability. The results are consistent with Table 4 and indicate that changes in NCOA are positively associated with the departure of audit multiple directors in two out of the three specifications. Again, changes in COA do not have any explanatory power.

(iii) Discretionary accruals

Prior research (e.g., Jones (1991)) has used regression models to separate total accruals into discretionary accruals that could be manipulated by management (i.e., low earnings quality) and non-discretionary accruals. We follow Jones (1991) and estimate non-discretionary accruals as the fitted value of a regression of total accruals on change in sales and the level of property, plant and equipment. Discretionary accruals are estimated as the residuals from the regression model (details of the estimation process are in Appendix Table A). We re-estimate the Table 4 models but use changes in discretionary and non-discretionary accruals and expect that relative to non-departing directors, the departure of audit multiple directors would be associated with an

increase in discretionary accruals. Our results are not supportive of this argument since the coefficient on changes in discretionary accruals is not significant at the usual levels. This suggests that the information used by audit multiple directors is correlated with simpler measures of earnings quality derived from the balance sheet, and not with measures derived from more sophisticated models.

(iv) Impact of sales growth

We have used accruals as indicative of temporary accounting distortions that mask true underlying performance and hence are a precursor of poor subsequent performance. However, Fairfield, Whisenant, and Yohn (2003) argue that the level of accruals may be related to future performance for reasons unrelated to accounting distortions. In essence, a growing firm would make investments with diminishing marginal returns (resulting in lower estimates of subsequent performance) and also be associated with higher accruals (due to increased production and sales). We replicate the analysis in Table 4 by including prior sales growth, and find that our results are unaltered.

(v) Excluding director retirements

It is possible that the director departures may in fact be departure of directors who are retiring, and may not indicate a decision to leave in advance of poor performance. If the departures are primarily retirements, it is unclear a priori why audit multiple director retirements (but not other director retirements) would be associated with a decline in earnings quality. In any case, we replicate Table 4 after excluding director retirements from the sample of director departures. We classify a departure as a retirement if (a) the director's age at the time of departure is more than 69 years since many firms have a mandatory retirement age between 70 and 75 (e.g., Yermack (2004)), and (b) the director does not hold any other directorships in other

firms after the departure. We find that our results are unchanged. We have also classified retirements as departures when the director's age is more than 69 years, and find our results are unchanged.

(vi) Additional specifications

We have adopted a parsimonious specification in Table 4 and included director age and tenure on the board as control variables. We now augment the Table 4 models by including firm size (log of total assets), the proportion of independent directors on the board, and a dummy variable indicating the post-SOX years as additional controls. It is possible that the potential damage to a director reputation is related to firm size, since these firms are more likely to be covered by the media. Larger firms are more likely to be sued (Ferris et al. (2003)), and so leaving prior to poor performance may limit the director's legal liability. We include the percent of independent directors as a measure of the quality of governance in the firm. Directors associated with poorly governed firms may be more willing to leave early to protect their reputation. SOX substantially increased the penalty of being associated with financial misreporting by the firm, and the director may be more likely to leave to avoid perceptions of misconduct. We find that our results are unaltered when we include these additional variables.

(vii) Impact of earnings restatements

We have used the change in accruals as a leading indicator of poor future performance. While prior research (e.g., Sloan (1996)) has shown that on average, high levels of accruals are associated with poor performance, it is not a direct measure of poor performance. We use a more direct measure - earnings restatements over the subsequent three years - as the main explanatory variable and examine whether audit multiple directors leave in advance of earnings restatements

(similar to the setup in Srinivasan (2005)).¹⁴ We find that the coefficient on restatements is significant and positive in model 1, suggesting that compared to non-departing directors, audit multiple directors are more likely to leave before restatements. However, the coefficient on restatements is not statistically significant when we replicate models 2 and 3 in Table 4.

(viii) Director departures and earnings quality – reverse causality

One potential explanation of our results is that the causality may run from director departures to low earnings quality – the departure of experienced, high-quality directors may decrease the level of monitoring faced by managers and lead to a decline in earnings quality and subsequent poor performance. However, we do not find strong support for this scenario. First, we find that the departure of audit non-multiple directors is not associated with a decline in earnings quality. The different results for audit multiple and audit non-multiple departures weaken the argument that an audit member departure may cause earnings quality to decline. Second, we use a concurrent decline in earnings quality (change in accruals) as the main explanatory variable rather than actual future changes in accruals or firm performance. Since the change in accruals occurs concurrently with the departure, it is unlikely that the departure causes the change in accruals. Third, we find that retirements of audit multiple directors are not coincident with a decline in earnings quality. If the loss of an experienced director from the audit committee is what causes the earnings quality decline, we should observe such a decline even for retirements of audit committee directors. Overall, it does not appear that the departure of audit committee directors causes the contemporaneous decrease in earnings quality. We note that Fahlenbrach et al. (2013) also consider and discard the reverse causality explanation.

4.3 Impact on other directorships

¹⁴ We use accounting restatements reported by the General Accounting Office. We thank Judson Caskey for making this data available (<https://sites.google.com/site/judsoncaskey/data>).

The results in Section 4.2 indicate that audit multiple directors depart when earnings quality declines, indicative of poor future performance. However, it is not clear whether such departures help the departing directors preserve their reputation, or if the labor market considers the departure as a director shirking his or her responsibility to act in the shareholders' best interests and penalizes them. In this Section, we present the results of analysis that investigates whether departing in advance of poor performance helps the director retain more of his directorships and/or get new directorships (Hypothesis H2). We also examine the quality of the directorships that they obtain.

4.3.1 Univariate results

We estimate the labor market impact for directors leaving the firm. For every director who departs a firm in a given year, we follow the director from the year prior to the departure (year (-1)) through three years subsequent to the departure (year (3)) and calculate the change in the number of other directorships held by them (other than the firm they are departing from) every year. For every other director who serves on the board of a firm in a given year (our base case scenario), we likewise calculate the change in the number of other directorships held (other than the firm in question) over the next three years. A positive change indicates that the director in question is in demand in the director labor market and was able to increase the number of net other directorships held, suggesting that they were successful in preserving their reputation. A negative value indicates that the labor market has imposed a penalty and the director in question has lost directorships.

The results in Panel A of Table 6 indicate that audit multiple directors who depart a firm lose significantly more directorships than the non-departing directors. For instance, in the year of

the departure, the departing audit multiple directors lose 0.08 directorships on average, which is significantly different (p-value = 0.00) from the loss of 0.01 directorships experienced by the non-departing directors. Over the three years after their departure (years -1, 3), the audit multiple directors lose an average of 0.37 directorships. In contrast, the non-departing directors lose 0.03 directorships over the same period, and the difference is again statistically very significant (p-value = 0.00). The differences are statistically significant in each of the seven time periods we examine – the four annual periods from year (-1) to year (3), and over the years (-1,1), (-1, 2), and (-1,3). Non-audit directors who depart also lose more directorships relative to the non-departing directors over the next three years, but the point estimates reveal that they lose less than the audit multiple directors who depart (loss of 0.14 vs. loss of 0.37 directorships). Departing audit non-multiple directors do not lose relative to the non-departing directors. We have earlier documented that there is a decline in earnings quality around audit multiple departures. If the directors leave when they observe a decline in earnings quality (which suggests poor performance is imminent), it does not appear to help them in the market for directorships.

The results in Panel A suggest that directors are not able to maintain their reputation by leaving early, but we haven't conditioned our analysis on a direct measure of poor performance. So, we examine the labor market impact when audit committee members leave prior to earnings restatements. In Panel B, we replicate the analysis in Panel A except that we restrict the sample to firm-years where there was an earnings restatement in the subsequent three years. This allows us to compare our results with those in Srinivasan (2005), who concludes that directors who serve on the board of restating firms, and especially those that serve on the audit committee, bear reputational costs and experience a significant loss in other directorships. Our results largely

mirror those in Panel A. Audit multiple directors who depart prior to earnings restatements face a significant loss in other directorships, relative to directors who do not depart.

As a robustness check, we replicate the analysis but exclude retirements of directors, identified as explained earlier in Section 4.2.3. We find that our results are similar to those reported above. We continue to find that departing audit multiple directors lose more of their other directorships as compared to the non-departing directors. The magnitude of the loss faced by non-audit directors and audit non-multiple directors is less than the loss faced by departing audit multiple directors.¹⁵

Overall, the evidence suggests that in the presence of a decline in earnings quality or faulty financial reporting, audit multiple directors who depart in advance of the revelation of poor performance face significant costs in the labor market relative to directors who do not leave. Rather than being able to avoid the reputational loss and preserving their reputation, the departing audit multiple directors actually incur a market penalty. The other directors do not time their departures to coincide with a decline in earnings quality and do not lose as much. This does not support hypothesis H2.

4.3.2 Multivariate results

We test Hypothesis H2 in a multivariate setting where the dependent variable is the change in the number of other directorships over the seven time periods. The main explanatory variable of interest is a dummy variable that takes the value ‘1’ for audit multiple departures and ‘0’ otherwise. For completeness, we also include dummy variables for non-audit departures and audit non-multiple departures. As before, we include director age, director tenure on the board,

¹⁵ These results are not separately tabulated but are available from the authors upon request.

firm size, and a dummy variable for the post-SOX period as control variables. We include director age since Field et al. (2013) document that older directors are able to get more directorships. Directors with longer tenure may have more experience and hence would be better positioned to obtain other directorships. Experience in larger boards is also valued in the market for directorships (Ferris et al. (2003)), and so we include firm size as an independent variable. We include the post-SOX dummy to test whether the increased scrutiny from the stock market after SOX has altered the labor market opportunities for directors.

The results are presented in Table 7. The coefficient on age and board tenure are surprisingly negative and significant in all models, indicating that *ceteris paribus*, older and more experienced directors are less likely to get more directorships. The coefficient on firm size is significantly negative while the post-SOX dummy is positive and significant in all the seven models. Importantly, we find that the coefficient on the audit multiple departure dummy variable is negative and significant at the five-percent level or better in all seven models. This confirms our univariate results and indicates that audit multiple directors lose significantly more directorships in the three years after their departure. Consistent with Table 6, non-audit directors also lose directorships after their departure but the magnitude of the loss is less than the loss incurred by the audit multiple directors. The results for audit non-multiple directors are mixed, with the coefficient significantly negative in one model, significantly positive in four models, and statistically insignificant in two models. The magnitude of the loss experienced by the audit multiple directors is significantly higher (p -values < 0.01) than the loss faced by audit non-multiple directors and non-audit directors in all seven models.

As before, we replicate the analysis after excluding retirements of directors (as explained in Section 4.2.3) as a robustness check. Our results are unaltered. We also estimate the Table 7

models separately for director departures when the change in accruals is above the median and when it is below the median (results not separately tabulated). We find that audit multiple directors lose more directorships relative to the non-departing directors in both instances. This suggests that the labor market penalizes audit market directors who depart and does not impose a higher penalty on directors whose departure coincides with a large increase in accruals.

4.3.3 Quality of lost directorships

The result that audit multiple directors lose other directorships in the subsequent three years is inconsistent with Hypothesis H2 and suggests that the labor market considers directors who leave early to be shirking their responsibilities and imposes a penalty in the form of loss of other directorships. However, this finding could also be consistent with other explanations. It is possible that the departures we observe are voluntary in nature where a busy audit multiple director realizes that (s)he may be overextended and decide to give up some of their directorships. We address this issue by examining the quality of the lost directorships. If the labor market sees through the early departure of the director and correctly infers that the early departure is an attempt to avoid a reputational penalty, the lost directorships would be more prestigious since these firms would be more likely to find other qualified directors whenever a need arises. Less prestigious firms would find it harder to attract high quality directors and hence would be less likely to be as selective. On the other hand, a busy director wanting to voluntarily lessen his or her workload would be more likely to retain the more prestigious directorships and give up the less prestigious directorships. We follow Masulis and Mobbs (2014) and use firm size (total assets and sales) as a proxy for the prestige associated a directorship. In untabulated analysis, we find that the directorships that the audit multiple directors lose in the subsequent

three years are larger in size than the ones they retain or newly obtain. The mean and median values of both total assets and sales for the lost directorships are larger than the corresponding values for the retained/new directorships, and three of the four differences are statistically significant at the five-percent level or better. This indicates that the other directorships that are lost are the more prestigious ones, consistent with a market penalty.

4.3.4 Strategic change as the reason for lost directorships

Anecdotal evidence suggests that firms appoint new directors when a change in strategy makes a particular skill and/or experience more valuable on the board of directors. For example, Walmart announced on September 29, 2014 that it had appointed Kevin Systrom, co-founder of Instagram, as a director. In a press release, the Chairman of Walmart Rob Walton stated that “Kevin’s entrepreneurial background and his technical and digital expertise will be invaluable as we further connect with customers and deploy new capabilities through e-commerce and mobile channels. Walmart is investing in e-commerce capabilities through talent, technology and fulfillment. Kevin’s passion and deep knowledge of social media align with our focus to engage customers through our digital and physical channels.”

If such appointments increase board size and there is no concurrent director departure, then it is unlikely that such strategic changes drive our results since such strategic changes would not be associated with director departures, by assumption. A search on the SEC’s EDGAR database around September 29, 2014 did not reveal any 8-K filings by Walmart announcing a director departure, suggesting that such director appointments add to board size. Even if such new appointments to the board are made by replacing a director whose skills may be deemed inadequate, it is not clear why candidates for such replacements would be more likely to be audit

multiple directors and not the other directors, since our results show that it is primarily audit multiple directors who bear the reputational penalty for leaving before the onset of poor performance. Hence, our results do not seem to be due to director departures that are the outcome of strategic changes made by a firm.

5. Conclusion

Shareholders elect directors to act as stewards who protect their investment in the firm. They expect that the elected directors will actively monitor the firm and act to resolve problems when they arise. However, our results suggest that multiple directors who are in demand in the directorships market time their departures and leave quietly when reported performance is high and the potential for poor performance increases. Specifically, we find that in the year prior to the departure the quality of earnings is higher, but stock performance and earnings quality decline after the departure of a multiple director who served on the audit committee.

If the directors quit before the revelation of poor performance because of the perception that they can preserve their reputation in the labor market, our results suggest that their perception does not reflect reality. Audit multiple directors who leave prior to a decline in earnings quality or prior to restatements lose more directorships than directors who remain with the firm during this period, suggesting that the director labor market may be relatively efficient.

Our results also have implications for the literature examining the effectiveness of audit committees. Since the accounting scandals at firms such as Enron and Worldcom, there has been an increased reliance on audit committees to provide oversight over the company's financial reporting system. The intent of the Sarbanes Oxley Act of 2002 and the subsequent rules and guidelines promulgated by the SEC and major stock exchange is that an effective audit

committee would ensure that firms release high quality financial reports that are useful to investors. Our results suggest one potential reason why such benefits may not occur. An audit committee member may be able to gauge a firm's true performance through discussions in board meetings, in their conversations with external auditors, or through information spillovers from their primary business and other directorships. When an audit committee member is able to discern discrepancies between the reported financials and his/her assessment of the firm's performance, we find that rather than making their concerns known privately to the board and/or the firm's executives, or raising their concerns publicly (e.g., via the media), they leave quietly. Such departures call into question the efficacy of regulations requiring qualified directors to serve on audit committees, since they depart when their experience is most needed – when the firm is likely to face a decline in future performance. The labor market is aware of the director incentives, but it still does not help the intentions of the regulations since we still observe the loss of directors prior to a decrease in earnings quality.

REFERENCES

- Adams, Renée B, Benjamin E Hermalin, and Michael S Weisbach, 2010, The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey, *Journal of Economic Literature* 58-107.
- Agrawal, Anup, and Mark A Chen, 2011, Boardroom Brawls: An Empirical Analysis of Disputes Involving Directors, *Available at SSRN 1362143*.
- Agrawal, Anup, Jeffrey F Jaffe, and Jonathan M Karpoff, 1999, Management Turnover and Governance Changes Following the Revelation of Fraud, *The Journal of Law and Economics* 42, 309-342.
- Coates, John C, 2007, The Goals and Promise of the Sarbanes-Oxley Act, *The Journal of Economic Perspectives* 91-116.
- DeFond, Mark L, Rebecca N Hann, and Xuesong Hu, 2005, Does the Market Value Financial Expertise on Audit Committees of Boards of Directors?, *Journal of Accounting Research* 43, 153-193.
- Dechow, Patricia M., Richard G. Sloan, and Amy P. Sweeney, 1995, Detecting earnings management, *The Accounting Review*, 70, 193-225.
- Dyck, Alexander, Adair Morse, and Luigi Zingales, 2010, Who Blows the Whistle on Corporate Fraud?, *The Journal of Finance* 65, 2213-2253.
- Edmans, Alex, 2009, Blockholder Trading, Market Efficiency, and Managerial Myopia, *The Journal of Finance* 64, 2481-2513.
- Engel, Ellen, Rachel M Hayes, and Xue Wang, 2010, Audit Committee Compensation and the Demand for Monitoring of the Financial Reporting Process, *Journal of Accounting and Economics* 49, 136-154.
- Fahlenbrach, Rüdiger, Angie Low, and Rene M Stulz, 2013, The Dark Side of Outside Directors: Do They Quit When They Are Most Needed?, *Charles A. Dice Center Working Paper* 10-17.
- Fairfield, Patricia M, J Scott Whisenant, and Teri Lombardi Yohn, 2003, Accrued Earnings and Growth: Implications for Future Profitability and Market Mispricing, *The Accounting Review* 78, 353-371.
- Fama, Eugene F, 1980, Agency Problems and the Theory of the Firm, *The Journal of Political Economy* 288-307.
- Fama, Eugene F, and Michael C Jensen, 1983, Separation of Ownership and Control, *Journal of Law and Economics* 301-325.

- Ferris, Stephen P, Murali Jagannathan, and Adam C Pritchard, 2003, Too Busy to Mind the Business? Monitoring by Directors with Multiple Board Appointments, *The Journal of Finance* 58, 1087-1112.
- Fich, Eliezer M, and Anil Shivdasani, 2006, Are busy Boards Effective Monitors?, *Journal of Finance* 61, 689-724.
- Fich, Eliezer M, and Anil Shivdasani, 2007, Financial Fraud, Director Reputation, and Shareholder Wealth, *Journal of Financial Economics* 86, 306-336.
- Field, Laura, Michelle Lowry, and Anahit Mkrtchyan, 2013, Are Busy Boards Detrimental?, *Journal of Financial Economics* 109, 63-82.
- Gilson, Stuart C, 1990, Bankruptcy, Boards, Banks, and Blockholders: Evidence on Changes in Corporate Ownership and Control When Firms Default, *Journal of Financial Economics* 27, 355-387.
- Harford, Jarrad, 2003, Takeover Bids and Target Directors' Incentives: The Impact of a Bid on Directors' Wealth and Board Seats, *Journal of Financial Economics* 69, 51-83.
- Helland, Eric, 2006, Reputational Penalties and the Merits of Class-Action Securities Litigation, *Journal of Law and Economics* 49, 365-395.
- Jones, Jennifer J, 1991, Earnings Management During Import Relief Investigations, *Journal of Accounting Research* 193-228.
- Larcker, David F, Scott A Richardson, and Irem Tuna, 2007, Corporate Governance, Accounting Outcomes, and Organizational Performance, *The Accounting Review* 82, 963-1008.
- Masulis, Ronald W, and Shawn Mobbs, 2011, Are All inside Directors the Same? Evidence from the External Directorship Market, *The Journal of Finance* 66, 823-872.
- Masulis, Ronald W, and Shawn Mobbs, 2014, Independent Director Incentives: Where Do Talented Directors Spend Their Limited Time and Energy?, *Journal of Financial Economics* 111, 406-429.
- Parrino, Robert, Richard W Sias, and Laura T Starks, 2003, Voting with Their Feet: Institutional Ownership Changes around Forced Ceo Turnover, *Journal of Financial Economics* 68, 3-46.
- Richardson, Scott A, Richard G Sloan, Mark T Soliman, and Irem Tuna, 2005, Accrual Reliability, Earnings Persistence and Stock Prices, *Journal of Accounting and Economics* 39, 437-485.

- Richardson, Scott A, Richard G Sloan, Mark T Soliman, and Irem Tuna, 2006, The Implications of Accounting Distortions and Growth for Accruals and Profitability, *The Accounting Review* 81, 713-743.
- Sloan, Richard G, 1996, Do Stock Prices Fully Reflect Information in Accruals and Cash Flows About Future Earnings?, *The Accounting Review* 289-315.
- Srinivasan, Suraj, 2005, Consequences of Financial Reporting Failure for Outside Directors: Evidence from Accounting Restatements and Audit Committee Members, *Journal of Accounting Research* 43, 291-334.
- Vafeas, Nikos, 1999, Board Meeting Frequency and Firm Performance, *Journal of Financial Economics* 53, 113-142.
- Warther, Vincent A, 1998, Board Effectiveness and Board Dissent: A Model of the Board's Relationship to Management and Shareholders, *Journal of Corporate Finance* 4, 53-70.
- Yermack, David, 2004, Remuneration, Retention, and Reputation Incentives for Outside Directors, *The Journal of Finance* 59, 2281-2308.

Appendix Table A Variable Definitions

Variable Name	Definition (Compustat variable name in parentheses)
Sales	Sales (SALE)
Total Assets	Total Assets (AT)
ATA	Average Total Assets $(AT_t + AT_{t-1})/2$
PREFSTOCK	If Preferred Stock - Liquidating Value (PSTKL) is non-missing, then PREFSTOCK = PSTKL . If PSTKL is missing and Preferred Stock - Redemption Value (PSTKRV) is non-missing, then PREFSTOCK = PSTKRV . If PSTKL and PSTKRV are both missing, then PREFSTOCK = Preferred/Preference Stock (Capital) - Total (PSTK).
B/M	Total assets / Market Value of Equity $(AT/LT - TXDITC + PREFSTOCK + PRCC_F * CSHO)$
ROA	Operating Income after Depreciation/ Average Total Assets (OIADP / ATA)
Leverage	Total Liabilities (LT) / Average Total Assets (ATA)
Sales Growth	Change in sales scaled by lagged total assets $(Sale_t - Sale_{t-1})/AT_{t-1}$
IBC	Income Before Extraordinary Items (Cash Flow) (IBC)
CFO	Operating cash flows (OANCF) + Extraordinary items and discontinued operations (XIDOC).
PPE	Property Plant and Equipment - Total (Net) (PPEGT)
Δrec	Change in accounts receivable (RECT)

Accruals Variables

Operating Income	Operating Income after Depreciation/ Average Total Assets (OIADP / ATA)
Accruals	Change in working capital accruals plus change in non-current operating accruals plus change in net financial assets, all scaled by average total assets $(\Delta WC + \Delta NCO + \Delta FIN) / ATA$
Cash flows	Operating Income - Accruals

Accruals Decomposition (Compustat variable name in bold parenthesis)

Change in working capital accruals $(\Delta WC) = \Delta COA - \Delta COL$
 COA = Current Assets (**ACT**) – Cash and Short Term Investments (**CHE**)
 COL = Current Liabilities (**LCT**) – Debt in Current Liabilities (**DLC**)

Change in non-current operating accruals $(\Delta NCO) = \Delta NCOA - \Delta NCOL$
 NCOA = Total Assets (**AT**) – Current Assets (**ACT**) – Investments and Advances (**IVAO**)
 NCOL = Total Liabilities (**LT**) – Current Liabilities (**LCT**) – Long-term debt (**DLTT**)

Change in net financial assets $(\Delta FIN) = \Delta FINA - \Delta FINL$
 FINA = Short Term Investments (**IVST**) + Long Term Investments (**IVAO**)
 FINL = Long term debt (**DLTT**) + Debt in Current Liabilities (**DLC**) + Preferred Stock (**PSTK**)

Jones Model (1991)

For each 2-digit SIC industry group, we estimate the following equation (1) annually. We require at least 8 observations for each industry-year combination and winsorize all of the regression variables at the 1% level.

$$\frac{(ibc-cfo)_{i,t}}{at_{i,t-1}} = \beta_1 \frac{1}{at_{i,t-1}} + \beta_2 \frac{\Delta sales_{i,t}}{at_{i,t-1}} + \beta_3 \frac{ppe_{i,t}}{at_{i,t-1}} + \varepsilon_{i,t} \quad (1)$$

Firm-specific discretionary accruals (DA) are computed as the residual from equation (1). Non-discretionary accruals are computed as the predicted value from equation (1).

Dechow, Sloan, and Sweeney (1995) (Modified Jones Model)

For each 2-digit SIC industry group, we estimate equation (1) annually, requiring at least 8 observations for each industry-year combination and winsorize all of the regression variables at the 1% level.

$$\frac{(ibc-cfo)_{i,t}}{at_{i,t-1}} = \beta_1 \frac{1}{at_{i,t-1}} + \beta_2 \frac{(\Delta sales_{i,t} - \Delta rec_{i,t})}{at_{i,t-1}} + \beta_3 \frac{ppe_{i,t}}{at_{i,t-1}} + \varepsilon_{i,t} \quad (2)$$

Firm-specific discretionary accruals (DA) are computed as the residual from equation (2). Non-discretionary accruals are computed as the predicted value from equation (2).

Computation of Long-run Returns

1. Buy and hold raw return from month T_1 and ending on month T_2 for firm j ,

$$BHAR_RAW_{j,T_1,T_2} = \left[\prod_{t=T_1}^{T_2} (1 + R_{jt}) - 1 \right].$$

2. Buy and hold market model adjusted returns,

$$BHAR_{MM_{j,T_1,T_2}} = \left[\prod_{t=T_1}^{T_2} (1 + R_{jt}) - 1 \right] - \left[(1 + \hat{\alpha}_j)^{(T_2 - T_1 + 1)} - 1 \right] - \hat{\beta}_j \left[\prod_{t=T_1}^{T_2} (1 + R_{mt}) - 1 \right]$$

where $\hat{\alpha}_j$ and $\hat{\beta}_j$ are estimated from the market model in the pre-period. We use a pre-period of sixty months and have a minimum requirement of twenty-four months of return data.

3. The average compounded abnormal return for each of the three measures:

$$\frac{1}{N} \sum_{j=1}^N BHAR_{j,T_1,T_2}.$$

Table 1
Sample formation

This table reports the sample selection process. We start with the directorships listed in the Corporate Library database and augment it with other directorships from the IRRC database. We then restrict the sample to firms that merge with CRSP and retain only domestic firms with a share code of 10 or 11. We exclude inside directors and financial firms (SIC code between 6000 and 6999) and insider directors. We identify director departures as firm-years when a director no longer serves on a firm's board.

	# of Firm-Years	# of Firm-Director-Years
Corporate Library/IRRC (1999-2012) with CRSP domestic stock (share code is 10 or 11)	29,458	237,771
Exclude inside directors	29,021	195,150
Exclude financial firms	23,839	155,082
Number of departures	8,697	12,638

Table 2
Descriptive statistics

This table reports means [medians] of firm (Panel A) and director level characteristics (Panel B) for our sample of directorships for the years 1999-2012. Column (1) reports the characteristics for the entire CRSP/Compustat population (CCM). Column (2) reports the characteristics for the combined CRSP/Compustat/directorships population. Column (3) reports the statistics for firm-years with no director departure. Columns (4)-(10) report statistics for various groups of director departures, *, **, and *** represent statistical significance at the 10%, 5%, and 1%, respectively, from t-tests and rank sum tests of the means and medians comparing Columns (4)-(10) with Column (3). Panel B reports director-specific information. Column (1) reports the statistics for all active directors in our combined corporate library/IRRC database. Columns (2)-(8) present the statistics for departing directors. *, **, and *** represent statistical significance at the 10%, 5%, and 1%, respectively, from t-tests and rank sum tests of the means and medians comparing Columns (2)-(8) with Column (1). The variable definitions are in Appendix Table A.

Panel A: Firm characteristics

	CCM	CCM/ directorship population	All non- departures	All departures	All audit departures	Audit multiple departures	Audit non-multiple departures	All non-audit departures	Non-audit multiple departures	Non-audit non-multiple departures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
N	58,852	22,460	14,643	8,603	4,494	1,031	3,663	5,637	1,426	4,575
Sales (\$mill)	2,665 [286]	3,987 [1,027]	3,446 [865]	5,232*** [1,307]*	5,052*** [1,226]*	8,432*** [1,982]*	4,322*** [1,120]*	5,683*** [1,456]*	8,551*** [2,797]*	5,121*** [1,285]*
Total assets (\$ mil)	3,392 [335]	4,552 [1,089]	3,989 [900]	6,186*** [1,441]*	5,908*** [1,343]*	9,526*** [2,314]*	5,147*** [1,171]*	6,875*** [1,625]*	10,425** [2,981]*	6,187*** [1,438]*
B/M	0.73 [0.70]	0.66 [0.66]	0.65 [0.64]	0.69*** [0.69]***	0.69*** [0.69]***	0.69*** [0.69]***	0.70*** [0.70]***	0.69*** [0.69]***	0.68*** [0.68]***	0.70*** [0.70]***
ROA (%)	-0.04 [5.90]	7.96 [8.82]	8.18 [8.99]	7.08*** [8.20]***	7.20*** [8.17]***	7.58*** [8.17]***	7.02*** [8.14]***	6.87*** [8.09]***	7.06*** [8.26]***	6.75*** [7.97]***
Leverage (%)	49.47 [48.09]	51.34 [51.68]	49.69 [49.73]	54.27*** [55.00]***	53.98*** [54.88]***	56.11 [57.75]***	53.42*** [54.08]***	55.07*** [55.70]***	59.32*** [60.14]***	54.27*** [54.87]***
Sales growth (%)	9.14 [5.50]	10.93 [7.05]	11.76 [7.75]	8.94*** [5.92]***	9.00*** [6.03]***	7.11*** [5.34]***	9.26*** [6.10]***	8.67*** [5.63]***	7.62*** [5.28]***	8.69*** [5.60]***

Panel B: Director characteristics

	All active directors	All departures	All audit departures	Audit multiple departures	Audit non- multiple departures	All non- audit departures	Non-audit multiple departures	Non-audit non- multiple departures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
N	142,441	12,598	5,338	1,115	4,224	7,264	1,605	5,660
Director age	60.49 [61.00]	62.30*** [64.00]***	62.83*** [64.00]***	62.82*** [64.00]***	62.84*** [65.00]***	61.91*** [63.00]** *	62.32*** [63.00]***	61.79*** [63.00]***
No. of directorships	1.97 [2.00]	1.98 [1.00]***	1.96 [1.00]***	4.13*** [4.00]***	1.39*** [1.00]***	1.99 [1.00]***	4.16*** [4.00]***	1.37*** [1.00]***
Tenure	7.65 [6.00]	9.32*** [7.00]***	9.03*** [7.00]***	8.16** [6.00]***	9.26*** [7.00]***	9.52*** [7.00]***	8.90*** [7.00]***	9.70*** [7.00]***

Table 3**Director departures and financial performance**

This table reports means [medians] of measures of financial performance around director departures identified from the combined Corporate Library/IRRC database for the period 1999-2012. All variables are defined in Appendix Table A. Columns (2)-(7) are classified based on whether or not the departing director serves on the audit committee and whether or not they hold multiple (three or more) directorships. Panel A reports the levels of the measure in latest fiscal year-end prior to the director turnover and Panel B reports the change in the measure from the latest fiscal year-end prior to the departure to the first fiscal year-end after the departure. *, **, and *** represent statistical significance at the 10%, 5%, and 1%, respectively.

	All departures	All audit departures	Audit multiple departures	Audit non-multiple departures	All non-audit departures	Non-audit multiple departures	Non-audit non-multiple departures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Financial performance at t=-1							
N	12,470	5,274	1,106	4,168	7,196	1,584	5,612
Operating income	0.0673*** [0.0794]***	0.0689*** [0.0801]***	0.0745*** [0.0808]***	0.0674*** [0.0801]***	0.0662*** [0.0789]***	0.0693*** [0.0817]***	0.0653*** [0.0780]***
Accruals	0.0158*** [0.0189]***	0.0151*** [0.0188]***	0.0069 [0.0168]***	0.0172*** [0.0195]***	0.0163*** [0.0190]***	0.0143*** [0.0179]***	0.0168*** [0.0193]***
Cash flows	0.0673*** [0.0794]***	0.0689*** [0.0801]***	0.0745*** [0.0808]***	0.0674*** [0.0801]***	0.0662*** [0.0789]***	0.0693*** [0.0817]***	0.0653*** [0.0780]***
Panel B: Changes in financial performance from t = -1 to t = 0							
N	12,465	5,273	1,106	4,167	7,192	1,583	5,609
Operating income	-0.0031*** [-0.0004]***	-0.0033*** [-0.0006]***	-0.0014 [0.0010]	-0.0038*** [-0.0011]***	-0.0030*** [-0.0003]***	0.0004 [0.0012]	-0.0040*** [-0.0010]***
Accruals	-0.0079*** [-0.0048]***	-0.0046 [-0.0035]**	0.0036 [-0.0006]	-0.0067** [-0.0041]**	-0.0103*** [-0.0059]***	-0.0091* [-0.0047]**	-0.0107*** [-0.0066]***
Cash flows	0.0045** [0.0049]***	0.0012 [0.0036]	-0.0058 [0.0025]	0.0031 [0.0041]	0.0070*** [0.0056]***	0.0097* [0.0071]***	0.0062** [0.0052]***

Table 4**Logistic regressions of audit multiple director departures and financial performance**

This table reports the results of logistic regressions where the dependent variable takes the value '1' for departures of audit multiple directors and '0' if either a director does not depart (column 1), a non-audit director departs (column 2), or an audit, non-multiple director departs (column 3). Panel A reports our model using the change in operating income from year -1 to 0 as our main explanatory variable. Panels B and C report the results using the change in accruals from year -1 to year 0 and change in cash flows from year -1 to year 0 as the main explanatory variable, respectively. Robust standard errors clustered by firm are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels respectively. Variable definitions are in Appendix Table A.

Panel A: Operating income

Dependent variable = '1' for audit multiple departures and = '0' for	All non-departures	Non-audit departures	Audit non-multiple departures
	(1)	(2)	(3)
Director age	0.036*** (0.004)	0.023*** (0.003)	0.009** (0.004)
Director tenure	-0.010** (0.004)	-0.039*** (0.005)	-0.030*** (0.006)
Δ Operating income (-1,0)	0.463 (0.575)	0.154 (0.491)	0.308 (0.475)
Constant	-7.624*** (0.290)	-3.492*** (0.259)	-2.380*** (0.272)
Year fixed effects	Yes	Yes	Yes
# Observations	139,810	8,221	5,261
Pseudo R ²	0.0439	0.0464	0.0667

Panel B: Accruals

Dependent variable = '1' for audit multiple departures and = '0' for	All non-departures	Non-audit departures	Audit non-multiple departures
	(1)	(2)	(3)
Director age	0.037*** (0.004)	0.023*** (0.003)	0.010*** (0.004)
Director tenure	-0.010** (0.004)	-0.039*** (0.005)	-0.030*** (0.006)
Δ Accruals (-1,0)	0.443** (0.213)	0.304* (0.162)	0.276 (0.179)
Constant	-7.728*** (0.298)	-3.549*** (0.264)	-2.521*** (0.277)
Year fixed effects	Yes	Yes	Yes
# Observations	135,081	7,956	5,094
Pseudo R ²	0.0445	0.0470	0.0667

Panel C: Cash flows

Dependent variable = '1' for audit multiple departures and = '0' for	All non-departures	Non-audit departures	Audit non-multiple departures
	(1)	(2)	(3)
Director age	0.037*** (0.004)	0.024*** (0.003)	0.010*** (0.004)
Director tenure	-0.010** (0.004)	-0.039*** (0.005)	-0.030*** (0.006)
Δ Cash flows (-1,0)	-0.441** (0.206)	-0.309* (0.163)	-0.267 (0.181)
Constant	-7.729*** (0.298)	-3.553*** (0.265)	-2.519*** (0.277)
Year fixed effects	Yes	Yes	Yes
# Observations	135,073	7,955	5,094
Pseudo R ²	0.0445	0.0470	0.0666

Table 5**Logistic regressions of other director departures and financial performance**

This table reports the results of logistic regressions explaining the decision to depart for directors other than audit, multiple directors. In columns (1)-(3), the dependent variable is a dummy variable equal to one if an audit, non-multiple director departs and equal to zero if either a director does not depart (1), a non-audit director departs (2), or an audit, multiple director departs (3). In columns (4)-(6), the dependent variable is a dummy variable equal to one if a non-audit, multiple director departs and equal to zero if either a director does not depart (4), an audit director departs (5), or a non-audit, non-multiple director departs (6). In columns (7)-(9), the dependent variable is a dummy variable equal to one if a non-audit, non-multiple director departs and equal to zero if either a director does not depart (7), an audit director departs (8), or a non-audit, multiple director departs (9). The main explanatory variable is the change in accruals from year -1 to year 0. Robust standard errors clustered by firm are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels respectively. Variable definitions are in Appendix Table A.

Dependent variable = '1' for	Audit non-multiple departures			Non-audit multiple departures			Non-audit non-multiple departures		
Dependent variable = '0' for	Non-departures	Non-audit departures	Audit multiple departure	Non-Departures	Audit departures	Non-audit non-multiple departures	Non-departures	Audit departures	Non-audit multiple departures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Director age	0.029*** (0.003)	0.014*** (0.002)	-0.010*** (0.004)	0.019*** (0.004)	-0.007** (0.003)	0.013*** (0.003)	0.007*** (0.002)	-0.018*** (0.002)	-0.013*** (0.003)
Director tenure	0.012*** (0.002)	-0.014*** (0.003)	0.030*** (0.006)	0.010*** (0.004)	0.002 (0.005)	-0.023*** (0.004)	0.030*** (0.002)	0.024*** (0.003)	0.023*** (0.004)
Δ Accruals (-1,0)	0.162 (0.113)	0.099 (0.095)	-0.276 (0.179)	0.027 (0.164)	-0.115 (0.141)	0.025 (0.147)	0.022 (0.108)	-0.156* (0.094)	-0.025 (0.147)
Constant	-5.274*** (0.176)	-0.989*** (0.153)	2.521*** (0.277)	-6.521*** (0.267)	-1.578*** (0.237)	-2.611*** (0.233)	-3.939*** (0.158)	0.944*** (0.150)	2.611*** (0.233)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	138,043	10,918	5,094	135,550	6,629	6,890	139,370	10,449	6,890
Pseudo R ²	0.0176	0.00973	0.0667	0.0375	0.0394	0.0618	0.0130	0.0128	0.0618

Table 6
Change in other directorships

This table reports the change in the number of other directorships held by directors over the years (-1 to 0), (0 to 1), (1 to 2), (2 to 3), (-1 to 1), (-1 to 2), and (-1 to 3). The analysis is conducted at the firm-director-year level and we calculate the number of other directorships excluding the directorship at the firm-year in question. We report the mean change in the number of other directorships for different subgroups of directors, followed in the next row by the p-value comparing the means of the different sub-groups of departing directors to the base case of non-departing directors. Panel A reports these results for our entire sample. Panel B reports the results for a sample preceding a restatement.

Panel A: Full sample

Time period	Mean change in the number of other directorships						
	(-1,0)	(0,1)	(1,2)	(2,3)	(-1,1)	(-1,2)	(-1,3)
Non-departing directors	0.0078	-0.0088	-0.0103	-0.0161	0.0026	-0.0109	-0.0263
Audit multiple departures	-0.2197	-0.0795	-0.0519	-0.0593	-0.2840	-0.3255	-0.3679
p-value	0.00	0.00	0.01	0.01	0.00	0.00	0.00
Audit non-multiple departures	-0.0236	-0.0015	-0.0090	-0.0017	-0.0238	-0.0348	-0.0349
p-value	0.0000	0.25	0.84	0.03	0.01	0.03	0.50
Non-audit departures	-0.0710	-0.0204	-0.0259	-0.0211	-0.0908	-0.1171	-0.1404
p-value	0.00	0.02	0.01	0.32	0.00	0.00	0.00

Panel B: Restatement sample

Time period	Mean change in the number of other directorships						
	(-1,0)	(0,1)	(1,2)	(2,3)	(-1,1)	(-1,2)	(-1,3)
Non-departing directors	-0.0309	-0.0406	-0.0322	-0.0332	-0.0679	-0.1005	-0.1236
Audit multiple departures	-0.2987	-0.3976	-0.0361	-0.0602	-0.6623	-0.6883	-0.7273
p-value	0.00	0.00	0.94	0.55	0.00	0.00	0.00
Audit non-multiple departures	-0.0236	-0.0245	-0.0245	-0.0027	-0.0413	-0.0767	-0.0678
p-value	0.03	0.69	0.37	0.59	0.25	0.09	0.24
Non-audit departures	-0.0815	-0.0324	-0.0494	-0.0239	-0.1019	-0.1574	-0.1667
p-value	0.79	0.53	0.75	0.16	0.46	0.56	0.22

Table 7
Multivariate regressions explaining the change in the number of directorships

This table reports multivariate regressions explaining the change in the number of other directorships. The dependent variable in models 1-7 is the change in the number of directorships over the years (-1 to 0), (0 to 1), (1 to 2), (2 to 3), (-1 to 1), (-1 to 2) and (-1 to 3), respectively. The main explanatory variables are the three dummy variables indicating the departure of audit multiple directors, audit non-multiple directors, and non-audit directors. Robust standard errors clustered by firm are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels respectively. Variable definitions are in Appendix Table A.

Dependent variable	Change in the number of other directorships						
	(-1,0) (1)	(0,1) (2)	(1,2) (3)	(2,3) (4)	(-1,1) (5)	(-1,2) (6)	(-1,3) (7)
Director Age	-0.003*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)	-0.005*** (0.000)	-0.008*** (0.000)	-0.011*** (0.000)
Director Tenure	-0.001*** (0.000)	-0.001*** (0.000)	-0.000*** (0.000)	-0.000 (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.001)
Size (total assets)	-0.006*** (0.001)	-0.007*** (0.001)	-0.006*** (0.001)	-0.008*** (0.001)	-0.013*** (0.001)	-0.021*** (0.002)	-0.031*** (0.002)
Post-Sox Dummy	0.083*** (0.007)	0.057*** (0.007)	0.057*** (0.007)	0.134*** (0.008)	0.083*** (0.010)	0.129*** (0.010)	0.195*** (0.011)
Audit, multiple depart dummy	-0.224*** (0.026)	-0.069*** (0.019)	-0.038** (0.015)	-0.045*** (0.014)	-0.281*** (0.032)	-0.308*** (0.036)	-0.339*** (0.038)
Non-audit depart dummy	-0.073*** (0.007)	-0.005 (0.005)	-0.011** (0.005)	-0.004 (0.005)	-0.081*** (0.008)	-0.091*** (0.010)	-0.102*** (0.011)
Audit, non-multiple depart dummy	-0.021*** (0.006)	0.019*** (0.005)	0.010** (0.004)	0.019*** (0.004)	-0.005 (0.007)	0.005 (0.008)	0.019** (0.010)
Constant	0.152*** (0.009)	0.163*** (0.010)	0.187*** (0.010)	0.105*** (0.011)	0.357*** (0.017)	0.519*** (0.025)	0.721*** (0.033)
# Observations	143,097	139,634	125,857	112,866	128,940	115,163	102,172
R-squared	0.019	0.017	0.014	0.016	0.028	0.042	0.053