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RESEARCH NOTES AND COMMENTARIES

CLEANING HOUSE OR JUMPING SHIP? UNDERSTANDING BOARD UPHEAVAL FOLLOWING FINANCIAL FRAUD

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Boards experience elevated levels of turnover among outside directors following financial fraud. Scholars have proposed two mechanisms that may drive this turnover. The first views turnover as part of a board's efforts to repair organizational legitimacy and avert resource withdrawal. The second argues that turnover is a byproduct of individual directors' efforts to safeguard their own reputations and mitigate professional devaluation. We use data on director departures following 63 fraud events to explore the relative importance of these two mechanisms. The results clarify our understanding of responses to governance failures and the challenges of reconstituting board membership following financial improprieties. Copyright © 2013 John Wiley & Sons, Ltd.

INTRODUCTION

The revelation of financial fraud at a firm often triggers significant upheaval within the board of directors. High turnover among outside directors has become an especially common feature of the fallout from these incidents. On average, nearly half of all outsiders leave the board following the disclosure of fraud (Srinivasan, 2005). These departures extend well beyond audit committee members or others who might be perceived as bearing greater responsibility for financial improprieties (Arthaud-Day *et al.*, 2006). Scholars have proposed two different mechanisms that might drive this turnover, yet they remain uncertain about which is more important in the wake of financial scandal (e.g., Pozner, 2008; Wiesenfeld, Wurthmann, and Hambrick, 2008). In this study, we argue that addressing this uncertainty is essential to advancing research on governance failures. Although not mutually exclusive, the proposed mechanisms fundamentally differ in whether they portray the board as an instigator of turnover or merely a bystander to it. As a result, important questions remain unanswered about how boards react to governance crises and what challenges they face when reconstituting their ranks.

The first of these mechanisms is what recent studies have labeled 'jumping ship' (Semadeni *et al.*, 2008). In this view, governance failures are construed as stigmatizing events that have the potential to mar a director's reputation even if he or she is not culpable for any wrongdoing (Pozner, 2008; Sutton and Callahan, 1987; Wiesenfeld *et al.*, 2008). Individuals seek to mitigate reputational damage, and its attendant professional penalties, by proactively leaving troubled organizations (Boivie, Graffin, and Pollock, 2012; Gales and Kesner, 1994; Semadeni *et al.*, 2008). The second mechanism proposed by scholars

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characterizes governance failure as a threat to organizational legitimacy, which can erode the support of important external constituents (Arthaud-Day *et al.*, 2006; Cowen and Marcel, 2011; Karpoff and Lott, 1993). In response, a board 'cleans house', prompting director departures as a way to mitigate the unfavorable judgments of outside audiences and protect the firm's access to needed resources.

The goal of this study is to examine the relative importance of these two mechanisms. Is post-fraud turnover primarily driven by a board's legitimacy management efforts or is it simply the byproduct of individual directors' efforts to safeguard their own reputations? Leveraging recent theory on both cleaning house and jumping ship (e.g., Arthaud-Day *et al.*, 2006; Pozner, 2008; Semadeni *et al.*, 2008; Wiesenfeld *et al.*, 2008), we develop hypotheses that suggest that directors who depart due to concerns about professional devaluation will have a fundamentally different profile from those whose departures result from a board's efforts to avert resource withdrawal. We focus specifically on directors' *human and relational capital* because these characteristics are both essential components of directors' reputations and observable signals of organizational legitimacy (Certo, 2003; Hillman, Cannella, and Paetzold, 2000). Although the reasons for directors' departures are rarely transparent, we propose that the primary driver of turnover can be inferred by examining the relationship between director capital and an individual's probability of exit following a fraud event. Our empirical analyses are based on director turnover data following 63 fraud events examined in prior management studies (Cowen and Marcel, 2011; O'Connor *et al.*, 2006).

This study makes several contributions to the growing literature on governance failure. First, our results allow for more confident attributions about board behavior following governance failures, addressing a key limitation noted by studies in this stream (e.g., Arthaud-Day *et al.*, 2006: 1129; Srinivasan, 2005: 331). Importantly, our study departs from the ongoing debate regarding what constitutes a 'voluntary' or 'involuntary' director departure (e.g. Boivie *et al.*, 2012) and instead focuses on the *motives* behind these departures as a novel way of understanding the role that boards play in effecting post-fraud turnover. Second, our study responds to recent calls for measurement approaches that can help to distinguish the reasons for director departures (Boivie *et al.*, 2012: 1354). Our focus here is specifically on fraud, but the measures of director capital that we propose could be adapted for use in other governance contexts. Finally, our results help to characterize better the challenges of governance recovery by providing insight into whether boards are losing their highest- or lowest-capital directors.

THEORY

Directors fulfill two primary governance functions—they monitor management on behalf of shareholders and they assist in the provision of important resources and external support (Eisenhardt, 1989; Hillman and Dalziel, 2003; Jensen and Meckling, 1976; Pfeffer and Salancik, 1978). Both of these responsibilities are facilitated by the presence of outside directors on a board. For example, these directors are less dependent on CEOs for employment or other rewards, making them more objective arbiters of managerial performance (Baysinger and Butler, 1985; Weisbach, 1988). Outside directors also bring unique sources of human and relational capital to bear on key organizational challenges (Hillman and Dalziel, 2003; Hillman *et al.*, 2000; Pfeffer and Salancik, 1978; Zahra and Pearce, 1989). Human capital encompasses directors' education, skills, and career history (Becker, 1964; Coleman, 1988). Relational capital refers to the resources embedded in their networks of personal and professional connections (Nahapiet and Ghoshal, 1998). Director capital is important for firms, in part, because it can serve as a marker of organizational legitimacy. The willingness of high-capital individuals to sit on a board signals the worth and appropriateness of a firm's activities, which makes it easier to establish and maintain relationships with external resource providers (Certo, 2003; Mizruchi, 1996; Pfeffer and Salancik, 1978). Building human and relational capital is also important to the interests of individual directors because that capital affects their access to professional opportunities (e.g., Hillman, 2005; Lester *et al.*, 2008). For example, an individual's skills, business experience, and relationships can determine whether they are considered an attractive candidate for directorships at other firms.

While there is a growing literature on governance failure, prior studies have not explored whether, or how, director capital is related to

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decisions regarding post-fraud director turnover. We propose that understanding this relationship is useful because it can reveal whether turnover is largely driven by board-initiated departures designed to preserve legitimacy or director-initiated departures intended to mitigate stigma and professional devaluation. Specifically, in the following sections we argue that cleaning house will favor the exit of lower capital directors, while jumping ship will be more likely to prompt departures of individuals with relatively high capital.

Cleaning house

A governance failure threatens organizational legitimacy by revealing that a firm's activities have not been fully consistent with accepted standards of business conduct (Suchman, 1995). This threat has important consequences because legitimacy is essential to firms' relationships with external resource providers (e.g., investors, lenders) and the information intermediaries who serve them (e.g., securities analysts, credit rating agencies). In order to safeguard their economic and reputational interests, these groups prefer to interact with firms 'that embody prevailing social norms and values' (Arthaud-Day *et al.*, 2006: 1120; Hambrick and D'Aveni, 1992; Pfeffer and Salancik, 1978; Suchman, 1995). When these norms are violated, external audiences face considerable uncertainty regarding whether it is appropriate to continue to support or maintain relationships with offending firms (Wiesenfeld *et al.*, 2008).

Fraudulent activity is particularly damaging to organizational legitimacy because it violates not only ethical standards, but also legal and regulatory ones (Pozner, 2008). Furthermore, fraud is usually motivated by the deliberate intent to mislead resource providers and other audiences outside the firm. Financial improprieties can, therefore, significantly erode firms' relationships with external constituents and jeopardize access to important resources (Arthaud-Day *et al.*, 2006; Karpoff and Lott, 1993; Palmrose, Richardson, and Scholz, 2004). The cleaning house perspective views director turnover as a board-initiated response that seeks to avert these negative consequences. Although directors are rarely complicit in fraudulent activity, these incidents nevertheless call into question the adequacy of monitoring and managerial oversight (Beresford, Katzenbach, and Rogers, 2003; Kang, 2008; Srinivasan, 2005). Director departures reaffirm organizational legitimacy by allowing the board to acknowledge past shortcomings and signal a willingness to remedy governance weaknesses (Arthaud-Day *et al.*, 2006; Cowen and Marcel, 2011). The replacement of outside directors is especially important to conveying this intent because external audiences most closely associate these individuals with monitoring responsibilities (Kang, 2008; Pozner, 2008). As a result, scholars propose that the departure of outside directors is one strategy for legitimacy repair and a way to reassure external constituents that it is safe to maintain their relationships with an offending firm (Arthaud-Day *et al.*, 2006; Cowen and Marcel, 2011; Suchman, 1995).

A board's motives for cleaning house suggest that it should be most likely to retain high-capital directors and encourage (or force) the exit of lower capital directors. Research indicates that the willingness of high-capital individuals, including directors, to affiliate with a firm lends credibility to its activities and positively influences organizational legitimacy (Certo, 2003; D'Aveni, 1990; Higgins and Gulati, 2003, 2005; Lester *et al.*, 2005; Pfeffer and Salancik, 1978). As a result, organizations often seek high-capital affiliations in situations of heightened uncertainty (e.g., financial distress, initial public offering) as a way to build or protect relationships with external resource providers (Certo, 2003; D'Aveni, 1990). In the wake of fraud, the continued service of high-capital directors should likewise provide a valuable endorsement of the firm's future prospects. Director capital is also an indicator of boards' actual oversight capabilities (Hillman and Dalziel, 2003). External audiences are, consequently, also likely to interpret the departures of *lower capital* individuals as evidence that a board intends to improve managerial monitoring going forward. Thus, for multiple reasons, boards should favor the retention of high-capital directors if their aim is to signal legitimacy and guard against resource withdrawal. In sum, the cleaning house perspective suggests that

Hypothesis 1. A director's capital will be negatively related to the probability that he or she departs the board following an incident of financial fraud.

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Jumping ship

The alternate view in the literature suggests that governance failures, such as fraud, are stigmatizing for the individuals associated with offending organizations (Fahlenbrach, Low, and Stulz, 2010; Gales and Kesner, 1994; Pozner, 2008; Semadeni *et al.*, 2008; Wiesenfeld *et al.*, 2008). Stigma is a reputational stain that derives from socially discredited characteristics, conduct, or associations (Goffman, 1963). This latter variety is termed courtesy stigma because it is generated merely by an individual's physical, temporal, or cognitive connection to a 'dubious category' (Goffman, 1963; Wiesenfeld *et al.*, 2008: 236). Courtesy stigma implies that directors' reputations can be tainted by their association with a governance failure, even if they are not culpable for the behavior that produced it. This association leads to professional devaluation when others, in turn, seek to avoid damage to their own reputations by severing ties to stigmatized parties (Pozner, 2008; Wiesenfeld *et al.*, 2008). As a result, executives frequently engage in tactics designed to mitigate stigma and its consequences (Sutton and Callahan, 1987).

Financial fraud is perceived as a categorically illegitimate event, making affiliations with offending organizations serious threats to directors' reputations (Phillips and Zuckerman, 2001; Pozner, 2008). In the wake of such events, external audiences question, and often disparage, the character and competence of organizational elites (Kang, 2008; Wiesenfeld *et al.*, 2008). As a result, even when outside directors are not cited for misconduct, their association with fraudulent activity can diminish their future career opportunities (Pozner, 2008). These directors, for example, are more likely to lose their existing board seats and encounter difficultly in securing new board appointments (Arthaud-Day *et al.*, 2006; Fich and Shivdasani, 2007; Srinivasan, 2005). However, research suggests that such professional consequences can be mitigated by self-presentation strategies (Jones, 1984). One of these is jumping ship. Past studies of managerial turnover have argued that stigma is most effectively mitigated when individuals leave prior to the revelation of damaging information (Semadeni *et al.*, 2008). Yet unlike managers, board members are rarely complicit in fraudulent activity and, consequently, lack the option to strategically depart before wrongdoing is made public (Srinivasan, 2005). Voluntarily severing ties with an offending organization; however, may benefit directors even after the fact. For example, former directors may be less likely to be mentioned in ongoing press coverage of the organization, thus minimizing the salience of their link to a fraud. Former directors also have greater latitude to denounce managers, convey dissatisfaction with governance practices, or otherwise construct accounts that diminish their connection to the incident (Pozner, 2008; Scott and Lyman, 1968). Finally, the act of disassociation, in and of itself, signals a rejection of social deviance and reaffirms an individual's commitment to ethical conduct (Pozner, 2008; Suchman, 1995). For all of these reasons, scholars have suggested that director turnover in the wake of fraud may be attributable to stigma management motives (Pozner, 2008; Wiesenfeld *et al.*, 2008).

Directors with relatively high capital are more likely to jump ship because their superior access to alternative opportunities raises the cost of reputational damage. Relative to their lower capital colleagues, these individuals have a greater probability of being attractive candidates for other directorships. Organizations expect that the experience and relationships of these individuals will be useful in the boardroom and bolster firms' external images (Hillman and Dalziel, 2003; Pfeffer and Salancik, 1978). However, associations with negative events or controversial organizations can undermine the perceived value of an individual's capital (Kang, 2008). Questionable affiliations, especially when they are seen as voluntary[1], are salient to observers and can prevent otherwise qualified individuals from being judged as appropriate for directorship roles (Goffman, 1959, 1963). This is particularly true because emotions such as schadenfreude—or 'pleasure in others' misfortune'—often create additional pressures for organizations to exclude high profile elites in the wake of scandal (Wiesenfeld *et al.*, 2008: 235). Furthermore, research shows that executives derive a variety of benefits—including income, prestige, and professional contacts—from serving as corporate directors (Lorsch and

[1] Ties to offending organizations are viewed unfavorably, but the literature on stigmatization suggests that audiences do judge 'unintentional' and voluntary affiliations differently (Goffman, 1963). Before a director is made aware of financial improprieties, his or her connection to an offending firm may be interpreted as unintentional. After this information comes to light, continued association with the firm is seen as voluntary.

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MacIver, 1989). High-capital directors are more likely to have multiple avenues for cultivating such resources, diminishing their dependence on *any* given organization—especially a struggling or controversial one—relative to lower capital board members. Finally, to the extent that jumping ship allows directors to construct narratives that cast their prior involvement with an offending firm in a more favorable light, high-capital directors may also simply have greater success with this stigma management strategy. Their explanations are more likely to be noticed and found credible than those of lower capital individuals, thereby more effectively rehabilitating their image (Adler and Kwon, 2002; Wiesenfeld *et al.*, 2008). Thus, the greater visibility of high-capital directors may not only *worsen* the consequences of remaining tied to an offending organization, but also *improve* the effectiveness of jumping ship in mitigating stigma. For these reasons, when director turnover is driven by jumping ship, we should observe that

Hypothesis 2. A director's capital will be positively related to the probability that he or she departs the board following an incident of financial fraud.

METHODOLOGY

Our sample encompasses 63 incidents of fraud that occurred at different NYSE- and NASDAQ-listed companies between the years 2001 and 2004. These events were originally identified in a study on executive incentives as an antecedent of fraudulent activity (O'Connor *et al.*, 2006). To develop this sample, O'Connor and colleagues began by isolating firms that had restated their financial results. They then attributed a given restatement to fraudulent activity *only* if media searches revealed that the restated results were less favorable than originally reported, unrelated to changes in accounting principles, and prompted by regulators following allegations of financial malfeasance. This methodology ensures that the events in our sample were clearly and publicly tied to organizational wrongdoing (i.e., as opposed to a more benign charge), thus creating the conditions that lead to cleaning house and jumping ship. However, these departure motives were rendered irrelevant at nine firms because they were acquired or went out of business shortly after fraudulent activity came to light, resulting in the dissolution of the board. For the remaining firms, we went on to identify all of the outside (i.e., nonmanagement) directors who served on the board at the time that the financial restatements were announced. We compiled this information using the last proxy statement (Form DEF-14a) filed with the U.S. Securities and Exchange Commission (SEC) prior to the restatement announcement. This yielded a sample of 412 directors. Five of these observations were ultimately dropped from the study due to missing data on one or more of the independent or control variables. Therefore, our final analyses are based on 407 director observations.

Dependent variable

Our dependent variable, *director exit*, takes a value of one if a director departs the board by the time he or she would next come up for reelection following the fraud announcement. This variable is equal to zero if the director remains on the board beyond this point in time. Shareholders elect directors to serve as their representatives. Thus, other board members can only remove a director prior to the end of his or her term 'for cause'—a provision that generally requires illegal conduct or gross negligence. Of course, a director may voluntarily step down at any time. In practice, boards typically initiate the replacement of directors by pressuring them to resign, or by declining to renominate them for election when their terms of service expire. The length of director terms, however, varies because some boards hold elections annually, while others stagger their election cycles such that a given director only stands for reelection once every 3 years. The convention in research on controversy-induced director turnover is to examine a 3-year departure window, which ensures that every director must face renomination at least once following an event of interest (Arthaud-Day *et al.*, 2006; Cowen and Marcel, 2011; Fich and Shivdasani, 2007; Srinivasan, 2005). In the present paper, we apply a stricter standard because we are expressly interested in testing theories that frame departure as a way to influence third-party opinions (regarding either organizational legitimacy or professional reputation). Departures would seem to be most effective in fulfilling this intent if they occur soon after a fraud incident rather than years later. By examining whether directors have departed by their first reelection

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opportunity we ensure that we can observe exit prompted by both cleaning house and jumping ship, while still being conservative in our departure window. Using this approach, the data show that 22% of outside directors exit the board. The departure rate using the 3-year window is considerably higher (46%) and very similar to that reported by earlier studies (e.g., 48% in Srinivasan, 2005). The reported analyses use the more conservative measure of exit, but our results are robust to the conventional (3-year window) measure as well.

Independent variables

The construct of interest in our study is director capital. Following prior research, we disaggregate director capital into two components—relational capital and human capital (Hillman and Dalziel, 2003; Tian, Haleblian, and Rajagopalan, 2011). Relational capital stems from directors' professional networks (Nahapiet and Ghoshal, 1998). These networks provide access to information and contacts that can benefit firms' activities (Mizruchi, 1996; Rosenstein *et al.*, 1993; Schoorman, Bazerman, and Atkin, 1981). They may also confer prestige to the extent that they include ties to important or powerful people (Galaskiewicz, 1985). Scholars have proposed that relational capital is, in part, derived from an individual's structural position in a given network (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998). To model directors' network positions, we used *Board Analyst*, a database available from The Corporate Library. This database contains information on board membership for over 3,200 North American companies. Directors are connected to one another by virtue of serving on the same boards. *Relational capital* is operationalized as an individual's normalized eigenvector centrality (logged) within the director network in the year preceding the revelation of fraud. We selected this measure of centrality because it accounts for the number of ties that a director maintains but gives greater weight to ties with well-connected individuals (Bonacich, 1987; Wasserman and Faust, 1994). These calculations were implemented using Pajek and UCINET 6.

Human capital lies in an individual's professional background and expertise (Becker, 1964; Coleman, 1988). Directors' skill sets define the capacities in which they contribute to board functioning (Baysinger and Zardkoohi, 1986; Hillman *et al.*, 2000). Business experts and professional specialists provide particularly important resources to their organizations. Business experts are active or former top executives at other firms who are familiar with running complex organizations, giving them the expertise to understand competitive issues and evaluate managerial decisions (Baysinger and Zardkoohi, 1986). In our analyses, *human capital–business expert* is a dichotomous variable equal to one if a given director is an active or former CEO of another firm, and zero otherwise. Professional specialists have backgrounds in law, capital markets, or other industry-specific areas (e.g., environmental impact mitigation) that facilitate a board's ability to understand more technical aspects of firm operations (Baysinger and Zardkoohi, 1986; Hillman *et al.*, 2000). We operationalize *human capital–professional specialist* as a dummy variable equal to one if a director has worked as an accountant, banker, CFO, lawyer or public relations professional during their careers, or if their background otherwise provides evidence that they possess industry-specific technical expertise (e.g., Ph.D. in a related field, employed by a niche consulting firm). Data on directors' backgrounds was gathered from the biographical information provided in firms' proxy statements. While these biographies always contain information on individuals' career histories, they vary substantially in their level of detail so it was not feasible to construct continuous measures of human capital (e.g., years in professional specialty).

Control variables

Our analyses control for a variety of director- and firm-level characteristics that may also influence departure following a fraud incident. To address the possibility that more powerful directors may be insulated from dismissal, we control for a director's *tenure*, whether he or she serves as *board chairman* or a *nominating committee member* and his or her *ownership percentage* in the firm. We also include the *annual board fees* that each director receives for their service because monetary incentives may affect individuals' willingness to depart. Director characteristics can also shape judgments about monitoring responsibilities, so whether an individual is an *unaffiliated director* or an *audit committee member* is accounted for in all analyses (Arthaud-Day *et al.*, 2006; Srinivasan, 2005). Finally, we control for a director's *age*.

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At the firm-level, we control for the percentage of outside, unaffiliated directors serving on the board (*board independence*), a firm's assets (*firm size*), and its return on assets over the four quarters preceding the financial restatement (*firm performance*). We also control for the average return on assets in the firm's primary (2-digit) SIC code over that same period (*industry performance*). These data were compiled from proxy statements and the *Board Analyst* and *Compustat* databases.

Directors' departure motives may be shaped by the visibility of the fraud incident. *Public visibility* reflects the number of articles about the incident that appeared in major U.S. news publications during the 90 days following its announcement (Cowen and Marcel, 2011). The presence of powerful resource providers may also heighten external scrutiny (Arthaud-Day *et al.*, 2006; Cowen and Marcel, 2011; Jensen, 2006); therefore, we include the percent of stock owned by public pension funds (*pension fund ownership;* Ryan and Schneider, 2002) and by unaffiliated individuals or institutions with a 5% or greater equity stake in a given firm (*blockholder ownership*). We also control for whether firms' CEOs or CFOs departed (*CEO/CFO turnover*) within 1 year of a fraud's public revelation since such departures may both increase an incident's visibility and potentially serve as a substitute for director turnover. Alternative departure cutoffs were tried but did not materially affect the reported results. The above data were gathered from *Factiva*, SEC filings (10-Ks, DEF-14as), and the *Thomson Reuters Institutional Holdings* database. Lastly, our sample period spans the passage of the Sarbanes-Oxley Act in 2002, which introduced new financial reporting requirements and governance standards related to board composition and structure. We control for any unspecified effects these changes might have had on director departures by including a dummy variable indicating the calendar year in which the restatement occurred.

RESULTS

Table 1 provides summary statistics and correlations for all variables. Given that the dependent variable is binary, we use logistic regression to test the hypotheses (Menard, 1995). One methodological concern is the potential lack of independence across observations because multiple directors are associated with the same offending firm. Following Srinivasan (2005), we correct for this by estimating robust standard errors, clustered by firm. This statistical procedure requires only that observations be independent across firms (White, 1980).

Our hypotheses made opposite predictions about the relationship between director capital and an individual's probability of exit following a fraud incident. Cleaning house (H1) suggested a negative relationship, while jumping ship supported a positive one (H2). Regression results are reported in Table 2. Model 1 includes only the control variables. Model 2 includes the measures of relational capital and human capital. Relational capital and both of the measures of human capital (business expert and professional specialist) have a negative and significant relationship to the probability of director exit. This provides strong evidence that, following fraudulent activity, cleaning house is the primary driver of outside director turnover.

We conducted three additional analyses to ensure the robustness of our findings. First, to confirm that the passage of Sarbanes-Oxley in July of 2002 was not unduly affecting our results, we reestimated our models, dropping any observations in which a fraud announcement occurred prior to that date. Despite reduced power, our results were robust in this smaller sample. Second, we tested our hypotheses using a generalized estimating equations (GEE) approach. The GEE specification allowed us to account for effects of possible nonindependence between calendar years that were not addressed by the inclusion of the dummy variables. We implemented this test using the 'xtgee' routine in Stata 10 and found no material differences from the reported results. Finally, we sought to verify that our findings were not an artifact of selection bias. In particular, the activities and behaviors that lead to financial fraud are not random, posing a potential threat to the use of standard regression techniques. Therefore, we replicated our findings using a two-stage selection model (Heckman, 1976). We first collected a sample of outside directors serving at firms that did not experience a fraud. The new observations included all outside director/nonoffending firm entries that appeared in *Board Analyst* for the years 2001–2004. In the first stage of the model, these new observations

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Table 1. Summary statistics and correlations

		Mean	Std. dev.	1	2	3	4	5	6	7	8	9	10	11	12
1	Director exit	0.22	0.41	1.00											
2	Tenure	7.08	6.57	0.03	1.00										
3	Board chairman	0.03	0.18	−0.07	0.15	1.00									
4	Nom. comm. member	0.23	0.42	−0.05	0.00	0.06	1.00								
5	Ownership percentage	0.11	0.26	0.04	0.27	0.23	−0.02	1.00							
6	Annual board fees	23,355	18,572	0.16	0.01	−0.03	0.11	−0.21	1.00						
7	Unaffiliated director	0.87	0.33	−0.03	0.00	−0.09	0.12	−0.06	0.06	1.00					
8	Audit comm. member	0.38	0.49	−0.07	0.01	−0.09	−0.02	0.03	−0.07	0.23	1.00				
9	Age	59.22	8.57	0.12	0.37	0.01	0.15	0.06	0.19	0.05	−0.06	1.00			
10	Board independence	69.18	19.63	−0.02	0.11	0.03	0.12	0.03	0.20	0.51	0.04	0.05	1.00		
11	Firm size	8.91	2.05	0.02	−0.08	−0.01	0.09	−0.23	0.36	0.11	−0.11	0.11	0.27	1.00	
12	Firm performance	−0.03	0.47	−0.09	0.11	0.01	−0.05	−0.07	−0.01	0.07	−0.05	0.02	0.10	0.09	1.00
13	Industry performance	−0.04	0.24	0.02	−0.09	0.02	0.08	−0.08	0.22	0.10	−0.06	−0.02	0.21	0.26	0.01
14	Public visibility	9.43	10.54	0.03	−0.20	0.02	0.06	−0.13	0.14	−0.02	−0.02	−0.06	0.02	0.48	0.03
15	CEO/CFO turnover	0.47	0.50	0.11	−0.01	−0.02	−0.03	−0.01	0.13	0.11	0.07	−0.05	−0.06	0.04	−0.13
16	Blockholder ownership	12.22	15.84	−0.07	0.03	0.04	−0.03	−0.13	0.00	−0.11	−0.03	−0.01	−0.18	−0.25	0.11
17	Pension fund ownership	2.44	1.07	−0.20	0.01	0.00	0.11	−0.26	0.05	−0.12	−0.07	0.12	−0.07	0.27	0.15
18	Relational capital	−5.51	4.69	−0.19	−0.07	0.05	0.16	−0.27	0.14	0.15	−0.06	0.02	0.24	0.50	0.01
19	Human cap-business exp	0.45	0.50	−0.12	−0.15	−0.04	−0.07	−0.10	0.08	0.16	−0.05	−0.08	0.14	0.14	−0.04
20	Human cap-prof specialist	0.18	0.39	−0.02	−0.11	−0.05	−0.06	−0.09	−0.08	−0.09	−0.01	−0.05	−0.07	−0.07	0.04

		Mean	Std. dev.	13	14	15	16	17	18	19	20
13	Industry performance	−0.04	0.24	1.00							
14	Public visibility	9.43	10.54	−0.06	1.00						
15	CEO/CFO turnover	0.47	0.50	0.16	0.12	1.00					
16	Blockholder ownership	12.22	15.84	0.05	−0.16	0.01	1.00				
17	Pension fund ownership	2.44	1.07	0.23	0.02	−0.17	0.30	1.00			
18	Relational capital	−5.51	4.69	0.14	0.34	0.11	0.08	0.27	1.00		
19	Human cap-business exp	0.45	0.50	0.06	0.12	0.03	−0.04	−0.01	0.23	1.00	
20	Human cap-prof specialist	0.18	0.39	−0.06	0.02	−0.01	0.04	−0.11	−0.07	−0.25	1.00

Table 2. Likelihood of director exit

	Model 1	Model 2
Control variables		
Tenure	0.016	0.013
Board chairman	−1.598	−1.328
Nom. comm. member	−0.432	−0.587^{+}
Ownership percentage	−0.019	−0.609
Annual board fees	0.000	0.000
Unaffiliated director	−0.257	0.063
Audit comm. member	−0.563^{+}	−0.918**
Age	0.034*	0.034^{+}
Board independence	−0.009	−0.012
Firm size	0.054	0.382*
Firm performance	−0.168	−0.591**
Industry performance	0.237	−0.474
Public visibility	−0.004	−0.019
CEO/CFO turnover	0.262	0.496
Blockholder ownership	−0.012	−0.002
Pension fund ownership	−0.548^{+}	−0.491
Year dummies	Included	Included
Independent variables		
Relational capital		−0.223**
Human cap-business expert		−0.882**
Human cap-prof specialist		−0.776*
Pseudo-R^2	0.12	0.21

$^{+}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$.

(n = 20,361) were added to the existing 407 observations in order to estimate the probability of selection into the offending firm subsample. Selection probability was modeled as a function of the percentage of equity held by the entire board (including both inside and outside directors) and the base retainer pay received by directors for their service. We selected these instruments because theory suggests that they reflect a board's incentives to engage in monitoring activities, which should reduce the likelihood of financial improprieties (Beasley, 1996; Hillman and Dalziel, 2003). The probit model used in the second stage then controlled for selection probability when estimating the hypothesized relationships. The independent and control variables in the second stage were identical to those reported in Model 2. As expected, board equity ownership and retainer pay predicted selection into our sample—both significantly reduce an organization's probability of financial improprieties. These results are not reported, because in the second stage, there were no changes to the variables of interest. We conclude that our findings are robust to this two-stage specification, thus strengthening our interpretation of the results presented in Table 2.

DISCUSSION

The exodus of outside directors following financial fraud is well documented, but its causes are not entirely understood (Arthaud-Day *et al.*, 2006; Boivie *et al.*, 2012; Fich and Shivdasani, 2007; Srinivasan, 2005). Governance researchers have proposed two interpretations of these upheavals—cleaning house and jumping ship. While both may operate in the wake of fraud, they suggest fundamentally different motivations behind directors' departures. Distinguishing between these explanations is important to accurately characterizing the role of boards in responding to governance failures and the challenges they face in reconstituting board membership. Thus, this study used data on director turnover following events of corporate fraud in an effort to understand better the relative importance of cleaning house and jumping ship. We introduced the novel approach of analyzing directors' human and relational capital as a way to understand departure motives.

The empirical evidence shows that low-capital directors are significantly more likely to leave boards than are high-capital directors. These results are consistent with cleaning house, or the view that boards initiate director departures to repair organizational legitimacy by signaling a willingness to remedy governance weaknesses. Such signals are essential in the aftermath of financial improprieties because they help to avert resource withdrawal by reassuring external audiences that it is appropriate to maintain ties to an offending firm (Arthaud-Day *et al.*, 2006). The pattern of turnover that we observe is likely to be an effective signal of legitimacy for two reasons. First, relational and human capital have been linked to directors' actual monitoring abilities (Hillman and Dalziel, 2003). Departures of low-capital directors may, therefore, convey to external audiences that the board intends to upgrade the monitoring abilities of its membership. Second, even in the absence of concrete information regarding monitoring improvements, the willingness of high-capital directors to remain affiliated with a firm serves as a general endorsement of its future conduct and may be interpreted as evidence that governance lapses are not expected to recur.

Our study resolves one key question regarding post-fraud director turnover, but it also raises new questions that may guide future research

endeavors. Our findings suggest that the task of reconstituting board membership will fall to higher capital directors. While this is perhaps reassuring, more research is needed to understand how boards approach, and succeed at, director recruitment in the wake of governance failures. In particular, it would be interesting to know whether reconstituted boards, in fact, have strengthened monitoring abilities. This could be examined by studying changes in not only board composition, but also governance structures and policies. Another avenue for future study could be to look at the relationship between cleaning house and other potential strategies for legitimacy repair. For example, apart from director turnover, boards may also make formal statements regarding governance failures or effect changes in management. These actions could substitute for cleaning house altogether or suggest other characteristics that may be relevant to predicting director departures. Finally, the findings of this study should not be interpreted to mean that certain directors do not elect to jump ship. The objective of this study was only to understand the *primary* driver of turnover. Future research might examine what personal or situational characteristics make this stigma management strategy more likely to be employed by individual directors. Recent theoretical work on director identity has begun to address this issue and could be further advanced by empirical inquiries (Withers, Corley, and Hillman, 2012).

Our study makes important contributions to the literature on governance failure, but it is subject to several limitations. For example, we do not have information regarding how decisions about changes to board composition are made. Therefore, we cannot say what director characteristics are actually invoked in the boardroom when deciding which directors to renominate or ask for a resignation. Relational and human capital may or may not enter into these conversations explicitly. Our sample is also drawn from a time period in which governance scrutiny and regulation had just begun to increase. This is consistent with our objective to explain the mechanisms behind the elevated post-fraud turnover observed in prior studies of similar time periods. Nevertheless, changes in governance climate over the ensuing years may have had some effect on these mechanisms and, indeed, on the very patterns of turnover we seek to explain. Finally, our sample may be limited by its exclusive focus on visible fraud events at U.S. companies. While the context we have examined is important, it may not allow us to represent accurately director outcomes following other types of failures or at firms operating in different national or regulatory environments.

The revelation of financial fraud is only one example of large organizational failures, which can include lawsuits, corporate involvement in environmental disasters, and firm bankruptcy. In many ways the fallout from failure is predictable—significant upheaval among senior management and the board frequently follows. The cleaning house perspective argues that director turnover is a board-initiated process designed to signal organizational legitimacy and preserve relationships with important external audiences in the wake of damaging events. Our data provides support for this explanation of post-fraud turnover by showing that low-capital directors are significantly more likely to exit than their higher capital counterparts. What effect such changes in board composition ultimately have on firm outcomes or governance quality remains a question for future study.

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REFERENCES

Adler P, Kwon S. 2002. Social capital: prospects for a new concept. *Academy of Management Review* **27**: 17–40.

Arthaud-Day M, Certo S, Dalton C, Dalton D. 2006. A changing of the guard: executive and director turnover following corporate financial restatements. *Academy of Management Journal* **49**: 1119–1136.

Baysinger B, Butler H. 1985. Corporate governance and the board of directors: performance effects of changes in board composition. *Journal of Law, Economics and Organization* **1**: 101–134.

Baysinger B, Zardkoohi A. 1986. Technology, residual claimants, and corporate control. *Journal of Law, Economics & Organization* **2**: 339–349.

Beasley M. 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review* **71**: 443–465.

Becker G. 1964. *Human Capital*. Columbia University Press: New York.

Beresford D, Katzenbach N, Rogers C. 2003. Report of investigation by the special investigative committee of the board of directors of WorldCom, Inc. Available at: http://fl1.findlaw.com/news.findlaw.com/hdocs/docs/worldcom/bdspcomm60903rpt.pdf. (accessed May 15, 2009).

Boivie S, Graffin S, Pollock T. 2012. Time for me to fly: predicting director exit at large firms. *Academy of Management Journal* **55**: 1334–1359.

Bonacich P. 1987. Power and centrality: a family of measures. *American Journal of Sociology* **92**: 1170–1183.

Certo S. 2003. Influencing initial public offering investors with prestige: signaling with board structures. *Academy of Management Review* **28**: 432–446.

Coleman J. 1988. Social capital in the creation of human capital. *American Journal of Sociology* **94**(Suppl): 95–120.

Cowen A, Marcel J. 2011. Damaged goods: board decisions to dismiss reputationally compromised directors. *Academy of Management Journal* **54**: 509–527.

D'Aveni R. 1990. Top managerial prestige and organizational bankruptcy. *Organization Science* **1**: 121–142.

Eisenhardt K. 1989. Agency theory: an assessment and review. *Academy of Management Review* **14**: 57–74.

Fahlenbrach R, Low A, Stulz R. 2010. The dark side of outside directors: Do they quit when they are most needed? NBER Working paper w15917, National Bureau of Academic Research, Cambridge, MA.

Fich E, Shivdasani A. 2007. Financial fraud, director reputation, and shareholder wealth. *Journal of Financial Economics* **86**: 306–336.

Galaskiewicz J. 1985. Interorganizational relations. *Annual Review of Sociology* **11**: 281–304.

Gales L, Kesner I. 1994. An analysis of board of director size and composition in bankrupt organizations. *Journal of Business Research* **30**: 271–282.

Goffman E. 1959. *The Presentation of Self in Everyday Life*. Doubleday Anchor: Garden City, NY.

Goffman E. 1963. *Stigma: Notes on the Management of Spoiled Identity*. Prentice-Hall: Englewood Cliffs, NJ.

Hambrick D, D'Aveni R. 1992. Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science* **38**: 1445–1466.

Heckman J. 1976. The common structure of statistical models of truncation, sample selection, and limited dependent variables and a simple estimator for such models. *The Annals of Economic and Social Measurement* **5**: 475–492.

Higgins M, Gulati R. 2003. Getting off to a good start: the effects of upper echelon affiliations on underwriter prestige. *Organization Science* **14**: 244–263.

Higgins M, Gulati R. 2005. Stacking the deck: the effects of top management backgrounds on investor decisions. *Strategic Management Journal* **27**: 1–25.

Hillman A. 2005. Politicians on the board of directors: do connections affect the bottom line? *Journal of Management* **31**: 464–481.

Hillman A, Cannella A, Paetzold R. 2000. The resource dependence role of corporate directors: strategic adaptation of board composition in response to environmental change. *Journal of Management Studies* **37**: 235–256.

Hillman A, Dalziel T. 2003. Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review* **28**: 383–396.

Jensen M. 2006. Should we stay or should we go? Accountability, status anxiety, and client defections. *Administrative Science Quarterly* **51**: 97–128.

Jensen M, Meckling W. 1976. Theory of the firm: managerial behavior, agency costs, and capital structure. *Journal of Financial Economics* **3**: 305–360.

Jones EE. 1984. *Social Stigma: The Psychology of Marked Relationships*. W.H. Freeman: New York.

Kang E. 2008. Director interlocks and spillover effects of reputational penalties from financial reporting fraud. *Academy of Management Journal* **51**: 537–555.

Karpoff J, Lott J. 1993. The reputational penalty firms bear from committing criminal fraud. *Journal of Law and Economics* **36**: 757–802.

Lester R, Certo S, Dalton C, Dalton D, Cannella A. 2005. Initial public offering investor valuations: an examination of top management team prestige and environmental uncertainty. *Journal of Small Business Management* **44**: 1–26.

Lester R, Hillman A, Zardkoohi A, Cannella A. 2008. Former government officials as outside directors: the role of human and social capital. *Academy of Management Journal* **51**: 999–1013.

Lorsch J, MacIver E. 1989. *Pawns or Potentates: The Reality of America's Corporate Boards*. Harvard Business School Press: Cambridge, MA.

Menard S. 1995. *Applied Logistic Regression Analysis*. Sage: Thousand Oaks, CK.

Mizruchi M. 1996. What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates. *Annual Review of Sociology* **22**: 271–298.

Nahapiet J, Ghoshal S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review* **23**: 242–266.

O'Connor J, Priem R, Coombs J, Gilley K. 2006. Do CEO stock options prevent or promote fraudulent financial reporting? *Academy of Management Journal* **49**: 483–500.

Palmrose Z, Richardson V, Scholz S. 2004. Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics* **37**: 59–89.

Pfeffer J, Salancik G. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row: New York.

Phillips D, Zuckerman E. 2001. Middle-status conformity: theoretical restatement and empirical demonstration in two markets. *American Journal of Sociology* **107**: 379–429.

Pozner J. 2008. Stigma and settling up: an integrated approach to the consequences of organizational misconduct for organizational elites. *Journal of Business Ethics* **80**: 141–150.

Rosenstein J, Bruno A, Bygrave W, Taylor N. 1993. The CEO, venture capitalists, and the board. *Journal of Business Venturing* **8**: 99–113.

Ryan L, Schneider M. 2002. The antecedents of institutional investor activism. *Academy of Management Review* **27**: 554–573.

Schoorman FD, Bazerman M, Atkin R. 1981. Interlocking directorates: a strategy for reducing environmental uncertainty. *Academy of Management Review* **6**: 243–251.

Scott M, Lyman S. 1968. Accounts. *American Sociological Review* **33**: 46–62.

Semadeni M, Cannella A, Fraser D, Lee D. 2008. Fight or flight: managing stigma in executive careers. *Strategic Management Journal* **29**: 557–567.

Srinivasan S. 2005. Consequences of financial reporting failure for outside directors: evidence from accounting restatements and audit committee members. *Journal of Accounting Research* **43**: 291–334.

Suchman M. 1995. Managing legitimacy: strategic and institutional approaches. *Academy of Management Review* **20**: 571–610.

Sutton R, Callahan A. 1987. The stigma of bankruptcy: spoiled organizational image and its management. *Academy of Management Journal* **30**: 405–436.

Tian J, Haleblian J, Rajagopalan N. 2011. The effects of board human and social capital on investor reactions to new CEO selection. *Strategic Management Journal* **32**: 731–747.

Tsai W, Ghoshal S. 1998. Social capital and value creation: the role of intrafirm networks. *Academy of Management Journal* **41**: 464–476.

Wasserman S, Faust K. 1994. *Social Network Analysis: Methods and Applications*. Cambridge University Press: Cambridge, UK.

Weisbach M. 1988. Outside directors and CEO turnover. *Journal of Financial Economics* **20**: 431–460.

White H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* **48**: 817–838.

Wiesenfeld B, Wurthmann K, Hambrick D. 2008. The stigmatization and devaluation of elites associated with corporate failures: a process model. *Academy of Management Review* **33**: 231–251.

Withers M, Corley K, Hillman A. 2012. Stay or leave: director identities and voluntary exit from the board during organizational crisis. *Organization Science* **23**: 835–850.

Zahra S, Pearce J. 1989. Boards of directors and corporate financial performance: a review and integrative model. *Journal of Management* **15**: 291–334.