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The Struggle for Power and Pay: Implications of Board of Directors' Power on Monitoring Effectiveness and Pay for Performance Sensitivity

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ABSTRACT:

Boards of directors monitor and incentivize CEOs to make decisions that maximize shareholder value; however, research has been inconsistent in identifying the relationship between board composition and monitoring effectiveness (Daily, Johnson, Ellstrand, & Dalton, 1998). Integrating an economic perspective (agency theory) with a socio-psychological perspective (upper echelon theory), this paper examines how outsiders' and insiders' power bases relate to pay-for-performance by proposing and empirically examining a multi-dimensional model of board power bases: ownership, prestige, and structural. I argue that board structural and composition characteristics can be used as proxy indicators of board power. Using data from 37,066 directors of 950 firms resulting in 3,581 firm-year observations between 2000-2006, I find the ratio of the average outsider's prestige power to insiders' associates positively with total compensation and pay-for-performance sensitivity in partial support of my hypothesis. Although contrary to my expectations, I find the ratios of the average outsiders' ownership and structural power bases to insiders' are insignificantly associated with pay-for-performance, supplemental analysis reveals that these relationships become significant as context changes. Thus, I extend my theoretical framework to the role of context in the board power and monitoring effectiveness relationship; specifically, I conceptualize context in terms of environmental (e.g., government regulation, world events, institutional pressures), firm (e.g., size and performance), board (e.g., size, level of board independence), and CEO (e.g., ownership and tenure) characteristics. Overall, this study contributes to research by illustrating that board power is relevant to monitoring effectiveness; however, this relationship is contextual.

**“The Struggle for Power and Pay: Implications of Board of Directors’ Power on
Monitoring Effectiveness and Pay-for-Performance Sensitivity”**

By

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DISSERTATION

Submitted in partial fulfillment of the requirements for the
degree of Doctor of Philosophy in Business Administration
in the Whitman School of Management of Syracuse University

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Dreams are the touchstone of our character. Henry David Thoreau

Some may say that a dissertation is a “labor of love,” but I believe it is a humbling journey of discovering who you are, what you know, and what you still have to learn. The beauty of the experience is in the challenge, and learning to embrace the discovery. Pursuing the doctorate was a dream born out of my love of learning, my aspirations to research, to write, to publicly motivate others, to consult, and to teach. I can only hope that by the end of this journey, I have done the best I can to represent the passion I have for learning... with integrity, humility, and the quality of excellence that my mentors, family, friends, and professors have taught me.

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CHAPTER 1. INTRODUCTION

1.1. Executive Compensation: The Economic Value vs. Weak Governance?

Popular press claims the public is outraged about increases in executive pay (Kuhnen & Niessen, 2012), but are CEOs overpaid in reality? CEO pay increased from an average of approximately \$4.1 million in 1995 to about \$16 million in 2000, and then declined to an average of about \$8 million in 2006 (Kaplan, 2008). Considering this trend in CEO pay, corporate governance scholars question how compensation reflects the manager's contribution to improving the firm's financial performance (e.g., Finkelstein, Hambrick, & Cannella, 2009; Hill & Phan, 1991; Rajagopalan & Prescott, 1990; Wowak, Hambrick, & Henderson, 2011). Scholars debate whether changes in executive pay reflect paying for CEO marginal value or problems of ineffective corporate governance. While proponents for the economic value argument suggest that CEOs are receiving, and should continue to receive, increased pay for their increased marginal effort and skill, proponents for the weak governance argument suggest that CEOs manipulate boards into giving them increased pay for less effort.

The economic value argument considers that pay has been determined by the market, was similar to increases of other key groups, and reflects pay for increased value. Just as CEO pay of SP 500 increased three to four times between 1994-2005 (Kaplan & Rau, 2008), reflecting growth in the U.S. economy (Kaplan, 2008), pay of other key players has also increased: private equity and venture capital investors increasing almost ten times and that of attorneys increasing almost two and a half times (Kaplan & Rau, 2008). But key to their argument is that CEOs should receive more pay because their leadership resulted in improved stock performance (Kaplan & Rau, 2008). If pay and performance are linked then, criticism of ineffective board of director monitoring is unjustified, as evidenced by the fact that boards have continued to make

effective monitoring decisions, such as terminating poorly performing CEOs. Approximately one out of every 6 CEOs has been terminated since 1998 compared with one out of 10 in the 1970s (Kaplan & Minton, 2008)

In contrast, proponents for the weak governance argument suggest that pay has increased without performance, serving as evidence that boards of directors have been ineffective. These critics argue excessive compensation results from the ineffectiveness of the firm's corporate governance structure, the failure of monitoring mechanisms, and the lack of alignment between compensation and shareholder goals (Colvin, 2010). Although executive compensation has risen significantly during the last decade, firm financial performance has not increased at a similar rate (Bebchuk & Fried, 2006). Executive pay increased 29% from 2009 to 2010, and cash bonuses increased 38% despite a 9% unemployment rate in the U.S (Joshi, 2011); however, executive compensation consultants find no correlation between pay and shareholder returns (Stodola, 2011). For example, Bank of New York Mellon's CEO Robert Kelly received a 73% increase in pay, while shareholder return was 9% (Stodola, 2011). Results indicate managerial compensation does not always reflect changes in the firm's financial status (Jensen & Murphy, 1990; Finkelstein & Hambrick, 1996), such that less than 5% of CEO pay can be explained as resulting from performance (Tosi, Werner, Katz, & Gomez-Mejia, 2000). Despite the fact that pay began to decrease in 2001, this decline has been attributed to the overall economic recession and not to improved corporate governance (Colvin, 2010). Some managerial critics argue this excessive growth in pay is managers' fault; they are able to manipulate financial reporting and earnings to benefit themselves, while some board critics argue this excessive growth is due to ineffective board decisions (Colvin, 2010).

This study contributes to corporate governance research by considering that the reason why this debate over CEO pay continues is because we have not fully considered how conceptualizing board power using structural and composition characteristics can clarify whether monitoring is effective, including when increased pay may be associated with improved performance. Although board members' characteristics affect their decisions (Finkelstein & Boyd, 1998), research has not fully considered how board characteristics may influence the development of different board power bases that increase the potential for one board member to be more likely than another board member to influence decisions associated with monitoring effectiveness. Research may benefit by considering a broadened, yet integrated, perspective that looks beyond traditional governance mechanisms (Jensen & Murphy, 1990) to utilizing a multi-dimensional model of board power to understand how, when and why pay and performance are linked.

1.2. Research Questions

Within the agency context, board power affects who is more likely to influence decisions relevant to monitoring effectiveness. Effective monitoring aligns managerial goals with those of shareholders, reducing total compensation and increasing pay-for-performance sensitivity (Hartzell & Starks, 2003). Executive compensation has been examined in terms of the CEO's power relative to the board (e.g., Hambrick & Finkelstein, 1988), but has not been examined in terms of board members' power relative to each other. Research has considered how power differentials between CEOs and boards affect compensation decisions (Finkelstein & Hambrick, 1988; Hill & Phan, 1991). While the study of board power within top management teams has been considered in terms of their effect on strategic decisions (e.g., Finkelstein, 1992), the study of how the distribution of power within the board affects monitoring is limited. Thus, scholars

have called for more research examining board power (e.g., Boyd, Haynes, and Zona, 2010; Hambrick et al., 2009). Finkelstein's (1992) model of top management team (TMT) power considers how powerful TMT members can exert their will within TMTs; however, a power struggle between outsiders and insiders also exists within the board of directors about who controls the CEO. If boards represent owners, then powerful boards will negate the effects of insiders' (e.g., TMT, CEO) power. More specifically, if insiders' power enables managers to make decisions in their self-interests (Finkelstein, 1992), then powerful outsiders should reduce this discretion of managers. Thus, studying board power within the board may shed insight into board monitoring and executive compensation decisions because the power to change CEO behavior to benefit shareholders is the central aspect of a board's monitoring responsibility.

Board power provides a conceptual bridge to link board structural and composition characteristics to examine pay-for-performance. Following Finkelstein (1992), I define power as the "capacity of individual actors to exert their will" (p. 506). However, I define *board power* as the capacity of the board to control the CEO, specifically by compelling the CEO to act in alignment with shareholder interests. By integrating agency and upper echelon theories, I derive certain indicators of the potential for individual board members to influence compensation decisions. These indicators fall within two categories: structural characteristics informed by agency theory and demographic indicators informed by upper echelon theory. Thus, I propose and argue board structural and demographic characteristics can serve as proxy indicators for the potential for board member power to increase, making it more likely that powerful board members will be associated with monitoring effectiveness. Therefore, my research questions are: a) *how do board power bases effect the influence members have on monitoring and executive compensation?* and b) *how do power bases influence outsiders' and insiders' monitoring*

effectiveness? Typically, board monitoring has been examined using single board characteristics variables as proxies (e.g., ownership concentration; number of outsiders), but results are inconsistent and causality is inconclusive (Daily, Johnson, Ellstrand, & Dalton, 1998). This may be due to assumptions made about these board characteristics and their potential influence on decisions. Since monitoring is about the relationship between boards and CEOs, there is a sense of fluidity in ability of the board to get the CEO to do what it wants the CEO to do. Therefore, examining power as a multi-dimensional construct, using board characteristics as proxy indicators for board power, captures the influence and relationship between the monitor and monitored; understanding monitoring is about the distribution of power, or the capacity to control the CEO that cannot be fully captured using single variable proxies. Collectively, though, these measures create a way to consider the potential of the board to control the CEO, or to monitor.

1.3. Research Contribution

What makes board monitoring successful, and even necessary, has been consistently debated in the literature using contrasting theoretical frameworks (Finkelstein et al., 2009). My study contributes to this debate by considering how theoretical perspectives can help us understand implications of power for corporate governance, specifically in the context of executive compensation. Linking social psychology perspectives on power with strategy perspectives on corporate governance, this study contributes theoretically to executive compensation and governance research by clarifying the inconsistent relationship between board classification (e.g., outsiders or insiders) on monitoring effectiveness and executive compensation, and by examining how board power bases influence the effect that board classification has on

monitoring effectiveness. By integrating an economic perspective (agency theory) and a socio-psychological perspective (upper echelon theory), I model an integrated agency-upper echelon theoretical view of board power, suggesting a new behavioral perspective on monitoring effectiveness and compensation. While the economic perspective explains how pay affects managers' willingness to accept risk, the social psychology perspective explains how individual characteristics can result in managerial pay decisions having either positive or negative consequences (Finkelstein et al., 2009). This dissertation addresses scholar's concerns that variables used as proxies of board vigilance are not actually representative of that vigilance, but rather have the potential to influence the degree of vigilance (e.g., Finkelstein et al., 2009). Specifically, I argue that board characteristics are indicators of board power bases that may influence monitoring effectiveness.

In addition to its theoretical contribution, this study contributes empirically to corporate governance research by extending Finkelstein's (1992) model of TMT power to the context of boards of directors. Finkelstein et al., (2009) call for research to develop a model of board power specific to the context of compensation because they suggest that Finkelstein's (1992)'s top management team power dimensions have been applied to numerous contexts, such as compensation, for which this power model may not have been intended. Therefore, I extend Finkelstein (1992) by proposing and empirically examining a multi-dimensional model of board power to clarify inconsistencies surrounding the relationship between board outsiders and insiders on monitoring effectiveness and executive pay.

This dissertation contributes to corporate governance research by developing a new method to examine board power. Specifically, I utilize board characteristics as proxy indicators of the potential presence of board power bases. While agency theory informs the board power

construct in terms of the potential to resolve the agency conflict, upper echelon theory informs the construct in terms of relevant board characteristics that may make an individual more likely to become powerful over the CEO. In so doing, I demonstrate that the predictive nature of board power for strategic decision-making is contextual, depending on how power is conceptualized. I empirically examine power as an antecedent to executive compensation and pay-for-performance sensitivity using longitudinal data for 950 firms from 2000-2006.

1.4. Organization of Dissertation

My primary purpose with this dissertation is to examine how board power effects monitoring and pay-for-performance sensitivity by conceptualizing a multi-dimensional model of board power and proposing a new way to empirically examine board power bases. This paper is divided as follows: Chapter 2 Board Monitoring, Executive Compensation, and Power Literature Review; Chapter 3 A Multi-Dimensional Model of Board Power; Chapter 4 Methodology; Chapter 5 Analysis; Chapter 6 Discussion; and, Chapter 7 Conclusions.

CHAPTER 2. BOARD MONITORING, EXECUTIVE COMPENSATION, AND POWER LITERATURE REVIEW

2.1. Theoretical Foundations: Agency and Upper Echelon Theories

Understanding what managers do and how they do it is essential to evaluating the effectiveness of any leadership structure (Carroll & Gillen, 1987). However, the results of research on the association between board monitoring and executive compensation have been inconsistent when only agency theory is utilized (Boyd, Haynes, & Zona, 2010). Because agency theory may be limited as an all-inclusive universal theory to explain corporate governance outcomes, some scholars have considered integrating agency theory with other theories to understand the contextual implications of agency conditions (e.g., Finkelstein & D'Aveni, 1994). Specifically, I suggest that by integrating agency theory (Jensen & Meckling, 1976) perspectives on the principal-agent conflict with upper echelon theory (Hambrick & Mason, 1984) perspectives about how human characteristics influence decisions, I can develop a model of board power using board structural and composition characteristics as proxy indicators of the potential for powerful board members to influence monitoring effectiveness.

At the heart of executive compensation decisions are power struggles to determine the optimal compensation contract. These conflicts include managers' power struggles with board members and board members' power struggles with each other. An examination of how board members influence decisions depends on which theoretical foundation is used (Hillman & Dalziel, 2003). Determining which members' goals are prioritized depends on how this conflict is resolved, which is a function of the power play within the board. By considering key assumptions, the units of analysis, and research foci, I argue that these theories can be integrated to create a power model that is relevant to monitoring effectiveness. These theories are relevant

because of their importance in monitoring decisions, their ability to highlight the board's role in resolving the agency conflict, and their ability to identify potential indicators that can serve as proxy indicators for power (Table 1).

First, agency and upper echelon theories have varying perspectives on how decisions affect monitoring. Focusing on decisions relevant to the compensation contract, agency theory considers how managers make decisions that differ from those of shareholders; thus, boards make incentive and monitoring decisions to align managerial and shareholder interests (Fama & Jensen, 1983). Focusing on the type of decision making, upper echelon theory is relevant to examining decisions with a behavioral element, such as reward decisions (Hambrick & Mason, 1984).

Second, integrating agency and upper echelon theories focuses on the board as a main unit of analysis because board members are the key decision makers in the executive compensation context. The agency theory's unit of analysis is the contract between the agent and the principal (Fama & Jensen, 1983; Eisenhardt, 1989), a unit that is relevant with regards to decisions. In contrast, the upper echelon theory's unit of analysis is the top management team as the dominant coalition (Hambrick & Mason, 1984), which is relevant to understanding decision makers. These units of analysis result in different research foci based on the particular theory as follows: a) agency theory: how the agency conflict develops, affects performance, and is resolved through monitoring and incentive alignment (Eisenhardt, 1989); and b) upper echelon theory: whether top managers matter as a result of their influence on strategic decisions and outcomes (Hambrick & Abrahamson, 1995).

Third, an integrated agency–upper echelon theoretical model can explain the relationships involved in power decisions and can identify variables that accurately capture the

key factors affecting outcomes. Relevant to human motivation and decision making, agency theory (Jensen & Meckling, 1976) assumes that humans act in their own self-interest and are limited rationally in their decision making by what they know; however, agency theory also clarifies that managers acting in their own self-interest can jeopardize shareholder wealth because managers and shareholders differ in their goals and risk preferences. Focusing on the relationship between the board and the chief executive officer, agency theory assumes that information asymmetry between boards and CEOs inhibits monitoring effectiveness (Eisenhardt, 1989). Hambrick & Mason's upper echelon theory (1984), which is relevant to understanding how individuals make decisions, argues that background and demographic characteristics reflect the decision maker's values and cognitive bases, which predict strategic outcomes and decisions. Through its focus on the decision maker, upper echelon theory explains how background characteristics influence an individual's general knowledge base, which affects monitoring decisions (Finkelstein & Hambrick, 1996).

In summary, I therefore use an integrated theoretical framework that includes both agency theory, which frames my research questions by examining the effectiveness of monitoring, and upper echelon theory, which frames my questions in terms of which characteristics of board members affect their decisions. By helping understand the context in which pay decisions are determined by the board, agency theory focuses on how board members make decisions about compensation, exert control over information and decisions, and focus on optimal contracting to minimize uncertainty. Upper echelon theory then lends insight into the decision makers themselves by focusing on the relationship of individual demographic characteristics regarding pay decisions. I note, however, that each theory's limitations may be somewhat, although not completely, covered by the other theory. Whereas agency theory is

limited in explaining situations in which managers do not act in ways that benefit their own self-interest, upper echelon theory's focus on differing characteristics helps me understand that situation. Upper echelon theory notes its own limitation in that demographic characteristics are more complex in meaning than what they represent; for example, a person's educational background reflects not only motivation but also social economic status (Hambrick & Mason, 1984). In the next section, I review the previous literature regarding board monitoring and executive compensation.

2.2. Board Monitoring and Executive Compensation

The core issue in agency theory is the separation of ownership and control (Berle & Means, 1932; Fama & Jensen, 1983). According to agency theory, the principal-agent relationship is characterized by differences in goals and risk preferences on the part of the CEO (the agent) and shareholders (the principal) (Jensen & Meckling, 1976). Shareholders delegate their decision-making authority to boards, relying on the boards to make decisions in the shareholders' best interests. Jensen and Meckling (1976) focused on the "behavioral implications of the property rights specified in the contracts between owners and managers of the firm (308)" to present a theory of the ownership structure of the firm (305) that can "explain how the conflicting objectives of the individual participants are brought into equilibrium so as to yield this result" (p. 307).

Board monitoring and incentive alignment are governance mechanisms intended to control managerial behavior (Beatty & Zajac, 1994). Whereas CEOs are risk-averse, shareholders are risk-neutral; therefore, boards monitor and use incentives to motivate managers to act in alignment with shareholder interest (Eisenhardt, 1989). Board monitoring refers to the

board's actions to assess managerial ability and effort in pursuing firm financial goals (Walsh & Seward, 1990) and to review managerial decisions that may not positively affect shareholders (Fama & Jensen, 1983). However, board members differ in their monitoring decisions (Cutting & Kouzmin, 2002).

Although boards are primarily responsible for hiring and firing CEOs, their role in designing executive compensation contracts has significant effects on performance (Walsh & Seward, 1990); thus, incentive alignment results from contracts that align managerial interests with those of shareholders so that CEOs do not act in their own self-interest and diminish shareholder value (Eisenhardt, 1989). More importantly, the “optimal level of monitoring [is] based on the incentive gap between the principal and the agent” (Beatty & Zajac, 1994, p. 317); thus, different internal governance mechanisms (e.g., representation by outsiders on the board) and equity ownership by managers can substitute for each other in minimizing managerial opportunism by aligning managerial interests with those of shareholders (Rediker & Seth, 1995).

To align managerial interests with those of shareholders, boards monitor the CEO and create an optimal balance of short- and long-term compensation components that will provide incentives for agents to motivate managers to bear some degree of risk (Jensen & Murphy, 1990) and make profit-maximizing decisions (Eisenhardt, 1989). The final compensation contract should illustrate the efficient organization of information and minimize risk-bearing costs to the firm through incentive alignment and the optimal structuring of control mechanisms (Eisenhardt, 1989). Because of the “incentive effect” resulting from the structure of compensation packages (Gerhart & Rynes, 2003), boards have the potential to “stimulate [the CEO's] extraordinary effort, encourage aggressive but prudent risk-taking, and promote a long-term horizon” (Wowak & Hambrick, 2010, p. 804). However, the effectiveness of incentive-based compensation

involving stock options depends on strategic, motivational, and stakeholder factors within the firm's competitive environment (Brandes, Dharwadkar, & Lemesis, 2003). Hence, board power, or the potential for the board to control the CEO, is reflected in the final compensation contract and its relationship to performance.

Board monitoring effectiveness decreases in conditions of information asymmetry (Jensen, 2005) and risk uncertainty; thus, boards utilize outcome-based contracts that consist of a larger portion of stock-based incentives (Eisenhardt, 1989; Nagar, Nanda, & Wysocki, 2003) to align the agent's interests with those of shareholders (Jensen and Meckling, 1976; Morck, Shleifer, & Vishny, 1988). In contrast, behavioral-based contracts consist of a larger proportion of short-term compensation, such as the yearly salary, than of stock-based compensation because the board is in a position to more actively monitor the CEO. With weaker monitoring, boards design outcome-based contracts that shift risk to the CEO as motivation to make decisions that are aligned with maximizing shareholder value (Eisenhardt, 1989). However, as board monitoring becomes stronger, boards tend to design behavioral-based contracts because the directors have more access to relevant monitoring information (Eisenhardt, 1989). In the next section, I elaborate on how boards' structural and compositional characteristics relate to monitoring.

2.2.1. Board Structure and Composition

Board structure refers to the "formal organization of the board of directors; its major dimensions are size, the division of labor between the board chair and the CEO, and board committees" (Finkelstein et al., 2009, p. 229). Whereas the majority of research on boards considers the board of directors' structure and composition (Zahra & Pearce, 1989), I suggest

that considering board structure in the context of the *distribution of power* would extend this research.

First, board structure refers to the structural characteristics of boards and is related to monitoring, i.e., board size, leadership roles, the number of meetings, and committee structure (Finkelstein et al., 2009). The way in which boards are structured (Core, Holthausen, & Larcker, 1999) and the frequency of board interaction (Forbes & Milliken, 1999) relate to compensation. Firm performance, as proxied by Tobin's Q, is positively associated with board size (Yermack, 1995) but negatively associated with the number of board meetings (Vafeas, 1999).

Second, board composition refers to compositional characteristics and is related to monitoring, i.e., board affiliation (insider, outsider), age, tenure, experience, demographic characteristics, and equity ownership. Compensation is related to board composition (Bhagat & Black, 1998), board and CEO tenure (Rajagopalan & Prescott, 1990), and director equity ownership (Boyd, 1994). Although board classification is relevant to the monitoring process, the relationship between board composition and firm performance has been inconclusive (Daily, Johnson, & Dalton, 1999). Some studies find a positive relationship between outsiders and increased firm value (e.g., Rhoades, Rechner, & Sundaramurthy, 2001; Baysinger & Butler, 1985; MacAvoy & Millstein, 1999), whereas other studies find a negative effect (e.g., Bhagat & Black, 1991), no relationship (Hermalin & Weisbach, 1991), or little relationship (Daily et al., 1998).

2.2.2. The Outsider vs. Insider Monitoring Debate

Scholars debate whether outsiders or insiders are more effective monitors. I define insider directors as those directors related to the firm either through employment or through familial

relationships and outsider directors as those directors having no familial or professional relationship other than their board role with the firm (e.g., risk metrics). Whereas the tenure of insiders is associated with maintaining the firm's strategic direction, the tenure of outsiders is associated with changing this direction (Finkelstein & Hambrick, 1990; Wiersman & Bantel, 1993). Although insiders are less likely to challenge the CEO when faced with employment risk (Johnson, 1996) and when there is a minimal number of insiders on the board (Combs, Kretch, Perryman, & Donahue, 2007), insiders have been known both to replace CEOs when firm performance declines (Ocasio, 1994) and to decline to adopt poison pills (Johnson, Ellstrand, Dalton, & Dalton, 1994).

This debate is contextual; outsiders and insiders differ in their monitoring depending on the context of the decisions. Although the potential exists for insider loyalty to the CEO to interfere with monitoring (Walsh and Seward, 1990; Helland and Sykuta, 2005), insiders bring an informational advantage about internal firm operations that assists in the monitoring process. For example, insiders are positively associated with long-term R&D investments (Baysinger, Kosnik, & Turk, 1991) and can benefit monitoring because of their specialized knowledge of the firm's strategy (Baysinger & Hoskisson, 1990). Conversely, although outsider knowledge about the firm is limited (Lorsch & MacIver, 1989), this lack of connection to the firm makes outsiders more objective monitors because they are less committed to maintaining the status quo (Hambrick & Mason, 1984). Outsiders are more likely to replace poorly performing CEOs, are positively associated with making strategic change decisions (Brunninge, Nordqvist, & Wiklund, 2007), and are associated with a decreased likelihood of bankruptcy (Daily & Dalton, 1994). Because monitoring involves assessing the firm's financial operations, research shows that outsiders are associated with increased accounting conservatism (Ahmed & Duellman, 2007),

increased focus on financial performance (Johnson et al., 1993), and an increased likelihood of dismissing poorly performing CEOs (Weisbach, 1988).

Although differences in compensation decisions by outsiders and insiders have been established in the previous literature, the results vary. Contrary to his expectations, Boyd (1994) found that insiders were associated with reduced total executive compensation. Converse to what theory would predict, Daily et al. (1998) found that a higher portion of CEOs on the compensation committee were associated with decreased changes in total pay. When firms are not performing well, outsiders are associated with CEO compensation contracts that are more aligned with shareholder interest (Mishra & Nielsen, 1999). When firms grow through acquisitions, outsiders make adjustments to the executive's compensation contract based on shareholder value rather than firm size (Wright, Ferris, Sarin, & Awasthi, 2002). Although the board's primary role is to provide the optimal contract that maximizes shareholder value (Core, Guay, & Larcker, 2003), managerial power can negate this effect. Managerial power influences pay (Bebchuk & Fried, 2003) in that powerful managers are able to manipulate contracts and extract rent (e.g., Morse, Nanda & Seru, 2008). Therefore, I suggest that understanding how power bases affect the potential of a board member to control the CEO may clarify the relationship between outsiders and insiders and executive compensation. To the best of my knowledge, no study has sought to capture this relationship in terms of power constructs developed using factor analysis and structural equation modeling. In the next section, I review power literature in the context of corporate governance.

2.3. Power in the Corporate Governance Context

Power influences decision making (Child, 1997) and corporate governance; however, the effects of power on decisions vary based on how power is conceptualized. Power is the “capacity

to exercise influence,” with influence defined as a “transaction in which one person (or group) acts in such a way as to change the behavior of an individual (or group) in some intended fashion ... [influence] is the demonstrated use of power” (Katz & Kahn, 1966, p. 550). Power can be “a force, a set of potential influence through which events can be affected” (Pfeffer, 1981, p. 7). Power concerns the ability to influence change and achieve desired goals (Lynall, Golden, & Hillman, 2003; Horner, 2010; Pfeffer, 1981), prompting psychological change, which is defined as “any alteration of the state of some system *a* over time (French & Raven, 1959, p. 151).

One important caveat of any study of board power is that unless we know that the power was implemented, we can only say that these power bases are *necessary, but not sufficient, conditions* in this study of board power and pay for performance. Somech and Drach-Zahavy (2002) distinguish power as the “inferred potential of one person (the agent) to cause another person (the target) to act in accordance with the agent's wishes” (Bass, 1990), whereas influence behavior refers to “the agent's actual behavior, which causes behavioral or attitudinal change in the target” (Raven & Rubin, 1983; Stahelski & Paynton, 1995). Katz & Kahn (1966) argue that power can exist even if it is not exerted; however, influence must be activated to exist. Influence behaviors illustrating this superior-subordinate power dynamic exists can be exerted in the two following ways: upwards, in which a subordinate acts to transform the organization’s objective by changing the individual or group above it in some way; or downwards, in which a superior acts to transform the organization’s objective by changing the individual or group below it in some way (Somech & Drach-Zahavy, 2002).

Because power can involve “potential influence” without actually having to take action toward another person (Pfeffer, 1981, p. 7), I suggest that using structural and compositional board characteristics can serve as proxies to indicate whether board members may be *more likely*

to influence monitoring. The individual's power stems from his power base, with "base" describing the source of power that results from the relationship between the individual or group with power and the object of that power (French & Raven, 1959). The way in which power is distributed between boards and CEOs (Main, O'Reilly, & Wade, 1994) affects board vigilance, i.e., the actions the board takes to protect the firm and shareholder value, while also providing links to resources in the firm's environment (Bucholtz, Powell, & Young, 1998).

2.4. A New Model of Board Power for Corporate Governance Research?

Power is not an uni-dimensional construct, but rather its implications depend on how power is conceptualized multi-dimensionally; therefore, I present a model of board power specific to the monitoring context that differs from previous power models in corporate governance research. Boyd's (1994) model of board control and Finkelstein's (1992) model of top management team power are leading examples in the corporate governance literature that model power and its relationship to decision making. Power research evolved from the work of French and Raven (1959) who developed a power typology defining five power types: 1) coercive describing perceptions of potential punishment; 2) reward power describing perceptions of rewards; 3) legitimate power describing perceptions of formal, hierarchical authority; 4) expert power describing perceptions of expertise or knowledge; and, 5) referent power describing perceptions of identification with the target person, or group. By integrating French & Raven's social power bases model with Boyd (1994) and Finkelstein (1992), I demonstrate how a model of board power can extend their work, and contribute a new way to conceptually and empirically examine how board power impacts pay (Table 2).

First, my study defines board power, specific to the monitoring of executive pay focusing on the board as the unit of analysis. Although both Boyd (1994) and Finkelstein (1992) based their power models in agency theory, Boyd's unit of analysis was the board of directors and Finkelstein's was the top management team. Thus, their definitions of power and its objective vary. Boyd defines power in terms of the board's control of the CEO to align the interest of managers with those of shareholders, while Finkelstein defines power as the capacity of the top management team to exert its' will with the objective to control the board of directors and reduce managerial risk and uncertainty. Finkelstein explained that the study of power required examining power distributions among members of a group's coalition (e.g., top management team) to fully understand power ramifications when power is decentralized within a group. Extending their work, I base my work in agency theory and upper echelon theory and I *define board power as the capacity of the board to compel the CEO to act in alignment with shareholder interests; thus, the goal of powerful boards is to control the CEO.*

Second, power models vary in terms of their relationship to decisions. Boyd (1994) examined the effect of board control on executive compensation, and found that compensation increased when board control decreased. More importantly, he found that specific board characteristics can proxy for indicators of board control; specifically, board control was negatively associated with director compensation and CEO duality, but positively associated with board equity ownership, increased ownership groups' representation, and insiders' presence on the board. While Boyd focused on control over executive compensation decisions, Finkelstein's model of power was applied to strategic decisions; specifically, diversification. Extending their work, I examine board power in the context of executive pay.

Third, power models vary in terms of their dimensionality, and constructs. While Boyd presented a uni-dimensional model of board control, Finkelstein presented a multi-dimensional model of top management team power that can be applied to the top manager context, and more importantly, that can be used to measure power: structural power referring to hierarchical authority determined by formal organizational position; ownership power referring to “strength of the manager’s position in the agent-principal relationship (p. 509)” increasing managerial control over boards; expert power referring to the extent to which the manager increases their ability to interact with the firm’s task environment; and, prestige power referring to associations with the membership elite that can reduce uncertainty. Finkelstein’s work on top management team power has been extended into the relationship between CEO power and firm performance. Extending French & Raven (1959), Finkelstein (1992), and Boyd (1994), I develop a multi-dimensional model of board power: structural, ownership and prestige.

Fourth, power models vary in terms of consequences from power. Boyd’s model of board control increases board’s monitoring effectiveness, reduces informational uncertainty, reduces managerial opportunism, and reduces excessive compensation. In contrast, Finkelstein’s model increases executive control over the board, reducing managerial risk and uncertainty. French and Raven’s model focuses on power’s implications for the degree of monitoring required. Integrating and extending their work, I suggest that my model of board power increases the board’s control over the CEO and increases pay-for-performance sensitivity.

Thus, I find a place to contribute something new to research. While Boyd (1994) contributed a control model of CEO and board relations, Finkelstein (1992) contributed a multi-dimensional model of top management team power, and French and Raven (1959) contributed a multi-dimensional model of social power bases, I contribute a multi-dimensional model of board

of director's power with a unique focus on monitoring in the executive compensation context. Similar to Finkelstein, I argue that the dominant coalition that holds the most power can reduce uncertainty in board decision-making; however, I differ in that my focus is to conceptualize the dominant coalition as the board of directors, whereas Finkelstein's focus was to conceptualize the dominant coalition as the top management team.

CHAPTER 3. A MULTI-DIMENSIONAL MODEL OF BOARD POWER

3.1. A Multi-Dimensional Model of Board Power

Linking pay to performance is one way that boards effectively monitor CEOs. This approach may include reducing excessive pay for a poorly performing CEO or increasing pay for a highly performing CEO (Hartzell & Starks, 2003) and is affected by board characteristics. Individual board member characteristics influence the style and degree to which boards monitor managers, thus affecting compensation decisions (Finkelstein, Hambrick, & Cannella, 2009) (Figure 1).

Modeling board power can help explain how board characteristics influence the likelihood of board members to monitor managers and can contribute to corporate governance research. By modeling board power in terms of board structural and compositional characteristics, I contribute to the previous literature by utilizing board characteristics as proxy indicators for the potential presence of powerful board members to take action and control the CEO (Figure 2).

Power can increase when board members are more likely to make decisions that are relevant to the monitoring process. Power bases may be strengthened by board member characteristics that affect the board's monitoring behaviors and thus reduce information asymmetry between the board and CEO. Thus, a model of board power must link board characteristics to the board's monitoring role and compensation decisions. In this paper, I argue that power is contextual; therefore, board power bases may be conceptualized using board structural and compositional characteristics.

3.2. The Board of Directors' Power Bases

Examining how power influences variations in compensation only by focusing on either the CEO or the board is restrictive because the distribution of power between the board and the CEO affects decision processes that affect compensation decisions (Finkelstein et al., 2009). Within the context of this paper, I restrict my discussion to the board's power or potential capacity to systemically influence and control the CEO through monitoring and incentive alignment. The board's influence on the CEO is exerted directly through monitoring or passively through incentive-based compensation (Daily & Johnson, 1997).

By integrating French and Raven's power bases with Finkelstein's conceptualization of top management team power, I develop a multidimensional power model that includes the following three key bases, or sources, for the board's power to potentially effect change on the agent: ownership, structural, and prestige (Table 3). Ownership power enables the board to potentially control CEO behavior by influencing decisions that affect the firm's equity sources. Structural power allows the board to potentially control the CEO by influencing decisions connected to the board's organizational structure. Prestige power allows the board to control the CEO by potentially increasing the board member's motivation to monitor the CEO to protect the board member's reputation outside the firm.

3.2.1. Ownership Power

Board ownership power refers to the ability of board members to potentially influence decisions that affect shareholder value. Finkelstein (1992) argued that top management team ownership power increases relative to the strength of the manager's position in the principal-agent relationship; specifically, the top management team member's ownership power increases

if the total director ownership power decreases, managerial ownership increases, and the manager is the founder of the firm or related to the firm. Extending this view to the board context, I argue that the board's ownership power increases as the strength of its position in the agent-principal relationship increases, specifically through increased equity ownership. Board members with ownership power have a financial interest in monitoring the CEO to maximize firm profitability (Perry, 1999).

Board ownership power affects the resolution of agency conflict because of its impact on monitoring decisions. Board ownership power aligns board member interests with those of shareholders, increasing the likelihood that board members may be more efficient monitors of managerial decisions (Booth, Cornett, & Tehrania, 1992; Ahmed & Duellman, 2007; Shleifer & Vishny, 1986) through formal means such as equity ownership and informal means such as status in the firm (Daily & Johnson, 1997). The ownership power of individual board members is more likely to increase when the following structural and compositional board characteristics are present: board ownership increases relative to the CEO; board owners are present on the compensation committee or the nomination committee; and board owners are not related to, employed by, or founders of the firm.

Equity Difference Between Directors and CEOs. Ownership gives board members the right to determine who will become board members through their proxy vote (Westphal & Zajac, 1995). Specifically, ownership power increases the board member's knowledge of shareholder goals and objectives (e.g., interest alignment), thus giving board members the motivation to communicate those goals and objectives to the board based on similarity. As ownership power increases, board members increase their capacity to make equity decisions through their voting rights. As board members' equity grows relative to the CEO, board power to influence the

monitoring process increases. Directors are motivated by equity ownership (Bhagat and Black, 2001) to be more engaged monitors and are more likely to replace a poorly performing CEO; consequently, director ownership is positively associated with firm performance (Bhagat, Carey, Elson, 1999) and market value (Morck et al., 1988).

Compensation Committee Ownership. The executive compensation decision-making process takes place primarily within the compensation committee (Singh & Harianto, 1989); however, previous studies indicate that the presence of a compensation committee is associated both with reduced pay and increased pay (Main & Johnson, 1993), suggesting that researchers should further examine the characteristics of these committees to resolve the disparity. Because the role of this committee is to make executive compensation decisions that are aligned with shareholder interests (Fisher, 1986), I suggest that ownership power increases with the presence of board members on the compensation committee because of their capacity to control decisions relevant to compensation and their shared goals with stockholders.

Nomination Committee Ownership. Although the purpose of the nomination committee is to identify and select new directors, member characteristics affect the committee's decision-making process differently. For example, the demographic characteristics of nomination committee members result in different nomination decisions based on demographics (Bilimoria & Piderit, 1994). Powerful CEOs tend to select directors who have similar demographic characteristics to them; consequently, this demographic similarity is associated with increased pay (Westphal & Zajac, 1995). As with demographic characteristics, board member ownership characteristics affect their nominating decisions. Although shareholders can select directors through their voting rights, in reality their influence is limited (Vafeas, 1999) because the nomination committee determines the slate of directors. I suggest that the ownership of the

nomination committee members strengthens board ownership power because these board members with ownership power are more likely to influence decisions that not only benefit shareholders, as in the selection of directors, but are also aligned with shareholder interests because their interests are similar.

Unrelated Board Ownership. When board members are related to the CEO or the founder of the firm, CEO ownership power increases the CEO's capacity to control board decisions (Finkelstein, 1992). Using this logic, I suggest that director ownership power increases as CEO ownership power decreases, which occurs when the board member is not related to the CEO or top management team members and is not the founder of the firm. This scenario increases the likelihood that the board member will control the CEO through his/her position in the principal-agent relationship.

Outsiders and insiders differ in the impact of their ownership power on monitoring and compensation decisions. Inside director ownership enhances earnings information (Warfield, Wild and Wild, 1995), increases updated management forecasting (Karamanou & Vafeas, 2005), and decreases the potential for market decline when firms are interlocked with fraudulent firms (Kang, 2008). However, because inside director owners are concerned about employment risk and are less likely to challenge CEOs (Baysinger & Hoskisson, 1990), I suggest that insiders will be less effective in monitoring as their ownership power increases. More importantly, both the Securities Exchange Commission and the Sarbanes-Oxley Act of 2002 gave outsiders legitimate authority to make compensation decisions by requiring that compensation committees be composed of outside directors. Therefore, I anticipate that with greater ownership power than insiders, outsiders will effectively influence the compensation-setting process. When outsider ownership power is greater than that of insiders, I anticipate a more actively engaged board with

an interest in protecting its equity stake in the firm's success. I therefore propose the following hypothesis:

Hypothesis 1: The ratio of the average outsider's ownership power to the average insider's ownership power associates negatively with total compensation and positively with pay-for-performance sensitivity.

3.2.2. Prestige Power

Board prestige power refers to directors' reputations in the firm's external environment (Finkelstein, 1992) as effective monitors of the CEO based on their board experiences. Finkelstein (1992) conceptualized top management team power in terms of its prestige or "status" external to the firm. Specifically, he argued that the board members' reputation influenced how stakeholders perceived them and thus had the potential to increase the top management team member's influence in decisions. Prestigious top management team members are members of the managerial elite, consisting of "those individuals who occupy formally defined positions of authority at the head of a social organization or institution." More importantly, Finkelstein argued that the reason why prestige increased the top management team's influence was because prestige increased their awareness of what was happening in the firm's environment, thus "facilitating the absorption of uncertainty... both informationally and symbolically" (p.510).

Board prestige power affects the resolution of the agency conflict because of its potential impact on monitoring decisions. The prestigious power of individual board members is more

likely to increase when the following board structural and composition characteristics related to the board's quantity and quality of board experiences are present.

The Quantity of Board Experience

Accumulated Board Seats. Because individual boundary-spanning capability influences decision making (Mintzberg, 1973), prestige power increases the board's capacity to access knowledge about the firm's perceptions by other firms and about practices and processes used by other firms by increasing board seats (Fama & Jensen, 1983; Loderer & Peyer, 2002; Rosenstein & Wyatt, 1994). When a larger number of linkages exist among firms amid conditions of environmental uncertainty, information exchanged among these networks increases, benefiting the monitoring process (Boyd, 1990; Carpenter and Westphal, 2001; Westphal and Zajac, 1997) and influencing decisions (Davis, 1991). Firms are open systems whose success is affected by the characteristics and players in their environment (Katz and Kahn, 1966). Serving on other boards of directors, being a member of the managerial elite (Giddens, 1979), and graduating from highly ranked universities and colleges enhances the director's professional reputation, facilitating access to information not available to other directors (Finkelstein, 1992). As this reputation increases, highly performing CEOs (Gilson, 1990) and board members are asked to serve on additional boards (Ferris, Jagannathan, & Pritchard, 2003). The CEO is motivated to protect his/her reputation because of the messages that are publicly available about his/her performance (Pharoah, 2003). Thus, prestige power affects board monitoring and compensation decisions because board members want to protect their reputations outside of the firm, increasing their motivation to effectively monitor management (Carter, Simkins, & Simpson, 2003).

The Quality of Board Experience

When board members interact with those external to the firm, they gain information about current trends, issues, and solutions in their task environment (e.g., Kefalas & Schoderbek, 1973; Levitt and March, 1988; Pfeiffer and Salancik, 1978). Board members use their experiences on other boards to advise other board members (Carpenter & Westphal, 2001) about how other firms have addressed problems (Hillman and Dalziel, 2003). I consider the quality of the board experience in the following three ways: a) increasing board independence, b) decreasing compensation, and c) increased experience on boards with high S&P ratings.

Board Experience Increasing Board Independence. As the percentage of outsiders on a board increases, boards are increasingly able to make objective disciplinary decisions regarding CEOs, whereas insiders are more likely to challenge the CEO (Hoskisson, Johnson, & Moesel, 1994). For example, Boeker (1992) found that outsiders are more likely to dismiss a CEO who is not performing well. Moreover, board independence has been associated with smaller increases in pay (Finkelstein & Hambrick, 1989). Thus, board members who have served on boards in which the percentages of outsiders increased will have benefited from decisions that are aligned with improved monitoring behavior. Consequently, these members' knowledge of effective board monitoring will pass through to the new board (Zajac & Westphal, 1996).

Board Experience Decreasing Executive Compensation. Boards that decide to decrease an executive's compensation are making decisions that are aligned with shareholder interests. Because managerial pay is publicly available, other boards are able to discern whether potential board members have experience as effective monitors by decreasing pay and will be sought more frequently for their active monitoring experience (Zajac & Westphal, 1996).

Board Experience on Boards with High S&P Credit Ratings. Board members who have served on boards with higher S&P credit ratings may have increased knowledge about financial

operations (Finkelstein, 1992), which increases the board member's capacity to make decisions that affect the CEO's behavior.

Prestige power affects the resolution of agency conflict by motivating boards to effectively monitor to protect their reputation. In addition, prestige power provides the board with the capacity to advise and/or counter the CEO regarding potential resources in the firm's environment that may enhance the firm's success, thus enhancing board member reputation. Prestigiously powerful board members may be more likely to influence other board member decisions because of the perception that the powerful board members' knowledge is superior based on reputation and membership in the managerial elite.

Although outsiders and insiders may be similar in their desire to protect their reputations, I suggest that the outsiders' prestige power will have a greater effect on monitoring and compensation decisions because outsiders' reputations are associated with their connections outside the firm that increase their access to resources (Hillman & Dalziel, 2003). The board's potential to effectively evaluate the CEO can be inhibited by the CEO's "celebrity status," specifically when journalists attribute firm success to the CEO's actions rather than those arising from the firm's situational context (Hayward, Rindova, & Pollock, 2004, p. 638); however, outsiders' access to resources and the fact that they are less affiliated with the firm suggests that independent directors are likely to be more objective monitors of managerial performance (Fama and Jensen, 1983; Klein, 2002). Specifically, independent directors are more likely to challenge managerial decisions that can jeopardize firm profitability (Jensen & Meckling, 1976). Thus, I propose the following hypothesis:

Hypothesis 2: The ratio of the average outsider's prestige power to the average insider's prestige power associates negatively with total compensation and positively with pay-for-performance sensitivity.

3.2.3. Structural Power

Organizational structure affects the individual's capacity to influence the decision-making process, particularly with regard to his/her organizational position (Gillen & Carroll, 1985) and tenure (Jackson, Joshi, & Earhardt, 2003). Referring to hierarchal authority or position in an organization (Finkelstein, 1992; Hambrick, 1981; Perrow, 1970), structural power enhances the ability of individuals to potentially influence compensation decisions.

Board structural power, referring to the hierarchical decision-making authority recognized by other board members and the CEO, affects the resolution of the agency conflict by increasing the potential for the board member to influence monitoring decisions. Structurally powerful boards are more likely to reduce information asymmetry between the CEO and the board and to make more effective pay-for-performance decisions. Board structural power changes as board structural and compositional characteristics change (Hambrick and Finkelstein, 1996). Specifically, I suggest that board hierarchical authority, compensation committee and nomination committee seniority, and overlapping committee membership can serve as indicators of the potential for a board member to be structurally powerful enough to influence compensation decisions and reduce the potential for managerial influence.

Board Hierarchical Authority. Board structural power increases as the CEO's control of the board decreases. When the CEO is also the board chairman, this CEO duality creates a conflict of interest that is negatively associated with monitoring effectiveness (Jensen &

Meckling, 1976; Fama & Jensen, 1983) and firm performance (Rechner & Dalton, 1991), thus reducing board control (Morck, Schleifer, & Vishny, 1989). When the CEO chairs the board, s/he controls decisions regarding the board's meeting agenda and discussion, thus increasing managerial power (Cannella & Holcomb, 2005; Daily & Johnson, 1997; Finkelstein & D'Aveni, 1994) and the potential for managerial opportunism and entrenchment (Fama & Jensen, 1983). Conversely, when a non-CEO board member chairs the board, the board is in a superior position of decision-making authority and control because the board decides what to discuss and what information is needed (Horner, 2010), such as increasing the number of meetings (Eisenhardt, 1989). In studies of compensation, CEO duality is negatively associated with board control (e.g., Boyd, 1994).

Compensation Committee Seniority. Tenure on the compensation committee can serve as a proxy indicator of the potential for a board member to influence compensation decisions. The compensation committee proposes to the larger board the way in which the CEO's pay should be structured (Singh & Harianto, 1989b); therefore, its structure and composition significantly affect the board's structural power base (Lorsch & MacIver, 1989). Longer tenure increases the diversity of perspectives and the sources of information (Jehn, Northcraft, & Neale, 1999) to the board and potentially provides the longer-tenured group with access to relevant information and resources (Pfeffer & Salancik, 1978), such as the history of compensation practices. Because compensation committee tenure is associated with increased awareness about previous compensation decisions, I suggest that the board members' structural power increases as their tenure on the compensation committee increases. Other board members may be more likely to consider the opinions of board members whose tenure on the committee exceeds their own.

Nomination Committee Seniority. Tenure on the nomination committee can serve as a proxy indicator of board members who are more likely to be structurally powerful because of their influence in the nomination process, which is associated with pay decisions (Westphal & Zajc, 1995). Specifically, this tenure increases the board member's knowledge of how the nomination committee works, as well as institutional knowledge regarding the nomination process. This knowledge increases the board member's capacity to influence director selection, which ultimately affects compensation. Because this knowledge increases with tenure, the structural power is greatest for senior committee members with the lengthiest tenure.

Overlapping Committee Membership. Overlapping membership potentially exposes individual directors to more decisions relevant to the board's monitoring role, thus making directors with overlapping membership more likely to be structurally powerful. Dalton et al. (1998) argued that the "critical processes and decisions of boards of directors do not derive from the board at large, but rather in subcommittees" (p. 284). When members are part of the board's committee structure, their structural power increases because board committees influence the firm's performance (Henke, 1986). The board's committee responsibilities regarding decision making are as follows: the audit committee is primarily responsible for monitoring the firm's financial reporting; the compensation committee determines the CEO's compensation package; and the nominating committee makes decisions regarding which individuals should be on the board. Thus, overlapping membership on these committees makes individual members more likely to increase their structural power because of their potential ability to influence monitoring decisions. Moreover, participation in a greater number of committees makes an individual more able to effectively assess the CEO's performance.

Although board structural power increases the potential for the board to control the CEO, the impact of outsiders' and insiders' structural power varies. I suggest that when outsiders' structural power is greater than that of insiders, monitoring effectiveness increases. Compensation committees with more insiders are perceived to be more likely to award greater compensation packages to managers (Lowenstein, 1994), whereas compensation committees with more outsiders are perceived to award lower compensation packages (Daily et al., 1998). More importantly, I suggest that a board's structural power increases as board members' legitimate authority increases. Outsiders' structural power relative to insiders was strengthened by government regulations, such as the Sarbanes-Oxley Act of 2002's requirements for independent auditing committees and the New York Stock Exchange's emphasis on compensation, nominating, and auditing committees that are composed of "non-executives" (e.g., Finkelstein et al., 2009; Kessner, 1988). Further, outsiders on the audit committee are associated with more financial restatements (Carcello & Neal, 2002), more financially literate directors (Karamanou & Vafeas, 2005), and reduced accounting accruals (Klein, 2002). Thus, I hypothesize the following:

Hypothesis 3: The ratio of the average outsider's structural power to the average insider's structural power associates negatively with total compensation and positively with pay-for-performance sensitivity.

CHAPTER 4. METHODOLOGY

4.1. Sample

My sample consists of companies from the Standard and Poor (S&P) 1500 for the period 2000-2006. Compensation data comes from Compustat Execucomp, firm financial information comes from Compustat's Industrial Annual and CRSP databases, institutional ownership data comes from CDA/Spectrum Thomson Financial's 13F database, and directors' data comes from the RiskMetrics database. Missing data in Compustat and Risk Metrics resulted in 37,066 director year observations yielding an unbalanced panel dataset consisting of 950 firms and 3,581 firm-year observations. Biographical data about directors came from the S&P Net Advantage database, and was supplemented from information from the Standard and Poor's Register of Directors and Corporations, LexisNexis, company annual reports, and SEC filings. Additional education information was collected from University records, New York Times news stories, and obituaries to complete the dataset that included educational data from S&P's Register of Directors and Corporations. Because I did not limit my sample on any specific criteria, my sample is considered to be reasonably "randomly selected", allowing me to make generalizations from my findings. Additional information about sample characteristics is provided in Appendix A.

4.2. Dependent Variables

In this paper, I examine the effects of board power on two main dependent variables that proxy for different aspects of executive compensation and its relationship to firm performance.

Total Compensation. This variable includes the CEO's total compensation inclusive of salary, bonus, long-term incentives, and options.

Pay-for-performance Sensitivity. Following Yermack (1995), I measure pay-for-performance sensitivity as:

$$\approx \Delta \frac{(\text{shares represented by option award})}{(\text{shares outstanding at start of the year})}$$

$$\Delta = e^{-dt} \Phi \{ \ln(P/E) + T(r-d + \sigma^2/2) / (\sigma\sqrt{T}) \}^1$$

4.3. Independent Variables

Board power bases were measured along three dimensions: ownership, structural, and prestige.

4.3.1. Ownership Power

Ownership power was calculated using the following 4 variables:

Difference in Director-CEO Ownership. CEO ownership increases the power of the CEO to influence decisions (Zald, 1969), including decisions impacting their termination (Daily & Johnson, 1997) and managerial opportunism (Finkelstein and Boyd, 1998); thus, board power increases when director's ownership power is greater than that of CEOs. I measure the difference in ownership between directors and CEOs as the difference between the percentage of outstanding shares owned by the director and the percentage of outstanding shares owned by the CEO. A higher number indicates the board has more ownership power over the CEO.

Compensation committee ownership. Ownership by members of the compensation committee is associated with variations in compensation decisions (Daily et al., 1998; Boyd,

¹ P=market price of stock on date option was granted; E=exercise price of the option grant; d=ln(1+dividend per share); r = log(1 + interest rate), interest rate is interest on 10-year U.S. treasury bonds during last month of the year; T = life of options, time period until date option grant expires; If the option grant expiration date was not available, I set the life of options to 10 years; σ = standard Black-Scholes volatility calculated over 60 months.

1994); therefore, I calculate compensation committee ownership as the percentage of total outstanding shares by individual members of the compensation committee.

Nomination committee ownership. I calculate nomination committee ownership as the percentage of total outstanding shares by individual members of the nomination committee.

Unrelated ownership. Finkelstein (1992) argued that TMT's ownership power to influence directors increased when the ownership of TMT members who were related or founders of the firm increases. Using similar logic, I suggest then that the ownership power of directors to influence the CEO increases as the ownership of board members who are not related, not founders of the firm, and not employees of the firm increase. Therefore, I calculate this variable as the percentage of outstanding shares owned by board members who are not related, founders, or employees of the firm.

4.3.2. Prestige Power

Prestige power was calculated using the board member's accumulated board seats, average S&P credit rating for boards on which they served, experience on boards that decreased executive compensation, and experience on boards that increased board independence.

Accumulated board seats. Accumulated board seats were measured using the total number of board seats that the individual has held since 1995.

S&P Credit Rating. S&P credit ratings indicate how well a firm is performing; therefore, the average S&P credit rating of all boards on which the board member served indicates the board member's service on firms external to the firm, and is an indicator of prestige (Finkelstein, 1992). This variable is calculated as the average S&P credit rating of firms on which board members served following Finkelstein (1992).

Board experience decreasing executive compensation. Board members who have experience on boards who decreased executive compensation are believed to be more active monitors (Zajac & Westphal, 1996). Therefore, following Zajac & Westphal (1996), I assign each board member a 1 for each board on which they decreased executive compensation from year t-2 to t-1. Then, I total this number for each board member. I then calculate *board experience decreasing executive compensation* for each board member by dividing the number representing their own individual board experience by the total number of boards on which the entire board had experience decreasing executive compensation.

Board experience increasing board independence. Board members who were on boards on which the percentage of outsiders increased are believed to be more effective monitors (Zajac & Westphal, 1996). Therefore, following Zajac & Westphal (1996), I assign each board member a 1 for each board on which the percentage of outsiders increased from year t-2 to t-1. Then, I total this number for each board member to arrive at the total number representing the total number of boards on which the entire board had experience increasing board independence. I then calculate *board experience increasing board independence* for each board member by dividing the number representing their own individual board experience by the total number of boards on which the entire board had experience increasing board independence.

4.3.3. Structural Power

Structural power is calculated using the following four variables: overlapping committee membership, compensation committee seniority, nomination committee seniority, and board hierarchical authority.

Overlapping compensation committee membership. Because structural power increases as the board member's access to compensation decisions within the board increases, I suggest that the board member's structural power increases when the board member is a member of both the audit and compensation committees and/or when the board member is member of both the nomination and compensation committees. This variable is calculated as 3 if the board member is on all 3 committees; 2 if the board member is either on both the audit and compensation committees or both the compensation and nomination committees; and, 1 if the board member does not have overlapping membership either on the audit and compensation committees or on the nomination and compensation committees.

Compensation committee seniority. Structural power increases as the tenure of the board member on the compensation committee increases. This variable is determined using the tenure of each member of the compensation committee on the overall board by rank-ordering compensation committee members so that the compensation committee member with the least firm tenure is scored 1 and the compensation committee member with the highest tenure is given the highest number.

Nomination committee seniority. Structural power increases as the seniority of individuals on the nomination committee increases. This variable is determined using the tenure of each member of the nomination committee on the overall board by rank-ordering nomination committee members so that the nomination committee member with the least tenure is scored 1 and the nomination committee member with the highest tenure is given the highest number.

Hierarchical Authority. Board structural power increases with hierarchical authority that allows the board member to control the CEO. Therefore, I develop a ranking of board titles (Appendix B), such that non-CEO board members who chair the board are ranked higher than

board members who do not rank committees or the board. I then rank order the board using these numbers, and calculate the percentage of the board that falls below the focal board member. Thus, board members with higher percentages indicate higher hierarchical authority than board members with lower percentages.

4.4. Control Variables

Firm size. Larger firms are associated with increased managerial opportunism (Demsetz & Lehn, 1985) and executive compensation (Gomez-Mejia & Welbourne, 1989); therefore, I control for firm size as the natural logarithm of the firm's total assets.

Firm profitability. I control for the firm's financial performance using return on assets as the ratio of the firm's net income to total assets since higher performance is associated with increased compensation (Gomez-Mejia & Welbourne, 1989).

Market growth. Higher market growth is associated with increased compensation; therefore, I control for market growth using Tobin's q as the market value to the book value of equity.

Liquidity. I control for liquidity as the ratio of the firm's current assets to current liabilities.

Leverage. I control for leverage as the ratio of long-term debt to total assets.

Institutional Ownership. Ownership concentration is associated with efficient managerial decision-making (Hoskisson, Hitt, Johnson, & Grossman, 2002). Institutional ownership concentration reduces executive compensation and increases long-term incentive-based pay (David, Kochhar, & Levitas, 1998) and is associated with monitoring effectiveness (Shleifer and

Vishny, 1986; Berle and Means, 1932); therefore, I control for total institutional ownership as the total ownership by institutional investors.

Large Owners. I control for large institutional ownership as the total ownership of the institutional investor with the most ownership of all institutional owners in the firm because large owners influence monitoring effectiveness (Dharwadkar, Goranova, Brandes, & Khan, 2008; Bebchuk & Fried, 2004). Specifically, large owners are associated with lower levels of compensation, greater salary proportion of the pay mix, and less contingent compensation (Khan, Dharwadkar, & Brandes, 2005).

CEO change. I control for the change of the CEO using a binary variable coded 1 if a new CEO started in the focal year.

CEO salary exceeding \$1 million. Since firms enjoy tax benefits as long as the CEO's salary is less than \$1 million, I control for salary exceeding \$1 million as a dichotomous variable where 1 indicates the CEO's salary was greater than \$1 million.

Firm Risk. I control for the firm's systemic risk using beta to measure the variance of the firm's stock price relative to the market.

Lagged compensation. Since the CEO's prior year's compensation impacts the following year's compensation, I control for the CEO's compensation at (t-1).

Industry. I control for industry- effects using 2- digit SIC classification dummy codes.

Post-Sarbanes Oxley. Since the Sarbanes-Oxley Act of 2002 affected how boards should be structured, I control for time following this Act with 1 if the year is beyond 2002.

4.5. Method

Panel data has been used to consider how corporate governance mechanisms impact compensation and pay-for-performance (e.g., Finkelstein and Boyd 1989; Dharwadkar et al., 2008). While cross-sectional data approaches consider changes in firms at one point in time, cross-sectional time series data allows me to consider how firms change over a period of time, and how firms differ in executive compensation. To test for multicollinearity, I ran an ordinary least squares regression using the variance inflation factor (VIF) test, and found no severe indications of a problem. Average VIF levels fell below the 5.0 multicollinearity level indicating multicollinearity was not significantly present (Belsley, Kuh, and Welsh, 1980). Because my sample tested positive for some autocorrelation present, a heteroscedasticity and autocorrelation robust variance-covariance estimator was used to adjust the estimation of the variance of the parameters in my model.² Conducting White's Test (White, 1980) and Breusch-Pagan Test (Breusch and Pagan, 1979), I found heteroscedasticity in my data; therefore, I ran my model using a generalized least squares regression, which adjusts standard errors in correcting for heteroscedasticity. I control for potential outliers by winsorizing my variables at $p=0.01$. Prior to conducting my analyses, I conducted the Shapiro Wilk's W test for normal distribution to assess if my variables were normally distributed, and adjusted some variables to their natural logs as indicated in the variables section. To address concerns for endogeneity, I lagged my independent variables by one year ($t-1$) to examine the effects of board power on compensation at time t .

² I examined whether my residuals are iid through my box graph and qnorm graphs of residuals pre and post variable transformations. This graph indicates that residuals are not iid, and thus, the robust vce estimator was needed because the observations are not independent (Appendix C).

4.5.1. Exploratory Factor Analysis: Principal Components vs. Principal Factors Analysis

Principal components factor analysis and principal factor analysis are methods used in exploratory factor analysis to extract common factors; however, these methods differ in terms of approach, and therefore, the researcher must consider the purpose for extracting factors prior to choosing the correct method. Principal components factor analysis is mostly a data reduction technique that creates composite measures by using all the variance of the variables, while principal factor analysis is a factor extraction method that creates factors using only the shared variance among the variables (Costello & Osborne, 2005). Because principal factor analysis considers the “underlying structure caused by the latent variables (Costello & Osborne, 2005, p.2) and principal component factor analysis does not, I choose to utilize those factors predicted through the principal factor analysis method in my regressions. However, in this section, I first replicate the principal components factor analysis process used by Finkelstein (1992) to demonstrate validity and show that the variables load onto 3 distinct factors using principal components factor analysis, thus demonstrating my study extends his work theoretically to the board context. Second, I then discuss the principal factor analysis technique, and demonstrate construct validity with this technique.

Principal Components Factor Analysis

In the second stage of my study, I initially extracted three dimensions to measure board power and evaluated their measurements in terms of their validity. I conducted an exploratory principal components factor analysis restricting factors to those with eigenvalues of at least 1 (Table 4). Principal components analysis limits the error associated with using a single variable measurement through creating composite factors using the entire variance of each variable

(Costello & Osborne, 2005). Following Finkelstein (1992) who used principal components analysis with a promax oblique rotation because he expected power dimensions to correlate with each other, I conducted a promax oblique rotation because I expect my power dimensions to correlate somewhat with each other, as they all are indicative of board power. Consequently, my principal components factor analysis resulted in three dimensions explaining approximately 53% variance in my data.³ The three factors included: a) structural power: overlapping compensation committee membership with the audit and/or nomination committees; compensation committee seniority, nomination committee seniority, and board hierarchical authority; b) ownership power: difference between the director's ownership and the CEO's ownership, compensation committee ownership; nomination committee ownership, and the percentage of ownership by directors who are unrelated, founders, or employees of the firm; and, c) prestige power: S&P credit ratings, accumulated board seats, experience decreasing executive compensation, and experience increasing board independence.

Principal Factor Analysis

As with the principal components factor analysis, dimensions created by principal factors analysis demonstrate validity, I find that variables load distinctly onto three dimensions (Table 5). These final three factors included: a) ownership power: difference between the director's ownership and the CEO's ownership, ownership by members of the compensation committee; ownership by members of the nomination committee, and the percentage of ownership of

³ The use of principal components analysis has been used by corporate governance scholars to examine how governance indicators may load onto single factors. Dey (2008) conducted an exploratory principal components analysis on 22 governance variables that resulted in 7 governance indicators: 1) governance and functioning of board of directors; 2) executive compensation; 3) equity-based director compensation; 4) "independence of the auditor, structure, and functioning of the audit committee"; 5) board's control over financial reporting quality. Exploratory factor analysis was also used by Larcker, Richardson, & Tuna (2007) who found 14 governance factors from 39 indicators.

members not related , founder, or employee of the firm; b) prestige power: accumulate board seats, S&P credit rating, effective board practices (increased outsider percentage), and effective board practices (decreased executive compensation); and, c) structural power: overlapping compensation committee membership with audit and/or nomination committees, compensation committee status, nomination committee status, and board hierarchical authority. As indicated in Table 6, my model demonstrates construct validity because all my loadings are greater than .40 and load onto a single factor.

My power dimensions demonstrate internal consistency as indicated by the Cronbach's alpha coefficient of reliability assessing how different measures are similar in measuring a latent construct. Alphas greater than or equal to 0.60 are considered an acceptable level of reliability (Nunnally, 1967). I found that each power base had a Cronbach alpha $> .60$ (Prestige: 0.66; Structural: 0.70; Ownership:0.69), establishing internal consistency within my model. Similarly, I find that the overall board power construct has a Cronbach alpha of 0.60. Thus, my dimensions demonstrate construct, internal and discriminant validity.

4.5.2. Descriptive Correlations and Power

In this section, I examined the descriptive statistics and correlations of the variables I use to measure power (Table 7). Comparing the correlations of items measuring power and the main dependent variables in with our power constructs in Table 7, I provide some initial insight. into the relationship between compensation outcomes and my variables composing ownership, prestige and structural power. First, In terms of ownership power, I find total compensation is negatively associated with ownership on the compensation committee ($r = -0.034$, $p < 0.001$), ownership on the nomination committee ($r = -0.023$, $p < 0.001$) and unrelated ownership ($r = -$

0.031, $p < 0.001$), but not significantly related to the difference between director and CEO ownership ($r = 0.007$, $p > 0.10$). Pay-for-performance is positively associated with ownership on the compensation committee ($r = 0.022$, $p < 0.001$), ownership on the nomination committee ($r = 0.027$, $p < 0.001$), and unrelated ownership ($r = 0.033$, $p < 0.001$), but negatively associated with the difference between director ownership and CEO ownership ($r = -0.052$, $p < 0.001$).

When I examine the correlations of variables used to examine Prestige Power, I find that total compensation is negatively related to effective board practice decreasing compensation ($r = -0.027$, $p < 0.001$), accumulated board seats ($r = -0.068$, $p < 0.001$), and S&P credit rating experience ($r = -0.071$, $p < 0.001$), but not related to effective board practice increasing board independence ($r = 0.002$, $p > 0.10$). However, we find that pay-for-performance sensitivity is positively associated with effective board practice decreasing compensation ($r = 0.025$, $p < 0.001$), effective board practice increasing board independence ($r = 0.009$, $p < 0.10$), accumulated board seats ($r = 0.147$, $p < 0.001$), and S&P credit rating experience ($r = 0.156$, $p < 0.001$). Finally, when I examine the correlation relations of variables used to examine structural power, in terms of its variables and as a construct, I find total compensation is positively associated with nomination committee seniority ($r = 0.028$, $p < 0.001$) and hierarchical status ($r = 0.015$, $p < 0.01$), negatively associated with overlapping committee membership ($r = -0.013$, $p < 0.05$), and not associated with compensation committee seniority ($r = -0.008$, $p > 0.10$). However, I find pay-for-performance is negatively associated with compensation committee seniority ($r = -0.033$, $p < 0.001$), nomination committee seniority ($r = -0.078$, $p < 0.001$), hierarchical authority ($r = -0.040$, $p < 0.001$), but positively related to overlapping membership ($r = 0.010$, $p < 0.05$).

Finally, because no factors have a correlation greater than 0.65, the correlations among the factors are low, indicating my dimensions demonstrate discriminant validity (Trochim & Donnelly, 2007; Finkelstein, 1992) (Table 8). In Tables 8a-8c, I examine how each power dimension correlates with the other power dimensions when considering the board as one group, as well as when considering insiders as distinct from outsiders. In Table 8, I find that all three dimensions are correlated with each other, as expected. Interestingly, I note that prestige power is negatively associated with ownership power ($r = -0.013$, $p < 0.01$), but positively associated with structural power ($r = 0.226$, $p < 0.001$). Structural power, however, is positively associated with ownership power ($r = 0.102$, $p < 0.001$). As the study examines how outsiders and insiders differ in regards to their power relationship to monitoring, I examine how outsiders' power dimensions correlate with each other in Table 8b, while looking at how insiders' power dimensions correlate with each other in Table 8c.

4.5.3. Confirmatory Factor Analysis: Structural Equation Modeling

In order to establish model fit, I utilized structural equation modeling procedures to conduct my confirmatory factor analysis (CFA). I consider multiple goodness of fit statistics: Chi-square for overall model fit (χ^2); root mean square error of approximation (RMSEA); Tucker-Lewis index (TLI); standardized root mean square residual (SRMR); and, comparative fit index considering how the Chi-square changes when compared with a null model (CFI). The coefficient of determination (CD) is an indicator of the percentage of the latent construct explained by its predictors. This CFA across all models also demonstrated factor loadings > 0.40 , further illustrating convergent validity with my EFA on all of my constructs (Table 9). In addition I note my paths from my observed variables are all significant at $p = 0.00$.

In order to further examine model fit, I examine model fit statistics on single factor models and the three factor model. Then, I compare fit statistics across all my models.

Single Factor Models

First, I conduct my CFA for single factor models: ownership (Figure 3), prestige (Figure 4), and structural (Figure 5). Single factor models demonstrate model fit for each one-factor model: ownership, structural, and prestige power bases. Although I note that the Chi-squared statistic is large, and does not reflect “strong fit”, I suggest the Chi-squared statistic is not an appropriate goodness of fit statistic indicator for my sample because of my sample’s large size. Specifically, I argue the Chi-squared statistics are sensitive to larger samples (Shreiber, Stage, King, Nora, & Barlow, 2006). Because I have a large number of observations ($n > 37,000$) and parameters to be estimated, my Chi-squared statistic will automatically be large. I thus conclude the other goodness-of-fit tests are more likely to accurately reflect the true fit of my models. Overall, I compare fit across one-factor and three-factor models and find my models demonstrate that they have reasonably good fit.

Three Factor Models

When I combine the models together into a three factor model, I find the model demonstrates reasonably good fit (Figure 6 and 7). Although my Chi-square of 5628 ($p < 0.001$) for the model indicates some concerns with model fit, two additional goodness of fit statistics indicate that my confirmatory factor analysis in Figure 6 demonstrates adequate model fit [RMSEA=0.054; SRMSR=0.033], while one additional goodness of fit statistic is .02 less than the cutoff for accepted fit [CFI=0.932] as indicated in my path diagram.

Deciding which GFI index to use is consistently debated in the literature (Stage, King, Nora, & Barlow, 2006). Although my χ^2 test indicates poor fit with $\chi^2 = 5628$ (p.=0.00), the χ^2 test is sensitive to large sample size (Hu & Bentler, 1999); therefore, as my sample size for my factor analysis is over 37,000 observations, I do not consider χ^2 to be an appropriate test of goodness of fit for my sample. My other goodness-of-fit sensitivity test statistics minimize the sensitivity to large samples that I noted with the χ^2 statistic, illustrating a goodness-of-fit that is robust to larger sample size. Thus, I find my three model indicates reasonably good fit according to my SRMR =0.034 and RMSEA=0.054, which is below the SRMR=0.08 and RMSEA=0.06-0.08 recommended by Stage, King, Nora, & Barlow (2006).

4.5.4. Calculating Power Scores

4.5.4.1. Ownership Power

After calculating each individual's ownership power factor score using the principal factor analysis method, I then calculate the average outsider ownership power and average insider ownership power as:

$$\text{Average outsider ownership power} = \frac{\sum_{i=1}^n (\text{Outside board member ownership power factor scores})}{\text{Total \# of outsiders}}$$

where i= number of outside board members

$$\text{Average insider ownership power} = \frac{\sum_{i=1}^n (\text{Inside board member ownership power factor scores})}{\text{Total \# of insiders}}$$

where i= number of inside board members

I then develop a ratio to represent when outsiders' ownership power is greater than insiders.

$$\text{Ownership Power} \left(\frac{\text{Outsiders}}{\text{Insiders}} \right) = \frac{\text{Average outsider ownership power}}{\text{Average insider ownership power}}$$

4.5.4.2. Prestige Power

After calculating each individual's prestige power factor score using the principal factor analysis method, I then calculate the average outsider prestige power and average insider prestige power as:

$$\text{Average outsider prestige power} = \frac{\sum_{i=1}^n (\text{Outside board member prestige power factor scores})}{\text{Total \# of outsiders}}$$

where i = number of outside board members

$$\text{Average insider prestige power} = \frac{\sum_{i=1}^n (\text{Inside board member prestige power factor scores})}{\text{Total \# of insiders}}$$

where i = number of inside board members

I then develop a ratio to represent when outsider prestige power is greater than insiders.

$$\text{Prestige Power} \left(\frac{\text{Outsiders}}{\text{Insiders}} \right) = \frac{\text{Average outsider prestige power}}{\text{Average insider prestige power}}$$

4.5.4.3. Structural Power

After calculating each individual's structural power factor score using the principal factor analysis method, I then calculate the average outsider structural power and average insider structural power as:

$$\text{Average outsider structural power} = \frac{\sum_{i=1}^n (\text{Outside board member structural power factor scores})}{\text{Total \# of outsiders}}$$

where i = number of outside board members

$$\text{Average insider structural power} = \frac{\sum_{i=1}^n (\text{Inside board member structural power factor scores})}{\text{Total \# of insiders}}$$

where i = number of inside board members

I then develop a ratio to represent when outsider structural power is greater than insiders.

$$\text{Structural Power} \left(\frac{\text{Outsiders}}{\text{Insiders}} \right) = \frac{\text{Average outsider structural power}}{\text{Average insider structural power}}$$

4.6. Random or fixed-effects Model Selection

In determining whether to run a random or fixed-effects model, I considered the issue theoretically and statistically. The Hausmann test examines whether fixed-effects, random-effects, or both estimators are consistent. If the test fails to reject the null hypothesis, I conclude that either method works fine, and the resulting estimators should be consistent and similar. However, if the test rejects the null hypothesis of consistency, I find the fixed-effects estimator is consistent, while the random-effects estimator is not, resulting in different results under both models.

Due to my Hausmann test findings, I report and discuss the fixed-effects regression method findings from my analysis because the Hausmann test indicates random-effects estimators are not consistent and the estimators are biased ($\chi^2=187.22$, $p=0.00$). The fixed-effects method will hold constant all the time-invariant observable factors of the fixed effect. In this case, I include industry and year fixed-effects in my model, which is based on the assumption that industry effects do not change over time.

I acknowledge that the choice to use the fixed-effects method has some limitations. Primarily, with the fixed-effects method, I lose the ability to consider how unobserved heterogeneity in my data can affect my results. In contrast to my fixed-effects model, the random-effects model with industry controls allows the model to consider industry changes over time. Practically, this means I allow the effect of industry to vary over time with the random-effects method, such that the effect of the industry may be important in the effects on

compensation in one time period, but not important in the other time period. Therefore, I also present my random-effects regression results in the Robustness section of my discussion, and find my results remain basically similar.

4.6.1. Regression Model

Finally, I consider how outsider power relative to insider power affects my results:

$$\text{Executive Compensation}_{it} = \alpha + \beta_1 \text{Outsiders/Insiders Ownership Power}_{it} + \beta_2 \text{Outsiders/Insiders Prestige Power}_{it} + \beta_3 \text{Outsiders/Insiders Structural Power}_{it} + \sum_{k=1}^{11} \beta_k X_{it} + \epsilon_{it}$$

where k=control variables; i=firm i; t=year

CHAPTER 5. ANALYSIS

5.1. Descriptive Statistics and Correlations

In the first stage of my study, I gathered summary descriptive and correlation statistics among my variables. The descriptive statistics, including means, standard deviations, and correlations, for all variables in my regression analyses are provided in Table 10. We see that the average total CEO compensation was \$5.48M (standard deviation (s.d.) is \$6.12M), salary proportion was 25%, contingent compensation long-term incentive pay (LTIP) was 44%, contingent compensation including long-term incentive pay and bonus (LTIP-Bonus) was 56%, and pay-for-performance sensitivity is \$1.56. In terms of equity ownership, I find that the average overall institutional ownership is 69% (s.d. 17.6%) and average largest institutional owner is 9.08 % (s.d. of 4.00%). In line with previous research (e.g., Dharwadkar, Goranova, Brandes, and Khan, 2008), the correlation statistics indicate that firm size ($r = 0.332$), growth ($r = 0.255$), profitability ($r = 0.140$), risk ($r = 0.055$), institutional ownership ($r = 0.040$), salary exceeding \$1 million ($r=0.355$), the previous year's compensation ($r=0.664$), and contingent compensation ($r = 0.232$) are positively correlated with total compensation, while liquidity ($r = -0.070$), salary proportion of the pay mix ($r = -0.468$), and the largest institutional owner are negatively associated with total compensation (-0.100). I find that pay-for-performance sensitivity is negatively associated with firm size ($r = -0.147$), firm performance ($r = -0.184$), leverage ($r = -0.170$), risk ($r = -0.240$), salary exceeding \$1 M ($r = -0.149$), the post Sarbanes Oxley Act of 2002 (SOX) ($r = -0.093$), the lagged salary proportion of the pay mix ($r = -0.105$), and positively associated with market growth ($r = 0.113$), liquidity ($r = 0.246$), institutional ownership ($r = 0.068$), largest owner ($r = 0.088$), lagged total compensation ($r = 0.035$), and contingent compensation ($r = 0.232$). I find that the salary proportion of

compensation is negatively associated with firm size ($r = -0.193$), market growth ($r = -0.208$), firm profitability ($r = -0.152$), risk ($r = -0.039$), institutional ownership ($r = -0.174$), salary exceeding \$1 M ($r = -0.180$), post SOX ($r = -0.075$), previous year's compensation ($r = -0.366$), and contingent compensation ($r = -0.287$), but positively associated with liquidity ($r = 0.041$), largest owner ($r = 0.054$), and previous year's salary proportion of the pay mix ($r = 0.553$). Contingent compensation (LTIP+Bonus) is positively associated with firm size ($r = 0.033$), market growth ($r = 0.311$), firm performance ($r = 0.077$), liquidity ($r = 0.107$), institutional ownership ($r = 0.086$), previous year's compensation ($r = 0.203$), and previous year's contingent-based pay ($r = 0.504$), but negatively associated with leverage ($r = -0.137$), risk ($r = -0.158$), largest owner ($r = -0.039$), post SOX ($r = -0.178$), and previous year's salary proportion ($r = -0.329$).

In examining the correlations of the power ratios, we find that the ratio of the average outsiders' to insiders' ownership power is negatively associated with total compensation ($r = -0.039$, $p < 0.05$), but insignificantly associated with pay-for-performance sensitivity ($r = -0.021$, $p > 0.10$). The ratio of the average outsiders' to insiders' prestige power is not significantly associated with total compensation ($r = -0.004$, $p > 0.10$), but positively associated with pay-for-performance sensitivity ($r = 0.043$, $p < 0.01$). Finally, the ratio of the average outsiders' to insiders' structural power is not associated with total compensation ($r = 0.018$, $p > 0.10$), but is negatively associated with pay-for-performance sensitivity ($r = -0.056$, $p < 0.001$).

5.2. Results: Total Compensation and Pay-for-performance Sensitivity

We examine the direct effects of power on total executive compensation and pay-for-performance sensitivity in Table 11. In Model 1, I run baseline model of control variables on

total compensation. I find that firm size ($\beta = 0.36, p < 0.001$), growth ($\beta = 0.21, p < 0.001$), institutional ownership ($\beta = 0.03, p < 0.05$), and post SOX ($\beta = 0.06, p < 0.05$) are positively associated with compensation, while CEO change ($\beta = -0.03, p < 0.05$) and CEO tenure ($\beta = -0.05, p < 0.10$) are negatively associated with compensation. In Model 6, I run a baseline model of control variables on pay-for-performance sensitivity, and find that firm size ($\beta = -0.29, p < 0.05$) and post SOX ($\beta = -0.06, p < 0.10$) are negatively associated with pay-for-performance sensitivity, while the largest institutional owner ($\beta = 0.04, p < 0.10$) and salary exceeding \$1 M ($\beta = 0.03, p < 0.05$) are positively related.

5.2.1. Ownership Power

In Hypothesis 1, I suggest that board members with ownership power are more likely to impact monitoring effectiveness. Specifically, I argue that the ratio of the average ownership power of outsiders' to insiders' is negatively associated with total compensation, but positively associated with pay-for-performance sensitivity.

In Model 2, I examine how ownership power impacts total compensation and in Model 7, how ownership power impacts pay-for-performance sensitivity. When I examine the ratio of the ownership power of outsiders' to insiders' in Model 2, I find the ratio of the average ownership power of outsiders to insiders' ($\beta = 0.01, p > 0.10$) is not significantly related to total compensation. In Model 7, I find that the ratio of the average outsiders' ownership power to insiders' ($\beta = 0.00, p > 0.10$) is not related to pay-for-performance. Thus, I find no support for Hypothesis 1.

5.2.2. Prestige Power

In Hypothesis 2, I suggest that board members with prestige power are more likely to impact monitoring effectiveness. Specifically, I argue that the ratio of the average prestige power of outsiders' to insiders' is negatively associated with total compensation, but positively associated with pay-for-performance sensitivity.

In Model 3, I examine how prestige power impacts total compensation and in Model 8, how prestige power impacts pay-for-performance sensitivity. When I examine the ratio of the prestige power of outsiders' to insiders' in Model 3, I find the ratio of the average prestige power of outsiders' to insiders' ($\beta = 0.07, p < 0.001$) is positively associated with compensation. In Model 8, I find that the ratio of the average outsiders' prestige power to insiders' ($\beta = 0.04, p < 0.05$) is positively associated with pay-for-performance sensitivity. Thus, I find partial support for Hypothesis 2.

5.2.3. Structural Power

In Hypothesis 3, I suggest the capacity for board members who are structurally powerful are more likely to impact monitoring effectiveness. Specifically, I argue that the ratio of the average outsiders' structural power to insiders' is negatively associated with total compensation, but positively associated with pay-for-performance sensitivity.

In Model 4, I examine how structural power impacts total compensation and in Model 9, how structural power impacts pay-for-performance sensitivity. In Model 4, I find total compensation is positively associated with the ratio of the average structural power of outsiders' to insiders' ($\beta = 0.04, p < 0.05$). In Model 9, I find the ratio of the average structural power of

outsiders' to insiders' ($\beta = -0.01, p > 0.10$) is not significantly related to pay-for-performance. Thus, I find no support for hypothesis 3.

5.2.4. Full Model

Our results remain almost similar when I examine ownership, prestige, and structural power variables simultaneously on compensation and on pay-for-performance. When I examine the ratios of outsiders' and insiders' ownership, prestige, and structural power together in Model 5 on total compensation, I find total compensation is positively, but insignificantly associated with the ratio of the average ownership power of outsiders' to insiders' ($\beta = 0.01, p > 0.10$) and the ratio of the average structural power of outsiders' to insiders' ($\beta = 0.03, p > 0.10$), while the ratio of the average prestige power of outsiders' to insiders' ($\beta = 0.07, p < 0.001$) is significantly positively related. In Model 10, I find that pay-for-performance sensitivity is not related to the ratio of the outsiders' to insiders' ownership power ($\beta = 0.01, p > 0.10$), nor structural power ($\beta = -0.02, p > 0.10$); however, it is positively associated with the ratio pertaining to prestige power ($\beta = 0.04, p < 0.05$).

5.3. Winsorized Power Ratios

We run the regression analyses again winsorizing the power ratios at $p = 0.01$, and find the results remain similar (Table 12). The ratio of the average prestige power of outsiders' to insiders' is positively associated with total compensation ($\beta = 0.06, p < 0.001$) and pay-for-performance sensitivity ($\beta = 0.04, p < 0.05$). Although the ratio of the average structural power of outsiders' to insiders' is positively associated with total compensation in the individual model ($\beta = 0.04, p < 0.05$), the result is no longer significant in the full model ($\beta = 0.02, p > 0.10$). The

ratio of the average outsiders' to insiders' ownership power is not significantly associated with compensation ($\beta = 0.02$, $p > 0.10$), nor with pay-for-performance ($\beta = 0.01$, $p > 0.10$).

5.4. Robustness Checks

5.4.1. Random-Effects Model: Total Compensation and Pay-for-Performance Sensitivity

The random-effects model allows me to consider industry changes over time, as well as the ability to make inferences about the larger population. For robustness, I run my regressions on total compensation and pay-for-performance again using random-effects with industry controls, and find that my results remain mostly the same with two exceptions; specifically, the ratio of the average outsiders' to insiders' structural power is negatively associated with pay-for-performance sensitivity and the ratio of the average outsiders' to insiders' ownership power is positively associated with total compensation in the winsorized model (Appendix D). In Tables D 17-18, I present the results of the random-effects panel data analyses of ownership, prestige, and structural power with compensation and pay-for-performance.

I examine the direct effects in Table D-17. As with the fixed-effects models, the ratio of the average outsiders' to insiders' prestige power is positively associated with both total compensation ($\beta = 0.04$, $p < 0.01$) and pay-for-performance ($\beta = 0.04$, $p < 0.05$) and the average outsiders' to insiders' structural power is significantly related to total compensation ($\beta = 0.02$, $p < 0.05$) in the isolated model, but not in the full model. However, different from the fixed-effects model, the ratio of the average outsiders' to insiders' structural power is negatively associated with pay-for-performance sensitivity ($\beta = -0.04$, $p < 0.05$).

I examine the winsorized power ratios in Table D-18. In contrast to the fixed-effects model, the random-effects model shows that the average outsiders' to insiders' ownership power

is significantly positively associated with total compensation ($\beta = 0.02, p < 0.10$) in the winsorized model, although having a similar insignificant relationship with pay-for-performance sensitivity ($\beta = -0.01, p > 0.10$).

Non-Linear Relationships. In contrast to the fixed-effects regression analysis, the random-effects regression (Table D-19) demonstrates that the ratio of the average outsiders' ownership power to insiders' ($\beta = 0.04, p < 0.05$; $\beta = -0.03, p < 0.05$) has an inverted U-shaped relationship with compensation, but insignificantly associated with pay-for-performance ($\beta = -0.00, p > 0.10$; $\beta = -0.01, p > 0.10$). However, the average outsiders' prestige power to does not have a non-linear relationship with total compensation insiders' ($\beta = 0.02, p > 0.10$; $\beta = 0.05, p < 0.001$), nor pay-for-performance sensitivity ($\beta = 0.01, p > 0.10$; $\beta = 0.06, p < 0.01$). Although the average outsiders to insiders' structural power does not have a non-linear relationship with total compensation ($\beta = 0.00, p > 0.10$; $\beta = 0.01, p > 0.10$) it has a U-shaped relationship with pay-for-performance sensitivity ($\beta = -0.04, p < 0.10$; $\beta = 0.05, p < 0.05$).

5.4.2. Ordinary Least Squares Regression (OLS)

As an additional robustness test, I run an ordinary least squares regression (OLS) with industry and year fixed-effects (Appendix E). In Table E-20, I find that the ratio of the average outsiders' to insiders' prestige power is positively associated with total compensation ($\beta = 0.03, p < 0.01$) and pay-for-performance sensitivity ($\beta = 0.04, p < 0.10$), while the ratio of the average outsiders to insiders' structural power is negatively associated with pay-for-performance sensitivity ($\beta = -0.03, p < 0.10$).

In Table E-21, I examine my winsorized power ratios and find that the ratio of the outsiders' to insiders' ownership power is negatively associated with pay-for-performance

sensitivity ($\beta = -0.03$, $p < 0.10$) and the ratio of the average outsiders' to insiders' prestige power is positively associated with total compensation ($\beta = 0.03$, $p < 0.01$), but not pay-for-performance sensitivity ($\beta = 0.03$, $p > 0.10$). I find total compensation is insignificantly related to the average outsiders' to insiders' ownership power ($\beta = 0.02$, $p > 0.10$) and the ratio of the average outsiders' to insiders' structural power ($\beta = 0.01$, $p > 0.10$). In contrast to the fixed and random-effects models, the ratio of the average outsiders' to insiders' prestige power is not significantly associated with pay-for-performance sensitivity ($\beta = 0.03$, $p > 0.10$).

5.4.3. Change in Total Compensation

As a final robustness test for my regressions, I ran my fixed-effects regressions using change in total compensation (Appendix F) as my dependent variable, and find that total compensation is negatively, but insignificantly associated with the ratio of outsiders' ownership power to insiders' ($\beta = -0.01$, $p > 0.10$), positively associated with the ratio of outsiders' prestige power to insiders' ($\beta = 0.11$, $p < 0.001$), and insignificantly associated with the ratio of outsiders' structural power to insiders' ($\beta = 0.01$, $p > 0.10$) (Table F-22). These results are similar in my winsorized model (Table F-23).

In contrast to the fixed-effects regression model, the random-effects regression shows that the ratio of the average outsiders' ownership power to insiders' ($\beta = 0.02$, $p < 0.05$) is positively associated with change in total compensation, while the ratio of the average outsiders' to insiders' prestige power is not significantly associated ($\beta = 0.03$, $p > 0.10$) (Table F-24). The ratio of the average outsiders' structural power to insiders' ($\beta = -0.01$, $p > 0.10$) is insignificantly associated with change in total compensation. These results are similar in my winsorized model (Table F-25).

5.4.4. Considering Alternative Items for Prestige Dimension

To examine whether additional items representing either educational expertise or industry experience may load onto the prestige dimension, I conduct my principal factor analysis using education status, accumulated industry experience, and ratio of director tenure to CEO tenure (Appendix G).

Education status. Receiving a degree, particularly an advanced degree, from a high-ranking university or college places a board member in the managerial elite, elevating his/her reputation and status (Finkelstein, 1992). Advanced training signals the board member's superior ability (D'Aveni, 1990). The more board members' graduating from elite universities and colleges, the greater the board's prestige power and access to information relevant to the monitoring process. I suggest, however, that ranking educational institutions is largely a matter of cultural and geographic perception; therefore, scholars should be cautious in concluding that graduates of institutions not on U.S.-based colleges and universities ranking lists are less prestigious. Rather, I suggest that the level of degree is an equitable signal of prestigious power because an advanced degree correlates education and knowledge that allows the board member to decrease uncertainty in the board's decision-making process.

Following Finkelstein (1992), I initially calculated the board's average elite education status by compiling each individual member's education status measured on a scale of 0-3 with 0 indicating no formal higher education; 1 indicating the board member received neither an undergraduate nor graduate degree from an elite institution; 2 indicating the board member received either an undergraduate or graduate degree from an elite institution; or 3 indicating the board member received both an undergraduate and graduate degree from an elite institution. However, because I noticed that some board members received their degrees outside the U.S., I

suggest this measure will underestimate the prestige status of the board member's education level. Rather, I followed (Westphal & Zajac, 1995), and used the education status of the individual where 1 indicates less than a bachelor's degree; 2 indicates less than a master's degree; 3 indicates less than a doctoral degree; and 4 indicates a doctoral degree.

Results indicate that expertise education does not load onto one of the three dimensions, but rather is as an unique measure that may suggest the presence of a potential fourth dimension.

Industry Experience. Experience in the industry is relevant to monitoring effectiveness. Calculating industry experience as the total number of years of experience a board member has in the firm's 2-digit SIC code, I consider how industry experience affects compensation. I find that this measure does not load positively onto any of the three dimensions; however, it loads negatively onto the prestige dimension, suggesting that future research may want to consider further variables that will collectively create a solid expertise dimension using four new variables. I can hypothesize that the fourth dimension may involve additional variables that will correlated negatively with the prestige dimension, but be internally consistent as a measure of overall board power. Because a director's experience in the same industry as the focal firm may increase their capacity to influence the control of information and decisions, I calculate industry experience as the total number of years of that director in the focal industry.

Education status. Following Finkelstein (1992), we initially calculated the board's average elite education status by compiling each individual member's education status measured on a scale of 0-3 with 0 indicating no formal higher education; 1 indicating the board member received neither an undergraduate nor graduate degree from an elite institution; 2 indicating the board member received either an undergraduate or graduate degree from an elite institution; or 3 indicating the board member received both an undergraduate and graduate degree from an elite

institution. However, because we noticed that some board members received their degrees outside the U.S., we suggest this measure will underestimate the prestige status of the board member's education level. Rather, we followed (Westphal & Zajac, 1995), and used the education status of the individual where 1 indicates less than a bachelor's degree; 2 indicates less than a master's degree; 3 indicates less than a doctoral degree; and 4 indicates a doctoral degree.

Ratio of director tenure to CEO tenure. The greater the director's tenure relative to the CEO, the more they may have the capacity to influence the CEO. Therefore, I calculate the ratio of the director's tenure to the CEO as the total number of years the director has been director of the focal firm to the total number of years the CEO as served as CEO.

Overall, the principal factors analysis illustrates that these three variables do not load in the same direction onto one of the three power dimensions considered in this study; however, the findings may indicate that further research should explore the existence of a potential fourth or fifth dimension. Because industry experience loads negatively (-0.57) onto the prestige dimension, this finding may be indicative of a fourth power dimension that may be negatively correlated to the prestige dimension (e.g., possibly some type of expertise or informational power dimension). In addition, both the ratio of the director tenure to CEO tenure and educational status indicate that they are unique (uniqueness > 0.90), and may load onto a completely different power dimension to be explored in future studies.

Overall, my findings indicate that education status does not load (factor loading < 0.40) onto any of the three dimensions: ownership, structural, prestige. Because accumulated industry experience loads negatively onto the prestige dimension, I interpret this finding to be indicative of the potential for another power dimension that may correlate negatively with the prestige dimension. Together, these two variables indicate the presence of a potential 4th or 5th dimension

to further be explored with variables similar theoretically to them in future studies. However, since these two variables do not load in the same direction onto any of the three dimensions, I do not consider them to be part of the three power dimensions examined in this study.

5.5. Supplemental Analysis

I conduct supplementary analyses to examine executive compensation structure, as well as contextual implications, such as different types of relationship with compensation decisions (e.g., non-linearity, interactions between outsiders' and insiders' power bases), firm characteristics (e.g., firm size and firm performance), context outside the firm (e.g., pre and post Sarbanes Oxley Act of 2002, the World Trade Center Attacks of 2001, industry mimetic pressures), board characteristics (e.g., degree of outsiders present, board size), and CEO characteristics (e.g., CEO ownership, tenure). Finally, I extend the model to other types of decisions (e.g., mergers and acquisitions). These analyses will give me further insight into the relationship between powerful outsiders and insiders with monitoring effectiveness.

5.5.1. Non-Linearity

Wagner, Stimpert, & Fubara (1998) found that the presence of either insiders or outsiders was non-linearly related to performance. In this section, I examine whether the relationship between power and compensation is curvilinear, rather than linear, when the average outsider's power is greater than the average insider's power (Appendix H). There does not appear to be a non-linear relationship between the power ratios and monitoring effectiveness: between the ratio of the average outsiders' to insiders' ownership power and compensation ($\beta = 0.03$, $p > 0.10$; $\beta = -0.02$, $p > 0.10$) and pay-for-performance sensitivity ($\beta = 0.03$, $p > 0.10$; $\beta = -0.02$, $p > 0.10$);

between prestige power and compensation ($\beta = 0.05, p < 0.05$; $\beta = 0.04, p < 0.05$) or pay-for-performance sensitivity ($\beta = 0.02, p > 0.10$; $\beta = 0.05, p < 0.05$); and, the ratio of the average outsiders' structural power to insiders' power and total compensation ($\beta = 0.01, p > 0.10$; $\beta = 0.04, p < 0.05$) or pay-for-performance sensitivity ($\beta = -0.03, p > 0.10$; $\beta = 0.03, p < 0.10$) (Table H-26). These results are similar in my winsorized models (Table H-27).

5.5.2. Hierarchical Linear Modeling

Hierarchical linear modeling (HLM) techniques allow us to examine variables by adding them gradually to the model. In this section, I first examine descriptive statistics for the HLM regression analysis, followed by my fixed-effects regression analysis. Specifically, I use the variables for the average outsider on the board.

5.5.2.1. Correlation Statistics

Ownership Power. First, I examine the four individual variables for ownership power (Table I-28). Three prestige variables are negatively correlated with total compensation and positively with pay-for-performance sensitivity: ownership on the compensation committee ($r = -0.117, p < 0.001$; $r = 0.071, p < 0.001$), ownership on the nomination committee ($r = -0.109, p < 0.001$; $r = 0.045, p < 0.01$), and ownership of members not related, founder, or employees ($r = -0.115, p < 0.001$; $r = 0.070, p < 0.001$). However, the equity difference with that of the CEO is positively correlated with total compensation ($r = 0.029, p < 0.10$) and negatively with pay-for-performance sensitivity ($r = -0.084, p < 0.001$).

Prestige Power. Three variables for prestige power are negatively correlated with total compensation and positively with pay-for-performance sensitivity: accumulated board seats ($r =$

- 0.120, $p < 0.001$; $r = 0.313$, $p < 0.001$); effective board practice decreasing total compensation ($r = -0.060$, $p < 0.001$; $r = 0.055$, $p < 0.001$); and S&P credit rating ($r = -0.143$, $p < 0.001$; $r = 0.343$, $p < 0.001$). However, effective board practice increasing board independence is not significantly associated with total compensation ($r = 0.006$, $p > 0.10$), but it is positively associated with pay-for-performance sensitivity ($r = 0.032$, $p < 0.05$).

Structural Power. Total compensation is negatively but insignificantly associated with overlapping committee membership ($r = -0.025$, $p > 0.10$) and seniority on the compensation committee ($r = -0.016$, $p > 0.10$) and positively but insignificantly associated with seniority on the nomination committee ($r = 0.066$, $p > 0.10$). However, hierarchical status is positively associated with total compensation ($r = 0.051$, $p < 0.001$) and negatively associated with pay-for-performance sensitivity ($r = -0.056$, $p < 0.001$). Although nomination committee seniority is not significantly associated with pay-for-performance sensitivity ($r = -0.155$, $p > 0.10$), pay-for-performance sensitivity is positively associated with overlapping committee membership ($r = 0.052$, $p < 0.001$) and negatively associated with seniority on the compensation committee ($r = -0.050$, $p < 0.001$).

5.5.2.2. HLM Fixed-Effects Regression Analysis

Ownership Power. The variables used to examine ownership power are not significantly associated with total compensation or pay-for-performance sensitivity: the ownership of members not related, founders, or employees ($\beta = -0.01$, $p > 0.10$; $\beta = 0.03$, $p > 0.10$); ownership on the compensation committee ($\beta = -0.01$, $p > 0.10$; $\beta = -0.02$, $p > 0.10$); ownership on the nomination committee ($\beta = 0.01$, $p > 0.10$; $\beta = -0.01$, $p > 0.10$); and equity difference with that of the CEO ($\beta = 0.05$, $p > 0.10$; $\beta = 0.01$, $p > 0.10$) (Table I-29).

Prestige Power. Three variables used to examine prestige power are not significantly associated with total compensation, nor pay-for-performance sensitivity: accumulated board seats ($\beta = 0.02, p > 0.10$; $\beta = 0.03, p > 0.10$); S&P credit rating ($\beta = 0.01, p > 0.10$; $\beta = 0.06, p > 0.10$); and effective board practice increasing board independence ($\beta = -0.01, p > 0.10$; $\beta = -0.00, p > 0.10$). However, effective board practice decreasing total compensation is negatively and significantly associated with total compensation and pay-for-performance sensitivity ($\beta = -0.08, p < 0.001$; $\beta = -0.06, p < 0.001$).

Structural Power. The following two variables used to examine structural power are not significantly associated with total compensation or pay-for-performance sensitivity: seniority on the nomination committee ($\beta = -0.00, p > 0.10$; $\beta = -0.03, p > 0.10$) and hierarchical status ($\beta = -0.02, p > 0.10$; $\beta = -0.01, p > 0.10$). However, overlapping committee membership is positively associated with total compensation and pay-for-performance sensitivity ($\beta = 0.05, p < 0.05$; $\beta = 0.06, p < 0.10$), whereas seniority on the compensation committee is not significantly associated with total compensation ($\beta = 0.00, p > 0.10$) but is negatively associated with pay-for-performance sensitivity ($\beta = -0.03, p < 0.10$).

Full Model. Our results remain similar in the full model (Model 5) for total compensation; however, the results differ slightly in the full model for pay-for-performance sensitivity (Model 10). We find that seniority on the compensation committee is negatively but no longer significantly associated with pay for performance ($\beta = -0.03, p > 0.10$).

5.5.2.3. HLM Random-Effects Regression Analysis

Ownership Power. The ownership of members not related, founders, or employees ($\beta = -0.01, p > 0.10$; $\beta = 0.03, p > 0.10$) and ownership on the compensation committee ($\beta = -0.02, p >$

0.10; $\beta = -0.02$, $p > 0.10$) are insignificantly associated with total compensation and pay-for-performance sensitivity. Ownership on the nomination committee ($\beta = 0.01$, $p < 0.10$; $\beta = -0.01$, $p > 0.10$) and equity difference with that of the CEO ($\beta = 0.04$, $p < 0.05$; $\beta = -0.00$, $p > 0.10$) are positively associated with total compensation but not significantly associated with pay-for-performance sensitivity (Table I-30).

Prestige Power. The following two variables used to examine prestige power are not significantly associated with total compensation or pay-for-performance sensitivity: accumulated board seats ($\beta = 0.03$, $p > 0.10$; $\beta = 0.05$, $p > 0.10$) and effective board practice increasing board independence ($\beta = 0.00$, $p > 0.10$; $\beta = -0.01$, $p > 0.10$). The variable S&P credit rating is not significantly associated with total compensation ($\beta = 0.02$, $p > 0.10$) but is positively associated with pay-for-performance sensitivity ($\beta = 0.10$, $p < 0.05$). However, effective board practice decreasing total compensation is negatively and significantly associated with total compensation and pay-for-performance sensitivity ($\beta = -0.10$, $p < 0.001$; $\beta = -0.06$, $p < 0.001$).

Structural Power. Overlapping committee membership is positively associated with total compensation and pay-for-performance sensitivity ($\beta = 0.03$, $p < 0.10$; $\beta = 0.07$, $p < 0.05$). Seniority on the compensation committee ($\beta = -0.01$, $p > 0.10$; $\beta = -0.05$, $p < 0.01$) and on the nomination committee ($\beta = -0.00$, $p > 0.10$; $\beta = -0.05$, $p < 0.01$) are insignificantly associated with total compensation but are negatively and significantly associated with pay-for-performance sensitivity. Hierarchical status ($\beta = -0.01$, $p > 0.10$; $\beta = -0.00$, $p > 0.10$) is not significantly associated with total compensation or with pay-for-performance sensitivity.

Full Models. In our full model (Model 5), the equity difference with that of the CEO ($\beta = 0.04$, $p < 0.05$) and overlapping committee membership ($\beta = 0.04$, $p < 0.05$) are positively associated with total compensation, whereas effective board practice decreasing total

compensation ($\beta = -0.10, p < 0.001$) is negatively associated. In Model 10, we find that the S&P credit rating ($\beta = 0.09, p < 0.05$) is positively associated with pay-for-performance sensitivity, whereas seniority on the compensation committee ($\beta = -0.04, p < 0.05$) and nomination committee ($\beta = -0.04, p < 0.05$) are negatively associated. The remaining variables are insignificantly associated with total compensation and pay-for-performance sensitivity.

5.5.3. Interaction Effects Between Outsiders and Insiders' Power

Although my main study uses the ratio of the average outsiders' to insiders' power bases to consider how board power and monitoring effectiveness are related, I conduct a supplementary analysis examining the interaction of outsiders' and insiders' power bases (Appendix J). One advantage of the interaction effects is that this measure has lower standard errors. In addition, interaction effects provide another contextual insight into the implications of power; specifically, is it possible that the relationship between outsiders' power and monitoring effectiveness depends on the degree of insiders' power present? If two variables interact as substitutes, the benefit of one variable lessens as the other variable increases (Siggelkow, 2002). Whereas the average outsiders' ownership power does not interact with that of the average insiders' power to significantly affect total compensation ($\beta=0.04, p > 0.10$) or pay-for-performance sensitivity ($\beta=-0.03, p > 0.10$) (Table J-31), the interaction of the average outsiders' prestige power with that of the insiders is negatively associated with total compensation ($\beta=-0.05, p < 0.001$) and pay-for-performance sensitivity ($\beta=-0.03, p < 0.10$). The interaction of the average outsiders' and the insiders' structural power is negatively associated with total compensation ($\beta=-0.03, p < 0.05$) and pay-for-performance sensitivity ($\beta=-0.02, p < 0.10$). The winsorized models remain similar

(Table J-32). The random-effects regression results are presented in Tables J-33 and J-34. I further discuss interaction effects in the discussion section of this paper.

5.5.4. Behavioral and Outcomes-Based Contracts

As uncertainty in outcome changes, boards adjust the structure of the compensation package to reflect these conditions and to present the most optimal contract to maximize shareholder profitability. Eisenhardt (1989) argues that short-term compensation should be assigned when information asymmetry between the board and the CEO is minimal, whereas long-term compensation should be assigned when information asymmetry increases and the board does not always know what the agent is doing. In my supplemental analysis, I consider how ownership, prestige and structural powers influence whether the executive's compensation package is structured as a behavioral-based or outcome-based compensation package. I use salary proportion as a proxy for behavioral contracting and contingent compensation as a proxy for outcome-based contracts, finding that the effects of power on short-term compensation and long-term compensation vary depending on the power base of insiders and outsiders. I examine the association of power to the following short-term and long-term components:

Salary Percentage. This variable measures the short-term compensation of the CEO in terms of the ratio of the CEO's salary to total compensation.

Contingent Compensation. Long-term compensation, inclusive of bonus, is the ratio of options plus bonus to total compensation.

Short-term compensation decreases when the average outsiders' prestige and structural power bases increase relative to those of the insiders but is not affected when outsiders' ownership power increases relative to that of the insiders. Conversely, long-term compensation

increases when the average outsiders' prestige power increases relative to that of the insiders but is not affected when the average outsiders' ownership and structural power bases increase relative to those of the insiders (Appendix K).

In Table K-35, I find that the average outsiders' ownership power relative to the average insiders' ownership power is not significantly associated with the salary proportion of the pay mix ($\beta = 0.01$, $p > 0.10$) or contingent compensation ($\beta = -0.00$, $p > 0.10$). As outsiders' prestige power increases relative to insiders' power, short-term compensation decreases ($\beta = -0.09$, $p < 0.001$) and long-term compensation increases ($\beta = 0.05$, $p < 0.10$). As outsiders' structural power increases relative to insiders' structural power, short-term compensation decreases ($\beta = -0.04$, $p < 0.10$) but is insignificantly associated with contingent compensation ($\beta = 0.01$, $p > 0.10$).

Finally, my results remain basically the same in my full model. The average outsiders' ownership power relative to insiders' power is not significantly associated with short-term compensation ($\beta = 0.02$, $p > 0.10$) or with long-term compensation ($\beta = -0.00$, $p > 0.10$). The average outsiders' prestige power relative to insiders' power is negatively associated with the salary proportion of the pay mix ($\beta = -0.08$, $p < 0.001$) but is positively associated with contingent compensation ($\beta = 0.05$, $p < 0.10$). When both ownership and prestige power are considered in the same model, the ratio of the average outsiders' to insiders' structural power is not significantly associated with the salary proportion of the pay mix ($\beta = -0.03$, $p > 0.10$) or contingent compensation ($\beta = 0.02$, $p > 0.10$). These results are similar when I winsorize my power ratios at $p=0.01$ (Table K-36).

When I examine the relationship between board power base ratios and short-term and long-term compensation using a random-effects model, my results remain basically the same

(Table K-37), although the ratio of the average outsiders' to insiders' structural power is negatively associated with short-term compensation ($\beta = -0.03$, $p < 0.05$) and positively associated with long-term compensation ($\beta = 0.03$, $p < 0.10$). Again, when I winsorize my power ratios at $p=0.01$, these results remain the same (Table K-38).

Finally, I summarize these fixed-effects and random-effects regression results in Table K-39. Whereas the ratio of the average outsiders' to insiders' prestige power is negatively associated with behavioral-based compensation and positively associated with contingent-based pay, structural power is negatively associated with behavioral-based pay.

5.5.4.1. Alternative Long Term Compensation (LTIP)

To further examine the relationship between board power and pay decisions, I run my analysis again by creating a ratio of the long-term incentive components of compensation, not including bonus, by total compensation (Appendix L). My results remain the same (Table L-40). Although the ratio of the average outsiders' to insiders' ownership power base ($\beta = 0.02$, $p > 0.10$) and structural power base ($\beta = -0.01$, $p > 0.10$) are not significantly associated with contingent-based pay, prestige power continues to be positively associated ($\beta = 0.06$, $p < 0.05$).

However, my results change when I winsorize my power ratios at $p=0.01$ (Table L-41). Specifically, although the results for prestige power and structural power do not change, the ratio of the average outsiders' to insiders' ownership power is positively associated with this variable proxying for contingent-based pay in the full model ($\beta = 0.05$, $p < 0.10$), but not when considered in the isolated model 7 ($\beta = 0.05$, $p > 0.10$).

When I examine the relationship between power bases and this alternative form of contingent-based pay using a random-effects model (Table L-42), I find that my results remain similar to my fixed-effects model; however, the ratio of the average outsiders' to insiders'

structural power base is negatively associated with contingent-based pay in this model. These results remain consistent when I winsorize my data at $p = 0.01$ (Table L-43).

These results suggest that further research may want to consider the relationship between power and contingent compensation by separating the effects of bonus-based pay and long-term incentive-payments, as well as considering theoretically why a random-effects model differs. In addition, outliers may be affecting my results. Random-effects (RE) and fixed-effects models handle unobserved heterogeneity associated with time invariant variables differently. RE assumes that unobserved heterogeneity is independent of my regressors and thus can be included in a time-invariant model, while fixed-effects assumes that unobserved heterogeneity is not independent of my regressors and should be controlled for. Thus, these results suggest both that the ownership power ratio is time-invariant, and its information is being removed from the analysis with a fixed-effects model, but is being considered in a random-effects model and is found to be relevant.

5.5.5. Pre- and Post-The Sarbanes Oxley Act

The time period in which the firm is examined may affect the relationship between board power and monitoring effectiveness differently. The Sarbanes-Oxley Act of 2002 (SOX) was passed to increase monitoring effectiveness and minimize managerial opportunism by requiring firm corporate governance practices to comply with certain requirements.

5.5.5.1. Ratios: Outsiders' to Insiders' Power Bases

In this section of my supplemental analysis, I examine whether the results obtained for board power are affected pre- and post-SOX (Appendix M).

First, I find that the average outsiders' to insiders' ownership power does affect our results differently pre- and post-SOX (Table M-44). Specifically, I find that the average outsiders' ownership power to insiders' power ratio is not significantly associated with total compensation pre-SOX ($\beta = 0.02, p > 0.10$) or post-SOX ($\beta = -0.01, p > 0.10$). No significant association exists with pay-for-performance sensitivity pre-SOX ($\beta = -0.01, p > 0.10$) or post-SOX ($\beta = 0.03, p > 0.10$).

Second, I find that the average outsiders' to insiders' prestige power affects our results differently pre- and post-SOX. Specifically, I find that the ratio of the average outsiders' prestige power to insiders' power is positively associated with total compensation pre-SOX ($\beta = 0.07, p < 0.05$) and insignificantly associated post-SOX ($\beta = 0.01, p > 0.10$) and is positively associated with pay-for-performance sensitivity pre-SOX ($\beta = 0.06, p < 0.10$) but insignificantly associated post-SOX ($\beta = -0.01, p > 0.10$).

Third, I find that the average outsiders' to insiders' structural power does not affect our results differently pre- and post-SOX. Specifically, I find that the ratio of the average outsiders' structural power to insiders' power increases but is not significantly associated with total compensation pre-SOX ($\beta = 0.01, p > 0.10$) or post-SOX ($\beta = 0.02, p > 0.10$) or significantly associated with pay-for-performance sensitivity pre-SOX ($\beta = -0.02, p > 0.10$) or post-SOX ($\beta = -0.03, p > 0.10$).

5.5.5.2. Interactions: Outsiders' and Insiders' Power Bases

In this section, because of the increased public accountability post-SOX, I examine whether outsiders' and insiders' power bases interacted differently pre- and post-SOX (Table M-44).

First, I find that the average outsiders' and insiders' ownership power bases interact differently to affect total compensation pre-SOX ($\beta = 0.10, p < 0.001$) but not post-SOX ($\beta = -0.02, p > 0.10$). No significant association exists with pay-for-performance sensitivity pre-SOX ($\beta = -0.05, p > 0.10$) but a significant negative interaction exists post-SOX ($\beta = -0.03, p < 0.10$).

Second, I find that the ratio of the average outsiders' to insiders' prestige power affects our results differently pre- and post -SOX. Specifically, I find that the average outsiders' prestige power interacts with that of insiders' power negatively to affect total compensation pre-SOX ($\beta = -0.05, p < 0.01$) and insignificantly post-SOX ($\beta = -0.03, p > 0.10$) and interacts significantly to affect pay-for-performance sensitivity pre-SOX ($\beta = -0.06, p < 0.05$) and post-SOX ($\beta = -0.05, p < 0.05$).

Third, I find that the average outsiders' to insiders' structural power interactions affect our results differently pre- and post-SOX. Specifically, I find that the average outsiders' structural power interacts with that of insiders' power negatively and significantly affects total compensation pre-SOX ($\beta = -0.05, p < 0.10$) but insignificantly post-SOX ($\beta = -0.05, p > 0.10$). This interaction is insignificantly associated with pay-for-performance sensitivity pre-SOX ($\beta = -0.01, p > 0.10$) but significantly post-SOX ($\beta = -0.05, p < 0.05$) in the isolated model (Model 19).

5.5.6. Pre- and Post- World Trade Center Attacks

The World Trade Center (WTC) attacks changed the competitive landscape and economic climate because of increased uncertainty and fear. In this section of my supplemental analysis, I examine whether the board power results are different before and after the WTC attacks (Appendix N).

5.5.6.1. Ratios: Outsiders' to Insiders' Power Bases

First, I find that the average outsiders' to insiders' ownership power does not affect my results differently before and after the World Trade Center (WTC) attacks (Table N-46).

Specifically, I find that the ratio of the average outsiders' ownership power to insiders' power is insignificantly associated with total compensation pre-WTC ($\beta = 0.05, p > 0.10$) and post-WTC ($\beta = -0.02, p > 0.10$). Similarly, an insignificant relationship exists with pay-for-performance sensitivity pre-WTC ($\beta = -0.03, p > 0.10$) and post-WTC ($\beta = 0.01, p > 0.10$).

Second, I find that the ratio of the average outsiders' to insiders' prestige power affects our results differently pre- and post-WTC. Specifically, I find that the ratio of the average outsiders' prestige power to insiders' power is positively associated with total compensation pre-WTC ($\beta = 0.12, p < 0.001$) but not post-WTC ($\beta = 0.01, p > 0.10$) and is positively associated with pay-for-performance sensitivity pre-WTC ($\beta = 0.08, p < 0.10$) but not post-WTC ($\beta = 0.01, p > 0.10$).

Third, I find that the ratio of the average outsiders' to insiders' structural power affects our results differently pre- and post-WTC. Specifically, I find that the ratio of the average outsiders' structural power to the average insiders' power is not significantly associated with total compensation pre-WTC ($\beta = -0.02, p > 0.10$) but is significantly associated post-WTC ($\beta = 0.05, p < 0.05$). The ratio is not significantly associated with pay-for-performance sensitivity pre-WTC ($\beta = -0.05, p > 0.10$) or post-WTC ($\beta = -0.01, p > 0.10$).

5.5.6.2. Interactions: Outsiders' and Insiders' Power Bases

Specifically, I find that the average outsiders' ownership power relative to insiders' power interacts positively to affect total compensation pre-WTC ($\beta = 0.13, p < 0.001$) but not

post-WTC ($\beta = 0.01$ $p > 0.10$) (Table N-47). An insignificant relationship exists with pay-for-performance sensitivity pre-WTC ($\beta = -0.04$, $p > 0.10$) and post-WTC ($\beta = -0.01$, $p > 0.10$).

Second, I find that the average outsiders' to insiders' prestige power affects our results differently before and after the WTC attacks. Specifically, I find that the average outsiders' prestige power to insiders' power interacts negatively to affect total compensation pre-WTC ($\beta = -0.08$, $p < 0.001$) but not post-WTC ($\beta = -0.03$, $p > 0.10$) and interacts negatively to affect pay-for-performance sensitivity pre-WTC ($\beta = -0.06$, $p < 0.10$) and post-WTC ($\beta = -0.06$, $p < 0.05$).

Third, I find that the average outsiders' to insiders' structural power affects our results differently before and after the WTC attacks. Specifically, I find that the average outsiders' structural power interacts with that of insiders negatively to affect total compensation pre-WTC ($\beta = -0.05$ $p < 0.10$) but not significantly post-WTC ($\beta = -0.01$ $p > 0.10$). The power ratio is not significantly associated with pay-for-performance sensitivity pre-WTC ($\beta = 0.00$ $p > 0.10$) but is negatively associated post-WTC ($\beta = -0.03$, $p < 0.10$).

5.5.7. Industry Mimetic Pressures

Industry mimetic forces may affect board monitoring practices. Deephouse (1996) examined the way in which organizational isomorphism, i.e., when organizations adopt characteristics that are similar to other firms, increased organizational legitimacy using a sample of commercial banks. Deephouse measured strategic isomorphism using the method by Finkelstein & Hambrick (1990) to measure strategic conformity, or "the extent to which an organization's strategies resembled the conventional, normal strategies in an industry." Finkelstein & Hambrick (1990) measured strategic conformity, or "the degree to which a firm's strategy matches the average strategic profile of its competitors in the same industry" by taking each

strategic dimension and standardizing it by industry. The researchers then took the absolute difference between the firm's score on a dimension and the average score for all firms in that sample. Following this method, Deephouse (1996) took each key asset strategy, or the way in which firms allocate resources to a specific market (Chandler, 1962), and "compared [each asset strategy] to the industry mean value for that variable and expressed as a standard deviation. The absolute values of the standard deviations for all the strategy variables were totaled for each bank, giving a holistic and parsimonious measure of deviation. Multiplying by -1 created a scale on which more positive numbers indicated greater conformity (Finkelstein & Hambrick, 1990, p. 1029)."

Following these aforementioned methods, I compared the total compensation and pay for performance values to the industry mean value for each variable by standardizing both the compensation and pay-for-performance variables y the industry using data in the sample only. I then took the absolute difference between each firm's score on both total compensation and pay-for-performance sensitivity and the average for all firms in this sample. I split the sample into those firms whose values fell within 1 standard deviation (SD) of the industry value, indicating greater similarity to the industry mean value, and those firms beyond 1 SD of the industry mean value, indicating variations further from the industry average (Appendix O).

5.5.7.1. Ratios: Outsiders' to Insiders' Power Bases

First, I find in the sub-samples both within 1 SD and beyond 1 SD, the results for the relationship between the average outsiders' to insiders' ownership power are similar to my main findings (e.g., insignificant) (Appendix O: Table O-48). These results indicate that the relationship of the ratio of the average outsiders' ownership power to the average insiders' power

on total compensation and pay for performance is not related to institutional mimetic pressures (Models 2, 5, 7, 10, 12, 15, 17, and 20).

Second, I find that the results for the relationship between the average outsiders' prestige power to insiders' power are similar in both sub-samples (Models 3,5, 8, 10, 13, 15, 18, and 20). These results indicate that the effect of the ratio of the average outsiders' prestige power to insiders' power on total compensation and pay for performance is not related to institutional mimetic pressures.

However, I find differing sub-sample results regarding the relationship between the average outsiders' structural power to the average insiders' power and total compensation. Although the structural power ratio is not significantly associated with total compensation in the <1 SD subsample, this ratio is positively associated in the >1 SD subsample (Model 9) ($\beta = 0.04$ $p < 0.10$). However, there is no significant difference between the < 1SD and > 1SD subsamples with regard to pay for performance.

First, I find in the sub-samples both within 1 SD and beyond 1 SD, the results for the relationship between the average outsiders' to insiders' ownership power are similar to my main findings (e.g., insignificant) (Appendix O: Table O-48). These results indicate that the relationship of the ratio of the average outsiders' ownership power to the average insiders' power on total compensation and pay for performance is not related to institutional mimetic pressures (Models 2, 5, 7, 10, 12, 15, 17, and 20).

Second, I find that the results for the relationship between the average outsiders' prestige power to insiders' power are similar in both sub-samples (Models 3,5, 8, 10, 13, 15, 18, and 20). These results indicate that the effect of the ratio of the average outsiders' prestige power to

insiders' power on total compensation and pay for performance is not related to institutional mimetic pressures.

However, I find differing sub-sample results regarding the relationship between the average outsiders' structural power to the average insiders' power and total compensation. Although the structural power ratio is not significantly associated with total compensation in the <1 SD subsample, this ratio is positively associated in the >1 SD subsample (Model 9) ($\beta = 0.04$ $p < 0.10$). However, there is no significant difference between the < 1SD and > 1SD subsamples with regard to pay for performance.

5.5.7.2. *Interactions: Outsiders' and Insiders' Power Bases*

Because a significant relationship is not found when firms are similar, I examine their interactions to see if these results may change as the degree of outsiders' and insiders' power changes (Table N-49). The only significant difference that exists is the interaction of outsiders' and insiders' structural power bases in the > 1 SD subsample ($\beta = -0.03$, $p < 0.10$) (Model 19).

5.5.7.3. *Random-Effects Models*

Interestingly, when I run my models again using a random-effects model, I find that my results change (Table O-50). Specifically, I find that the ratio of outsiders' to insiders' prestige power is positively associated with total compensation when mimetic forces are present ($\beta = 0.08$ $p < 0.001$) (Table O-50, Model5). In addition, I find that outsiders' ownership power interacts with insiders' power to affect pay-for-performance sensitivity when industry mimetic forces are not present ($\beta = -0.08$ $p < 0.05$) (Table O-51, Model 20), suggesting a substitution effect in that pay-for-performance sensitivity increases both when outsiders' ownership power is high and

insiders' ownership power is low, and when outsiders' ownership power is low and insiders' ownership power is high.

5.5.8. Firm Size

Firm size may affect the monitoring effectiveness of board power; therefore, I examine in this supplemental analysis how firm size proxied by total assets may affect this relationship. I divide the sample into large and small firms by splitting the sample using the median per year for total assets, and examine the relationship between power and monitoring (Appendix P).

5.5.8.1. Ratios: Outsiders' to Insiders' Power Bases

The ratio of the average outsiders' to insiders' ownership power and structural power bases are not significantly associated with total compensation and pay for performance in both the large- and small-firm sub-samples (Table P -52). The ratio of the average outsiders' to insiders' prestige power is positively associated with total compensation in both the large and small firms. However, although the ratio of the average outsiders' to insiders' prestige power is positively associated with pay-for-performance sensitivity in small firms ($\beta = 0.06$, $p < 0.10$), this ratio is not significantly associated in larger firms ($\beta = 0.02$, $p > 0.10$).

5.5.8.2. Interactions: Outsiders' and Insiders' Power Bases

In this section, I consider whether the interaction between outsiders' and insiders' power bases may be contingent on firm size (Table P-53). These results reveal that understanding the relationship between outsiders' board power and monitoring is contingent on the presence of insiders' board power and the firm's size. Overall, these results then suggest that the size of the

firm is relevant to understanding how power and monitoring are affected. We find that the interaction between outsiders' and insiders' power bases differs in large vs. smaller-sized firms; specifically, the relationship is contingent on whether firms are larger.

First, we find that outsiders' and insiders' ownership power interacts to affect total compensation ($\beta = 0.10, p < 0.01$) and pay-for-performance sensitivity ($\beta = -0.16, p < 0.001$) in large firms but is not significant in smaller firms.

Second, I find that although the interaction between outsiders' and insiders' prestige power bases is similar in both large and small firms in regards to total compensation, these factors interact with each other negatively to affect pay-for-performance sensitivity ($\beta = 0.14, p < 0.01$) in larger firms.

Finally, I find that structural power interacts similarly regardless of firm size; however, the interaction is significant in smaller firms ($\beta = -0.03, p < 0.10$) for pay-for-performance sensitivity.

5.5.9. High-Performing vs. Low-Performing Firms

Firm performance may affect the monitoring effectiveness of board power; therefore, I examine in this supplemental analysis the way in which return on assets (ROA) may affect this relationship. I divide the sample into high- and low-performing firms and examine the relationship between power and monitoring (Appendix Q).

5.5.9.1. Ratios: Outsiders' to Insiders' Power Bases

Specifically, I find that the relationship between the ratio of outsiders' to insiders' ownership and structural power does not vary in high- versus low-performing firms for total

compensation or pay-for-performance sensitivity (Table Q-54). Although the relationship between the average outsiders' to insiders' prestige power and total compensation is similar in high- and low-performing firms, the relationship between outsiders' and insiders' prestige power and pay-for-performance sensitivity differs. The ratio of the average outsiders' to insiders' prestige power is not significantly associated with pay-for-performance sensitivity in low-performing firms ($\beta = 0.04$ $p > 0.10$); however, it is positively and significantly associated in high-performing firms ($\beta = 0.06$ $p < 0.05$).

5.5.9.2. Interactions: Outsider * Insider Power Bases

In Table Q-55, I examine the interactions between outsiders' and insiders' power bases, finding that the relationship between power bases and total compensation does not change significantly in low- versus high-performing firms; however, the relationship with pay for performance does change. Although the ratio of the average outsiders' to insiders' ownership power is insignificantly associated with pay for performance in both high- and low-performing firms, the outsiders' to insiders' prestige power bases interact ($\beta = -0.09$ $p < 0.01$) to affect pay for performance in high-performing firms but not in low-performing firms. Outsiders' and insiders' structural power bases interact to affect pay for performance in low-performing firms ($\beta = -0.06$ $p < 0.05$) but not in high-performing firms ($\beta = 0.01$ $p > 0.10$).

5.5.10. Most Powerful Board Member

The degree of power may be relevant to board monitoring effectiveness. Although institutional ownership is considered to be an effective corporate governance monitoring mechanism, Dharwadkar et al. (2008) found that the characteristics of monitors, specifically

large owners and their portfolio characteristics, provide a more accurate assessment of monitoring effectiveness. Similarly, I consider whether board members' degree of power affects their monitoring. Thus, I consider whether the most powerful board member in terms of ownership, prestige, or structure affects the results (Appendix R).

5.5.10.1. Ratios: Outsiders' to Insiders' Power Bases

I find that the ratio of the most powerful outsider to insider in terms of ownership is not significantly related to total compensation ($\beta = 0.00$ $p > 0.10$) or to pay-for-performance sensitivity ($\beta = 0.01$, $p > 0.10$) (Table R-56). The ratio of the most prestigiously powerful outsider to the most powerful insider associates positively with total compensation ($\beta = 0.10$, $p < 0.001$) and pay-for-performance sensitivity ($\beta = 0.04$, $p < 0.10$). The ratio of the most structurally powerful outsider to the most powerful insider board member is positively associated with total compensation ($\beta = 0.04$, $p < 0.05$) but not related to pay for performance ($\beta = -0.01$, $p > 0.10$).

5.5.10.2. Interactions: Outsiders' and Insiders' Power Bases

The most prestigiously powerful outsider interacts with the most prestigiously powerful insider ($\beta = -0.05$ $p < 0.01$) so that compensation is suppressed when both outsiders' and insiders' prestige power is higher, suggesting a complementary effect (Table R-57). The factors negatively interact to affect pay for performance ($\beta = -0.03$, $p < 0.10$), suggesting a substitution effect in that pay-for-performance sensitivity is higher both when outsiders' prestige power is higher and insiders' prestige power is lower and when outsiders' prestige power is lower and insiders' prestige power is higher.

Structural. The most structurally powerful outsider negatively interacts with the most structurally powerful insider to affect compensation ($\beta = -0.03$ $p < 0.05$) and pay-for-

performance sensitivity ($\beta = -0.02$, $p > 0.10$). Total compensation is suppressed both when outsiders' and insiders' structural power is higher, suggesting a complementary effect, whereas a substitution effect exists with pay for performance.

My results are similar to those of my main model, indicating that the degree of power possessed by the board member does not provide additional insight into monitoring effectiveness. Total compensation is not affected by the most powerful board member in terms of ownership power but is affected by the most prestigiously and most structurally powerful board members. Pay for performance is not affected by the most powerful board member in terms of ownership and structural power bases but is affected by the most prestigiously powerful board member.

5.5.11. The Percentage of Outsiders on the Board

In this section, I examine whether the number of outsiders on the board affects the relationship between board power and monitoring (Appendix S).

5.5.11.1. Ratios: Outsiders' to Insiders' Power Bases

Ownership. Specifically, I find that the ratio of the average outsiders' ownership power to the average insiders' ownership power is insignificantly associated with total compensation whether outsiders are less ($\beta = 0.01$, $p > 0.10$) or more present ($\beta = 0.04$, $p > 0.10$). Similarly, an insignificant relationship exists with pay-for-performance sensitivity whether outsiders are less ($\beta = 0.02$, $p > 0.10$) or more present ($\beta = 0.02$, $p > 0.10$) (Table S-58).

Prestige. Although the relationship between the ratio of the average outsiders' to insiders' prestige power and total compensation does not change when outsiders are less ($\beta =$

0.06, $p < 0.10$) or more present ($\beta = 0.06$, $p < 0.05$), the relationship with pay-for-performance sensitivity does change. Specifically, I find that the ratio of the average outsiders' prestige power to insiders' power is positively but insignificantly associated with pay-for-performance sensitivity when outsiders are less present ($\beta = 0.05$, $p > 0.10$), whereas the ratio is significantly associated when outsiders are more present ($\beta = 0.07$, $p < 0.05$).

Structural. I find that the average outsiders' to insiders' structural power affects our results differently when outsiders are less or more present. Specifically, I find that the ratio of the average outsiders' to insiders' structural power is not significantly associated with total compensation whether outsiders are less ($\beta = 0.02$, $p > 0.10$) or more present ($\beta = 0.03$, $p > 0.10$), whereas the ratio is negatively significantly associated with pay-for-performance sensitivity when outsiders are more present ($\beta = -0.06$, $p < 0.05$) but not less present ($\beta = 0.02$, $p > 0.10$).

5.5.11.2. Interactions: Outsiders' and Insiders' Power Bases

In this section, I examine whether the number of outsiders on the board affects the relationship between board power and monitoring as an interaction (Table S-59).

Ownership. Specifically, I find that outsiders' ownership power interacts with insiders' power when outsiders are more present ($\beta = 0.09$, $p < 0.01$) but not when outsiders are less present ($\beta = -0.00$, $p > 0.10$) to affect compensation. Similarly, outsiders' ownership power interacts with insiders' power when outsiders are more present ($\beta = -0.16$, $p < 0.001$) but not when outsiders are less present ($\beta = 0.01$, $p > 0.10$) to affect pay-for-performance sensitivity.

Prestige. Specifically, I find that the interaction between outsiders' and insiders' prestige power affects compensation similarly when outsiders are less present ($\beta = -0.06$, $p < 0.05$) and more present ($\beta = -0.05$, $p < 0.05$). Similarly, I find that the interaction between

outsiders' and insiders' prestige power affects pay for performance similarly when outsiders are less present ($\beta = -0.05$, $p > 0.10$) and more present ($\beta = -0.01$, $p > 0.10$).

Structural. Specifically, I find that outsiders' structural power insignificantly interacts with insiders' power similarly when outsiders are less present ($\beta = -0.03$, $p > 0.10$) or more present ($\beta = -0.03$, $p > 0.10$) to affect compensation. However, outsiders' structural power interacts with insiders' power when outsiders are more present ($\beta = -0.06$, $p < 0.05$) but not less present ($\beta = 0.00$, $p > 0.10$) to affect pay-for-performance sensitivity.

5.5.12. Board Size

In this section, I examine whether the size of the board affects the relationship between board power and monitoring (Appendix T).

5.5.12.1. Ratios: Outsiders' to Insiders' Power Bases

Ownership. Specifically, I find that the ratio of the average outsiders' ownership power to insiders' power is insignificantly associated with total compensation when boards are smaller ($\beta = -0.02$, $p > 0.10$) or larger ($\beta = 0.02$, $p > 0.10$) (Table T-60). Similarly, an insignificant relationship exists with pay-for-performance sensitivity whether boards are smaller ($\beta = -0.00$, $p > 0.10$) or larger ($\beta = 0.03$, $p > 0.10$).

Prestige. Although the relationship between the ratio of the average outsiders' to insiders' prestige power and total compensation does not change when boards are smaller ($\beta = 0.06$, $p < 0.10$) or larger ($\beta = 0.07$, $p < 0.01$), the relationship with pay-for-performance sensitivity does change. Specifically, I find that the ratio of the average outsiders' prestige power to insiders' power is positively but insignificantly associated with pay-for-performance

sensitivity when boards are smaller ($\beta = 0.04, p > 0.10$), whereas the ratio is significantly associated when boards are larger ($\beta = 0.08, p < 0.05$).

Structural. I find that the average outsiders' to insiders' structural power affects our results differently when boards are smaller or larger. Specifically, I find that the ratio of the average outsiders' structural power to insiders' power is significantly associated with total compensation when boards are smaller ($\beta = 0.09, p < 0.05$) but not larger ($\beta = -0.01, p > 0.10$), whereas the ratio is negatively significantly associated with pay-for-performance sensitivity when boards are larger ($\beta = -0.05, p < 0.10$) but not smaller ($\beta = 0.01, p > 0.10$).

5.5.12.2. Interactions: Outsiders' and * Insiders' Power Bases

In section, I examine whether board size affects the relationship between board power and monitoring as an interaction (Table T-61).

Ownership. Specifically, I find that outsiders' ownership power does not significantly interact with insiders' power when boards are smaller ($\beta = 0.07, p > 0.10$) or larger ($\beta = -0.00, p > 0.10$) to affect compensation. Similarly, outsiders' ownership power does not interact with insiders' when boards are smaller ($\beta = -0.05, p > 0.10$) or larger ($\beta = 0.02, p > 0.10$) to affect pay-for-performance sensitivity.

Prestige. Specifically, I find that the interaction between outsiders' and insiders' prestige power affects compensation similarly when boards are smaller ($\beta = -0.07, p < 0.01$) and larger ($\beta = -0.10, p < 0.01$). However, outsiders' and insiders' prestige power interact to affect pay for performance when boards are smaller ($\beta = -0.05, p < 0.10$) but not larger ($\beta = -0.03, p > 0.10$).

Structural. Specifically, I find that outsiders' structural power interacts with insiders' power when boards are larger ($\beta = -0.03$, $p < 0.10$) but not smaller ($\beta = 0.03$, $p > 0.10$) to affect compensation. Similarly, outsiders' structural power interacts with insiders' power when boards are larger ($\beta = -0.02$, $p < 0.10$) but not smaller ($\beta = -0.03$, $p > 0.10$) to affect pay-for-performance sensitivity.

5.5.13. Incentive Alignment: CEO Ownership and Ownership Power

In this section, I examine whether the results change depending on the degree of managerial incentive alignment proxied by either the degree of CEO ownership (Section 5.5.13.1) or ownership power (Section 5.5.13.2) (Appendix U).

5.5.13.1. CEO Ownership

5.5.13.1.1. Ratios: Outsiders' to Insiders' Power Bases

In this section, I examine whether CEO ownership affects the relationship between board power and monitoring (Table U-62).

Ownership. Specifically, I find that the ratio of the average outsiders' ownership power to insiders' ownership power is insignificantly associated with total compensation when CEO ownership is lower ($\beta = -0.01$, $p > 0.10$) or higher ($\beta = -0.02$, $p > 0.10$). Similarly, an insignificant relationship exists with pay-for-performance sensitivity whether CEO ownership is lower ($\beta = -0.02$, $p > 0.10$) or higher ($\beta = 0.04$, $p > 0.10$).

Prestige. Although the relationship between the ratio of the average outsiders' to insiders' prestige power and total compensation is insignificant when CEO ownership is lower ($\beta = 0.02$, $p > 0.10$), it is positively associated when CEO ownership is higher ($\beta = 0.08$, $p < 0.01$).

Similarly, although the relationship between the ratio of the average outsiders' to insiders' prestige power and pay-for-performance sensitivity is insignificant when CEO ownership is lower ($\beta = 0.01, p > 0.10$), it is positively associated when CEO ownership is higher ($\beta = 0.08, p < 0.05$).

Structural. I find that the average outsiders' to insiders' structural power affects our results differently when CEO ownership is low or high. Specifically, I find that the ratio of the average outsiders' structural power to insiders' structural power is significantly associated with total compensation when CEO ownership is lower ($\beta = 0.06, p < 0.05$) but not higher ($\beta = -0.00, p > 0.10$), whereas the ratio is insignificantly associated with pay-for-performance sensitivity when CEO ownership is lower ($\beta = -0.03, p > 0.10$) or higher ($\beta = 0.01, p > 0.10$).

5.5.13.1.2. Interactions: Outsiders' and Insiders' Power Bases

In this section, I examine whether board size affects the relationship between board power and monitoring as an interaction (Table U-63).

Ownership. Specifically, I find that outsiders' ownership power does not significantly interact with insiders' ownership power when CEO ownership is lower ($\beta = -0.03, p > 0.10$) or higher ($\beta = 0.00, p > 0.10$) to affect compensation. Similarly, outsiders' ownership power does not interact with insiders' ownership power when CEO ownership is lower ($\beta = 0.03, p > 0.10$) or higher ($\beta = -0.00, p > 0.10$) to affect pay-for-performance sensitivity.

Prestige. Specifically, I find that the interaction between outsiders' and insiders' prestige power affects compensation similarly when CEO ownership is lower ($\beta = -0.03, p < 0.10$) or higher ($\beta = -0.06, p < 0.05$). However, outsiders' and insiders' prestige power interact to

affect pay for performance when CEO ownership is higher ($\beta = -0.05$, $p < 0.10$) but not lower ($\beta = -0.02$, $p > 0.10$).

Structural. Specifically, I find that outsiders' structural power interacts with insiders' structural power when CEO ownership is lower ($\beta = -0.07$, $p < 0.01$) but not higher ($\beta = -0.01$, $p > 0.10$) to affect compensation. Similarly, outsiders' structural power interacts with insiders' structural power when CEO ownership is lower ($\beta = -0.06$, $p < 0.05$) but not higher ($\beta = 0.01$, $p > 0.10$) to affect pay-for-performance sensitivity.

5.5.13.2. CEO Ownership Deciles

In this section, I separate the data into CEO ownership deciles and quartiles, finding that the relationship between board power changes based on the level of CEO ownership.

Total Compensation. First, I examine deciles. Specifically, I find that the ratio of outsiders' to insiders' ownership power is negatively associated with total compensation in the 3rd ($\beta = -0.09$, $p < 0.01$) and 8th decile ($\beta = -0.12$, $p < 0.05$) but insignificantly associated in the other deciles (Table U-64). The average CEO ownership in the 1st decile is 0.002%; that in the 2nd decile is 0.03%; that in the 3rd decile is 0.07%; that in the 8th decile is 0.88%; that in the 9th decile is 1.96%; and that in the 10th decile is 10.95%. The ratio of the average outsiders' to insiders' prestige power is positively associated with total compensation at the 10th decile ($\beta = 0.17$, $p < 0.05$). Finally, the average ratio of outsiders' structural power to insiders' structural power is positively associated with total compensation in the 1st decile ($\beta = 0.10$, $p < 0.05$).

Second, I examine the quartiles and find that the ratio of outsiders' to insiders' ownership power is negatively associated with compensation in the 1st quartile ($\beta = -0.05$, $p < 0.10$), whereas the ratio of the average outsiders' to insiders' prestige power is positively associated in the 4th

quartile ($\beta = 0.12$, $p < 0.05$) and the ratio of the average outsiders' to insiders' structural power is positively associated in the 1st quartile ($\beta = 0.09$, $p < 0.01$) (Table U-66).

Pay-for-performance sensitivity. The ratio of the average outsiders' to insiders' ownership power is positively associated with pay-for-performance sensitivity at the 2nd ($\beta = 0.51$, $p < 0.05$) and 3rd deciles ($\beta = 0.04$, $p < 0.01$) (Table U-65). The ratio of the average outsiders' to insiders' prestige power is positively associated at the 9th decile ($\beta = 0.37$, $p < 0.05$). The ratio of the average outsiders' to insiders' structural power is not significantly associated in any decile. Second, I examine the quartiles and find that ratio of the average outsiders' to insiders' prestige power is positively associated in the 4th quartile ($\beta = 0.11$, $p < 0.10$) (Table U-67).

5.5.13.3. Insider/Outsider Ownership Power Ratio

In this section, I examine whether the results change when I look at the degree to which managers' incentives are aligned using the ratio of the average insiders' to outsiders' ownership power (Appendix V). In the fixed-effects model, I find that this ratio is insignificantly associated with both total compensation ($\beta = -0.05$, $p > 0.10$) and pay-for-performance sensitivity ($\beta = 0.02$, $p > 0.10$) (Table V-68). These results do not change significantly in the winsorized model (Table V-69). However, in the random-effects model, the results change. The ratio of the insiders' to outsiders' ownership power is negatively associated with total compensation ($\beta = -0.04$, $p < 0.05$) but insignificantly with pay for performance ($\beta = 0.03$, $p > 0.10$) (Table V-70). These results do not change significantly with the winsorized model (Table V-71). I find similar results when using an OLS model (Table V-72). The ratio of the average insiders' to outsiders' ownership power is negatively associated with total compensation ($\beta = -0.04$, $p < 0.05$) and not

significantly associated with pay for performance ($\beta = 0.03$, $p > 0.10$). These results are similar in the winsorized model (Table V-73).

5.5.14. CEO Tenure

Although ownership and structural power bases had an insignificant relationship with compensation and pay for performance in the first portion of my study, I examine in the supplemental analysis whether CEO entrenchment may affect this relationship (Appendix W). As CEO power increases, CEOs may become more entrenched, as proxied by increased CEO tenure and increased firm performance. With increased tenure as the CEO, managers' bargaining power with the board increases (Mitchell, 2010); thus, CEOs are able to negotiate a compensation contract with the board that is preferable with regard to the CEO's interests and minimizes the CEO's risk. Using CEO tenure as a proxy for managerial entrenchment, I examine the relationship between each power base and pay for performance in conditions with high and low CEO tenure.

5.5.14.1. Ratios: Outsiders' to Insiders' Power Bases

First, I find that ratio of outsiders' ownership power to insiders' is insignificantly associated with total compensation when CEO tenure is low ($\beta = -0.01$, $p > 0.10$) or high ($\beta = 0.01$, $p > 0.10$), but negatively with pay for performance when CEO tenure is low ($\beta = -0.08$, $p < 0.05$), but not when CEO tenure is high ($\beta = 0.01$, $p > 0.10$) (Table W-74).

Second, I find that the average outsiders' prestige power to insiders' prestige power is positively and significantly associated with total compensation when CEO tenure is low or high. However, when CEO tenure increases, the average outsiders' prestige power relative to insiders'

prestige power is not related to pay-for-performance sensitivity. Specifically, I find that the ratio of the outsiders' prestige power to insiders' power is positively associated with total compensation when CEO tenure is low ($\beta = 0.07, p < 0.05$) and high ($\beta = 0.07, p < 0.05$) but insignificantly associated with pay for performance when CEO tenure is low ($\beta = 0.05, p > 0.10$) or high ($\beta = 0.05, p > 0.10$).

Third, I find that the average outsiders' to insiders' structural power is significantly related to total compensation and pay for performance when CEO tenure is low but not related when CEO tenure is high. Specifically, I find that when CEO tenure is low, the ratio of the outsiders' structural power to that of the insiders is significantly associated with total compensation ($\beta = 0.05, p < 0.10$) and pay for performance ($\beta = -0.08, p < 0.01$).

5.5.14.2. Interactions: Outsiders' and * Insiders' Power Bases

In this section, I examine whether CEO tenure affects the relationship between board power and monitoring as an interaction (Table W-75).

Ownership. Specifically, I find that outsiders' ownership power significantly interacts with insiders' power when CEO tenure is lower ($\beta = -0.06, p < 0.10$) but not higher ($\beta = -0.00, p > 0.10$) to affect compensation. Similarly, outsiders' ownership power interacts with insiders' ownership power when CEO tenure is lower ($\beta = -0.06, p > 0.10$) but not higher ($\beta = -0.03, p > 0.10$) to affect pay-for-performance sensitivity.

Prestige. Specifically, I find that the interaction between outsiders' and insiders' prestige power affects compensation similarly when CEO tenure is lower ($\beta = -0.03, p < 0.10$) or higher ($\beta = -0.05, p < 0.10$). However, outsiders' and insiders' prestige power interact to affect

pay for performance when CEO tenure is higher ($\beta = -0.05$, $p < 0.10$) but not lower ($\beta = -0.01$, $p > 0.10$).

Structural. Specifically, I find that outsiders' structural power interacts with insiders' power when CEO tenure is lower ($\beta = -0.06$, $p < 0.01$) but not higher ($\beta = -0.01$, $p > 0.10$) to affect compensation. Outsiders' structural power does not interact with insiders' power when CEO tenure is lower ($\beta = -0.04$, $p > 0.10$) nor higher ($\beta = -0.00$, $p > 0.10$) to affect pay-for-performance sensitivity.

5.5.15. Mergers and Acquisitions

The relationship between power and the resolution of the agency conflict is relevant to merger and acquisitions (M & A) decisions because managers can make M & A deals that benefit themselves financially. Because M & A decisions can result in larger firms and increased pay for the CEO, managers should be monitored carefully (Amihud & Lev, 1981); thus, examining the association between board power and shareholder value is relevant in the M&A context.

In their study challenging Amihud & Lev's (1981) conclusions that managers engage in unrelated mergers and acquisitions unless closely monitored, Lane, Cannella, & Lubatkin (1998) reconsider Amihud & Lev's findings concerning board vigilance, ownership, and corporate strategy. Lane et al. consider arguments grounded in management theory that managers do not always act in their own self-interest to counter explanations grounded in agency theory, an economic perspective, that managers will act in their self-interest unless monitored. The researchers "find no support for the standard agency theory predictions that management-controlled firms are associated with strategically inferior levels of diversification and acquisition

types, lower levels of risk and lower levels of returns than are firms with large blockholders and/or firms with vigilant boards” (Lane et al., 1998, p. 571).

Whereas trends in 2011 regarding boards included increased camaraderie between boards and shareholders, increased regulatory oversight, and an increased focus on stock performance as indicators of successful boards, Lewkow, Beller, Fisher, & Klingsberg (2012) recommended that boards should focus on M&A opportunities and risks. Thus, in my supplementary analysis, I consider the way in which my power model relates to the monitoring of M&A activity and returns during my sample period. Consistent with other studies examining M&A activity in the corporate governance context (e.g., Goranova, Dharwadkar, & Brandes, 2010), I use event study analysis and examine the relationship between monitoring and cumulative abnormal returns (CARs). I examine CARs using six event windows that range from 3 to 7 days surrounding the M &A announcement: a) (-1, +1), b) (-2, +1), c) (-2, +2), d) (-3, +3), e) (-1, +2), and, f) (-1, +3) (Appendix J). Using multiple event windows allows me to consider the longer effects of board monitoring behavior while also considering shorter event windows that enter less unobserved error into the result than the longer window (Weston, Siu, & Johnson, 2001). Consistent with prior research (e.g., Walters et al., 2007), abnormal returns were calculated on one day as $AR=R_{it} - (\alpha_i + \beta_i R_{mt})$.⁴ Cumulative abnormal returns (CARs) are the total returns for the individual daily returns in the specified event window.

To create the sample dataset for the M&A analysis, I use the companies in my main analysis dataset and find the CARs for these event windows by integrating data from the Eventus/CRSP and the Thomson Reuters M&A databases. This approach produced a dataset representing 1,477 M&A deals. In addition, I use the following controls that are similar to M&A

⁴ Abnormal returns include the following: R_{it} = return on firm i 's stock for day t ; R_{mt} = market return for day t ; and α_i = firm i 's expected return if the market portfolio does not change (Walters et al., 2007).

studies: firm size, Tobin's Q, firm financial performance, previous M&A experience, percentage acquired, whether the acquiring and target firm were in the same industry, whether the deal was considered a hostile takeover, institutional ownership, the percentage of ownership by the largest institutional owner, control for post-Sarbanes-Oxley Act of 2002, and board size.

5.5.15.1. Mergers and Acquisitions: Outsider/ Insider Power Ratios

For the first event window (-1, +1), I find that the ratio of outsiders' to insiders' ownership, prestige, and structural power are insignificantly associated with CAR (Appendix X Table X-76). In the second event window (-2, +1), the full model indicates the ratio of outsiders' ownership power to insiders' ownership ($\beta = -0.05$, $p < 0.05$) and the ratio of outsiders' structural power to insiders' structural power ($\beta = -0.05$, $p < 0.10$) are negatively associated (Table X-77). The third event window (-2, +2) also reveals the ratio of outsiders' ownership power to insiders' power is negatively associated ($\beta = -0.04$, $p < 0.10$) in the full model (Table X-78). In the fourth event window (-3, +3), I find similar results in the full model in that the ratio of outsiders' ownership power to insiders' power is negatively associated with CAR ($\beta = -0.04$, $p < 0.10$) (Table X-79). In the fifth event window (-1, +2), I find that the ratio of outsiders' ownership power to insiders' power is negatively associated with CAR in the isolated model ($\beta = -0.04$, $p < 0.10$) (Model 2) but insignificantly associated in the full model ($\beta = -0.04$, $p > 0.10$) (Table X-80). In the sixth event window (-1, +3), I find that the ratio of outsiders' ownership power to insiders' power is negatively associated with CAR in the isolated model ($\beta = -0.04$, $p < 0.10$) (Model 2) but insignificantly associated in the full model ($\beta = -0.04$, $p > 0.10$) (Table X-81).

In Tables X-81– X-87, I run my analysis again, winsorizing my ownership variable at $p=0.01$, and find my results remain the same with the exception of the third event window (-2 +

2), the fifth event window (-1, +2), and the sixth event window (-1, +3). In the third event window (-2, +2), the ratio of the average outsiders' to insiders' ownership power is significant in the isolated model ($\beta = -0.05$, $p < 0.10$) (Model 2) but not in the full model ($\beta = -0.05$, $p > 0.10$) (Table X-84). In the fifth event window (-1, +2), the ratio of the average outsiders' to insiders' ownership power is significant in the isolated model ($\beta = -0.06$, $p < 0.05$) (Model 2) and the full model ($\beta = -0.06$, $p < 0.10$) (Model 5) (Table X-86). In the sixth event window (-1, +2), the ratio of the average outsiders' to insiders' ownership power is significant in the isolated model ($\beta = -0.07$, $p < 0.05$) (Model 2) and the full model ($\beta = -0.06$, $p < 0.10$) (Model 5) (Table X-87).

5.5.15.2. Mergers and Acquisitions: Insider/Outsider Power Ratios

To determine whether the results change if I examine the alignment of manager incentives, I run my analysis again using a winsorized insider-to-outsider ownership power ratio (Appendix Y). For the first event window (-1, +1), I find that the ratio of outsiders' to insiders' ownership, prestige, and structural power are insignificantly associated with CAR (Table Y-88). In the second event window (-2, +1), the full model indicates that the ratio of outsiders' to insiders' prestige power ($\beta = 0.06$, $p < 0.10$) is positively associated (Table Y-89). In the third event window (-2, +2), I find that the ratios of outsiders' to insiders' ownership, prestige, and structural power are insignificantly associated with CAR (Table Y-90). In the fourth event window (-3, +3), I find the ratio of insiders' to outsiders' ownership power is positively associated with CAR ($\beta = 0.06$, $p < 0.10$) (Table Y-91). In the fifth event window (-1, +2), I find that the ratios of outsiders' to insiders' ownership, prestige, and structural power are insignificantly associated with CAR (Table Y-92). In the sixth event window (-1, +3), I find that the ratio of insiders' to outsiders' ownership power is positively associated with CAR in the

isolated model ($\beta = 0.07, p < 0.10$) (Model 2) but insignificantly associated in the full model ($\beta = 0.06, p > 0.10$) (Table Y-93).

5.5.15.3. Mergers and Acquisitions: Summary

These findings indicate that board power is relevant to whether firms are engaging in M & A decisions that positively or negatively affect shareholder value. Specifically, I find that the ratio of insiders' to outsiders' ownership power is positively associated with CARs, whereas the ratio of outsiders' to insiders' structural power and ownership power are negatively associated. My findings regarding ownership power are consistent with the previous literature in that managers with equity have greater incentives to make decisions that affect shareholder value (Finkelstein & Jackson, 2000).

In reference to the negative relationship between structural power and CARs, I can speculate that these results may reflect compensation committee structure, confusing messages to the market during a risky decision-making period, the specific manner in which structural power was operationalized or the degree of managerial entrenchment. First, CARs are related to the way in which the compensation committee is structured because of its control over golden parachutes, which affect the costs of monitoring the CEO and takeovers. Citing mixed results in their review of studies examining the relationship between firm performance and golden parachutes, Davidson, Pilger, & Szakmary (1997) nevertheless note a relationship between the composition of the compensation committee by insiders and outsiders, and CARs; specifically, these researchers find that negative CARs result when affiliated outsiders, rather than independent outsiders, comprise the committee. Future research should clarify the rationale

behind my results to develop a new database differentiating between affiliated outsiders and independent outsiders to examine whether my findings are consistent with other findings.

Second, as outsiders acquire more structural power than insiders, outsiders are able to control decisions that can limit managerial opportunism. However, increased structural power, such as in non-CEO duality situations with greater board control over board discussions, also results in less decision-making control for the CEO at a time of high risk for the firm. This scenario creates the potential for confused decision-making processes and diffused authority, which sends mixed messages to the market (Finkelstein & D'Aveni, 1994; Miller & Friesen, 1977).

Third, the specific operationalization of the board structural power context is in the pay-for-performance context, operationalized based on overlapping membership on the nominating and compensation committees, tenure on the nomination and compensation committees, and hierarchy on the board in relationship to the board's ability to control the CEO. An interesting extension to the paper will be to operationalize a structural power construct that involves membership and/or tenure on the auditing committee, as well as an additional power expertise power base considering the financial expertise of the board member. I anticipate that a structural power construct operationalized using variables relevant to M & A valuation activity would be positively associated with CARs. Moreover, managerial entrenchment as proxied by CEO tenure may affect these results. Walters, Kroll, & Wright (2007) found that CEO tenure is positively associated with firm performance when managers are less tenured and negatively associated with performance as tenure increases. The researchers suggest that these results may be linked to longer-tenured CEOs becoming more complacent regarding their knowledge of M&A and firm growth (Kroll et al., 2000; Finkelstein & Hambrick, 1996). More interestingly, longer-tenured

CEOs have more influence on boards (Zajac & Westphal, 1996); thus, although outsiders may have more structural power, the outsiders remain somewhat dependent on the CEO for information that can be manipulated.

Finally, although this paper considers the linear relationship between board power bases and CARs as supplemental analyses, it may be possible that the relationship can be non-linear; this possibility should be explored in future research. Board monitoring and M&A outcomes are affected by characteristics such as CEO tenure that create a non-linear relationship with performance (e.g., Walters et al., 2007).

5.6. Economic Significance

Although my study indicates that the relationship of power to monitoring effectiveness is contextual, in this section I report the economic significance of my power ratios without considering contextual implications. As the ratio of the average outsiders' prestige power to that of insiders increases by 1 unit, there is a 7 % increase in total compensation and a 4 % increase in pay-for-performance sensitivity. Because managers' work contributes to shareholder wealth, managers' earnings will increase as shareholders' wealth increases. In this example, instead of making \$1.56 for every \$1,000 shareholders make, managers will make \$1.68. As the ratio of the average outsiders' ownership power to that of insiders increases by 1 unit, there is a 1% increase in total compensation and no increase in pay-for-performance sensitivity. As the ratio of the average outsiders' structural power to that of insiders increases by 1 unit, there is a 4% increase in total compensation and a 1% decrease in pay-for-performance sensitivity.

CHAPTER 6. DISCUSSION

Assessing monitoring effectiveness by considering the multidimensional nature of board power, as proxied by board structural and compositional characteristics, provides insight into understanding pay for performance. The ability to evaluate whether boards are effective requires an understanding of how board characteristics affect monitoring. Although research has been inconclusive concerning this relationship (Daily et al., 1998), board power provides a conceptual bridge to examine how board characteristics potentially result in conflicting goals, loyalties, and risk preferences that affect the distribution of power within boards and thus influence monitoring effectiveness. Therefore, I argue that research has been inconsistent on the association between board outsiders/insiders and monitoring effectiveness because we have not considered the influence of power bases within boards. Although managerial and board power are largely referenced conceptually in corporate governance research, to the best of my knowledge, no research has attempted to theoretically and empirically model board power as a multi-dimensional construct in the executive compensation context to reconcile this inconsistency.

By integrating agency and upper echelon theories, this study attempts to clarify the inconsistent link between board composition (e.g., classification as outsider or insider) and pay performance implications (Baker, Jensen, & Murphy, 1988) by presenting a power framework that can explain whether board members are potentially able to effectively influence pay for performance. More specifically, I suggest that board structural and compositional characteristics can serve as proxy indicators for different bases of power within boards. These bases were empirically validated and then used to examine the following two research questions: a) *how do board power bases affect members' influence on monitoring and executive compensation?* and b)

how do power bases influence outsiders' and insiders' monitoring effectiveness? In examining these questions, I extend Finkelstein's (1992) model of top management team power to the context of a board of directors' monitoring responsibilities. Moreover, this study contributes to corporate governance research by demonstrating that board power bases are important components in conceptualizing and assessing monitoring. Overall, my findings indicate that board power bases affect the influence of outsiders' and insiders' monitoring effectiveness differently; however, the influence of power bases is contextual, depending not only on environmental, firm, board, and CEO characteristics but also on how powerful outsiders and insiders are relative to each other.

First, my findings indicate that monitoring effectiveness improves as outsiders become more powerful compared to insiders; however, this relationship is contextual based on environmental, firm, board, and CEO characteristics. In my main study, I find that the ratio of outsiders' to insiders' prestige power is positively associated with pay for performance, while the ratios of outsiders' to insiders' ownership and structural power bases are not significantly related. Why are the ownership and structural power ratios not significant? In my supplemental analyses, I find that the reason why the ratios of outsiders' to insiders' ownership and structural powers may not have been significant is because this relationship changes as environmental (e.g., government regulation, world/economic events, institutional forces), firm, (e.g., size, performance) board (e.g., size, level of independence), and CEO characteristics (e.g., equity and tenure) change.

Second, my supplementary analyses indicate that outsiders' and insiders' power bases interact as substitutes or complements to affect monitoring, depending on context. For example, we find a significant substitution effect in large firms, not smaller firms, when we examine outsiders' ownership power relative to that of insiders, indicating that managerial incentive

alignment is important to consider in examining the relationship of board power to monitoring. Thus, the overall finding that boards become more effective as outsiders' power bases grow relative to insiders' power bases is consistent with the previous research indicating that boards, when more powerful, are more likely to combat managerial influence (e.g., Walsh & Seward, 1990); however, an extended contribution of my study is the finding that this relationship is contextual. .

6.1. Board Power Theoretical Framework Extended: Contextual Implications

Overall, this study demonstrates that board power is a multi-dimensional construct and that each dimension has different implications for monitoring when we consider outsiders' power bases relative to those of insiders. Without first considering any unique contextual conditions (e.g., environmental characteristics) in my initial regression models, I find that as outsiders' prestige increases relative to insiders' prestige, pay for performance increases, whereas ownership and structural power have no significant relationship. Why does prestige power have such a large, significant effect and ownership have such a weak, insignificant effect? Prestige power is perceived by individuals as someone having power over them more than ownership is perceived in this way (Finkelstein, 1992); thus, I suggest that these findings indicate how other board members may perceive power will affect monitoring effectiveness. After finding that perceived power was more correlated with prestige power ($r=0.42$, $p < 0.001$) than with ownership power ($r=0.17$, $p < 0.001$), Finkelstein (1992) explained that it is conceivable that ownership power would be the least type of power associated with perceived power because "managers with ownership power, though still powerful, may be less involved in the actual

management of firms since perceived power is based on managerial influence in strategic decision making (p. 523-524).”

6.1.1. Contextual Theoretical Framework: Environment, Firm, Board, and CEO

This study provides an interesting extension to board power and monitoring research, specifically by providing a theoretical framework to explore the role of context in understanding how power affects board monitoring effectiveness. Specifically, this study finds that context can influence board power bases differently by affecting the level of discretion managers use to influence outcomes. Managerial discretion is positively associated with total compensation, contingent-based pay, advertising intensity, and CEO turnover, but negatively associated with firm age and a stable strategic direction (Rajoplan & Finkelstein, 1992). In this section, I extend my board power theoretical framework to context in terms of four primary contextual groupings: environmental, firm, board, and CEO characteristics (Table 13).

Contextual implications may vary based on whether the context examined involves changes that are internal or external to the firm. Whereas CEO entrenchment, as proxied by CEO tenure, is a within-the-firm internal condition, legislation, firm performance, industrial pressures, and world events are also affected by events external to the firm (e.g., war, global issues, and economic climate).

6.1.1.1. Contextual Theoretical Framework: Environmental Characteristics

Environmental characteristics, such as governmental regulations, world and/or economic events, and institutional forces, affect the way in which board power affects monitoring effectiveness. Forces and/or events within the firm’s environmental context affect managerial

discretion, or the latitude of managers to influence outcomes (Hambrick & Finkelstein, 1987). The characteristics of the firm's environment, such as product differentiation, industry structure, demand instability, legal constraints, or outside forces may increase or decrease the effect of managers depending on the environmental context (Hambrick & Abrahamson, 1995). These contextual considerations are relevant to executive pay decisions because firms may have to pay managers more to compensate them for providing leadership in an environment characterized by more complex and riskier competitive conditions (Finkelstein & Boyd, 1998).

First, governmental regulations affecting corporate governance practices impose legal requirements and consequences for failing to abide by these regulations. Because of their constraints on managerial action, legal requirements can reduce managerial discretion, which in turn affects pay-for-performance sensitivity. The Sarbanes-Oxley Act of 2002 was intended to improve corporate governance by increasing regulations that require boards to be more effective and objective monitors both in terms of their structure (e.g., board independence) and practices (e.g., financial reporting). As a result, public accountability for boards increased and boards changed their executive pay practices to include less contingent-based pay and more salary-component pay immediately following SOX (Cohen, Dey, & Lys, 2007). My results indicate that reduced contingent-based pay following SOX may have inadvertently negatively affected pay-for-performance sensitivity because there were fewer incentives for managers to take riskier actions at a time when publicity surrounding performance had increased.

Second, world and economic events affect the firm's competitive landscape and reduce managerial discretion because of changes in consumer behavior that affect firm profitability; however, these changes may be industry-specific. The World Trade Center attacks of 2001 provide an example of how firm profitability was negatively affected by a world event that

resulted in fear and uncertainty and influenced consumer behavior (e.g., travel decisions, including airlines and transportation). Although boards may have to compensate managers to take more risks in an uncertain environment and directors may be more active monitors during times of greater uncertainty (Goodstein, Guatam, & Boeker, 1994), there is a limit to what CEOs can and cannot control in uncertain environments; therefore, there may be less of an association with pay-for-performance sensitivity.

Thirdly, institutional forces in the firm's industry may limit managerial discretion. Institutional isomorphism results when firms make decisions similar to other firms in the same industry to enhance legitimacy, rendering managerial action futile. As institutional isomorphism increases, variation in executive pay decreases. When these institutional mimetic forces are strong, executive action matters less; managers have less discretion because firm "performance [is]...affected by forces beyond a leader's control" (Liebersohn & O'Connor, 1972, p. 121). Bertrand & Schoar (2003) found that a 5% variance in firm performance was linked to managerial efforts after controlling for industry, year, and firm fixed-effects. The design of compensation contracts is affected by forces in the firm's institutional context. Brandes, Dharwadkar, & Das (2005) integrated agency and institutional theories, building on Lawrence et al.'s (2001) multi-stage model of institutionalization to demonstrate how the adoption of incentive-based compensation is influenced at each stage. Specifically, these researchers indicate that mimetic forces, passed through board interlocks, influence the adoption of stock options in the first stage, whereas the second stage of stability is characterized by firms that appear similar to each other after adopting these plans. Finally, in the deinstitutionalization stage, agents and/or principals may try to influence regulators to eliminate incentive-based compensation if ineffective.

Amid conditions characterized by more institutional pressures, we may observe that certain board power bases are more influential than others. For example, prestige power increases the potential for directors to interact more with members of the managerial elite. As directors interact more frequently through increased directorships and/or interlocks, a “capitalist class culture” develops (Useem, 1979, 1984) and the potential for board practices to pass among firms increases (Davis, 1991).

Finally, additional environmental characteristics that can be examined in this context include product market competition and market growth, which increase managerial discretion. Thus, we would expect to see greater pay-for-performance sensitivity.

6.1.1.2. Contextual Theoretical Framework: Firm Characteristics

Firm characteristics influence the way in which board power affects monitoring effectiveness. The characteristics of an organization, including the firm’s size, age, culture, capital intensity, resource availability, or forces from players inside the firm, may affect managerial discretion (Hambrick & Finkelstein, 1987).

First, firm size affects the firm’s operations by influencing the level of difficulty for the manager to control outcomes and for the board to monitor managers. The potential for managerial opportunism increases in larger firms (Demsetz & Lehn, 1985), which is positively associated compensation (Gomez-Mejia & Welbourne, 1989). Some board power bases may be more affected than others by a firm’s size. Smaller firms are associated with more managerial discretion because the manager has a greater ability to control an outcome in situations with less uncertainty. Thus, we expect to see more behavioral-based compensation and active boards in smaller firms. Boards may be more involved in smaller firms because management teams may

be less diverse in skills (Finkelstein et al., 2009); thus, we may observe a greater association between structural power and pay for performance. Jensen and Murphy (1990) argued that “higher pay-performance sensitivities for small firms could reflect that CEOs are more influential in smaller companies” (p. 260). In contrast, larger firms are associated with greater uncertainty, a greater risk of managerial opportunism, and a greater need for more effective monitoring. We would expect to see a larger amount of contingent-based pay and more aligned incentives; thus, we may note a greater association between ownership power and pay for performance in larger firms.

Second, the level of a firm’s current performance will affect the impact of power on monitoring effectiveness. Compensation increases as firm performance increases (Gomez-Mejia & Welbourne, 1989). In lower-performing firms, CEOs have less bargaining power but may have a greater commitment to change the firm’s current strategic direction (Hambrick, Geletkanycz & Fredrickson, 1993). Similarly, board members themselves may perform differently in a low-performing versus high-performing firm. Because outside directors are motivated by a need to protect their reputation (Fama & Jensen, 1983), outside directors are forced to incur a cost to their reputation by serving as a board member of a poorly performing firm; thus, we anticipate that more prestigious directors will not remain on a poorly performing firm’s boards. In contrast, CEOs of higher-performing firms have more bargaining power and may make stronger attempts to persuade boards. However, boards may not have to be as active in monitoring because managers are more committed to the status quo in higher-performing firms (Hambrick, Geletkanycz, & Fredrickson, 1993). Further, boards may have to pay more to recruit/retain a talented CEO, which depends on when the CEO was hired.

Finally, additional firm characteristics that can be examined in this context include the equity structure and the age of firms. More concentrated ownership reduces managerial discretion and affects pay-for-performance sensitivity, whereas less concentrated ownership increases discretion, which is related to pay decisions (Hoskisson, Hitt, Johnson, & Grossman, 2002). Larger institutional owners affect monitoring effectiveness (Dharwadkar, Goranova, Brandes, & Khan, 2008); these owners are associated with less total compensation, more behavioral-based compensation and less contingent-based compensation (Khan, Dharwadkar, & Brandes, 2005). Thus, when large owners are present, we may observe an association between board power bases and pay; therefore, we anticipate seeing large owners and board power bases, specifically board ownership power, interacting as substitutes in enhancing monitoring effectiveness. Further, board members may be more involved in a newer firm than in an older firm (Zald, 1969).

6.1.1.3. Contextual Theoretical Framework: Board Characteristics

Board characteristics, including the board's size and its degree of independence, affect monitoring effectiveness. Although the board's size, the percentage of outside directors and the percentage of inside ownership are associated with more firm litigation (e.g., lawsuits), boards whose directors sit on multiple boards are negatively associated (Kassinis & Vafeas, 2002).

First, board size affects the influence of board members in the monitoring process, and thus, the number of directors on the board may result in some power bases (e.g., prestige) being more prevalent on some boards as opposed to other boards. Larger boards tend to be ineffective monitors associated with increased pay and reduced pay-for-performance sensitivity (Core et al., 1997). When boards increase in size, they become less willing to challenge the CEO and to demonstrate objectivity, contributing to faulty decision-making processes (Lipton & Lorsch,

1992). Larger boards are associated with more conflict and diversity on the board (Goodstein, Guatam, & Boeker, 1994). Although larger boards may have more directors serving on multiple boards, which enhances a board's prestige power base, these directors may be overly committed and less involved in leadership roles on the focal firm's board, thus reducing the outsiders' structural power base.

Second, the degree of board independence is relevant to understanding the board's bases of power. Although board independence increases the potential for objective monitoring on the board, outsiders may be less focused on the focal firm if they have too many outside directorships. Further, because boards with more outsiders will have less knowledge about the firm's operations, there may be increased potential for the CEO to manipulate the board. Thus, we anticipate that the level of independence on the board is highly relevant to explaining how the relationship between outsiders' monitoring effectiveness and ownership, prestige, and structural power bases change.

Finally, additional board characteristics that can be examined in this context include CEO duality and the frequency of board meetings. CEO duality increases managerial discretion and requires more active monitoring; therefore, we may observe that more structurally powerful boards are more engaged in a dual-chaired board than a non-CEO-chaired board. Further, structural power may be more relevant on boards that meet more often, whereas ownership and prestige power may be more relevant on boards that meet less often because of their passive approach to monitoring through incentive alignment.

6.1.1.4. Contextual Theoretical Framework: CEO Characteristics

CEO characteristics are relevant to understanding the impact of board power on monitoring effectiveness. Managerial characteristics, including the CEO's aspiration level, commitment to the status quo, ambition, and power base will affect the manager's discretion (Hambrick & Finkelstein, 1987). First, managerial incentives align manager equity interest with those of shareholders so that managers make equity decisions that are in the best interests of shareholders. When managerial incentives are aligned, this alignment reduces the need for active board monitoring and can substitute for board monitoring mechanisms (Beatty & Zajac, 1994).

Second, CEO tenure affects managerial decision making and the potential for managerial entrenchment. With increased CEO tenure, CEO bargaining power increases; consequently, CEO tenure is associated with increased managerial pay, whereas the relationship between pay and stock returns decreases (Hill & Phan, 1991). Although ownership power aligns board interests with those of shareholders, the need for active board monitoring as CEO tenure increases may be replaced by the CEO's own interest alignment that occurs by his/her need for employment security. Increased tenure may motivate CEOs to avoid making riskier decisions that threaten their employment because of what they could lose, as opposed to what they could gain (Coffee, 1988). CEOs become more conservative as CEO tenure increases and have a tendency to conform to the firm's current strategic direction (Finkelstein & Hambrick, 1990). Similarly, CEOs can become more entrenched, increasing their bargaining power over the board in terms of their compensation decisions. Managerial opportunism may be a problem at higher levels of CEO tenure (Shen & Cannella, 2002a). Thus, we anticipate that the impact of ownership, prestige, and structural power bases on monitoring effectiveness will change as CEO tenure changes.

6.1.2. Contextual Theoretical Framework: Interaction Effects

Extending the board power theoretical framework to interactions among power bases (Table 14), I provide a theoretical framework that offers four quadrants predicting how outsiders' and insiders' power bases interact to affect monitoring. Quadrants 1 and 3 provide insight into the potential for substitution effects, whereas quadrant 2 provides insight into the potential for complementary effects. Because both outsiders' and insiders' power bases are low in quadrant 4, the potential for managerial opportunism and ineffective monitoring exists.

In quadrant 1, the interaction of high outsiders' power with low insiders' power produces an overall potential for effective monitoring with minimal managerial opportunism and greater pay-for-performance sensitivity. Directors are more incentivized and empowered to control managerial opportunism: ownership incentives are aligned for directors but not for managers; prestige power motivates directors to protect their reputation when insiders are not similarly motivated, and structural power gives directors greater control and decision-making authority over managers.

In quadrant 2, the interaction of high outsiders' power and high insiders' power produces an overall potential for effective monitoring that may appear as a complementary effect. Managerial opportunism is minimized and greater pay-for-performance sensitivity is possible because equity incentives are aligned for both directors and managers; both directors and managers are motivated to protect their reputation, and the board has a similar degree of structural oversight over the CEO, which may create a team approach to enhancing shareholder value.

In quadrant 3, the interaction of low outsiders' and high insiders' power produces the potential for monitoring to be compromised; however, the potential also exists for a substitution

effect to take place that can enhance monitoring. Although managerial opportunism may occur, it may be limited because ownership and reputation incentives are aligned for managers, not directors. Because managers have structural control over decisions, however, the potential for the board to be manipulated by the CEO may exist.

My supplementary analyses indicate that outsiders' and insiders' prestige and structural power bases interact with each other both with and without context considerations; however, the interaction of outsiders' and insiders' ownership power bases is contextual. In this section, I examine the interactions independent of contextual implications and then discuss the contextual implications for interactions in the following sections. Outsiders' and insiders' prestige power bases interact with each other in a complementary way to suppress total compensation (Figure 8a); however, these bases may have a substitution interaction effect with each other to enhance pay-for-performance sensitivity (Figure 8b). Similarly, outsiders' and insiders' structural power indicate a complementary interaction effect to suppress compensation and a substitution effect to increase pay-for-performance sensitivity. In regard to structural power, total compensation increases when insiders' structural power is present and outsiders' structural power is less present (Figure 8c). However, pay-for-performance increases both when outsiders' structural power is high and insiders' structural power is low and when outsiders' structural power is low and insiders' structural power is high (Figure 8d).

Overall, the significance of these interaction results suggests that understanding the implications of outsiders or insiders' power bases may depend on the degree to which the other group's power is present. However, these interactions vary as context changes, a scenario that we explore further in the following sections.

A summary of initial regression analyses based on this contextual theoretical framework is presented in Table 15, and interaction effects based on supplementary regression analyses are provided in Table 16.

6.2. Ownership, Prestige, and Structural Power Implications

6.2.1. Ownership Power is Relative: Context and Incentive Alignment

Ownership power is relative, such that the relationship between outsiders' ownership power and monitoring effectiveness depends on the firm's context and the degree of insiders' ownership power. CEOs may not perceive outsiders' ownership power as a threatening monitoring source of control (Finkelstein, 1992), which may explain why ownership power was not significantly associated with pay for performance in the main model (e.g., without context). Finkelstein (1992) found that of the three powers, ownership, structural, and prestige, ownership power was the least correlated with perceived power and hypothesized that TMT members did not perceive other TMT members with ownership power as actively participating in the process to influence decisions. However, although ownership power is not significantly associated with pay for performance in my main analysis, my supplementary analysis lends support to the idea that the relationship between a board's ownership base and monitoring is contextual, and specifically, based not only on environmental, firm, board, and CEO characteristics but also on the degree of insiders' ownership power. When insiders' ownership power is high, managerial incentives are aligned, which decreases the need for board monitoring that is associated with high outsiders' ownership power.

6.2.1.1. *Ownership Power and Environmental Characteristics: Government Regulation and World Events*

First, environmental conditions such as government regulation and world events affect how ownership power and monitoring are related. My findings indicate that a substitution effect takes place if we examine pre- and post-SOX, such that outsiders' and insiders' ownership power substitute for each other to suppress compensation pre-SOX and pre-WTC attacks. During the pre-SOX period, total compensation is suppressed both when outsiders' ownership power is high and insiders' ownership power is low and when outsiders' ownership power is low and insiders' ownership power is high, indicating a substitution effect (Figure Z-9a). However, increased regulatory oversight during the post-SOX era results in a positive association between outsiders' ownership power and pay for performance, such that pay for performance increases when outsiders' ownership power is high and insiders' ownership power is low (Figure Z-9b). Before the WTC attacks, a substitution interaction effect exists such that total compensation is suppressed both when outsiders' ownership power is high and insiders' ownership power is low and when outsiders' ownership power is low and insiders' ownership power is high (Figure Z-10).

6.2.1.2. *Ownership Power and Firm Characteristics: Firm Size*

Second, firm characteristics affect the relationship differently such that outsiders' and insiders' ownership power substitute for each other to suppress compensation and enhance PPS in large firms, but not in smaller firms. We find that total compensation is suppressed when outsiders' ownership power is high and insiders' power is low, as well as when insiders' power is high and outsiders' power is low (Figure Z-12a). Pay-for-performance sensitivity is enhanced

both when outsiders' ownership power is low and insiders' ownership power is high and when outsider ownership power is high and insiders' ownership power is low (Figure Z-12b).

6.2.1.3. *Ownership Power and Board Characteristics: Board Independence*

Third, board characteristics affect this relationship because outsiders' and insiders' ownership power substitute for each other to suppress compensation and improve PPS when a larger proportion of the board are outsiders. When outsiders are more present, these power bases interact to have a substitution effect with total compensation; total compensation is suppressed both when outsiders' ownership power is high and insiders' ownership power is low and when outsiders' ownership power is low and insiders' ownership power is high (Figure Z-13a).

Similarly, pay for performance is higher both when outsiders' ownership power is high and insiders' ownership power is low and when outsiders' ownership power is low and insiders' ownership power is high (Figure Z-13b).

6.2.1.4. *Ownership Power and CEO Characteristics: CEO Tenure*

Finally, CEO characteristics affect this relationship because outsiders' and insiders' ownership power substitute for each other to suppress compensation and enhance pay-for-performance sensitivity when CEO tenure is lower. When CEO tenure is low, these power bases interact to create a substitution effect to affect total compensation; total compensation is suppressed both when outsiders' ownership power is high and insiders' ownership power is low and when outsiders' ownership power is low and insiders' ownership power is high (Figure Z-14a). However, pay-for-performance sensitivity is enhanced when outsiders' ownership power is low and insiders' ownership power is high (Figure Z-14b).

Why then does ownership have this effect when CEO tenure is low but not high? When managerial entrenchment is less present, as in the case of lower CEO tenure, managers may take risks that may or may not benefit the firm financially at the beginning of their career, whereas managers may take fewer risks that result in average firm performance, similar to industry norms, as CEO tenure increases (Finkelstein & Hambrick, 1990); thus, board monitoring is needed and can have a significant influence at lesser degrees of tenure than when tenure increases. Caution, knowledge regarding industrial norms, and a tendency to conform to the firm's strategic direction increase with tenure (Finkelstein & Hambrick, 1990), thus aligning managerial interests, motivating managers to make more profitable decisions, and reducing the need for powerful outsiders with ownership power to monitor. Boards in which outsiders hold more ownership power than insiders have a greater investment in a firm's financial success because of their interest alignment with shareholders (Chhaochharia & Grinstein, 2009). As outsiders' ownership power increases relative to insiders' ownership power and managers are less entrenched, monitoring effectiveness improves because outsiders' incentives to monitor increases at a time when CEOs may be less effective in manipulating the board. As outsiders' ownership power increases relative to insiders' power when managerial entrenchment is more present, the board's monitoring effectiveness may be compromised because they are subject to potential manipulation by the CEO. CEOs have more managerial discretion that comes with increased tenure and advanced firm-specific knowledge, thus increasing board costs to terminate the CEO and weakening monitoring effectiveness (Shleifer & Vishny, 1989; Arthur, 2001).

6.2.2. Prestige Power and the Reputation Incentive Effect

6.2.2.1. The Main Effects of Prestige Power

Board prestige power increases as the perception of a board member's reputation as an effective board monitor increases outside the firm. My findings indicate that board prestige power is positively associated with pay for performance because board members' motivation to protect their reputation as effective monitors potentially increases (Fama & Jensen, 1983). Therefore, I refer to the relationship between board prestige power and monitoring as the reputation incentive effect.

Specifically, I find that as outsiders' prestige power increases relative to insiders' prestige power, monitoring effectiveness improves, as demonstrated by a positive association with pay-for-performance sensitivity; however, pay also increases. CEOs may be paid more to incentivize them to take risks that benefit shareholders. Moreover, this finding that outsiders are associated with increased pay is consistent with the previous literature (e.g., Boyd, 1994; Lambert et. al., 1993). However, my findings also indicate that the increased pay associated with prestige power also correlates to monitoring improvements because pay-for-performance sensitivity increases.

Despite the positive implications of reputational incentives, monitoring can be inhibited when insiders also become members of this elite group, as well as when prestige results in increased board responsibilities. When both outsiders and insiders are part of an elite group, they may possess a loyalty to each other and therefore outsiders may become less effective monitors. Further, as outsiders become more prestigiously powerful, the time that board members must spend on monitoring the focal firm may decrease. In studying the way in which participation on multiple boards influences bank risk, Cooper & Uzun (2012) examined the reputation versus busyness hypothesis, finding support for the busyness hypothesis. Specifically, bank boards whose members are on more boards have increased risk compared to boards with less busy directors.

6.2.2.2. The Contextual Implications of Prestige Power

Prestige power is contextual because the relationship between outsiders' prestige power and monitoring effectiveness depends on the firm's context and the degree of insiders' prestige power. I find that government regulation, world events, firm size, firm performance, the degree of board independence, board size, CEO tenure, and the level of CEO equity alignment affects this relationship.

6.2.2.2.1. Prestige Power and Environmental Characteristics: Government Regulation and World Events

First, government regulations such as SOX are relevant when examining how prestige power affects board monitoring. The ratio of outsiders' to insiders' prestige power is positively associated with total compensation pre-SOX but not post-SOX. Why, then, is the ratio of the outsiders' to insiders' prestige power positively associated with total compensation and pay-for-performance sensitivity pre-SOX but not post-SOX? Public accountability associated with the post-SOX era motivated prestigiously powerful directors to make sure that compensation packages were not excessive. Boards reduced the incentive-based, contingent compensation that forced managers to accept risk after SOX and increased the salary proportion (Cohen, Dey, & Lys, 2004). I can speculate that the prestige power of outsiders had a significant effect pre-SOX because the contingent-based proportion of executive pay, combined with the board's motivation to protect its reputation, may have incentivized boards to monitor. However, as the structure of the pay package changed post-SOX, the immediate years following SOX may reflect less of an association between prestige power and pay for performance. Further, the interaction regression

analyses indicate that outsiders' and insiders' prestige power bases create a complementary effect pre-SOX with total compensation and a substitution effect post-SOX with pay-for-performance sensitivity. Total compensation during the pre-SOX period is suppressed when both outsiders' and insiders' prestige power bases are high (Figure AA-15a). Before and after SOX, pay for performance increases both when outsiders' prestige power is high and insiders' prestige power is low and when outsiders' prestige power is low and insiders' prestige power is high (Figure AA-15b).

Similarly, we find that the relationship between prestige power and monitoring effectiveness changed as world events such as the World Trade Center attacks of 2001 affected the economy. We find that the ratio of outsiders' to insiders' prestige power is positively associated with total compensation and pay-for-performance sensitivity before the attacks but not after the attacks. Further, outsiders' and insiders' prestige power interacted similarly pre- and post-WTC. Supplementary analyses indicate that a complementary interaction effect existed because total compensation was suppressed when both outsiders' and insiders' prestige power was high (Figure z-16a). However, a substitution effect existed in regards to pay for performance because pay for performance increased both when outsiders' prestige power was high and insiders' prestige power was low and when outsiders' prestige power was low and insiders' prestige power was high (Figure Z-16b).⁵

6.2.2.2.2. *Prestige Power and Firm Characteristics: Firm Size and Performance*

⁵ Although not present with the fixed-effects model, the random-effects regression model found that when industry pressures are present, outsiders' and insiders' prestige power bases interact with each other in such a way to create a complimentary effect in suppressing compensation (Figure AA-17a), but a substitution effect with pay-for-performance, such that pay-for-performance increases both when outsiders' prestige power is high and insiders' prestige power is low and when outsiders' prestige power is low and insiders' prestige power is high (Figure AA-17b).

Secondly, firm characteristics such as firm size and performance influence how prestige power affects monitoring effectiveness. The results indicate that the ratio of outsiders' to insiders' prestige power was positively associated with pay-for-performance sensitivity in smaller firms but not in larger firms, illustrating that board members, such as CEOs, may be more influential in smaller companies than in larger companies (Jensen and Murphy, 1990). Interestingly, however, larger firms are affected by the interaction between outsiders' and insiders' prestige power bases. Outsiders' and insiders' prestige power bases interact in a complementary way to suppress compensation in both smaller and larger firms (Figure AA-18a). However, these bases substitute for each other to enhance pay for performance in larger firms; i.e., pay-for-performance sensitivity increases both when the average outsiders' prestige power is high and the average insiders' prestige power is low and when the average outsiders' prestige power is low and the average insiders' prestige power is high (Figures AA-18b).

Firm performance is relevant to prestige power. The ratio of outsiders' to insiders' prestige power is positively associated with pay-for-performance sensitivity in high-performing firms rather than lower-performing firms. Supplemental analyses reveal that better firm performance also affects the interaction of outsiders' and insiders' prestige power bases to create a substitution effect, such that pay-for-performance sensitivity improves when outsiders' prestige power is high and insiders' prestige power is low and when insiders' prestige power is low and outsiders' prestige power is high (Figure AA-19).

6.2.2.2.3. *Prestige Power and Board Characteristics: Board Size and Independence*

Thirdly, board characteristics such as board size and the degree of board independence affect how prestige power affects monitoring effectiveness. Larger boards may have more

prestigiously powerful outsiders, and the ratio of outsiders' to insiders' prestige power is positively associated with pay for performance on larger boards rather than smaller boards. Further, board size affects how outsiders' prestige power interacts with that of insiders, creating a substitution effect. Pay for performance is enhanced on larger boards both when outsiders' prestige power is high and insiders' prestige power is low and when outsiders' prestige power is low and insiders' prestige power is high (Figure AA-21a). Similarly, as the degree of board independence increases, we find that the ratio of outsiders' to insiders' prestige power is positively associated with pay for performance on boards with a larger presence of outsiders.

6.2.2.2.4. *Prestige Power and CEO Characteristics: CEO ownership and Tenure*

Fourth, CEO characteristics such as CEO ownership affect the way in which prestige power affects monitoring effectiveness. The ratio of outsiders' to insiders' prestige power is positively associated with total compensation and pay for performance when CEO incentives are more closely aligned. Further, the impact of this incentive alignment is reflected in how outsiders' and insiders' prestige power interact with each other to enhance pay for performance when outsiders' prestige power is high and insiders' prestige power is low (Figure AA-22a). Similarly, CEO tenure affects these power bases, such that more managerial entrenchment is associated with a substitution effect. Pay for performance is enhanced both when outsiders' prestige power is high and insiders' prestige power is low and when outsiders' prestige power is low and insiders' prestige power is high (Figure AA-23a).

6.2.3. Structural Power is Contextual

Structural power has implications regarding how the board's authoritative structure affects the unity of command, which affects monitoring effectiveness. When outsiders become more structurally powerful relative to insiders, the board's authoritative structure (e.g., the chairperson of a committee or the board) may become less concentrated in the hands of the CEO. Structurally powerful board members are more likely to be able to control the CEO to act in alignment with shareholder interests, although that control is somewhat limited. When board outsiders are structurally powerful to a lower degree, the CEO may still control some aspects of the board decision-making structure; consequently, potential problems with the decision-making structure of the board (e.g., who is in charge) may exist. As a result, total compensation and pay-for-performance sensitivity may decline. Firms whose leadership structure is characterized by a diffused decision-making structure or the lack of unity of command can inhibit clear, strong, decision making by the CEO, thus threatening a firm's performance (Miller & Friesen, 1977). Although boards may be subject to manipulation by the CEO, CEO duality conveys a unity of command, "establishing clear lines of authority and responsibility within the firm, helping to avoid confusion among top managers as to who is the boss, (and) facilitating effective decision making" (Finkelstein & D'Aveni, 1994, p. 1083). When decision-making structures are unclear, communication may become more complex and assumptions may be made, such that board members may prefer to avoid conflict threatening effective governance (Jensen, 1993). As outsiders become more structurally powerful at a higher degree, the potential increases for non-CEOs to chair the board and committees. This scenario makes it clear that outsiders control relevant aspects of the board's decision-making structure, positively influencing pay for

performance. When insiders are less powerful, they are in a reduced position to sabotage the control of discussion topics within the board.

Although the ratio of outsiders' to insiders' structural power was not significantly associated with total compensation or pay-for-performance sensitivity, in our main models the supplemental analyses indicate that contextual conditions affect the relationship between structural power and monitoring.

6.2.3.1. Structural Power and Environmental Characteristics: Government Regulation, World Events, and Industry Forces

Environmental characteristics, including government regulation, world events, and industry forces, affect the relationship between structural power and monitoring effectiveness. First, government regulations such as SOX legitimized specific board structural characteristics, thus affecting monitoring. I find that the impact of outsiders' structural power depends on the degree of insiders' structural power present on the board. Specifically, before SOX, I find that outsiders' and insiders' structural power complement each other to suppress compensation (Figure BB-24a). However, after SOX, these power sources substitute for each other to improve pay-for-performance sensitivity both when outsiders' structural power is high and insiders' structural power is low and when outsiders' structural power is low and insiders' structural power is high (Figure BB-24b).

World events such as the World Trade Center attacks affected the impact of structural power. We find that the ratio of outsiders' to insiders' structural power is positively associated with total compensation and pay for performance before the attacks but not after the attacks. In examining interaction effects, I find that outsiders' and insiders' structural power bases interact

with other in a complementary way to suppress compensation before the attacks (Figure BB-25a). Pay-for-performance sensitivity at that time improved both when outsiders' structural power is high and insiders' structural power is low and when outsiders' structural power is low and insiders' structural power is high (Figure BB-25b).

Industry forces are important in understanding the relationship between structural power and monitoring. Specifically, we find that the ratio of outsiders' to insiders' structural power is positively associated with total compensation when industry mimetic forces are not present. When industry mimetic forces are not in play, these results suggest that a substitution effect exists because pay-for-performance sensitivity is higher both when outsiders' structural power is high and insiders' structural power is low and when outsiders' structural power is low and insiders' structural power is high (Figure BB-26).⁶

6.2.3.2. *Structural Power and Firm Characteristics: Firm Size and Performance*

Secondly, I find that firm characteristics are relevant to understanding the way in which structural power affects the monitoring relationship. However, this impact is reflected in the analyses not of the ratio of outsiders' to insiders' structural power, but rather in their interaction. Firm characteristics affect the structural power of insiders, which affects how structurally powerful a board can be, thereby affecting monitoring. Firms that are smaller or less financially profitable result in outsiders' and insiders' structural power bases substituting for each other to improve pay for performance both when outsiders' structural power is high and insiders' structural power is low and when outsiders' structural power is low and insiders' structural power is high (Figures BB-28a and BB-28b).

⁶ Results for industry mimetic pressures are similar with the *random-effects* model (Figure BB-27).

6.2.3.3. *Structural Power and Board Characteristics: Board Size and Independence*

Board characteristics such as board size and board independence are relevant to understanding the relationship between power and monitoring. First, in line with previous research, we find that ineffectiveness associated with board size (e.g., Lipton & Lorsch, 1992) affects how structural power is related to monitoring. Smaller boards may be more easily manipulated by the CEO because the ratio of outsiders' to insiders' structural power is positively associated with total compensation in smaller boards. However, larger boards characterized by more conflict are negatively associated with pay for performance. Board size affects the structural power of both insiders and outsiders differently; therefore, we find insight in their interaction. When boards are larger, these power bases interact to have a complementary effect with total compensation. Total compensation is suppressed when both outsiders' and insiders' structural power is high (Figure BB-31a); structurally powerful outsiders and insiders may work together more efficiently and outsiders can hold insiders' more accountable. However, the way in which pay is structured on larger boards may affect incentive-based pay that is related to monitoring effectiveness so that a more passive monitoring approach is appropriate. When boards are larger, pay for performance is enhanced when insiders' structural power is high and outsiders' structural power is low (Figure BB-31b). Further research might consider how behavioral and contingent-based pay is structured on larger versus smaller boards with structurally powerful outsiders.

Second, board independence can affect the relationship between structural power and monitoring effectiveness by affecting the degree of structural power by outsiders and insiders. When boards have a larger number of outsiders, there may exist a point at which they are less involved in leadership roles because of time commitments; thus, the degree of independence may

compromise monitoring. When board independence increases, we find that that the ratio of outsiders' to insiders' structural power is negatively associated with pay-for-performance sensitivity. However, pay-for-performance is enhanced when insiders' structural power is high and outsiders' structural power is less present (Figure BB-30), further illustrating the importance of considering how the unity of command is related to monitoring in future research.

6.2.3.4. *Structural Power and CEO Characteristics: CEO Ownership and Tenure*

CEO characteristics such as CEO ownership and tenure affect the relationship between structural power and monitoring effectiveness. The ratio of outsiders' to insiders' structural power is positively associated with compensation when managerial incentives are not aligned, but is not significant when managerial incentives are aligned. The impact of managerial incentives is apparent in the interaction between outsiders' and insiders' structural power. When managerial incentive alignment is less present, these power bases interact to have a complementary effect with total compensation; total compensation is suppressed when both outsiders' and insiders' structural power is high (Figure BB-32a). When CEO ownership is higher, pay for performance is enhanced when insiders' structural power is high and outsiders' structural power is low (Figure BB-32b). When CEO tenure is lower, CEOs are paid more when outsiders' structural power is high and insiders' structural power is low; boards may try to incentivize CEOs to take risks earlier in their careers (Figure BB-33).

6.3. Theoretical Implications

In addition to my empirical findings, this study makes important theoretical contributions to research. Although the previous research finds no systematic differences in the relationship between board composition and firm performance (Dalton, Daily, Ellstrand, & Johnson, 1998), I

find that power bases influence outsiders and insiders differently in their monitoring effectiveness. This finding lends support to my theoretical framework that models board power by integrating agency and upper echelon theories, specifically by using board structural and compositional characteristics based in theory as proxy indicators for the potential for board members to become more powerful. Thus, the two key theoretical implications of my study are as follows: my theoretical and empirical modeling of board power bases and my theoretical and empirical extension of the role of context in studying board power.

6.3.1. The Theoretical and Empirical Modeling of Board Power Bases

My study supports the perspective of scholars who recommend using a multi-theoretical perspective (Daily et al., 2003) to examine how boardroom dynamics influence decision making (e.g., Pettigrew, 1992; Forbes and Milliken, 1999) because single theoretical perspectives limit our understanding of how composition affects performance (Dalton et al., 1998). More specifically, this study supports scholars who argue that research should look more in depth to the characteristics of the monitors to understand their ramifications on monitoring (e.g., Dharwadkar et al., 2008). This integrated agency–upper echelon theoretical model of power creates a foundation for considering power as related to the behavioral view of the firm, which suggests that decision making is rational but affected by cognitive characteristics and limitations (Simon, 1947; March and Simon, 1958; and Cyert and March, 1963). In this paper, the theoretical contributions of my study are examined in terms of the conceptualization and measurement of board ownership, prestige, and structural power, of how board power affects monitoring, and of how the monitoring and decision-making process affects executive compensation.

First, my study and its findings lend support to theoretically conceptualized board power bases using board structural and compositional characteristics as proxy indicators. Ownership power is conceptualized and empirically validated using equity differences between the director and the CEO; equity by members of the compensation and nomination committee; and, equity ownership by those who were not founders, employed by the firm, or related to the CEO. Prestige power was conceptualized and empirically validated using the quantity and quality of board experiences as proxy indicators: accumulated board seats, S&P credit ratings of boards on which the focal member served, experience on boards that reduced total compensation, and experience on boards that increased board independence. Structural power was conceptualized and empirically validated using board hierarchical authority rankings, overlapping committee membership, and seniority on the compensation and nomination committees.

Second, my study demonstrates that board power bases should be considered when assessing monitoring effectiveness. Board power bases affect monitoring and compensation decisions because their presence increases the likelihood that the focal board member will be able to influence decisions that increase control over the CEO and positively influence pay-for-performance sensitivity. As my findings suggest, powerful outside owners make decisions that are aligned with shareholder interests when CEOs have less bargaining power, as in the case of lower degrees of CEO tenure. As board members become more prestigiously powerful, their reputations as effective monitors outside the firm increase, potentially increasing their motivation to monitor the CEO of the focal firm to protect this reputation; consequently, pay-for-performance sensitivity improves. As boards become structurally more powerful, pay for performance changes as the context changes.

Third, my study demonstrates that an integrated agency and upper echelon theory can be used to model board power that can be examined in the corporate governance context. My research is supported by agency theory in demonstrating that resolutions of the agency conflict vary based on board structural characteristics, how board members are classified, and how board characteristics affect a board's motivation to monitor. In addition, my research is supported by upper echelon theory in demonstrating that the characteristics of board members, such as affiliation, ownership, tenure and experience, affect decisions differently. Pay for performance improves as the power of outsiders—who are often described as having less internal firm information and employment risk—increases relative to the power of insiders; however, that effect is contextual, depending on ownership, prestige, and structural power bases.

Fourth, my study and its findings suggest that compensation and monitoring decisions are contextual, depending on the board's structural and compositional characteristics. Although human motivation at times can be predictable, at others times it cannot. As my study demonstrates, powerful independent directors are associated with increased pay for performance to compensate CEOs for increased risk (e.g., Conyon and Peck, 1998).

Finally, and more interestingly, these findings reflect the theoretical arguments of French and Raven (1959) and Raven and French (1958) that board prestige power represents a type of reward power, board ownership represents a type of coercive power, and structural power represents a type of legitimate power. First, ownership power may represent a form of coercive power that occurs when the CEO, the subordinate, perceives that the board, the superior, can punish him or her (French & Raven, 1958). Ownership power is associated with reduced pay because outsiders were structurally powerful to some extent and managers were less entrenched. In addition, when CEOs are less entrenched and in the presence of outsiders who are powerful in

terms of their ownership power base, the CEO is aware that the board can exert public influence or pressure on the CEO by virtue of their control of equity decisions and information via their control over proxies and influence in shareholder meetings. Second, prestige power may represent a form of reward power, occurring when the CEO perceives that the board, the superior, can mediate rewards for him or her (French & Raven, 1958). Prestige power is associated with increased pay and pay for performance as outsiders become more prestigiously powerful; thus, prestige power represents a type of reward power that is more passive yet effective with less behavioral-based compensation and more outcome-based compensation. Finally, structural power may represent a type of legitimate power that is associated with having recognized authority over the decision-making structures of an organization (French & Raven, 1958). We observed that our findings changed given the implications of government regulation (e.g., SOX) that legitimized board structural characteristics; however, the impact of outsiders' structural power depends on the degree of insiders' structural power present.

6.4. Board Power Theoretical Framework Extension: Different Organizational Outcomes

6.4.1. The Type of Compensation Contract: Short-Term vs. Long-Term

Different monitoring approaches by powerful outsiders and insiders are also apparent in the type of compensation contract that is preferred. When boards are able to monitor management actively, they prefer to assign a behavioral-based compensation package (e.g., salary) rather than outcome-based compensation (e.g., incentive-based pay), an indicator of a passive monitoring approach (Eisenhardt, 1989).

Contingent compensation involving stock options aligns CEO interests with those of shareholders (Gomez-Mejia, 1994) and tends to increase in times of public scrutiny regarding

executive pay (Kuhnen & Niessen, 2012). As I previously suggested, prestige power increases as the reputation of a board member as an effective monitoring increases and as the quantity and quality of his/her experience as a board monitor changes. Although I find that a board characterized by prestigiously powerful outsiders relative to insiders may prefer a less active monitoring approach with an increased use of incentive-based pay, this approach is more associated with improved pay-for-performance sensitivity. Hence, although risk is transferred to the agent, a prestigious board may be more aware that they are transferring some degree to the agent; however, this decision appears to be effective because prestige power is positively associated with pay-for-performance sensitivity.

6.5. Future Research

This study of the multidimensional nature of board power presents a theoretical and empirical framework with which to extend corporate governance research. My theoretical and empirical approach to modeling board power provides a mechanism to examine how board power applies in other contexts. Moreover, because context is relevant to power implications, the potential exists to theoretically develop and empirically examine the additional power bases of boards. In addition, power implications vary based on temporal and cultural considerations and on the degree of discretion accorded to managers.

First, the potential exists to examine the implications of board power in other decision-making contexts, such as research and development investment decisions, that affect the firm's strategy and performance outcomes. Although research and development (R&D) investment, or "the degree to which a firm devotes its financial resources to research and development given its stock of resources" (Kor, 2006, p. 1082) can be profit-maximizing for shareholders, an inherent

agency conflict exists within management's R&D decisions because managers must assume employment risk associated with failed investment projects (Alchian & Demsetz, 1972). Consequently, managers may choose to limit R&D investments, thus requiring active monitoring (Kor, 2006). Although previous research has found that R&D investment is positively related to insiders on the board (e.g., Baysinger, Kosnik, and Turk, 1991; Hill and Snell, 1988), other research continues to examine when and whether outsiders will have a positive or negative impact on R&D intensity as predicted by agency theory (e.g., Kor, 2006). Because existing research has been inconclusive in explaining how board composition affects R&D investment differently across firms, I suggest that this board power model may provide some insight regarding the way in which power affects these decisions.

Second, future research may seek to explore additional board power bases and their implications on monitoring. Specifically, I suggest that the following two additional power bases may affect compensation: expertise power and referent power. Board expertise power increases knowledge that helps monitor managerial decision making involving potential financial consequences (Carpenter & Westphal, 2001; Westphal, 1999). Law, finance, and accounting knowledge is relevant to monitoring profitability outcomes and the effective use of firm resources, whereas business knowledge associated with broad management expertise is relevant to understanding the array of options that CEOs face in making their decisions. Similarly, referent power, a scenario in which the follower identifies with the leader, increases the potential for the follower (e.g., the CEO) to assume attitudes, beliefs or behaviors possessed by the leader (French & Raven, 1959). Executive characteristics, such as an individual's age, ethnicity, functional background, or educational background, influence the decision-making process (Hambrick and Mason, 1984). New directors are demographically similar to the CEO when the

CEO is more powerful and are similar to the existing board when the board is more powerful (Westphal & Zajac, 1995). Because directors' identities shape the way in which they identify with the board and the CEO (Hillman, Nicholson, & Shropshire, 2008), their identities influence compensation (Westphal & Zajac, 1997). Westphal & Zajac (1995) found that when CEOs are powerful, directors appointed during their tenure are more demographically similar to them; consequently, this demographic similarity between the CEO and the newly appointed board members is associated with increased compensation. Age is associated with decisions, such that compensation committee members who are less than 65 years old are associated with increased compensation (Main et al., 1995).

Third, future research may want to consider how cultural context moderates the relationship between these board power bases and their compensation effects. Cultural context is relevant to the decision-making process. Cultural values and wealth characteristics affect the way in which decision makers evaluate problems and solutions (Brechin, 1999) and can moderate power implications. Geographically, the effectiveness of governance mechanisms differs between developed and emerging economies (Dharwadkar, George, & Brandes, 2000), which affects compensation differently (Su, Li, & Li, 2010). Similarly, research on diversity has been inconclusive regarding the relationship between board diversity and firm value. Although Shrader, Blackburn, & Iles (1997) find that women are associated with increased firm value, Zahra & Stanton (1988) did not find any significant relationship. Carter et al. (2003) find that as the percentage of insiders increases on the board, the presence of women and ethnic minorities decreases, suggesting that more outsiders on the board are associated with greater diversity. Some scholars find board diversity to be associated with "less insular decision making" and

change (Westphal & Milton, 2000), whereas other scholars find board diversity to be associated with more conflict (Clegg, 1990).

Fourth, future research may consider how temporal patterns affect the relationship between power and monitoring outcomes. MacAvoy & Millstein (1999) found that timing is relevant for considering when, what, and how outsiders will affect outcomes. Research on boards should consider using a greater than one-year time lag when examining board compensation decisions and their effects on performance (Daily, 1996; Daily & Dalton, 1994).

Fifth, future research may consider the type of knowledge that is passed among board social networks. These networks influence firm decisions, such that firms may mimic the behavior of other firms within an industry to gain organizational legitimacy (DiMaggio & Powell, 1983). More importantly, board interlocks affect compensation decisions. For example, executive compensation increases as board member interlocks with firms that have highly paid CEOs increase (Hallock, 1997). For example, Davis (1991) found that the adoption of poison pills increased as boards were interlocked with boards of other firms. Board characteristics, such as whether executives and non-executives sit on each other's compensation committees, compromise monitoring effectiveness (Ezzamel & Watson, 1997).

Finally, future research may want to consider how the degree of discretion afforded to managers affects the relationship between monitoring and outcomes. Finkelstein & Boyd (1998) found that as managerial discretion increases, as in the case of increased competition and uncertainty, boards may have to pay managers for their willingness to accept increased risk. Similarly, Finkelstein & Hambrick (1990) found that the relationship between TMT tenure and strategic persistence varied based on the level of managerial discretion. Because the relationship between tenure and decision making varies based on discretion and because I found that the

relationship between ownership power and monitoring effectiveness differs when CEO tenure is more or less present, I anticipate that the level of managerial discretion increases environmental uncertainty and may afford managers increased power to influence outcomes, thus affecting monitoring effectiveness.

6.6. Limitations

First, some limitations I note in my study concern the development of my power constructs. While my analysis demonstrates that the variables I use as proxy indicators for board power are valid in measuring board power base constructs, there may be alternative measurements for these same concepts. For example, board members who have been CEO's may increase the board's prestige power because CEOs are considered members of the managerial elite (Giddens, 1972). By changing examining board compensation in terms of stock ownership, we may learn how incentive-based compensation affects directors differently. Further, other factors may moderate the impact of power on compensation, such as SOX's requirement for non-management directors to meet without management (Chhaochharia & Grinstein, 2009).

Secondly, my study is limited in that I do not have access to the cognitive processes that individual directors use to frame their decisions. Evaluating performance of individuals is a complex process requiring skill sets specific to the type of performance evaluated (Lee & Gillen, 1989). Monitoring involves using specific data points to arrive at a decision, and then developing alternatives based on how boards processed that information; therefore, understanding cognitive processes is key to assessing monitoring effectiveness (Lerch & Harter, 2001). Wowak and Hambrick (2010) explain that incentive-based pay impacts performance

depends on the CEO's individual-level attributes (e.g., executive motives and drives, cognitive frame, and self-confidence), arguing that incentive-based pay will enhance performance of executives who are "more talented", and decrease performance of those with less ability (p. 803).

Third, my study is limited in that it does not consider specific types of information (internal and external to the firm) or how they flow within the board to affect compensation. External information and information control relevant to monitoring includes knowledge about environmental limitations that inhibit the firm's strategy implementation (Hrebiniak & Joyce, 1985), regulations affecting managerial discretion (Hambrick & Finkelstein, 1987), institutional forces and isomorphism (DiMaggio & Powell, 1983), risk in the firm's task environment (Finkelstein & Boyd, 1998), and compensation of peer groups (Conyon, Peck, & Sadler, 2009). This information is only as powerful as the board member's ability to control its flow internally with firm executives and with other board members. Similarly, the external context effects the flow of information, such that powerful board members will communicate information with other board members about resources available externally, as well as will communicate information with external constituencies about firm operations.

Fourth, how outsiders and insiders are defined and the degree to which they are present on the board may limit my results. Research has inconsistently defined the two (Zajac & Westphal, 1996); rather, there may be degrees of "insiderness" and "outsiders" particularly with top management team members (Finkelstein & Hambrick, 1996). The percentage of outsiders and insiders on the board may influence the degree to which they have power implications because board classification is associated with board structure and composition. Audit committee independence is positively associated with board size and the percentage of outsiders on the

board, and decreases with the “firm’s growth opportunities, when the firm experiences two or more consecutive losses, and in the presence of alternate monitoring mechanisms (Klein, 2002).”

Finally, my study is limited by some concerns with endogeneity, particularly omitted variable bias. Specifically, I do not consider here how CEO’s may interpersonally manipulate boards to taper their powerful influence over them. CEOs protect and enhance their power base by blaming others for poor performance (Walsh & Seward, 1990), by ingratiation behavior toward outsiders (Westphal, 1998), separating themselves from directors who challenge them (Westphal & Khanna, 2003), and/or by making it appear they are acting as directors want them to act when they are not actually doing that (Westphal and Zajac, 1994, 1998, 2001). Compensation can affect board structure and compensation, which then can affect board structure.

CHAPTER 7. Conclusion

Board power cannot be considered as an uni-dimensional construct in isolation; rather, it is a multi-dimensional construct with implications that vary as board structural and composition characteristics change, thus affecting the potential for the board to control the CEO to act in alignment with shareholder interests. Powerful board members have the capacity to enhance pay-for-performance sensitivity.

While my main results indicate the necessity of examining board power as a multi-dimensional construct because the implication of board power for monitoring effectiveness change as board structural and composition characteristics change, my supplemental analysis indicates that power is relative and contextual. This study has provided preliminary evidence that outsiders and insiders differ in their monitoring because board power bases can potentially affect their approaches to compensation decisions differently. Specifically, I examine the power of outsiders and insiders' relative to each other, and find that prestigiously powerful board members tend to use a passive, yet effective monitoring approach as pay-for-performance improves when outsiders' prestige power increases relative to insiders. Although the ratios of outsiders' to insiders' ownership and structural power bases were insignificantly associated with pay-for-performance in my main model, I find that these relationships change as environmental, firm, board, and CEO contextual characteristics vary. Overall, this study provides a new conceptual and empirical framework to examine not only board power and monitoring effectiveness, but more interestingly, how this relationship varies as context changes.

TABLE 1. Theoretical Foundations for Board Monitoring, Power and Pay Decisions

| | AGENCY THEORY | UPPER ECHELON THEORY |
|---|--|--|
| ASSUMPTIONS | <p>Managers are self-interested and opportunistic.</p> <p>Principals and agents differ in their goals and risk preferences because managers are risk averse and shareholders are risk neutral.</p> <p>Principals and boards of directors are bounded by their rationality.</p> <p>Information asymmetry exists between managers and boards.</p> <p>Managers will act opportunistically unless monitored.</p> | <p>Managerial characteristics reflect the firm's internal and external contexts.</p> <p>Background characteristics (e.g., demographics, age, tenure, functional background, education, socioeconomic roots, and financial position) reflect values and cognitive bases of the decision-makers, and can predict strategic decisions and outcomes,</p> |
| FOUNDATIONS | Economics (Jensen & Meckling, 1976) | Management (Hambrick & Mason, 1984) |
| UNIT OF ANALYSIS | The contract between agent and principal | Top management team as a dominant coalition |
| RESEARCH FOCUS | How the agency conflict develops, impacts performance, and is resolved through monitoring and incentive alignment. | How top managers influence strategic decisions and outcomes |
| KEY FACTORS RELEVANT TO MONITORING | <p>Information asymmetry between CEO and board inhibits monitoring effectiveness.</p> <p>Manager (agent) makes decisions that differ from shareholders (principals) in terms of goal interests and risk-preferences. Boards make incentive and monitoring decisions that align managerial and shareholder interests.</p> | <p>Background characteristics affect how the board monitors managers.</p> <p>Managers and boards make decisions with a behavioral element (e.g., reward systems and structure) that are key components of the monitoring process.</p> |
| FACTORS RELEVANT TO A POWER MODEL IN CONTEXT OF PAY | <p>Board structural components affect board's influence in executive compensation decisions.</p> <p>Boards have the potential to influence pay decisions that are associated with pay-for-performance.</p> <p>Optimal contracting to minimize uncertainty.</p> | Board composition and demographic characteristics influence pay decisions. |
| FACTORS NOT CONSIDERED FOR A POWER MODEL IN CONTEXT OF PAY | Situation when managers act in ways that do not benefit their self-interest. | <p>Demographic indicators are more complex in meaning than what they represent (e.g., person's educational background can also reflect socio-economic background)</p> <p>Limitations in researching causality: executives not randomly hired, limiting variance in executive characteristics within industries.</p> |

TABLE 2. Comparing and Contrasting Power Frameworks Relevant to Board Monitoring

| | BOYD (1994) | FINKELSTEIN (1992) | FRENCH & RAVEN (1959); RAVEN (1990) | LEBRÓN (2012) |
|-------------------------------|--------------------------------------|--|--|---|
| THEORETICAL FOUNDATION | Agency theory | Agency theory | Social Psychology perspective Political perspective | Agency theory Upper echelon theory Socio-political perspective |
| UNIT OF ANALYSIS | Board of directors | Top management team | Individual or group | Board of directors |
| OBJECTIVE | Control the CEO ³ | Control board of directors Reduce managerial risk and uncertainty | Psychological change | Control the CEO |
| POWER DEFINITION | Board control of CEO | Capacity of top management team members to exert their will | Influencing psychological change (behavior, opinions, attitudes, goals, needs, and values) | Capacity of the board to compel CEO to act in alignment with shareholder interests |
| KEY DECISIONS | Executive compensation | Strategic decisions (e.g., diversification) | Required level of monitoring of subordinate Reward or punishment decisions | Required level of monitoring of subordinate Executive compensation decisions |
| DIMENSIONS | Uni-dimensional | Multi-dimensional | Multi-dimensional | Multi-dimensional |
| RESEARCH CONTRIBUTION | Control model of CEO/board relations | Multi-dimensional model of top management team power | Social power bases | Multi-dimensional model of board of directors' power |

| | BOYD (1994) | FINKELSTEIN (1992) | FRENCH & RAVEN (1959); RAVEN (1990) | LEBRÓN (2012) |
|---------------------|--|---|---|--|
| CONSTRUCTS | Board control | <p>Top Management Team Power Bases:</p> <p>Structural: formal organizational structure and hierarchical authority, increasing management of uncertainty</p> <p>Ownership: “strength of manager’s position in the agent-principal relationship”</p> <p>Prestige: “status”; manager’s reputation in the institutional environment</p> <p>Expert: “ability to deal with environmental dependencies”</p> | <p>Social Power Bases:</p> <p>Legitimate: legitimate right; structural relationship</p> <p>Expert: knowledge</p> <p>Coercive: mediate punishments</p> <p>Reward: mediate rewards</p> <p>Referent: identification</p> <p>Informational: information relevant to decision</p> | <p>Board Social Power Bases</p> <p>Structural: Hierarchical decision-making authority increasing board’s control over the CEO</p> <p>Ownership: strength of the board member’s position in the agent-principal relationship; capacity to influence equity decisions</p> <p>Prestige: board member’s reputation outside the firm.</p> |
| CONSEQUENCES | <p>Increases board’s monitoring effectiveness</p> <p>Reduces informational uncertainty</p> <p>Reduces managerial opportunism</p> <p>Reduces excessive executive compensation</p> | <p>Increases executive’s control over the board</p> <p>Reduces informational uncertainty</p> <p>Reduces managerial risk</p> | <p>Expert power: subordinate accepts that superior knows best</p> <p>Legitimate power: less monitoring over subordinate needed.</p> <p>Coercive power: increased monitoring over subordinate needed</p> <p>Reward power: positive outcomes with limited monitoring needed.</p> <p>Referent power: subordinate and superior see goals similarly</p> <p>Informational power: more trust; less monitoring over subordinate needed.</p> | <p>Increases board’s control of CEO</p> <p>Increases pay-for-performance sensitivity</p> <p>Ownership power: Increases board control over equity decisions</p> <p>Prestige power: Incentivizes board member to be an active monitor to protect reputation.</p> <p>Structural power: CEO accepts board’s decision making authority as legitimate.</p> |

TABLE 3. Board Power Bases

| POWER BASE | STRUCTURAL POWER | OWNERSHIP | PRESTIGE POWER |
|----------------------------|--|--|---|
| DEFINITION | Hierarchical decision-making authority recognized by other board members, increasing board member's control over executive compensation decisions; organizational position factors in the decision-making process. | Strength of the board member's position in the agent-principal relationship; board member has capacity to influence equity decisions. | Board member's reputation outside the firm as an active monitor of the CEO. |
| AGENCY CONFLICT RESOLUTION | Potentially increases board member control over decisions on the board, thus, limiting potential manipulation by the CEO of compensation decision. | Potentially increases alignment of board interests with those of shareholders, thus potentially increasing monitoring that benefits shareholder profit-maximizing goals. | Potentially increases board motivation to monitor to protect reputation as an active, effective monitor of the CEO. |

TABLE 4. Board Power - Principal Components Factor Analysis, Promax Rotation

| VARIABLES | FACTOR 1: STRUCTURAL POWER | FACTOR 2: OWNERSHIP POWER | FACTOR 3: PRESTIGE POWER |
|--|---|--|---|
| <i>Overlapping committee membership</i> | 0.8190 | -0.0396 | 0.0316 |
| <i>Compensation committee seniority</i> | 0.8065 | 0.0156 | -0.0089 |
| <i>Nomination committee seniority</i> | 0.6333 | 0.0506 | -0.0482 |
| <i>Board hierarchical authority</i> | 0.6384 | -0.0310 | -0.0097 |
| <i>Not related, founder, employee ownership</i> | -0.0245 | 0.8163 | 0.0101 |
| <i>Compensation committee ownership</i> | 0.0828 | 0.7656 | 0.0166 |
| <i>Nomination committee ownership</i> | 0.0507 | 0.6667 | 0.0127 |
| <i>Difference between director ownership & CEO ownership</i> | -0.1163 | 0.6257 | -0.0440 |
| <i>Accumulated board seats</i> | 0.0875 | 0.0033 | 0.7818 |
| <i>S&P credit rating</i> | -0.0687 | 0.0115 | 0.7063 |
| <i>Board experience increasing board independence</i> | -0.0227 | -0.0018 | 0.6674 |
| <i>Board experience decreasing executive compensation</i> | -0.0263 | -0.0159 | 0.6476 |
| Variance Explained | 2.19 | 2.10 | 2.00 |
| Proportional | 0.1827 | 0.1750 | 0.1669 |
| Cumulative | | 0.3577 | 0.5246 |

N=37,066 observations

TABLE 5. Board Power - Principal Factor Analysis, Promax Rotation

| Variables | Factor 1: Structural Power | Factor 2: Ownership Power | Factor 3: Prestige Power |
|--|---------------------------------------|--------------------------------------|-------------------------------------|
| <i>Overlapping committee membership</i> | 0.7344 | -0.0385 | 0.0180 |
| <i>Compensation committee seniority</i> | 0.7228 | 0.0128 | -0.0189 |
| <i>Nomination committee seniority</i> | 0.4739 | 0.0383 | -0.0287 |
| <i>Board hierarchical authority</i> | 0.4682 | -0.0168 | 0.0006 |
| <i>Not related, founder, employee ownership</i> | -0.0237 | 0.7017 | 0.0068 |
| <i>Compensation committee ownership</i> | 0.0691 | 0.6503 | 0.0112 |
| <i>Nomination committee ownership</i> | 0.0338 | 0.5104 | 0.0102 |
| <i>Difference between director ownership & CEO ownership</i> | -0.0831 | 0.4609 | -0.0368 |
| <i>Accumulated board seats</i> | 0.0631 | 0.0016 | 0.6523 |
| <i>S&P credit rating</i> | -0.0546 | 0.0077 | 0.5523 |
| <i>Board experience increasing board independence</i> | -0.0173 | -0.0034 | 0.4993 |
| <i>Board experience decreasing executive compensation</i> | -0.0177 | -0.0138 | 0.4762 |
| Variance Explained | 1.57 | 1.40 | 1.25 |
| Proportional | 0.4839 | 0.4334 | 0.3863 |

N=37,066observations

TABLE 6. Board Power Validity Measures

| Variables | Cronbach Alphas | Average Item-Scale Correlations | Average Inter-item Correlation |
|---|------------------------|--|---------------------------------------|
| Prestige Power <i>Accumulated board seats</i> <i>S&P credit rating</i> <i>Board experience increasing board independence</i> <i>Board experience decreasing executive compensation</i> | 0.6549 | 0.6331 | 0.3217 |
| Structural Power <i>Overlapping committee membership</i> <i>Compensation committee seniority</i> <i>Nomination committee seniority</i> <i>Board hierarchical authority</i> | 0.7029 | 0.7272 | 0.3717 |
| Ownership Power <i>Not related, founder, employee ownership</i> <i>Compensation committee ownership</i> <i>Nomination committee ownership</i> <i>Difference between director ownership & CEO ownership</i> | 0.6903 | 0.7200 | 0.3578 |

TABLE 7. Descriptive Statistics and Correlations of Items Measuring Power and Main Dependent Variables

| No. | Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----|----------------------------------|-------|-------|-----------|-----------|-----------|-----------|-----------|----------|----------|-----------|----------|----------|----------|
| 1 | Total Compensation (\$M) | 5.87 | 6.48 | 1 | | | | | | | | | | |
| 2 | Pay-for-performance Sensitivity | 1.27 | 2.52 | 0.054*** | 1.000 | | | | | | | | | |
| 3 | Salary Proportion | 24.64 | 18.62 | -0.570*** | 0.006 | 1.000 | | | | | | | | |
| 4 | Contingent Comp (LTIP + Bonus) | 43.11 | 25.84 | 0.243*** | 0.163*** | -0.500*** | 1.000 | | | | | | | |
| 5 | Contingent Comp (LTIP) | 55.04 | 24.93 | 0.360*** | 0.181*** | -0.544*** | 0.665*** | 1.000 | | | | | | |
| 6 | Compensation Own (%) | 0.13 | 1.39 | -0.034*** | 0.022*** | 0.038*** | -0.010* | -0.025*** | 1.000 | | | | | |
| 7 | Nomination Own (%) | 0.15 | 1.52 | -0.023*** | 0.027*** | 0.027*** | -0.014** | -0.027*** | 0.338*** | 1.000 | | | | |
| 8 | Dir-CEO Own diff (%) | -0.64 | 4.34 | 0.007 | -0.052*** | -0.052*** | 0.002 | 0.020*** | 0.273*** | 0.263*** | 1.000 | | | |
| 9 | Unrelated Owner (%) | 0.21 | 1.78 | -0.031*** | 0.033*** | 0.036*** | -0.017*** | -0.028*** | 0.552*** | 0.373*** | 0.348*** | 1.000 | | |
| 10 | Eff Bd Practice (TC) (%) | 9.14 | 14.67 | -0.027*** | 0.025*** | 0.046*** | -0.010+ | -0.002 | -0.005 | -0.010 + | -0.027*** | -0.011* | 1.000 | |
| 11 | Eff Bd Practice (Out) (%) | 8.93 | 15.91 | 0.002 | 0.009+ | -0.005 | 0.004 | 0.010+ | -0.003 | -0.005 | -0.017*** | -0.002 | 0.278*** | 1.000 |
| 12 | Accum Bd Seats (%) | 10.92 | 7.81 | -0.068*** | 0.147*** | 0.054*** | 0.024*** | 0.012* | 0.015** | 0.018*** | -0.033*** | -0.006 | 0.342*** | 0.373*** |
| 13 | SP Credit (%) | 10.92 | 7.38 | -0.071*** | 0.156*** | 0.058*** | 0.026*** | 0.012* | 0.016** | 0.018*** | -0.049*** | 0.003 | 0.247*** | 0.250*** |
| 14 | Compensation Committee Seniority | 1.80 | 1.25 | -0.008 | -0.033*** | 0.007 | 0.008 | -0.010+ | 0.145*** | 0.010 + | -0.033*** | 0.037*** | 0.033*** | 0.035*** |
| 15 | Nomination Committee Seniority | 1.79 | 1.32 | 0.028*** | -0.078*** | -0.035*** | -0.030*** | -0.009 | 0.020*** | 0.157*** | 0.029*** | 0.009+ | 0.008 | 0.022*** |
| 16 | Hierarchical Status | 45.49 | 28.14 | 0.015** | -0.040*** | -0.016** | -0.003 | 0.003 | 0.048*** | 0.036*** | -0.066*** | 0.009+ | 0.044*** | 0.049*** |
| 17 | Overlapping Membership | 1.32 | 0.56 | -0.013* | 0.010* | 0.009+ | 0.001 | -0.020*** | 0.066*** | 0.022*** | -0.064*** | 0.002 | 0.050*** | 0.046*** |

N = 37,066 firm-year observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 7 (cont'd). Descriptive Statistics and Correlations of Items Measuring Power and Main Dependent Variables

| No. | Variable | 12 | 13 | 14 | 15 | 16 | 17 |
|-----|-------------------------------------|----------|-----------|----------|----------|----------|----|
| 12 | Accum Bd Seats (%) | 1.000 | | | | | |
| 13 | SP Credit (%) | 0.441*** | 1.000 | | | | |
| 14 | Compensation Committee Seniority | 0.125*** | 0.002 | 1.000 | | | |
| 15 | Nomination Committee Seniority | 0.088*** | -0.025*** | 0.278*** | 1.000 | | |
| 16 | Hierarchical Status | 0.072*** | 0.007 | 0.340*** | 0.310*** | 1.000 | |
| 17 | Overlapping Membership | 0.139*** | 0.064*** | 0.636*** | 0.361*** | 0.306*** | 1 |

N= 37,066 observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 8. Descriptive Statistics and Correlations of Power Bases**Table 8a. Descriptive Statistics and Correlations of Power**

| No. | Variable | Mean | SD | 1 | 2 | 3 |
|-----|------------------|------|------|----------|----------|------|
| 1 | Ownership Power | 0.00 | 0.82 | 1.000 | | |
| 2 | Prestige Power | 0.00 | 0.79 | -0.013** | 1.000 | |
| 3 | Structural Power | 0.00 | 0.85 | 0.102*** | 0.226*** | 1.00 |

N = 37,066 observations⁷

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

Table 8b. Descriptive Statistics and Correlations of Outsiders' Power

| No. | Variable | Mean | SD | 1 | 2 | 3 |
|-----|------------------|-------|------|-----------|----------|-------|
| 1 | Ownership Power | -0.03 | 0.67 | 1.000 | | |
| 2 | Prestige Power | 0.05 | 0.82 | -0.027*** | 1.000 | |
| 3 | Structural Power | 0.24 | 0.85 | 0.078*** | 0.212*** | 1.000 |

N = 25, 551 observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

Table 8c. Descriptive Statistics and Correlations of Insiders' Power

| No. | Variable | Mean | SD | 1 | 2 | 3 |
|-----|------------------|-------|------|----------|----------|-------|
| 1 | Ownership Power | -0.05 | 0.48 | 1.000 | | |
| 2 | Prestige Power | -0.14 | 0.66 | 0.066*** | 1.000 | |
| 3 | Structural Power | -0.71 | 0.22 | 0.550*** | 0.303*** | 1.000 |

N = 6,914 observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

⁷ Of the 37, 066 observations in the sample, 25, 551 are outsiders, 6,914 are insiders, and 4, 601 are affiliated.

TABLE 9. Confirmatory Factor Analysis Loadings and Goodness-of-Fit Statistics

| Dimension | Variable | CFA (p-value) | Alpha (.60) | Max r _{xy} | X ² | RMSEA (≤.06 to .08) | CFI (≥ 0.95) | TLI (≥ 0.95) | SRMR (≤.08) | CD |
|------------|--|---------------|-------------|---------------------|----------------|---------------------|--------------|--------------|-------------|-------|
| Prestige | Board experience decreasing executive compensation | 0.46 (0.00) | 0.66 | 0.44 | 252 | 0.058 | 0.989 | 0.963 | 0.016 | 0.712 |
| | Board experience increasing board independence | 0.49 (0.00) | | | | | | | | |
| | Accumulated Board Seats | 0.77 (0.00) | | | | | | | | |
| | S&P Credit Rating | 0.56 (0.00) | | | | | | | | |
| Structural | Overlapping committee membership | 0.82 (0.00) | 0.70 | 0.63 | 1569 | 0.145 | 0.950 | 0.851 | 0.039 | 0.80 |
| | Compensation committee seniority | 0.77 (0.00) | | | | | | | | |
| | Nomination committee seniority | 0.43 (0.00) | | | | | | | | |
| | Board hierarchical authority | 0.42 (0.00) | | | | | | | | |
| Ownership | Difference b/t director ownership & CEO ownership | 0.44 (0.00) | 0.69 | 0.55 | 252 | 0.058 | 0.99 | 0.97 | 0.016 | 0.759 |
| | Compensation | 0.69 (0.00) | | | | | | | | |
| | Committee ownership | 0.49 (0.00) | | | | | | | | |
| | Nomination Committee ownership | 0.49 (0.00) | | | | | | | | |
| | Not related, founder, employee ownership | 0.79 (0.00) | | | | | | | | |
| 3-Factor | | | 0.60 | 0.63 | 5628 | 0.054 | 0.932 | 0.912 | 0.034 | 0.986 |

Note: Highest max r_{xy} in Finkelstein (1992) was 0.64 in structural power and 0.54 in ownership power
 Cutoff criteria for acceptance follows Schreiber, Stage, King, Nora, & Barlow (2006).

TABLE 10. Descriptive Statistics and Correlations of Variables in Regression Analysis

| No. Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|--------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 Total Compensation (\$M) | \$5.48 | \$6.12 | 1.000 | | | | | | | | | | |
| 2 Pay-for-performance Sensitivity | \$1.56 | \$3.04 | 0.095*** | 1.000 | | | | | | | | | |
| 3 Salary Proportion (%) | 25.43 | 19.35 | -0.565*** | -0.020 | 1.000 | | | | | | | | |
| 4 Contingent Compensation (LTIP + Bonus) | 55.70 | 25.25 | 0.258*** | 0.174*** | -0.523*** | 1.000 | | | | | | | |
| 5 Contingent Compensation (LTIP) | 43.73 | 26.42 | 0.360*** | 0.204*** | -0.553*** | 0.681*** | 1.000 | | | | | | |
| 6 Firm Size (assts)(\$B) | 5.92 | 12.45 | 0.332*** | -0.147*** | -0.193*** | 0.033* | 0.079*** | 1.000 | | | | | |
| 7 Market Growth | 1.63 | 1.55 | 0.255*** | 0.113*** | -0.208*** | 0.311*** | 0.306*** | -0.084*** | 1.000 | | | | |
| 8 Firm Performance | 4.09 | 10.09 | 0.140*** | -0.184*** | -0.152*** | 0.077*** | 0.047** | 0.012 | 0.324*** | 1.000 | | | |
| 9 Liquidity | 2.20 | 1.61 | -0.070*** | 0.246*** | 0.041* | 0.107*** | 0.119*** | -0.229*** | 0.270*** | -0.050** | 1.000 | | |
| 10 Leverage | 0.22 | 0.16 | 0.003 | -0.170*** | 0.003 | -0.137*** | -0.125*** | 0.165*** | -0.410*** | -0.161*** | -0.354*** | 1.000 | |
| 11 Risk | 0.52 | 0.20 | 0.055*** | -0.240*** | -0.039* | -0.158*** | -0.140*** | 0.229*** | -0.419*** | -0.131*** | -0.604*** | 0.793*** | 1.000 |
| 12 Institutional Ownership (%) | 68.59 | 17.58 | 0.040* | 0.068*** | -0.174*** | 0.086*** | 0.121*** | -0.146*** | 0.104*** | 0.155*** | 0.115*** | -0.127*** | -0.145*** |
| 13 Large Owner (%) | 9.08 | 4.00 | -0.100*** | 0.088*** | 0.054*** | -0.039* | -0.030+ | -0.154*** | -0.060*** | -0.046** | 0.114*** | -0.006 | -0.033* |
| 14 Salary Exceed \$1 million | 0.13 | 0.34 | 0.355*** | -0.149*** | -0.180*** | 0.004 | 0.057*** | 0.381*** | -0.050** | 0.063*** | -0.184*** | 0.111*** | 0.202*** |
| 15 CEO Change | 0.07 | 26.00 | -0.011 | -0.003 | -0.003 | -0.010 | -0.009 | 0.030+ | -0.017 | -0.039* | -0.013 | 0.015 | 0.034* |
| 16 Post-SOX | 0.43 | 0.49 | 0.020 | -0.093*** | -0.075*** | -0.178*** | -0.114*** | 0.033* | -0.003 | 0.089*** | 0.035* | -0.120*** | -0.071*** |
| 17 Lagged total compensation (\$M) | 5.78 | 6.58 | 0.664*** | 0.035* | -0.366*** | 0.203*** | 0.236*** | 0.330*** | 0.250*** | 0.098*** | -0.030+ | -0.021 | 0.029+ |
| 18 Lagged salary proportion | 22.22 | 15.10 | -0.468*** | -0.105*** | 0.553*** | -0.329*** | -0.359*** | -0.203*** | -0.280*** | -0.157*** | -0.032* | 0.051*** | 0.021 |
| 19 Lagged contingent compensation (ltip +bonus) | 64.13 | 20.68 | 0.232*** | 0.232*** | -0.287*** | 0.504*** | 0.419*** | 0.025 | 0.373*** | 0.090*** | 0.194*** | -0.204*** | -0.245*** |
| 20 Lagged contingent compensation (ltip) | 51.38 | 23.19 | 0.226*** | 0.271*** | -0.238*** | 0.406*** | 0.534*** | 0.063*** | 0.330*** | -0.043** | 0.212*** | -0.159*** | -0.208*** |

| | | | | | | | | | | | | | | |
|----|---------------------------|------|------|-----------|-----------|----------|----------|----------|-----------|----------|-----------|----------|-----------|-----------|
| 21 | Ownership Power (out) | 1.97 | 0.36 | -0.060*** | -0.002 | 0.031* | -0.006 | -0.017 | -0.025 | -0.004 | 0.006 | 0.016 | 0.020 | 0.002 |
| 22 | Ownership Power (in) | 1.93 | 0.24 | | | | | | | | | | | |
| 23 | Ownership Power (out/in) | 1.02 | 0.19 | -0.047* | 0.069*** | 0.043** | -0.003 | -0.020 | -0.032* | -0.001 | -0.020 | 0.011 | -0.033* | -0.036* |
| 24 | Prestige Power (out) | 2.14 | 0.43 | -0.039* | -0.021 | 0.012 | -0.006 | -0.012 | -0.012 | 0.000 | 0.012 | 0.011 | 0.030+ | 0.019 |
| 25 | (Prestige Power (in) | 1.90 | 0.60 | -0.117*** | 0.282*** | 0.108*** | 0.070*** | 0.040* | -0.219*** | 0.172*** | -0.081*** | 0.283*** | -0.219*** | -0.280*** |
| 26 | Prestige Power (out/in) | 1.21 | 0.36 | -0.086*** | 0.172*** | 0.089*** | 0.022 | 0.006 | -0.135*** | 0.072*** | -0.048** | 0.161*** | -0.139*** | -0.203*** |
| 27 | Structural Power(out) | 2.26 | 0.47 | -0.004 | 0.043** | -0.027+ | 0.032* | 0.026+ | -0.030+ | 0.058*** | 0.003 | 0.032* | -0.043** | -0.009 |
| 28 | Structural Power(in) | 1.29 | 0.13 | -0.006 | -0.010 | 0.018 | 0.022 | -0.049** | -0.057*** | 0.032* | 0.044** | 0.029+ | -0.042** | -0.031* |
| 29 | Structural Power (out/in) | 1.78 | 0.41 | -0.053*** | 0.121*** | 0.085*** | 0.016 | 0.013 | -0.045** | 0.044** | -0.025 | 0.067*** | -0.061*** | -0.114*** |
| | | | | 0.018 | -0.056*** | -0.024 | 0.016 | -0.049** | -0.031* | 0.010 | 0.049** | -0.003 | -0.008 | 0.025 |

N= 3,581 firm-year observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE 10 (CONT'D)
Descriptive Statistics and Correlations of Variables in Regression Analysis

| No. | Variable | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----|---|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|
| 12 | Institutional Ownership (%) | 1.000 | | | | | | | | | | | |
| 13 | Large Owner (%) | 0.431 *** | 1.000 | | | | | | | | | | |
| 14 | Salary Exceed \$1 million | 0.005 | -0.051 *** | 1.000 | | | | | | | | | |
| 15 | CEO Change | -0.004 | 0.044 ** | -0.050 ** | 1.000 | | | | | | | | |
| 16 | Post-SOX | 0.237 *** | 0.060 *** | 0.086 *** | -0.029 + | 1.000 | | | | | | | |
| 17 | Lagged total compensation (\$M) | 0.028 + | -0.102 *** | 0.358 *** | 0.036 * | -0.013 | 1.000 | | | | | | |
| 18 | Lagged salary proportion | -0.216 *** | 0.044 ** | -0.192 *** | -0.047 ** | -0.032 * | -0.598 *** | 1.000 | | | | | |
| 19 | Lagged contingent compensation (Itp +bonus) | 0.159 *** | -0.021 | -0.010 | 0.032 * | -0.113 *** | 0.281 *** | -0.558 *** | 1.000 | | | | |
| 20 | Lagged contingent compensation (Itp) | 0.122 *** | -0.020 | 0.032 * | 0.033 * | -0.162 *** | 0.356 *** | -0.541 *** | 0.742 *** | 1.000 | | | |
| 21 | Ownership Power (out) | -0.017 | 0.072 *** | -0.042 ** | 0.026 | 0.024 | -0.076 *** | 0.060 *** | -0.031 * | -0.036 * | 1.000 | | |
| 22 | Ownership Power (in) | -0.091 *** | -0.019 | -0.015 | 0.048 ** | -0.074 *** | -0.006 | 0.024 | 0.025 | 0.030 * | -0.012 | 1.000 | |
| 23 | Ownership Power (out/in) | 0.012 | 0.075 *** | -0.032 * | 0.003 | 0.057 *** | -0.062 *** | 0.046 ** | -0.035 * | -0.042 ** | 0.934 *** | -0.312 *** | 1.000 |
| 24 | Prestige Power (out) | 0.101 *** | 0.086 *** | -0.221 *** | -0.015 | -0.074 *** | -0.084 *** | 0.022 | 0.145 *** | 0.132 *** | -0.046 ** | 0.038 * | -0.049 ** |
| 25 | Prestige Power (in) | 0.048 ** | 0.062 *** | -0.109 *** | -0.080 *** | -0.017 | -0.050 ** | 0.018 | 0.074 *** | 0.071 *** | 0.005 | 0.058 *** | 0.001 |
| 26 | Prestige Power (out/in) | 0.035 * | 0.015 | -0.065 *** | 0.082 *** | -0.022 | -0.032 * | 0.012 | 0.018 | 0.005 | -0.013 | -0.031 * | -0.010 |
| 27 | Structural Power(out) | -0.012 | -0.017 | -0.056 *** | -0.029 + | 0.041 ** | -0.032 * | 0.046 ** | -0.007 | -0.041 ** | 0.021 | 0.017 | 0.027 + |
| 28 | Structural Power(in) | -0.086 *** | 0.005 | -0.060 *** | 0.000 | -0.169 *** | -0.042 ** | 0.065 *** | 0.040 * | 0.052 *** | -0.062 *** | 0.521 *** | -0.225 *** |
| 29 | Structural Power (out/in) | 0.024 | -0.019 | -0.025 | -0.021 | 0.100 *** | -0.010 | 0.009 | -0.020 | -0.056 *** | 0.046 ** | -0.166 *** | 0.108 *** |

N= 3,581 firm-year observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 10 (CONT'D)
Descriptive Statistics and Correlations of Variables in Regression Analysis

| No. Variable | 24 | 25 | 26 | 27 | 28 | 29 |
|---------------------------------|----------|-----------|-----------|----------|-----------|-------|
| 24 Prestige Power (out) | 1.000 | | | | | |
| 25 (Prestige Power (in) | 0.168*** | 1.000 | | | | |
| 26 Prestige Power (out/in) | 0.479*** | -0.702*** | 1.000 | | | |
| 27 Structural Power(out) | 0.251*** | 0.039* | 0.119*** | 1.000 | | |
| 28 Structural Power(in) | 0.042** | 0.295*** | -0.230*** | -0.046** | 1.000 | |
| 29 Structural Power (out/in) | 0.204*** | -0.097*** | 0.211*** | 0.918*** | -0.421*** | 1.000 |

N= 3,581 firm-year observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 10 (CONT'D)
Descriptive Statistics and Correlations of Variables in Regression Analysis

| No. Variable | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|------------------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|----------------------|----------------------|-----------------------|-------|
| 24 Ownership Power (out/in) | 1.000 | | | | | | | | |
| 25 Prestige Power (avg) | -0.054 | 1.000 | | | | | | | |
| 26 Prestige Power (out) | -0.058 ⁺ | 0.853 ^{***} | 1.000 | | | | | | |
| 27 Prestige Power (in) | -0.014 | 0.474 ^{***} | 0.163 ^{***} | 1.000 | | | | | |
| 28 Prestige Power (out/in) | -0.010 | 0.134 ^{***} | 0.486 ^{***} | -0.699 ^{***} | 1.000 | | | | |
| 29 Structural Power (avg) | 0.084 ^{***} | 0.175 ^{***} | 0.152 ^{***} | 0.027 | 0.085 ^{***} | 1.000 | | | |
| 30 Structural Power (out) | 0.078 ^{***} | 0.210 ^{***} | 0.244 ^{***} | 0.029 | 0.122 ^{***} | 0.872 ^{***} | 1.000 | | |
| 31 Structural Power (in) | -0.322 ^{***} | 0.145 ^{***} | 0.058 ⁺ | 0.318 ^{***} | -0.236 ^{***} | -0.045 | -0.067 ^{**} | 1.000 | |
| 32 Structural Power (out/in) | 0.180 ^{***} | 0.127 ^{***} | 0.193 ^{***} | -0.108 ^{***} | 0.211 ^{***} | 0.810 ^{***} | 0.923 ^{***} | -0.430 ^{***} | 1.000 |

N = 3,581 firm-year observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 11. Results of Fixed-Effects Panel Data Analyses of Board Power, Compensation, and Pay-for-performance Sensitivity

| VARIABLES | Total Compensation | | | | | Pay-for-performance Sensitivity | | | | |
|---------------------------|--------------------|---------|----------|---------|---------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.36*** | 0.37*** | 0.37*** | 0.36*** | 0.36*** | -0.29* | -0.28* | -0.28* | -0.28* | -0.28* |
| Market Growth | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.05 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary > \$1 Million | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | 0.03 | 0.01 | 0.01 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03** | -0.03* | -0.03** | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.03 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.06* | 0.06* | 0.06* | 0.06* | 0.06* | -0.06+ | -0.08* | -0.08* | -0.08* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | | | | | |
| Ownership Power(OUT/IN) | | 0.01 | | | 0.01 | | 0.00 | | | 0.01 |
| Prestige Power (OUT/IN) | | | 0.07*** | | 0.07*** | | | 0.04* | | 0.04* |
| Structural Power (OUT/IN) | | | | 0.04* | 0.03 | | | | -0.01 | -0.02 |
| Constant | 5.88*** | 5.83*** | 5.59*** | 5.77*** | 5.49*** | 6.73*** | 6.73*** | 6.33** | 6.92*** | 6.34** |
| F | 10.23*** | 9.58*** | 10.49*** | 9.70*** | 9.56*** | 3.99*** | 3.94*** | 3.94*** | 3.85*** | 3.64*** |
| R ² | 7.91 | 7.88 | 8.49 | 8.07 | 8.60 | 3.12 | 3.28 | 3.44 | 3.30 | 3.48 |
| Adjusted R ² | 7.45 | 7.39 | 8.00 | 7.58 | 8.06 | 2.66 | 2.80 | 2.95 | 2.81 | 2.94 |
| Δ Adjusted R ² | | -0.06 | 0.55*** | 0.13* | 0.61*** | | 0.14 | 0.29* | 0.15 | 0.28* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model. N=950 firms (unbalanced)

Power variables are not winsorized.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 12. Results of Fixed-Effects Panel Data Analyses of Winsorized Board Power, Compensation, and Pay-for-performance Sensitivity

| VARIABLES | Total Compensation | | | | | Pay-for-performance Sensitivity | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------------------------------|---------|--------|---------|--------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.36*** | 0.37*** | 0.36*** | 0.36*** | 0.36*** | -0.29* | -0.28* | -0.28* | -0.28* | -0.28* |
| Market Growth | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.05 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary > \$1 Million | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | 0.03 | 0.01 | 0.00 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.03 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.06* | 0.06* | 0.06* | 0.06* | 0.06* | -0.06+ | -0.08* | -0.08* | -0.08* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | | | | | |
| Ownership Power(OUT/IN) | | 0.02 | | | 0.02 | | 0.00 | | | 0.01 |
| Prestige Power (OUT/IN) | | | 0.06*** | | 0.06** | | | 0.04* | | 0.04* |
| Structural Power (OUT/IN) | | | | 0.04* | 0.02 | | | | -0.01 | -0.02 |
| Constant | 5.88*** | 5.66*** | 5.63*** | 5.77*** | 5.38*** | 6.73*** | 6.72*** | 6.36** | 6.93*** | 6.26** |
| F | 10.23 | 9.5762 | 10.2638 | 9.6979 | 9.3478 | 3.9848 | 3.9794 | 3.9488 | 3.8479 | 3.7025 |
| R ² | 7.91 | 7.93 | 8.35 | 8.06 | 8.5 | 3.12 | 3.28 | 3.42 | 3.3 | 3.46 |
| Adjusted R ² | 7.45 | 7.44 | 7.86 | 7.57 | 7.96 | 2.66 | 2.79 | 2.93 | 2.81 | 2.92 |
| Δ Adjusted R ² | | -0.01 | 0.41*** | 0.12* | 0.51** | | 0.13 | 0.27* | 0.15 | 0.26* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model. N=950 firms (unbalanced)

Power variables winsorized at p=0.01.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE 13. Extending Theoretical Framework: Contextual Implications for Outsider/ Insider Board Power & Monitoring Effectiveness

| Characteristics | Context | Monitoring Impact | | Ownership | Prestige | Structural |
|------------------------|---|--------------------------|---|--|---|---|
| External | Sarbanes-Oxley Act of 2002 | Pre | <ul style="list-style-type: none"> Less regulatory oversight | Less association with pay-for-performance sensitivity (PPS) due to lack of government oversight. | Less association with PPS due to lack of government oversight. | Less association with PPS due to lack of government oversight. |
| | | Post | <ul style="list-style-type: none"> Increased regulations for corporate governance practices Increased public accountability Less contingent-based pay and more salary-based pay following 2002 | Less association with PPS due to reduced incentive alignment. | More association with PPS because increased accountability motivated directors to protect reputation. | More association with PPS because increased regulation intended to improve structural power of outsiders. |
| | World Trade Center Attacks of 2001 | Pre | <ul style="list-style-type: none"> Economy more profitable | More association with PPS | More association with PPS | More association with PPS |
| | | Post | <ul style="list-style-type: none"> Negatively impacted economy. Economic/world events may limit managerial discretion. Less connection with pay-for-performance due to economic uncertainty; firm profitability negatively affected (may be industry-specific) | Less association with PPS because WTC attacks limited managerial discretion | Less association with PPS because WTC attacks limited managerial discretion | Less association with PPS because WTC attacks limited managerial discretion |
| | Industry Mimetic Pressures | No | <ul style="list-style-type: none"> Monitoring independent of industry pressures. | More association with PPS | More association with PPS | More association with PPS |
| | | Yes | <ul style="list-style-type: none"> Increased legitimacy by mimicking industry practices Executive action matters less; reduces PPS | Less association with PPS; depends on industry | More association with PPS due to reputation impact; depends on industry | Less association with PPS; depends on industry |

| Characteristics | Context | Monitoring Impact | | OWNERSHIP | PRESTIGE | STRUCTURAL |
|-----------------|--------------------|-------------------|--|---|---|--|
| Firm | Size | Small | <ul style="list-style-type: none"> • More managerial discretion/CEO control over outcomes; more PPS • Less uncertainty; therefore, less of need for contingent-base, but greater potential for more actively involved boards. | Less association with PPS; active board monitoring replaces managerial incentive alignment, less contingent-based pay. | More association with PPS; smaller firms are associated with more active boards | More associated with PPS; smaller firms are more associated with tenure and strategic change, may see more active boards |
| | | Large | <ul style="list-style-type: none"> • Less managerial discretion/CEO control over outcomes; affects PPS. • More uncertainty; therefore, greater need for incentive alignment. • However, due to size, boards may be limited in ability to monitor effectively due to complexity of firm. | More associated with PPS because larger firms are associated with more uncertainty, should see greater use of incentive alignment | More associated with PPS because larger firms are associated with more uncertainty, should see greater motivation to protect reputation | Less associated with PPS because larger firms are more complex and associated with more uncertainty. More manipulation by CEO. |
| | Performance | Low | <ul style="list-style-type: none"> • CEO may be more committed to change in low-performing firm • May have to pay CEO more to recruit/retain; depends on when CEO is hired • Directors incur cost of monitoring a low performing firm; therefore, may see directors resign to protect reputation. | Less association with PPS due to low financial performance. | Less association with PPS because prestigious directors may not remain long in low performing firms due to risk to reputation. | More association with PPS because structurally powerful board has more oversight over CEO. |
| | | High | <ul style="list-style-type: none"> • Increases CEO bargaining power • More committed to status quo; self-motivated to continue high performance. | More association with PPS due to incentive alignment implications. | More association with PPS due to impact on reputation. Success of firm attributed to leader of the firm | Less association with PPS because higher performing firms need less monitoring. |

| Characteristics | Context | Monitoring Impact | | Ownership | Prestige | Structural |
|-----------------|---------------|-------------------|---|--|---|--|
| Board | Size | Small | <ul style="list-style-type: none"> Less conflict on boards, less skills on board. Easier to manage. | Association with PPS less impacted by board size; but may depend on level of incentive alignment | Less association with PPS | More associated with PPS |
| | | Large | <ul style="list-style-type: none"> More conflict on boards; greater reputation of skills on board. More difficult to manage. | Association with PPS less impacted by board size; but may depend on level of incentive alignment | More associated with PPS; board members forced to accept reputational cost of not monitoring effectively. | Less associated with PPS because greater conflicts on a structurally powerful board. |
| | Outsiders (%) | Low | <ul style="list-style-type: none"> Increases potential for managerial opportunism, less objective monitoring. | Less association with PPS | Less association with PPS | Less association with PPS |
| | | High | <ul style="list-style-type: none"> Increases objective monitoring on the board, but may also result in too many directors who have more outside commitments, less focused on monitoring | More association with PPS | More association with PPS | More associated with PPS |
| CEO | Ownership | Low | <ul style="list-style-type: none"> No managerial incentives to make decisions in the best interests of shareholders; needs more active monitoring Increases managers incentives to make decisions in the best interests of shareholders; reduces need for active board monitoring | High association with PPS; substitution effect | High association with PPS; substitution effect | High association with PPS; substitution effect |
| | | High | | Less association with PPS; substitution effect | Less association with PPS; substitution effect | Less association with PPS; substitution effect |
| | Tenure | Low | <ul style="list-style-type: none"> More likely to change strategic direction Less managerial bargaining power | More association with PPS | More association with PPS | More association with PPS |
| | | High | <ul style="list-style-type: none"> More likely to conform to strategic direction Increases managerial bargaining power | Less association with PPS | Less association with PPS | Less association with PPS |

TABLE 14. Extending Theoretical Framework: Interaction Effects of Outsiders & Insider Power Bases

| | | | |
|------------------------------|-------------|---|---|
| OUTSIDERS' POWER BASE | HIGH | <p>Effective monitoring: minimal managerial opportunism and greater PPS.</p> <ul style="list-style-type: none"> • Ownership: Incentives aligned for directors, but not for managers. • Prestige: Strong motivation to protect reputation for directors, but not for managers. • Structural: Control over decision-making authority for directors. | <p>Effective monitoring: minimal managerial opportunism and greater PPS.</p> <ul style="list-style-type: none"> • Ownership: Incentives aligned for both directors and managers. • Prestige: Strong motivation to protect reputation for directors and managers. • Structural: Board has oversight over CEO decision-making. |
| | LOW | <p>Ineffective monitoring; potential for managerial opportunism increases</p> | <p>Board monitoring limited; however, greater PPS due to managerial incentive alignment and/or CEO's motivation to protect reputation.</p> <ul style="list-style-type: none"> • Ownership: Incentives aligned for managers, but not for directors • Prestige: Strong motivation to protect reputation for managers, but not for directors • Structural: Greater CEO control over decision-making. |
| | | <p>Q-1 Q-4</p> | <p>Q-2 Q-3</p> |
| | | LOW | HIGH |
| | | INSIDERS' POWER BASE | |

TABLE 15. Summary of Contextual Implications from Regression Analyses

Table 15a. Firm's External Environment: Sarbanes-Oxley Act of 2002, World Trade Center Attacks of 2001, and Industry Mimetic Pressures

| | | Ownership Power | | | | Prestige Power | | | | Structural Power | | | |
|-----------------|----------------|-----------------|-------|-------|--------|----------------|---------|--------|--------|------------------|-------|--------|--------|
| | | TC | | PPS | | TC | | PPS | | TC | | PPS | |
| | | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post |
| Sox | Isolated Model | 0.02 | -0.00 | -0.01 | 0.03 | 0.07* | 0.01 | 0.05 | -0.01 | 0.02 | 0.02 | -0.01 | -0.03 |
| | Full Model | 0.02 | -0.01 | -0.01 | 0.03 | 0.07* | 0.01 | 0.06+ | -0.01 | 0.01 | 0.02 | -0.02 | -0.03 |
| | Out | 0.00 | 0.01 | 0.03 | 0.03 | -0.00 | -0.02 | -0.05 | 0.02 | -0.00 | 0.02 | -0.014 | -0.00 |
| | In | 0.03 | 0.02 | 0.03 | -0.02 | -0.05 | -0.02 | -0.06 | 0.00 | -0.03 | 0.01 | 0.01 | 0.06* |
| | Interaction | 0.10*** | -0.02 | -0.05 | -0.03+ | -0.06** | -0.04 | -0.06* | -0.05* | -0.05* | -0.02 | -0.02 | -0.05* |
| WTC | Isolated Model | 0.06 | -0.01 | -0.04 | 0.01 | 0.11*** | 0.01 | 0.07 | 0.01 | 0.01 | 0.05* | -0.04 | -0.01 |
| | Full Model | 0.05 | -0.02 | -0.03 | 0.01 | 0.12*** | 0.01 | 0.08+ | 0.01 | -0.02 | 0.05* | -0.05 | -0.01 |
| | Out | 0.07* | -0.01 | 0.04 | 0.01 | -0.00 | -0.07** | -0.08 | -0.00 | 0.01 | 0.05* | 0.01 | 0.01 |
| | In | 0.07* | 0.00 | 0.08 | 0.00 | -0.08* | -0.02 | -0.07 | 0.01 | -0.01 | 0.01 | 0.06 | 0.04* |
| | Interaction | 0.13** | 0.01 | -0.03 | 0.00 | -0.08*** | -0.03+ | -0.05+ | -0.06* | -0.06+ | -0.02 | -0.00 | -0.03+ |
| Industry | Isolated Model | < 1SD | >1SD | < 1SD | >1SD | < 1SD | >1SD | < 1SD | >1SD | < 1SD | >1SD | < 1SD | >1SD |
| | Full Model | -0.02 | 0.01 | -0.02 | 0.02 | 0.06* | 0.08** | 0.08* | 0.05* | 0.02 | 0.04+ | 0.07 | -0.00 |
| | Out | -0.01 | 0.02 | -0.02 | 0.02 | -0.03 | -0.06* | 0.01 | 0.02 | 0.03 | 0.04 | 0.06 | 0.00 |
| | In | 0.01 | 0.01 | -0.00 | -0.01 | -0.10** | -0.08** | -0.08 | -0.03 | 0.01 | -0.01 | -0.02 | 0.02 |
| | Interaction | -0.03 | 0.06 | 0.07 | -0.04 | -0.06* | -0.04* | -0.08 | -0.03 | -0.01 | -0.01 | -0.01 | -0.03+ |

Table 15b. Firm's Characteristics: Size and Performance

| | | Ownership Power | | | | Prestige Power | | | | Structural Power | | | |
|-------------------------|----------------|-----------------|-------------|------------|-------------|----------------|-------------|------------|-------------|------------------|-------------|------------|-------------|
| | | TC | | PPS | | TC | | PPS | | TC | | PPS | |
| | | Small | Large | Small | Large | Small | Large | Small | Large | Small | Large | Small | Large |
| Firm Size | Isolated Model | -0.01 | 0.04 | 0.01 | -0.00 | 0.09** | 0.10*** | 0.06+ | 0.02 | 0.04 | 0.05 | 0.00 | 0.00 |
| | Full Model | -0.03 | 0.05 | 0.01 | 0.00 | 0.09** | 0.09*** | 0.06+ | 0.02 | 0.03 | 0.03 | -0.01 | -0.00 |
| | Out | -0.02 | 0.04 | 0.01 | 0.01 | -0.04 | -0.01 | 0.03 | -0.04 | 0.04 | -0.00 | 0.02 | -0.00 |
| | In | 0.00 | 0.00 | -0.01 | -0.02 | -0.09** | -0.12*** | -0.01 | -0.09* | -0.01 | -0.04 | 0.03 | 0.00 |
| | Interaction | 0.02 | 0.11*** | 0.01 | -0.14*** | -0.08*** | -0.07** | -0.03 | -0.12* | -0.03+ | -0.08** | -0.04* | -0.01 |
| Firm Performance | Isolated Model | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| | Full Model | 0.04 | -0.00 | 0.01 | 0.04 | 0.08** | 0.08** | 0.04 | 0.06+ | 0.04 | 0.03 | -0.02 | -0.00 |
| | Out | 0.03 | -0.01 | 0.01 | 0.05 | 0.07* | 0.08** | 0.04 | 0.06* | 0.02 | 0.02 | -0.02 | -0.02 |
| | In | -0.00 | 0.03 | 0.01 | 0.05 | -0.00 | -0.03 | 0.01 | 0.01 | 0.01 | 0.05+ | -0.00 | 0.00 |
| | Interaction | -0.06* | 0.04* | -0.03 | -0.01 | -0.05 | -0.11*** | -0.00 | -0.06* | -0.04 | 0.02 | 0.03 | -0.00 |
| | | 0.02 | -0.00 | -0.06 | -0.03 | -0.05* | -0.10*** | -0.00 | -0.09** | -0.03 | -0.00 | -0.04* | 0.01 |

Table 15c. Board's Characteristics: Size and Outsiders' %

| | | Ownership Power | | | | Prestige Power | | | | Structural Power | | | |
|-------------------|----------------|-----------------|--------|-------|---------|----------------|---------|--------|-------|------------------|---------|-------|--------|
| | | TC | | PPS | | TC | | PPS | | TC | | PPS | |
| | | Small | Large | Small | Large | Small | Large | Small | Large | Small | Large | Small | Large |
| Board Size | Isolated Model | -0.01 | 0.01 | -0.00 | 0.01 | 0.08* | 0.07** | 0.04 | 0.07* | 0.09** | 0.00 | 0.01 | -0.04 |
| | Full Model | -0.02 | 0.02 | -0.00 | 0.03 | 0.06+ | 0.07** | 0.04 | 0.08* | 0.09* | -0.01 | 0.01 | -0.05+ |
| | Out | -0.01 | 0.02 | -0.00 | 0.04 | -0.04 | -0.03 | -0.01 | 0.04 | 0.08* | -0.01 | 0.03 | -0.03 |
| | In | 0.01 | -0.00 | -0.02 | 0.05 | -0.07* | -0.13** | 0.01 | -0.07 | -0.03 | 0.00 | 0.03 | 0.03 |
| | Interaction | 0.06 | 0.02 | -0.04 | 0.05 | -0.07** | -0.11** | -0.05+ | -0.03 | -0.01 | -0.04** | -0.03 | -0.02+ |
| | | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| Outsiders | Isolated Model | 0.01 | 0.05 | 0.02 | 0.00 | 0.06+ | 0.07** | 0.05 | 0.06* | 0.03 | 0.04 | 0.03 | -0.05+ |
| | Full Model | 0.01 | 0.04 | 0.02 | 0.02 | 0.06+ | 0.06* | 0.05 | 0.07* | 0.02 | 0.03 | 0.02 | -0.06* |
| | Out | 0.02 | -0.02 | 0.03 | 0.05 | -0.05 | -0.04 | -0.01 | 0.07+ | 0.02 | 0.03 | 0.03 | -0.05 |
| | In | 0.01 | 0.01 | 0.01 | -0.07 | -0.09** | -0.05+ | -0.06* | -0.01 | -0.02 | -0.02 | -0.01 | 0.02 |
| | Interaction | 0.00 | 0.10** | 0.01 | -0.13** | -0.06* | -0.05* | -0.05 | -0.01 | -0.02 | -0.04 | -0.00 | -0.04 |

Table 15d. CEO Characteristics: Ownership and Tenure

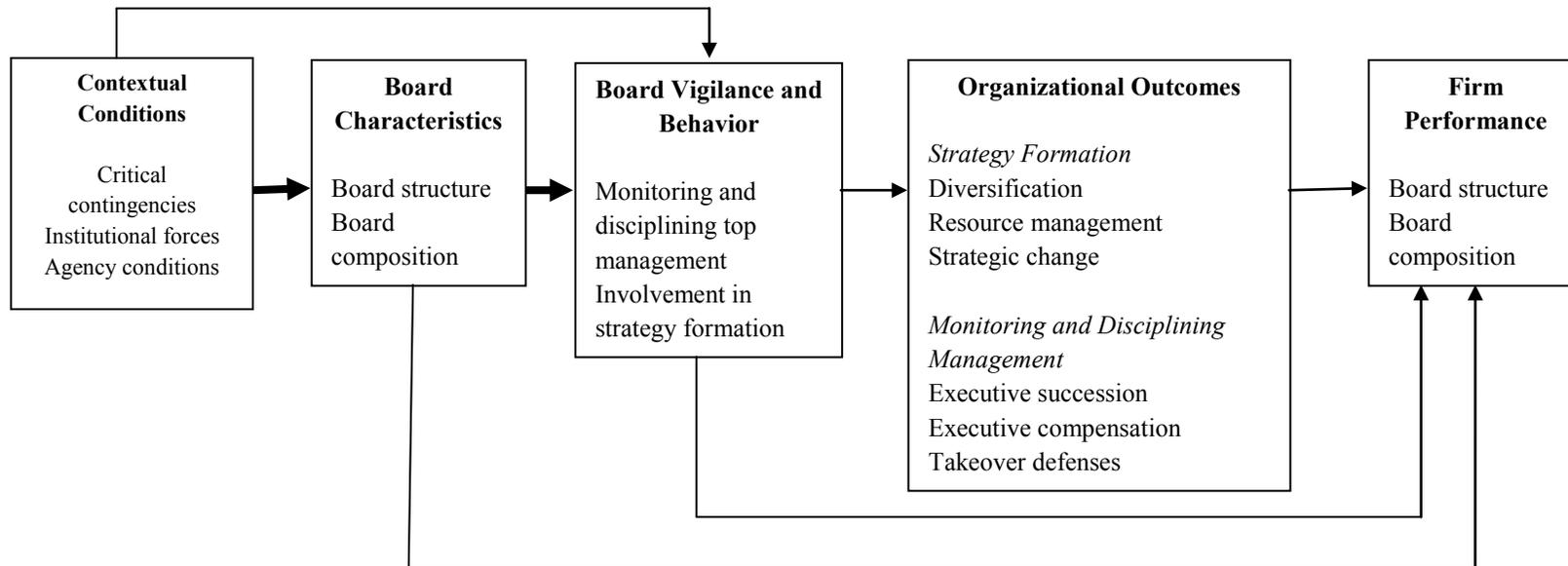
| | | Ownership Power | | | | Prestige Power | | | | Structural Power | | | |
|-------------------|----------------|-----------------|-------|---------|-------|----------------|----------|-------|--------|------------------|-------|---------|-------|
| | | TC | | PPS | | TC | | PPS | | TC | | PPS | |
| | | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| CEO Own | Isolated Model | -0.00 | -0.01 | -0.03 | 0.04 | 0.03 | 0.08** | 0.00 | 0.08* | 0.06* | 0.01 | -0.03 | 0.02 |
| | Full Model | -0.01 | -0.02 | -0.02 | 0.04 | 0.02 | 0.08** | 0.01 | 0.08* | 0.06* | -0.00 | -0.03 | 0.01 |
| | Out | 0.00 | -0.01 | -0.00 | 0.03 | -0.05+ | -0.02 | -0.04 | 0.04 | 0.04 | -0.01 | -0.04 | 0.02 |
| | In | 0.03 | 0.00 | 0.01 | -0.04 | -0.03 | -0.11*** | 0.00 | -0.07* | -0.02 | -0.01 | 0.02 | -0.02 |
| | Interaction | -0.02 | 0.01 | 0.04 | -0.01 | -0.04+ | -0.06* | -0.03 | -0.05+ | -0.07** | -0.01 | -0.07* | 0.00 |
| | | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| CEO Tenure | Isolated Model | 0.00 | 0.01 | -0.10* | 0.01 | 0.08** | 0.07* | 0.03 | 0.06 | 0.06* | 0.01 | -0.08** | 0.04 |
| | Full Model | -0.01 | 0.01 | -0.08* | 0.01 | 0.07* | 0.07* | 0.05 | 0.05 | 0.05+ | -0.00 | -0.08** | 0.03 |
| | Out | -0.05+ | 0.02 | -0.07** | -0.01 | -0.04 | -0.04 | 0.01 | -0.01 | 0.04 | 0.00 | -0.09* | 0.04 |
| | In | -0.02 | 0.00 | 0.04 | -0.05 | -0.09** | -0.07* | 0.01 | -0.06* | -0.02 | -0.00 | 0.02 | -0.01 |
| | Interaction | 0.10*** | 0.00 | -0.06+ | -0.03 | -0.04* | -0.05+ | -0.00 | -0.05+ | -0.06* | -0.01 | -0.03 | -0.00 |

TABLE 16. Substitution & Complimentary Contextual Implications of Outsider & Insider Interaction Power Bases

*Based on supplemental analysis regression results

| | OWNERSHIP POWER | | | | PRESTIGE POWER | | | | STRUCTURAL POWER | | | |
|-----------------------------------|-----------------|----------------|------------------------|----------------|----------------|----------------|---------------|----------------|--------------------|----------------|--------------------|----------------|
| | TC | | PPS | | TC | | PPS | | TC | | PPS | |
| NO CONTEXT | | | | | Compliment | | Substitute | | Compliment | | Substitute | |
| EXTERNAL | Pre/ No | Post/ Yes | Pre/ No | Post/ Yes | Pre/ No | Post/ Yes | Pre/ No | Post/ Yes | Pre/ No | Post/ Yes | Pre/ No | Post/ Yes |
| Sox (Pre/Post) | Substitute | | High Out Low In | | Compliment | | Substitute | | Compliment | | Substitute | |
| WTC (Pre/Post) | Substitute | | | | Compliment | Compliment | Substitute | Substitute | Compliment | | Substitute | |
| Industry Pressures (No/Yes) | | | | | | | | | | | Substitute | |
| FIRM | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High |
| Size (Small/Large) | Substitute | | Substitute | | Compliment | | Compliment | | Substitute | | Substitute | |
| Performance (High/Low) | | | | | | | | | Substitute | | Substitute | |
| BOARD | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High | Small/ Low | Large/ High |
| Size (Small/Large) | | | | | Compliment | | Compliment | | Substitute | | Compliment | |
| Outsiders (%) (High/Low) | Substitute | | Substitute | | | | | | | | Low Out High In | |
| CEO | Low | High | Low | High | Low | High | Low | High | Low | High | Low | High |
| Ownership | | | | | | | | | High Out Low In | | Compliment | |
| Tenure | Substitute | | Incentive Alignment | | Compliment | | Compliment | | Substitute | | Compliment | |

FIGURE 1. A Model of Boards Of Directors
 (Finkelstein, Hambrick, & Cannella, 2009, p. 228)

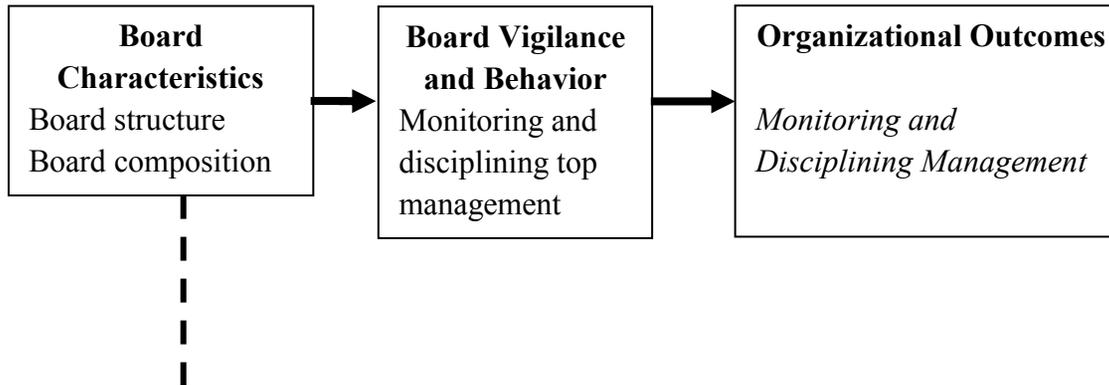


Chief Research Questions:

1. What are the determinants of board characteristics?
2. What determines the vigilance and behavior of boards?
3. How do boards affect organizational choices, strategies, and performance?

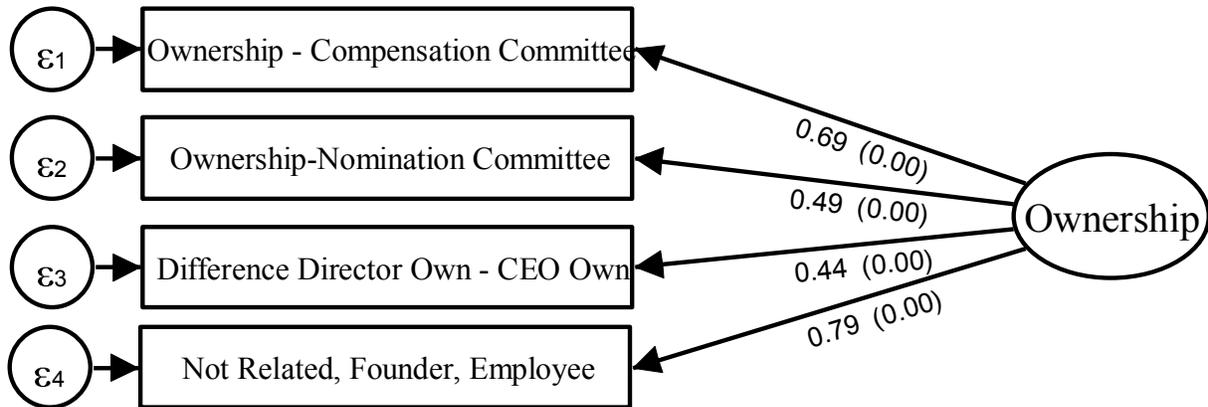
FIGURE 2. Research Contribution - Board Power Influence on Monitoring

(bold box adding to Finkelstein et al., 2009)



| BOARD POWER BASES | | | |
|------------------------------|---|---|--|
| | OWNERSHIP POWER | PRESTIGE POWER | STRUCTURAL POWER |
| Board characteristics | <ul style="list-style-type: none"> • Compensation committee ownership • Nomination committee ownership • Difference between director ownership and CEO Ownership • Not related, founder, employee ownership | <ul style="list-style-type: none"> • Board experience increasing board independence • Board experience decreasing executive compensation • Accumulated board seats • S& P credit rating | <ul style="list-style-type: none"> • Board hierarchical authority • Overlapping committee membership • Compensation committee seniority • Nomination committee seniority |

FIGURE 3. Board Ownership Power Path Diagram

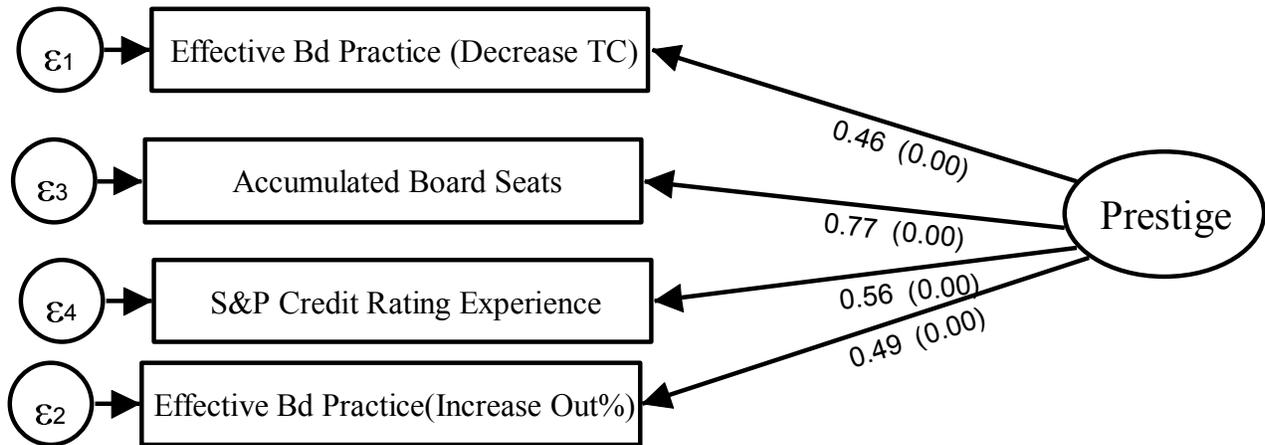


Goodness of Fit Statistics:

χ^2 : 252
P: 0.00
RMSEA: 0.058
SRMR: 0.016
CFI: 0.99
TLI: 0.97
CD: 0.75

(p-values in parenthesis)

FIGURE 4. Board Prestige Power Path Diagram

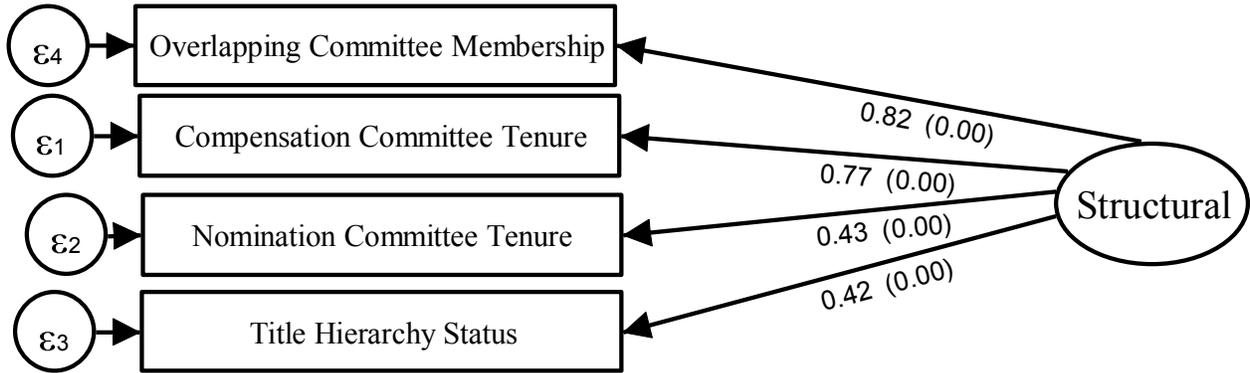


Goodness of Fit Statistics:

χ^2 : 252
P: 0.00
RMSEA: 0.058
SRMR: 0.016
CFI: 0.989
TLI: 0.963
CD: 0.71

(p-values in parenthesis)

FIGURE 5. Board Structural Power Path Diagram



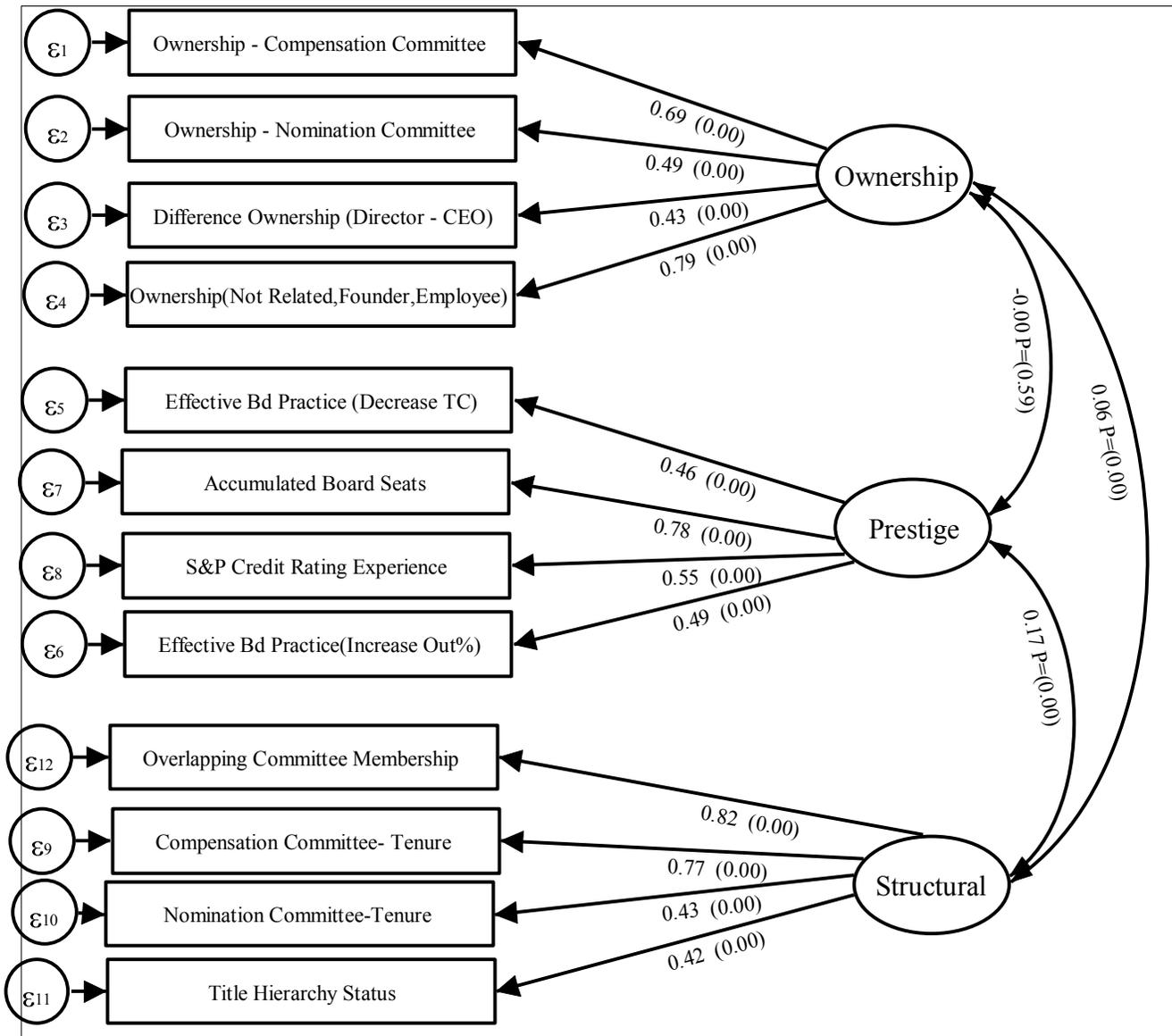
Goodness of Fit Statistics:

χ^2 : 1569
P: 0.00
RMSEA 0.145
SRMR: 0.039
CFI: 0.950
TLI: 0.851
CD: 0.796

(p-values in parenthesis)

FIGURE 6. Board Power Path Diagram –Three Factor Model

(Default Standard Errors)

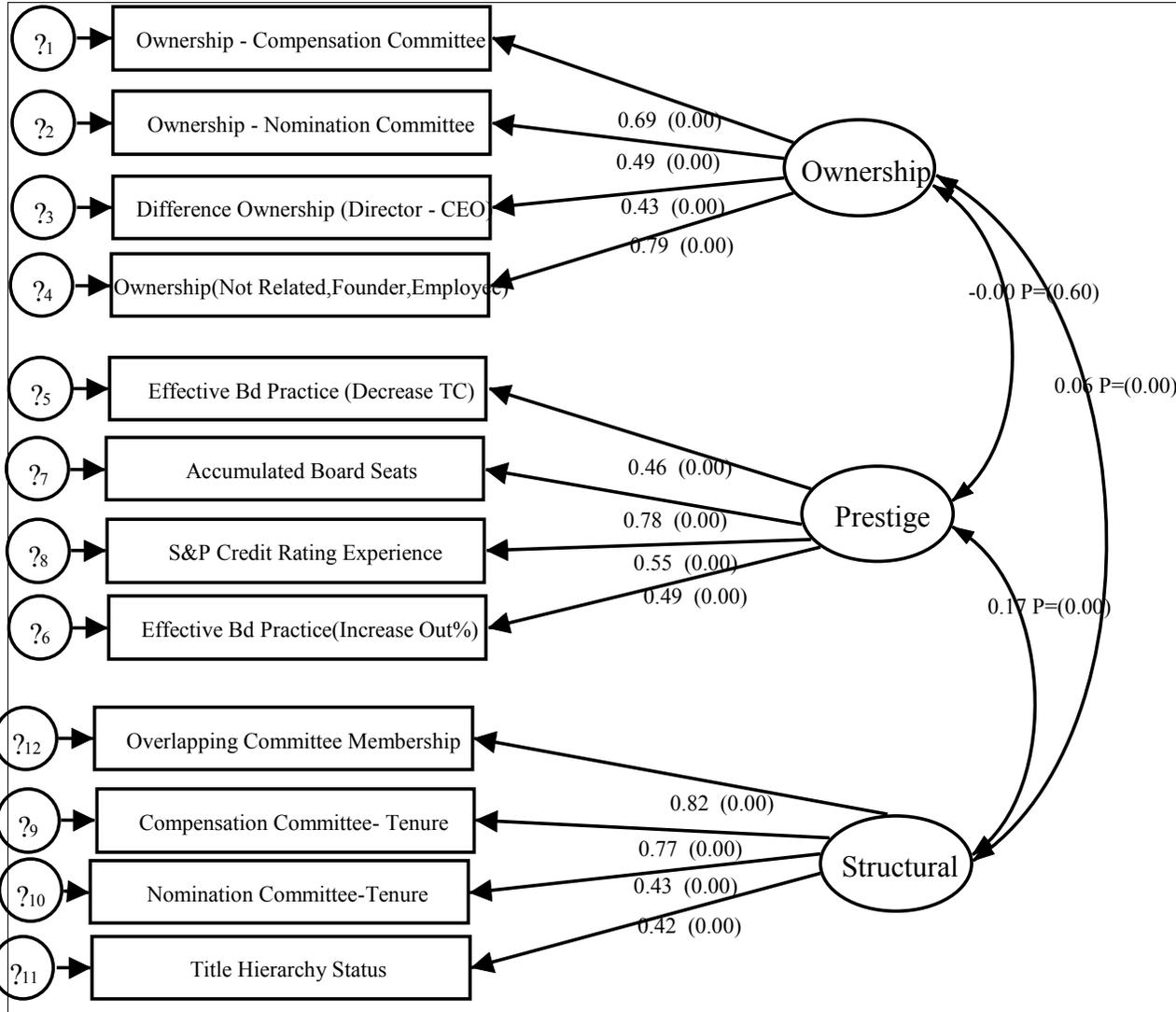


Goodness of Fit Statistics:

χ^2 : 5628
 P: 0.00
 RMSEA 0.054
 SRMR: 0.033
 CFI: 0.932
 TLI: 0.912
 CD: 0.986

(p-values in parenthesis)

FIGURE 7. Board Power Path Diagram –Three Factor Model (Robust Standard Errors)



p-values in parenthesis

FIGURE 8. Interaction Effects of Outsiders' and Insiders' Power and Monitoring Effectiveness

Figure 8a: Total Compensation and Prestige Power

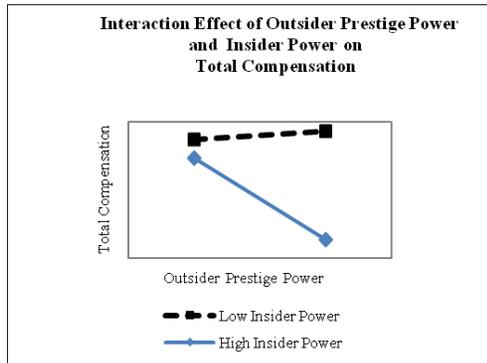


Figure 8b: Pay-for-performance Sensitivity and Prestige Power

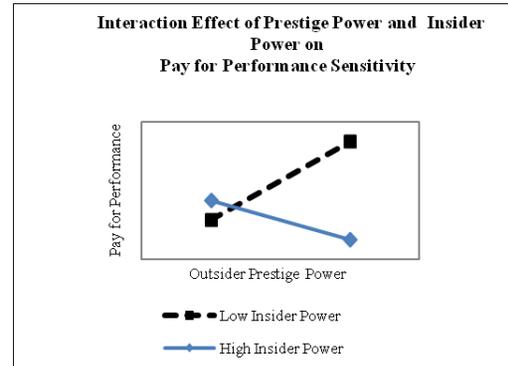


Figure 8c: Total Compensation and Structural Power

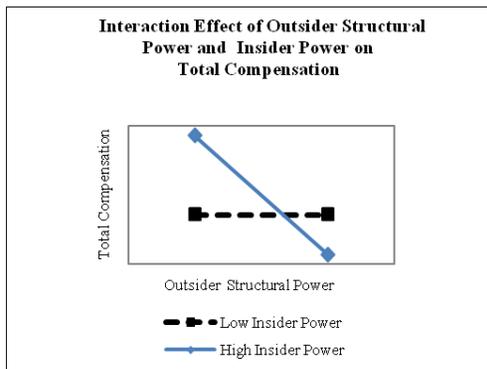
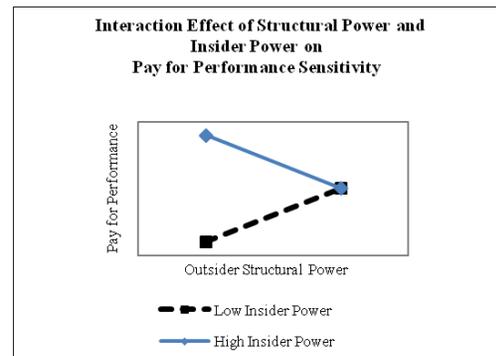


Figure-8d: Pay-for-performance Sensitivity and Structural Power



APPENDIX A. SAMPLE FORMATION – BOARD OF DIRECTORS’ POWER, 2000-2006

Note: Execucomp = 12196 firm-year observations; 2292 firms; Exec Comp with all PPS data = 8,672 firm-year observations, 1886 firms (note: PPS data for 8831 firm year observations and 2043 firms); S&P 1500 with information in Compustat for 16,609 firms; 82001 firm-year observations; S&P Credit ratings for 14840 firms; 73421 firm-year observations; 58315 observations from S&P Register Net Advantage & hand inputted from S&P Corporate Register; 1065 hand-entered from Lexis Nexxus; 35 hand-entry of Obituaries/University Alumni News.

| | Subtotal # Firms | Subtotal # firm-year observations | Subtotal # firm-year director observations |
|---|-------------------------|--|---|
| S&P 1500 firms in Risk Metrics – Directors database | 3180 | 12433 | 105457 |
| Exec Comp + Risk Metrics + Codirfin _compratio | 1818 | 7355 | 51, 778 |
| S&P 1500 firms with information in Compustat | 1607 | 6886 | 42110 |
| Thomson Reuters 13f | 1249 | 5121 | 40836 |
| S&P Credit Ratings | 1249 | 5121 | 40836 |
| CEO duality | 1114 | 4310 | 39172 |
| Education Data: S&P Register Data Lexis Nexxus Obituaries/University Alumni News | 1024 | 3982 | 37891 |
| After predicting factor scores | 962 | 3666 | 37106 |
| After removing all observations where average outsiders/insiders’ power =0 | 950 | 3581 | 37066 |

APPENDIX B. BOARD STRUCTURE – BOARD HIERARCHICAL AUTHORITY

The chair of the board who is not the CEO is ranked highest and the CEO is ranked lowest. Ranking of titles on board were based on the theoretical argument that board members are able to control the CEO when they have more structural authority; therefore, these board members on a non-CEO controlled board have the highest ranking.

Note: High number indicates highest ranking

BOARD MEMBER IS NOT THE CEO

***NON-DUALITY BOARD**

- 10: Non-CEO board chair, Chair of a committee
- 9: Non-CEO board chair, not chair of a committee
- 8: Not chair of board, but chair of a committee
- 7: Not chair of board, not chair of a committee, but member of a committee

***CEO-DUALITY BOARD**

- 6: Not chair of board, chair of a committee, and member of a committee
- 5: Not board chair; not chair of a committee; member of a committee

BOARD MEMBER IS THE CEO

***NON-DUALITY BOARD**

- 4: CEO, not chair of board, not chair of a committee
- 3: CEO, not chair of board, chair of committee

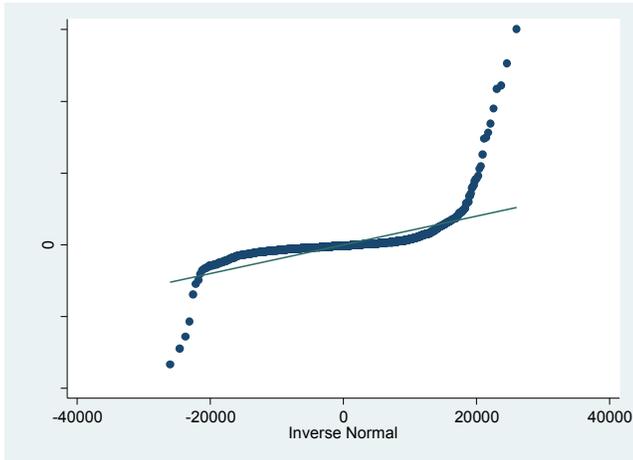
***CEO-DUALITY BOARD**

- 2: Board chair, chair of board, not chair of a committee
- 1: Board chair, chair of committee

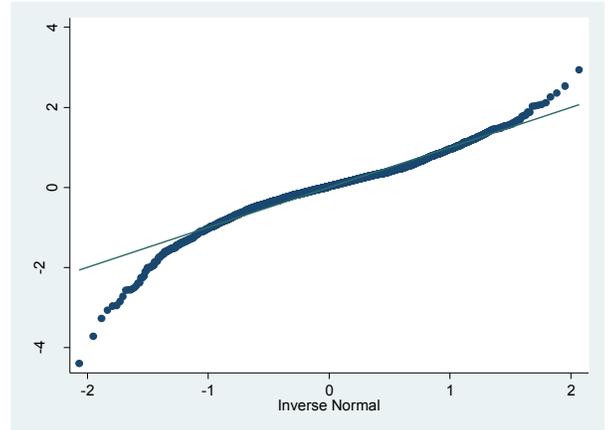
APPENDIX C. MULTIVARIATE NORMALITY DIAGNOSTICS

Multivariate Normality Assumption: Residuals fit the line of best fit; Residuals are independently and identically distributed.

Residuals (Not transformed variables)



Residuals (transformed variables)

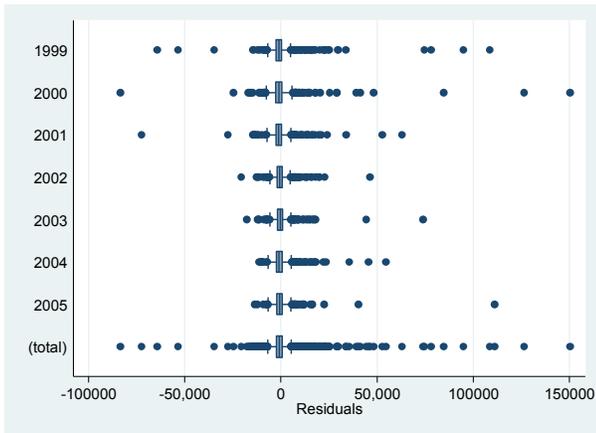


Diagnostics: Show residuals are iid

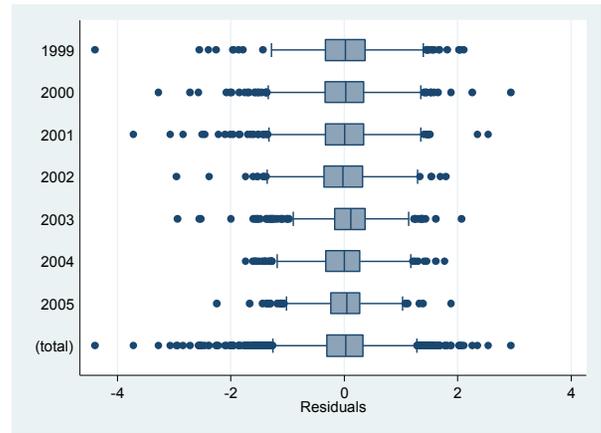
Multivariate Normality Assumption: Residuals fit the line of best fit; Residuals are independently and identically distributed.

Graph shows distribution of the residuals for each year and overall.

Residuals (Not transformed)



Residuals (transformed)



APPENDIX D: RANDOM-EFFECTS REGRESSION RESULTS

TABLE D - 17. Results of Random-Effects Panel Data Analyses of Board Power, Compensation, and Pay-for-Performance

| VARIABLES | Total Compensation | | | | | Pay-for-performance Sensitivity | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.39*** | 0.39*** | 0.40*** | 0.39*** | 0.39*** | - | - | - | - | - |
| Market Growth | 0.17*** | 0.17*** | 0.17*** | 0.18*** | 0.17*** | 0.31*** | 0.31*** | 0.31*** | 0.31*** | 0.31*** |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.08** | -0.08** | -0.08** | -0.08** | -0.08** |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.07+ | 0.07 | 0.07+ | 0.07 | 0.07 |
| Institutional Ownership | 0.04** | 0.04** | 0.04** | 0.04** | 0.04** | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03+ |
| Salary > \$1 Million | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -0.09 | -0.10+ | -0.10+ | -0.09+ | -0.10+ |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | -0.00 | -0.04+ | -0.04+ | -0.03 | -0.04+ | -0.03 |
| Lagged Total Compensation | 0.37*** | 0.37*** | 0.37*** | 0.37*** | 0.37*** | | | | | |
| Ownership Power (OUT/IN) | | 0.02 | | | 0.02 | | -0.01 | | | -0.01 |
| Prestige Power (OUT/IN) | | | 0.04*** | | 0.04** | | | 0.03 | | 0.04* |
| Structural Power (OUT/IN) | | | | 0.02* | 0.01 | | | | -0.03+ | -0.04* |
| Constant | 2.80*** | 2.72*** | 2.66*** | 2.73*** | 2.51*** | 6.76*** | 7.06*** | 6.50*** | 7.24*** | 6.93*** |
| χ^2 | 4241 | 4292 | 4234 | 4281 | 4313 | 318 | 316 | 335 | 316 | 337 |
| $\Delta \chi^2$ | | 51 | -7*** | 40 | 72** | | -2 | 17 | -2+ | 19* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control model

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE D - 18. Results of Random-Effects Panel Data Analyses of Winsorized Board Power, Compensation, and Pay-for-Performance

| VARIABLES | Total Compensation | | | | | Pay-for-performance Sensitivity | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.39*** | 0.39*** | 0.39*** | 0.39*** | 0.39*** | -0.31*** | -0.31*** | -0.31*** | -0.31*** | -0.31*** |
| Market Growth | 0.17*** | 0.18*** | 0.17*** | 0.18*** | 0.17*** | 0.05+ | 0.05 | 0.05+ | 0.05 | 0.05 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.08** | -0.07** | -0.08** | -0.08** | -0.08** |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.07+ | 0.07 | 0.07+ | 0.07 | 0.07 |
| Institutional Ownership | 0.04** | 0.04** | 0.04** | 0.04** | 0.04** | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03+ |
| Salary > \$1 Million | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -0.09 | -0.09+ | -0.10+ | -0.09+ | -0.10+ |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | -0.00 | -0.04+ | -0.04+ | -0.03 | -0.04+ | -0.03 |
| Lagged Total Compensation | 0.37*** | 0.37*** | 0.37*** | 0.37*** | 0.37*** | | | | | |
| Ownership Power (OUT/IN) | | 0.02+ | | | 0.02+ | | -0.02 | | | -0.01 |
| Prestige Power (OUT/IN) | | | 0.04** | | 0.04** | | | 0.03 | | 0.03+ |
| Structural Power (OUT/IN) | | | | 0.02* | 0.01 | | | | -0.03+ | -0.03+ |
| Constant | 2.80*** | 2.57*** | 2.67*** | 2.72*** | 2.39*** | 6.75*** | 7.54*** | 6.55*** | 7.25*** | 7.29*** |
| χ^2 | 4270 | 4266 | 4241 | 4282 | 4291 | 318 | 316 | 336 | 316 | 339 |
| $\Delta \chi^2$ | | -4+ | -29** | 12 | 21** | | -2 | 18 | -2+ | 21+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 with respect to control model

Power variables winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE D - 19. Non-Linear Results of Random-Effects Panel Data Analyses of Board Power, Compensation, and Pay-for-Performance

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|--|--------------------|---------|---------|---------|---------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.38*** | 0.38*** | 0.39*** | 0.39*** | 0.39*** | -0.28*** | -0.28*** | -0.27*** | -0.28*** | -0.27*** |
| Market Growth | 0.18*** | 0.18*** | 0.17*** | 0.18*** | 0.17*** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.08** | -0.08** | -0.08** | -0.08** | -0.08** |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Leverage | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Institutional Ownership | 0.04* | 0.03* | 0.04* | 0.04* | 0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Large Owner | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | 0.04* | 0.04* | 0.03+ | 0.04+ | 0.03+ |
| Salary > \$1 Million | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 |
| CEO Change | -0.02* | -0.02* | -0.03* | -0.02* | -0.02* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | -0.02 | -0.01 | -0.01 | -0.02 | -0.00 | -0.03 | -0.03 | -0.02 | -0.03 | -0.02 |
| Lagged Total Compensation | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Firm Size | 0.37*** | 0.38*** | 0.38*** | 0.37*** | 0.38*** | | | | | |
| Ownership Power (OUT/IN) | | 0.04* | | | 0.04* | | -0.00 | | | 0.01 |
| Ownership Power (OUT/IN) ² | | -0.03* | | | -0.03* | | -0.01 | | | -0.01 |
| Prestige Power (OUT/IN) | | | 0.02 | | 0.02 | | | 0.00 | | 0.01 |
| Prestige Power (OUT/IN) ² | | | 0.06*** | | 0.05*** | | | 0.06** | | 0.06** |
| Structural Power (OUT/IN) | | | | 0.01 | 0.00 | | | | -0.04+ | -0.04* |
| Structural Power (OUT/IN) ² | | | | 0.01 | 0.01 | | | | 0.04* | 0.04* |
| χ^2 | 4401 | 4453 | 4520 | 4420 | 4568 | 372 | 374 | 397 | 364 | 395 |
| $\Delta \chi^2$ | | 52* | 119*** | 19 | 167* | | 2 | 25** | -8* | 23** |

n=3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 with respect to control model

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX E: ORDINARY LEAST SQUARES (OLS) REGRESSION

TABLE E - 20. Resu lts of OLS Analyses of Board Power, Total Compensation, and Pay-for-Performance Sensitivity

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.30*** | 0.30*** | 0.30*** | 0.30*** | 0.30*** | -0.23*** | -0.23*** | -0.22*** | -0.23*** | -0.23*** |
| Tobin's Q | 0.14*** | 0.14*** | 0.13*** | 0.14*** | 0.13*** | 0.04 | 0.05 | 0.04 | 0.05 | 0.04 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.17*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** |
| Liquidity | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 | 0.09** | 0.09** | 0.08** | 0.09** | 0.08** |
| Leverage | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04* | 0.04* | 0.04* | 0.04* | 0.04* |
| Salary Exceed > \$1 M | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.09** | -0.09** | -0.10** | -0.09* | -0.09** |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | -0.00 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | -0.13*** | -0.13*** | -0.13*** | -0.13*** | -0.13*** |
| Lagged Total Compensation | 0.51*** | 0.51*** | 0.51*** | 0.51*** | 0.51*** | | | | | |
| Ownership Power (out/in) | | 0.02 | | | 0.02 | | -0.02 | | | -0.01 |
| Prestige Power (out/in) | | | 0.03** | | 0.03** | | | 0.03 | | 0.04+ |
| Structural Power (out/in) | | | | 0.01 | 0.01 | | | | -0.02 | -0.03+ |
| F | 143*** | 141*** | 141*** | 141*** | 136*** | 13.31*** | 16.02*** | 16.21*** | 16.02*** | 15.66*** |
| R ² | 63.91 | 63.94 | 64.02 | 63.93 | 64.05 | 21.66 | 21.69 | 21.76 | 21.69 | 21.85 |
| Adjusted R ² | 63.40 | 63.42 | 63.50 | 63.41 | 63.51 | 20.57 | 20.58 | 20.65 | 20.59 | 20.70 |
| Δ Adjusted R ² | | 0.02 | 0.10** | 0.01 | 0.11** | | 0.01 | 0.08 | 0.02 | 0.13+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE E - 21. Results of OLS Analyses of Winsorized Board Power, Compensation, and Pay-for-Performance

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|-----------|-----------|-----------|-----------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.30*** | 0.30*** | 0.30*** | 0.30*** | 0.30*** | -0.23*** | -0.23*** | -0.23*** | -0.23*** | -0.23*** |
| Tobin's Q | 0.14*** | 0.14*** | 0.13*** | 0.14*** | 0.13*** | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.17*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** |
| Liquidity | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 | 0.09** | 0.09*** | 0.08** | 0.09** | 0.09** |
| Leverage | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04* | 0.04* | 0.04* | 0.04* | 0.04* |
| Salary Exceed > \$1 M | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.09** | -0.09* | -0.09** | -0.09* | -0.09** |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | 0.00 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 |
| Sox | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | -0.13*** | -0.13*** | -0.13*** | -0.13*** | -0.13*** |
| Lagged Total Compensation | 0.51*** | 0.51*** | 0.51*** | 0.51*** | 0.51*** | | | | | |
| Ownership Power (out/in) | | 0.02 | | | 0.02 | | -0.03+ | | | -0.03 |
| Prestige Power (out/in) | | | 0.03** | | 0.03** | | | 0.03 | | 0.03 |
| Structural Power (out/in) | | | | 0.02 | 0.01 | | | | -0.02 | -0.02 |
| F | 143.07*** | 140.83*** | 140.73*** | 140.63*** | 136.11*** | 16.31*** | 16.08*** | 16.22*** | 16.02*** | 15.71*** |
| R ² | 63.91 | 63.94 | 64.00 | 63.93 | 64.03 | 21.66 | 21.76 | 21.72 | 21.69 | 21.86 |
| Adjusted R ² | 63.40 | 63.42 | 63.48 | 63.41 | 63.49 | 20.57 | 20.65 | 20.61 | 20.58 | 20.71 |
| Δ Adjusted R ² | | 0.02 | 0.08 | 0.01 | 0.09 | | 0.08 | 0.04 | 0.01 | 0.14 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in R-Squared in respect to the control model.

Power ratios winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX F: CHANGE IN TOTAL COMPENSATION

TABLE F - 22. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Change in Total Compensation

| | (1) | (2) | (3) | (4) | (5) |
|---------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.24 | -0.24 | -0.23 | -0.24 | -0.23 |
| Tobin's Q | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Firm Performance | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Liquidity | -0.18** | -0.18** | -0.18** | -0.18** | -0.18** |
| Leverage | 0.21* | 0.21* | 0.22* | 0.21* | 0.22* |
| Institutional Ownership | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| Large Owner | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Salary Exceed \$1M | -0.10** | -0.10** | -0.10** | -0.10** | -0.10* |
| Risk | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 |
| CEO Change | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| CEO Tenure | -0.01 | -0.01 | 0.02 | -0.01 | 0.02 |
| Sox | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Ownership Power (out/in) | | -0.01 | | | -0.01 |
| Prestige Power(out/in) | | | 0.11*** | | 0.11*** |
| Structural Power(out/in) | | | | 0.02 | 0.01 |
| F | 3.48*** | 3.30*** | 4.87*** | 3.31*** | 4.38*** |
| R ² | 1.51 | 1.51 | 1.93 | 1.54 | 1.93 |
| Adjusted R ² | 1.04 | 1.02 | 1.43 | 1.04 | 1.38 |
| Δ Adjusted R ² | | -0.02 | 0.39 | 0.00 | 0.34 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE F - 23. Results of Fixed-Effects Panel Data Analyses Examining Winsorized Board Power and Change in Total Compensation

| | (1) | (2) | (3) | (4) | (5) |
|---------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.24 | -0.23 | -0.23 | -0.24 | -0.23 |
| Tobin's Q | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Firm Performance | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Liquidity | -0.18** | -0.18** | -0.18** | -0.18** | -0.18** |
| Leverage | 0.21* | 0.21* | 0.22* | 0.21* | 0.22* |
| Institutional Ownership | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| Large Owner | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Salary Exceed \$1M | -0.10** | -0.10** | -0.10** | -0.10** | -0.10** |
| Risk | -0.16 | -0.16 | -0.16 | -0.16 | -0.16 |
| CEO Change | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| CEO Tenure | -0.01 | -0.01 | 0.01 | -0.01 | 0.01 |
| Sox | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Ownership Power (out/in) | | 0.02 | | | 0.02 |
| Prestige Power(out/in) | | | 0.09*** | | 0.09*** |
| Structural Power(out/in) | | | | 0.02 | 0.01 |
| F | 3.48*** | 3.31*** | 4.47*** | 3.31*** | 4.07*** |
| R ² | 1.51 | 1.53 | 1.83 | 1.54 | 1.85 |
| Adjusted R ² | 1.04 | 1.03 | 1.33 | 1.04 | 1.29 |
| Δ Adjusted R ² | | -0.01 | 0.29 | 0.00 | 0.25 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

Power ratios winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE F- 24. Results of Random-Effects Panel Data Analyses Examining Board Power and Change in Total Compensation

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|--------------------------|---------|---------|---------|---------|---------|
| Firm Size | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Tobin's Q | 0.05** | 0.05** | 0.05** | 0.05** | 0.05** |
| Firm Performance | -0.05* | -0.05* | -0.05* | -0.05* | -0.05* |
| Liquidity | -0.05* | -0.05** | -0.06** | -0.05** | -0.06** |
| Leverage | 0.06+ | 0.07+ | 0.07* | 0.07+ | 0.07* |
| Institutional Ownership | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Salary Exceed \$1M | -0.04** | -0.04** | -0.04** | -0.04** | -0.04** |
| Risk | -0.06 | -0.06 | -0.06+ | -0.06 | -0.06+ |
| CEO Change | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CEO Tenure | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 |
| Ownership Power (out/in) | | 0.02* | | | 0.02* |
| Prestige Power(out/in) | | | 0.03 | | 0.03 |
| Structural Power(out/in) | | | | 0.00 | -0.01 |
| χ^2 | 63* | 65* | 79*** | 67* | 85*** |
| $\Delta \chi^2$ | | 2* | 16 | 4 | 22* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 with respect to control model

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE F - 25. Results of Random-Effects Panel Data Analyses Examining Board Power and Change in Total Compensation

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|--------------------------|---------|---------|---------|---------|---------|
| Firm Size | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Tobin's Q | 0.05** | 0.05** | 0.05** | 0.05** | 0.05** |
| Firm Performance | -0.05* | -0.05* | -0.05* | -0.05* | -0.05* |
| Liquidity | -0.05* | -0.06** | -0.05** | -0.05** | -0.06** |
| Leverage | 0.06+ | 0.07+ | 0.07* | 0.07+ | 0.07* |
| Institutional Ownership | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Salary Exceed \$1M | -0.04** | -0.04** | -0.04** | -0.04** | -0.04** |
| Risk | -0.06 | -0.06 | -0.06+ | -0.06 | -0.06+ |
| CEO Change | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 |
| CEO Tenure | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 |
| Ownership Power (out/in) | | 0.02 | | | 0.03+ |
| Prestige Power(out/in) | | | 0.03 | | 0.03 |
| Structural Power(out/in) | | | | 0.00 | -0.01 |
| χ^2 | 63* | 63* | 76** | 67* | 79** |
| $\Delta \chi^2$ | | 0 | 13 | 4 | 16+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 with respect to control model

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX G: ALTERNATIVE MEASURES FOR PRESTIGE

| Variables | Structural Power | Ownership Power | Prestige Power | Uniqueness |
|---|------------------|-----------------|----------------|------------|
| <i>Overlapping Audit & Compensation Committee Membership</i> | 0.7331 | | | 0.4660 |
| <i>Status on compensation committee</i> | 0.7207 | | | 0.4858 |
| <i>Status on nomination committee</i> | 0.4737 | | | 0.7740 |
| <i>Title Ranking</i> | 0.4693 | | | 0.7728 |
| <i>Not related, founder, employee ownership</i> | | 0.6512 | | 0.5767 |
| <i>Compensation Committee Ownership</i> | | 0.5890 | | 0.6443 |
| <i>Nomination Committee Ownership</i> | | 0.4901 | | 0.7565 |
| <i>Difference between director ownership & CEO ownership</i> | | 0.5652 | | 0.6789 |
| <i>Accumulated board seats</i> | | | 0.7012 | 0.4933 |
| <i>S&P Credit Rating</i> | | | 0.4769 | 0.7800 |
| <i>Effective Board Practices (Increased Outsiders Percentages)</i> | | | 0.5212 | 0.7335 |
| <i>Effective Board Practices (Decreased Executive Compensation)</i> | | | 0.4883 | 0.7659 |
| <i>Industry Experience</i> | | | -0.5667 | 0.6599 |
| <i>Expertise Education</i> | | | | 0.9597 |
| <i>Ratio of Director Tenure/CEO Tenure</i> | | | | 0.9956 |
| <i>Variance Explained</i> | 1.5840 | 0.3449 | 1.6475 | |
| <i>Proportional</i> | 0.4260 | 0.3617 | 0.4431 | |

APPENDIX H. NON-LINEAR REGRESSIONS

TABLE H - 26: Non-Linear Results of Fixed-Effects Panel Data Analyses of Board Power, Compensation, and Pay for Performance

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|--|--------------------|---------|----------|---------|---------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.36*** | 0.37*** | 0.38*** | 0.36*** | 0.38*** | -0.28* | -0.28* | -0.26* | -0.28* | -0.26* |
| Market Growth | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary > \$1 Million | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03+ | 0.03* | 0.03+ |
| Risk | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| CEO Change | -0.03* | -0.03* | -0.03** | -0.03** | -0.03** | -0.02 | -0.02 | -0.02+ | -0.02 | -0.02+ |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 |
| Sox | 0.06* | 0.06* | 0.06* | 0.07* | 0.06* | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.03 | 0.04 | 0.02 | 0.03 | | | | | |
| Ownership Power (OUT/IN) | | 0.03 | | | 0.03 | | 0.01 | | | 0.03 |
| Ownership Power (OUT/IN) ² | | -0.02 | | | -0.02 | | -0.01 | | | -0.02 |
| Prestige Power (OUT/IN) | | | 0.05** | | 0.05* | | | 0.02 | | 0.02 |
| Prestige Power (OUT/IN) ² | | | 0.04* | | 0.04* | | | 0.05* | | 0.05* |
| Structural Power (OUT/IN) | | | | 0.02 | 0.01 | | | | -0.03 | -0.03 |
| Structural Power (OUT/IN) ² | | | | 0.04* | 0.04* | | | | 0.03+ | 0.03+ |
| F | 10.23*** | 9.38*** | 10.48*** | 9.45*** | 9.31*** | 4.08*** | 3.76*** | 3.96*** | 3.64*** | 3.39*** |
| R ² | 7.91 | 7.94 | 8.74 | 8.29 | 9.15 | 3.12 | 3.29 | 3.73 | 3.42 | 3.91 |
| Adjusted R ² | 7.45 | 7.42 | 8.22 | 7.78 | 8.53 | 2.66 | 2.78 | 3.22 | 2.91 | 3.29 |
| Δ Adjusted R ² | | -0.03 | 0.77 | 0.33 | 1.08 | | 0.12 | 0.56* | 0.25 | 0.63* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints. R² and their tests are with respect to the control model.

Data was demeaned in order to correct for multicollinearity.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE H - 27: Non-Linear Results of Fixed-Effects Panel Data Analyses of Winsorized Board Power, Compensation, and Pay-for-Performance

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|---------|----------|---------|---------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.37*** | 0.37*** | 0.38*** | 0.36*** | 0.37*** | -0.28* | -0.28* | -0.26* | -0.28* | -0.26* |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed > \$1 M | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03** | -0.03** | -0.03** | -0.02 | -0.02 | -0.02+ | -0.02+ | -0.02+ |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.06* | 0.06+ | 0.06* | 0.06* | 0.06* | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | | | | | |
| Ownership Power (out/in) | | 0.03 | | | 0.02 | | 0.00 | | | 0.01 |
| Ownership Power (out/in) | | -0.03 | | | -0.03 | | 0.00 | | | -0.00 |
| Prestige Power (out/in) | | | 0.05** | | 0.05* | | | 0.02 | | 0.03 |
| Prestige Power (out/in) | | | 0.04* | | 0.04* | | | 0.04* | | 0.04* |
| Structural Power (out/in) | | | | 0.02 | 0.00 | | | | -0.03 | -0.04 |
| Structural Power (out/in) | | | | 0.04** | 0.04** | | | | 0.04* | 0.04* |
| F | 10.13*** | 9.14*** | 10.24*** | 9.49*** | 8.86*** | 4.08*** | 3.77*** | 3.99*** | 3.66*** | 3.44*** |
| R ² | 7.91 | 8.04 | 8.54 | 8.33 | 9.11 | 3.12 | 3.28 | 3.63 | 3.47 | 3.84 |
| Adjusted R ² | 7.45 | 7.53 | 8.03 | 7.81 | 8.50 | 2.66 | 2.77 | 3.12 | 2.95 | 3.22 |
| Δ Adjusted R ² | | 0.08 | 0.58** | 0.36** | 1.05** | | 0.11 | 0.46* | 0.29* | 0.56* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints. R² and their tests are with respect to the control model.

Data was demeaned in order to correct for multicollinearity.

Winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

APPENDIX I. HIERARCHICAL LINEAR REGRESSION ANALYSIS

TABLE I - 28. Descriptive Statistics and Correlations of Variables in HLM Regression Analysis

| No. | Variable | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----|--|--------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | Total Compensation (\$M) | \$5.48 | \$6.12 | 1.000 | | | | | | | | | | |
| 2 | Pay-for-Performance Sensitivity | \$1.56 | \$3.04 | 0.095*** | 1.000 | | | | | | | | | |
| 3 | Salary Proportion | 25.43 | 19.35 | -0.565*** | -0.020 | 1.000 | | | | | | | | |
| 4 | Contingent Compensation (LTIP + Bonus) | 55.70 | 25.25 | 0.258*** | 0.174*** | -0.523*** | 1.000 | | | | | | | |
| 5 | Contingent Compensation (LTIP) | 43.73 | 26.42 | 0.360*** | 0.204*** | -0.553*** | 0.681*** | 1.000 | | | | | | |
| 6 | Firm Size (assts) | 5.92 | 12.45 | 0.332*** | -0.147*** | -0.193*** | 0.033* | 0.079*** | 1.000 | | | | | |
| 7 | Market Growth | 1.63 | 1.55 | 0.255*** | 0.113*** | -0.208*** | 0.311*** | 0.306*** | -0.084*** | 1.000 | | | | |
| 8 | Firm Performance | 4.09 | 10.09 | 0.140*** | -0.184*** | -0.152*** | 0.077*** | 0.047** | 0.012 | 0.324*** | 1.000 | | | |
| 9 | CEO change | 0.07 | 26.00 | -0.011 | -0.003 | -0.003 | -0.010 | -0.009 | 0.030+ | -0.017 | -0.039* | 1.000 | | |
| 10 | CEO tenure | 7.46 | 6.21 | 0.010 | 0.039* | 0.047** | 0.030+ | 0.013 | -0.087*** | 0.064*** | 0.012 | -0.289*** | 1.000 | |
| 11 | Liquidity | 2.20 | 1.61 | -0.070*** | 0.246*** | 0.041** | 0.107*** | 0.119*** | -0.229*** | 0.270*** | -0.050** | -0.013 | 0.088*** | 1.000 |
| 12 | Leverage | 0.22 | 0.16 | 0.003 | -0.170*** | 0.003 | -0.137*** | -0.125*** | 0.165*** | -0.410*** | -0.161*** | 0.015 | -0.050** | -0.354*** |
| 13 | Salary Exceed \$1 million | 0.13 | 0.34 | 0.355*** | -0.149*** | -0.180*** | 0.004 | 0.057*** | 0.381*** | -0.050** | 0.063*** | -0.050** | 0.010 | -0.184*** |
| 14 | Risk | 0.52 | 0.20 | 0.055*** | -0.240*** | -0.039* | -0.158*** | -0.140*** | 0.229*** | -0.419*** | -0.131*** | 0.034* | -0.095*** | -0.604*** |
| 15 | Lagged total compensation (\$M) | 5.78 | 6.58 | 0.664*** | 0.035* | -0.366*** | 0.203*** | 0.236*** | 0.330*** | 0.250*** | 0.098*** | 0.036* | -0.001 | -0.030+ |
| 16 | Lagged salary proportion | 22.22 | 15.10 | -0.468*** | -0.105*** | 0.553*** | -0.329*** | -0.359*** | -0.203*** | -0.280*** | -0.157*** | -0.047** | 0.063*** | -0.032* |
| 17 | Lagged contingent compensation (ltip +bonus) | 64.13 | 20.68 | 0.232*** | 0.232*** | -0.287*** | 0.504*** | 0.419*** | 0.025 | 0.373*** | 0.090*** | 0.032* | 0.040** | 0.194*** |
| 718 | Lagged contingent compensation (ltip) | 51.38 | 23.19 | 0.226*** | 0.271*** | -0.238*** | 0.406*** | 0.534*** | 0.063*** | 0.330*** | -0.043** | 0.033* | 0.011 | 0.212*** |
| 19 | Institutional Ownership (%) | 68.59 | 17.58 | 0.040* | 0.068*** | -0.174*** | 0.086*** | 0.121*** | -0.146*** | 0.104*** | 0.155*** | -0.004 | 0.026 | 0.115*** |
| 20 | Large Owner (%) | 9.08 | 4.00 | -0.100*** | 0.088*** | 0.054*** | -0.039* | -0.030+ | -0.154*** | -0.060*** | -0.046** | 0.044** | 0.037* | 0.114*** |
| 21 | Ownership – Compensation Comm (average outsider) (%) | 0.09 | 0.25 | -0.117*** | 0.071*** | 0.119*** | -0.005 | -0.060*** | -0.101*** | 0.044** | 0.004 | -0.013 | 0.072*** | 0.078*** |

| | | | | | | | | | | | | | | |
|----|--|-------|------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 22 | Ownership – Nomination Comm (avg outsider) % | 0.06 | 0.15 | -0.109*** | 0.045** | 0.073*** | -0.041** | -0.059*** | -0.094*** | 0.034* | 0.014 | -0.009 | 0.042** | 0.073*** |
| 23 | Ownership – Difference between director and CEO (average outsider) % | -1.20 | 3.37 | 0.029+ | -0.084*** | -0.095*** | 0.007 | 0.047** | 0.083*** | -0.075*** | -0.013 | 0.070*** | -0.401*** | -0.056*** |
| 24 | Ownership - Not related, founder, employee (avg out) % | 0.18 | 0.46 | -0.115*** | 0.070*** | 0.128*** | -0.026 | -0.064*** | -0.099*** | 0.016 | -0.010 | -0.001 | 0.047** | 0.078*** |
| 25 | Accumulated board seats (avg outsider) | 0.12 | 0.04 | -0.120*** | 0.313*** | 0.092*** | 0.088*** | 0.057*** | -0.232*** | 0.180*** | -0.095*** | -0.007 | 0.039* | 0.296*** |
| 26 | Effective bd practice (decrease TC) (avg out) | 0.10 | 0.07 | -0.060*** | 0.055*** | 0.101*** | -0.016 | -0.009 | -0.052*** | 0.029+ | -0.035* | 0.021 | -0.042** | 0.112*** |
| 27 | SP Credit Rating (avg out) | 0.12 | 0.04 | -0.143*** | 0.343*** | 0.108*** | 0.085*** | 0.048** | -0.257*** | 0.207*** | -0.062*** | -0.049** | 0.082*** | 0.325*** |
| 28 | Effective bd practice (increase out) (avg out) | 0.10 | 0.07 | 0.006 | 0.032* | -0.002 | 0.011 | 0.022 | -0.034* | 0.043** | -0.024 | 0.033* | -0.055*** | 0.045** |
| 29 | Comm Overlap (avg out) | 1.48 | 0.39 | -0.025 | 0.052*** | 0.030+ | 0.030+ | -0.041** | -0.094*** | 0.054*** | 0.021 | -0.024 | 0.027+ | 0.080*** |
| 30 | Compensation Committee Seniority (avg out) | 2.08 | 0.57 | -0.016 | -0.050** | 0.030+ | 0.051*** | -0.037* | -0.064*** | 0.013 | 0.033* | -0.018 | 0.018 | -0.010 |
| 31 | Nomination Committee Seniority (avg out) | 1.88 | 0.74 | 0.066 | -0.155 | -0.080 | -0.083 | -0.038 | 0.118 | -0.053 | 0.092*** | 0.010 | -0.069*** | -0.098*** |
| 32 | Hierarchical Status | 0.56 | 0.10 | 0.051*** | -0.056*** | -0.018 | 0.007 | -0.037* | 0.039* | -0.039* | 0.028+ | -0.076*** | 0.122*** | -0.059*** |

N = 3,581 firm-year observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE I 28 (CONT'D)
Descriptive Statistics and Correlations of Variables in HLM Regression Analysis

| No. | Variable | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|-----|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|-----------|
| 12 | Leverage | 1.000 | | | | | | | | | | | |
| 13 | Salary Exceed \$1 million | 0.111*** | 1.000 | | | | | | | | | | |
| 14 | Risk | 0.793*** | 0.202*** | 1.000 | | | | | | | | | |
| 15 | Lagged total compensation (\$M) | -0.021 | 0.358*** | 0.029+ | 1.000 | | | | | | | | |
| 16 | Lagged salary proportion | 0.051*** | -0.192*** | 0.021 | -0.598*** | 1.000 | | | | | | | |
| 17 | Lagged contingent compensation (ltip +bonus) | -0.204*** | -0.010 | -0.245*** | 0.281*** | -0.558*** | 1.000 | | | | | | |
| 18 | Lagged contingent compensation (ltip) | -0.159*** | 0.032* | -0.208*** | 0.356*** | -0.541*** | 0.742*** | 1.000 | | | | | |
| 19 | Institutional Ownership (%) | -0.127*** | 0.005 | -0.145*** | 0.028+ | -0.216*** | 0.159*** | 0.122*** | 1.000 | | | | |
| 20 | Large Owner (%) | -0.006 | -0.051*** | -0.033* | -0.102*** | 0.044** | -0.021 | -0.020 | 0.431*** | 1.000 | | | |
| 21 | Ownership – Compensation Comm (average outsider) | -0.065*** | -0.094*** | -0.103*** | -0.119*** | 0.145*** | -0.029+ | -0.057*** | -0.081*** | 0.097*** | 1.000 | | |
| 22 | Ownership – Nomination Comm (average outsider) | -0.107*** | -0.095*** | -0.115*** | -0.107*** | 0.101*** | -0.033* | -0.049** | -0.014 | 0.007 | 0.481*** | 1.000 | |
| 23 | Ownership – Difference between director and CEO (average outsider) | 0.127*** | 0.036* | 0.133*** | 0.014 | -0.095*** | -0.015 | 0.031* | 0.128*** | 0.028+ | -0.021 | 0.049** | 1.000 |
| 24 | Ownership - Not related, founder, employee (avg out) | -0.061*** | -0.095*** | -0.092*** | -0.120*** | 0.165*** | -0.051*** | -0.069*** | -0.106*** | 0.073*** | 0.779*** | 0.498*** | 0.041** |
| 25 | Accumulated board seats (avg outsider) | -0.209*** | -0.244*** | -0.287*** | -0.100*** | 0.036* | 0.148*** | 0.131*** | 0.109*** | 0.101*** | 0.090*** | 0.044** | -0.115*** |
| 26 | Effective bd practice (decrease TC) (avg out) | -0.082*** | -0.042** | -0.082*** | 0.025 | -0.083*** | 0.091*** | 0.126*** | 0.034* | 0.028+ | -0.015 | -0.043** | -0.025 |
| 27 | SP Credit Rating (avg out) | -0.273*** | -0.262*** | -0.355*** | -0.131*** | 0.062*** | 0.140*** | 0.112*** | 0.146*** | 0.103*** | 0.101*** | 0.044** | -0.144*** |
| 28 | Effective bd practice (increase out) (avg out) | -0.022 | -0.036* | -0.011 | 0.023 | -0.039* | 0.049** | 0.046** | 0.029+ | 0.004 | -0.008 | -0.026+ | -0.009 |

| | | | | | | | | | | | | | |
|----|---|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|---------|----------|----------|-----------|
| 29 | Comm Overlap (avg out) | -0.080*** | -0.094*** | -0.093*** | -0.051*** | 0.054*** | 0.018 | -0.024 | 0.018 | 0.000 | 0.107*** | 0.159*** | -0.095*** |
| 30 | Compensation Committee Seniority (avg out) | 0.023 | -0.040** | 0.024 | -0.034* | 0.058*** | -0.014 | -0.028+ | -0.079*** | -0.029+ | 0.131*** | 0.051*** | -0.054*** |
| 31 | Nomination Committee Seniority (avg out) | 0.035* | 0.084*** | 0.106*** | 0.036* | -0.043** | -0.087*** | -0.089*** | 0.058*** | -0.033 | -0.024 | 0.275 | 0.135 |
| 32 | Hierarchical Status | 0.015 | 0.075*** | 0.066*** | 0.048** | -0.022 | -0.014 | -0.033* | -0.004 | -0.023 | -0.034* | -0.019 | -0.060*** |

N= 3,581 firm-year observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE I- 28 (CONT'D)
Descriptive Statistics and Correlations of Variables in HLM Regression Analysis

| No. | Variable | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|-----|--|-----------|----------|----------|-----------|----------|----------|----------|----------|-------|
| 24 | Ownership - Not related, founder, employee (avg out) | 1.000 | | | | | | | | |
| 25 | Accumulated board seats (avg outsider) | 0.050** | 1.000 | | | | | | | |
| 26 | Effective bd practice (decrease TC) (avg out) | -0.030+ | 0.362*** | 1.000 | | | | | | |
| 27 | SP Credit Rating (avg out) | 0.076*** | 0.793*** | 0.309*** | 1.000 | | | | | |
| 28 | Effective bd practice (increase out) (avg out) | -0.005 | 0.327*** | 0.284*** | 0.264*** | 1.000 | | | | |
| 29 | Comm Overlap (avg out) | 0.018 | 0.281*** | 0.085*** | 0.288*** | 0.085*** | 1.000 | | | |
| 30 | Compensation Committee Seniority (avg out) | 0.032* | 0.055*** | -0.007 | 0.027+ | 0.036* | 0.627*** | 1.000 | | |
| 31 | Nomination Committee Seniority (avg out) | -0.031 | -0.138 | -0.063 | -0.156*** | -0.018 | 0.415*** | 0.241*** | 1.000 | |
| 32 | Hierarchical Status | -0.092*** | -0.038* | -0.027+ | -0.066*** | -0.002 | 0.136*** | 0.252*** | 0.191*** | 1.000 |

N = 3,581 firm-year observations

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE I - 29. Results of Hierarchical Linear Modeling (HLM) fixed-effects Regression Analysis: Average Outsiders' Variables

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|--|--------------------|---------|----------|---------|----------|---------------------------------|--------|----------|--------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.37*** | 0.35*** | 0.38*** | 0.36*** | 0.37*** | -0.28* | -0.28* | -0.23+ | -0.28* | -0.22+ |
| Tobin's Q | 0.21*** | 0.21*** | 0.20*** | 0.21*** | 0.20*** | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.06 | -0.06 | -0.05 | -0.06 | -0.05 |
| Leverage | -0.04 | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.02 | -0.02 | -0.01 | -0.02 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed > \$1 M | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03+ | 0.03* | 0.03+ |
| Risk | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | -0.05+ | -0.04 | -0.05* | -0.04 | -0.04 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 |
| Sox | 0.06* | 0.06* | 0.06* | 0.07* | 0.07* | -0.08* | -0.08* | -0.08* | -0.07* | -0.07* |
| Lagged Total Compensation | 0.03 | 0.02 | 0.04 | 0.03 | 0.04 | | | | | |
| Ownership – Not related, founder, employee (Avg Out) | | -0.01 | | | -0.01 | | 0.03 | | | 0.03 |
| Ownership – Compensation Committee (Avg Out) | | -0.01 | | | -0.01 | | -0.02 | | | -0.01 |
| Ownership- Nomination Committee (Avg Out) | | 0.01 | | | 0.01 | | -0.01 | | | -0.00 |
| Director – CEO Ownership (Avg Out) | | 0.05 | | | 0.05 | | 0.01 | | | 0.01 |
| Accumulated Board Seats (AvgOut) | | | 0.02 | | 0.01 | | | 0.03 | | 0.03 |
| Effective Board Practice (Decrease TC) (Avg Out) | | | -0.08*** | | -0.08*** | | | -0.06*** | | -0.06*** |
| SP Credit Rating (Avg Out) | | | 0.01 | | 0.01 | | | 0.06 | | 0.05 |
| Effective Board Practice (Increase Out 5) (Avg Out) | | | -0.01 | | -0.01 | | | -0.00 | | -0.00 |
| Committee Overlap (Avg Out) | | | | 0.05* | 0.05* | | | | 0.06+ | 0.05+ |
| CompensationCommittee Seniority (Avg Out) | | | | 0.00 | 0.01 | | | | -0.03+ | -0.03 |
| Nomination Committee Seniority (Avg Out) | | | | -0.00 | -0.01 | | | | -0.03 | -0.03 |
| Hierarchical Status (Avg Out) | | | | -0.02 | -0.02 | | | | -0.01 | -0.01 |

| | | | | | | | | | | |
|---------------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| F | 10.13*** | 8.57*** | 1.31*** | 8.76*** | 8.14*** | 4.07*** | 3.41*** | 3.71*** | 3.41*** | 2.81*** |
| R ² | 7.87 | 8.09 | 9.37 | 8.27 | 9.90 | 3.28 | 3.32 | 4.25 | 3.51 | 4.47 |
| Adjusted R ² | 7.41 | 7.52 | 8.81 | 7.70 | 9.14 | 2.82 | 2.75 | 3.68 | 2.94 | 3.69 |
| Δ Adjusted R ² | | 0.11 | 1.40*** | 0.29 | 1.73*** | | -0.07 | 0.86*** | 0.12+ | 0.87*** |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints. R² and their tests are with respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE I - 30. Results of Hierarchical Linear Modeling (HLM) Random-Effects Regression Analysis: Average Outsiders' Variables

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|--|--------------------|---------|----------|---------|----------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.38*** | 0.38*** | 0.39*** | 0.39*** | 0.38*** | -0.29*** | -0.29*** | -0.23*** | -0.27*** | -0.22*** |
| Market Growth | 0.18*** | 0.18*** | 0.17*** | 0.18*** | 0.17*** | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.07* | -0.07** | -0.07* | -0.07* | -0.07* |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 |
| Leverage | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.02 | -0.03 | -0.02 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04* | 0.04* | 0.03+ | 0.03+ | 0.03+ |
| Salary > \$1 Million | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03* | 0.03+ | 0.03+ | 0.03* | 0.03+ |
| Risk | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| CEO Tenure | -0.02 | 0.00 | -0.02 | -0.01 | -0.00 | -0.03 | -0.03 | -0.03+ | -0.03 | -0.03 |
| SOX | 0.03** | 0.03** | 0.03** | 0.03** | 0.03* | -0.06*** | -0.06*** | -0.06*** | -0.05*** | -0.05*** |
| Lagged TC | 0.37*** | 0.37*** | 0.39*** | 0.37*** | 0.39*** | | | | | |
| Ownership – Not related, founder, employee (Avg Out) | | -0.01 | | | -0.01 | | 0.03 | | | 0.02 |
| Ownership – Compensation Committee (Avg Out) | | -0.02 | | | -0.01 | | -0.02 | | | -0.02 |
| Ownership- Nomination Committee (Avg Out) | | 0.01+ | | | 0.01 | | -0.01 | | | -0.00 |
| Director – CEO Ownership (Avg Out) | | 0.04* | | | 0.04* | | -0.00 | | | 0.00 |
| Accumulated Board Seats (AvgOut) | | | 0.03 | | 0.02 | | | 0.05 | | 0.05 |
| Effective Board Practice (Decrease TC) (Avg Out) | | | -0.10*** | | -0.10*** | | | -0.06*** | | -0.06*** |
| SP Credit Rating (Avg Out) | | | 0.02 | | 0.01 | | | 0.10* | | 0.09* |
| Effective Board Practice (Increase Out 5) (Avg Out) | | | 0.00 | | 0.01 | | | -0.01 | | -0.01 |
| Committee Overlap (Avg Out) | | | | 0.03+ | 0.04* | | | | 0.07* | 0.04 |
| Compensation Committee Seniority (Avg Out) | | | | -0.01 | -0.01 | | | | -0.05** | -0.04* |
| Nomination Committee Seniority (Avg Out) | | | | -0.00 | -0.01 | | | | -0.05** | -0.04* |

| | | | | | | | | | | |
|-------------------------------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| Hierarchical Status (Avg Out) | | | | -0.01 | -0.01 | | | | -0.00 | -0.00 |
| χ^2 | 4372*** | 4534*** | 4538*** | 4382*** | 4729*** | 348*** | 355*** | 373*** | 340*** | 378*** |
| $\Delta \chi^2$ | | 162* | 166*** | 10+ | 357*** | | 7 | 25*** | -8*** | 30*** |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control model

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX J: INTERACTIONS- OUTSIDERS * INSIDERS POWER BASES

TABLE J- 31. Results of Fixed-Effects Panel Data Regression Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|----------------------------|--------------------|---------|----------|---------|----------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.36*** | 0.37*** | 0.32** | 0.36*** | 0.33** | -0.29* | -0.29* | -0.28* | -0.28* | -0.28* |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.05 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.02 | -0.04 | -0.02 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed \$1M | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03 | 0.01 | 0.00 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03** | -0.03* | -0.02 | -0.02 | -0.02 | -0.02+ | -0.02 |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.04 | -0.03 | -0.02 | -0.02 | -0.02 | -0.02 |
| Sox | 0.06* | 0.06* | 0.05+ | 0.07* | 0.06+ | -0.06+ | -0.08* | -0.08* | -0.07* | -0.07* |
| Lagged Total Compensation | 0.03 | 0.02 | 0.04 | 0.02 | 0.04 | | | | | |
| Ownership Power (avg out) | | 0.01 | | | 0.01 | | 0.01 | | | 0.02 |
| Ownership Power (avg in) | | -0.00 | | | -0.01 | | -0.01 | | | -0.02 |
| Ownership Power(out*in) | | 0.04 | | | 0.03 | | -0.03 | | | -0.04 |
| Prestige Power (avg out) | | | -0.04+ | | -0.04* | | | 0.01 | | 0.02 |
| Prestige Power (avg in) | | | -0.07*** | | -0.07*** | | | -0.02 | | -0.02 |
| Prestige Power(out*in) | | | -0.05*** | | -0.05** | | | -0.03+ | | -0.03+ |
| Structural Power (avg out) | | | | 0.03+ | 0.04* | | | | -0.00 | -0.01 |
| Structural Power (avg in) | | | | -0.01 | 0.01 | | | | 0.02 | 0.02 |
| Structural Power(out*in) | | | | -0.03* | -0.01 | | | | -0.02+ | -0.03+ |
| F | 10.23*** | 8.72*** | 9.77*** | 8.88*** | 7.75*** | 3.99*** | 3.65*** | 3.55*** | 3.53*** | 2.98*** |
| R ² | 7.91 | 8.21 | 9.26 | 8.18 | 9.77 | 3.12 | 3.37 | 3.44 | 3.44 | 3.77 |
| Adjusted R ² | 7.45 | 7.67 | 8.72 | 7.64 | 9.08 | 2.66 | 2.83 | 2.90 | 2.90 | 3.06 |
| Δ Adjusted R ² | | 0.22 | 1.27*** | 0.19* | 1.63*** | | 0.17 | 0.24+ | 0.24+ | 0.40+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE J - 32. Results of Fixed-Effects Panel Data Regression Analyses Examining Winsorized Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|----------------------------|--------------------|---------|----------|---------|----------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.36*** | 0.37*** | 0.32** | 0.36*** | 0.32** | -0.29* | -0.28* | -0.28* | -0.28* | -0.28* |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.05 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.02 | -0.04 | -0.03 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03+ | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed \$1M | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03 | 0.01 | 0.00 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03** | -0.03* | -0.02 | -0.02 | -0.02 | -0.02+ | -0.02 |
| CEO Tenure | -0.05+ | -0.04+ | -0.03 | -0.05+ | -0.04 | -0.03 | -0.02 | -0.02 | -0.02 | -0.02 |
| Sox | 0.06* | 0.06* | 0.05+ | 0.06* | 0.05+ | -0.06+ | -0.08* | -0.08* | -0.07* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.03 | 0.05 | 0.02 | 0.04 | | | | | |
| Ownership Power (avg out) | | 0.03 | | | 0.02 | | 0.02 | | | 0.02 |
| Ownership Power (avg in) | | -0.00 | | | -0.01 | | -0.00 | | | -0.02 |
| Ownership Power(out*in) | | 0.03 | | | 0.02 | | -0.01 | | | -0.02 |
| Prestige Power (avg out) | | | -0.05* | | -0.06** | | | 0.01 | | 0.01 |
| Prestige Power (avg in) | | | -0.07*** | | -0.07*** | | | -0.02 | | -0.02 |
| Prestige Power(out*in) | | | -0.05** | | -0.04** | | | -0.03+ | | -0.03+ |
| Structural Power (avg out) | | | | 0.03 | 0.04+ | | | | -0.00 | -0.01 |
| Structural Power (avg in) | | | | -0.01 | 0.00 | | | | 0.02 | 0.03 |
| Structural Power(out*in) | | | | -0.02* | -0.02 | | | | -0.02+ | -0.02+ |
| F | 10.23*** | 8.70*** | 10.09*** | 8.86*** | 7.97*** | 3.98*** | 3.73*** | 3.59*** | 3.52*** | 3.11*** |
| R ² | 7.91 | 8.13 | 9.34 | 8.17 | 9.80 | 3.12 | 3.32 | 3.45 | 3.44 | 3.67 |
| Adjusted R ² | 7.45 | 7.59 | 8.80 | 7.62 | 9.12 | 2.66 | 2.78 | 2.91 | 2.90 | 2.96 |
| Δ Adjusted R ² | | 0.14 | 1.35*** | 0.17* | 1.67*** | | 0.12 | 0.25+ | 0.24+ | 0.30+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

Power variables winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE J - 33. Results of Random-Effects Panel Data Regression Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|----------------------------|--------------------|---------|----------|---------|----------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.39*** | 0.39*** | 0.37*** | 0.39*** | 0.37*** | -0.31*** | -0.31*** | -0.28*** | -0.31*** | -0.28*** |
| Tobin's Q | 0.17*** | 0.17*** | 0.18*** | 0.18*** | 0.18*** | 0.05+ | 0.05 | 0.05 | 0.05 | 0.04 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | -0.08** | -0.07** | -0.08** | -0.08** | -0.07** |
| Liquidity | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.07+ | 0.07 | 0.07 | 0.07 | 0.07 |
| Institutional Ownership | 0.04** | 0.04** | 0.04** | 0.04** | 0.04** | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03 |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -0.09 | -0.10+ | -0.09+ | -0.09+ | -0.10+ |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| CEO Tenure | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.03 |
| Lagged Total Compensation | 0.37*** | 0.37*** | 0.38*** | 0.37*** | 0.38*** | | | | | |
| Ownership Power (avg out) | | 0.01 | | | 0.01 | | -0.00 | | | 0.00 |
| Ownership Power (avg in) | | -0.02+ | | | -0.02 | | -0.00 | | | -0.02 |
| Ownership Power(out*in) | | 0.02 | | | 0.02 | | -0.03 | | | -0.05 |
| Prestige Power (avg out) | | | -0.03+ | | -0.03* | | | 0.06* | | 0.07** |
| Prestige Power (avg in) | | | -0.03** | | -0.03* | | | 0.02 | | 0.01 |
| Prestige Power(out*in) | | | -0.05*** | | -0.05*** | | | -0.03 | | -0.03 |
| Structural Power (avg out) | | | | 0.01 | 0.02+ | | | | -0.02 | -0.03+ |
| Structural Power (avg in) | | | | -0.02 | 0.00 | | | | 0.03+ | 0.02 |
| Structural Power(out*in) | | | | -0.01 | 0.00 | | | | -0.03* | -0.04** |
| χ^2 | 4270 | 4319 | 4307 | 4283 | 4391 | 318 | 319 | 343 | 322 | 357 |
| $\Delta \chi^2$ | | | | | | | | | | |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control model

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE J - 34. Results of Random-Effects Panel Data Regression Analyses Examining Winsorized Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|----------------------------|--------------------|---------|----------|---------|----------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.39*** | 0.39*** | 0.37*** | 0.39*** | 0.37*** | -0.31*** | -0.31*** | -0.29*** | -0.30*** | -0.28*** |
| Tobin's Q | 0.17*** | 0.18*** | 0.18*** | 0.18*** | 0.18*** | 0.05+ | 0.05 | 0.05 | 0.05 | 0.04 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | -0.08** | -0.07** | -0.08** | -0.08** | -0.07** |
| Liquidity | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.07+ | 0.07 | 0.07 | 0.07 | 0.07 |
| Institutional Ownership | 0.04** | 0.04** | 0.04** | 0.04** | 0.04* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03 |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -0.09 | -0.10+ | -0.10+ | -0.09+ | -0.10+ |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.02 | -0.01 |
| CEO Tenure | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.03 |
| Lagged Total Compensation | 0.37*** | 0.37*** | 0.38*** | 0.37*** | 0.38*** | | | | | |
| Ownership Power (avg out) | | 0.02 | | | 0.01 | | -0.01 | | | 0.00 |
| Ownership Power (avg in) | | -0.03* | | | -0.02+ | | 0.01 | | | -0.01 |
| Ownership Power(out*in) | | 0.01 | | | 0.01 | | -0.01 | | | -0.02 |
| Prestige Power (avg out) | | | -0.03* | | -0.04** | | | 0.05* | | 0.06** |
| Prestige Power (avg in) | | | -0.03** | | -0.03** | | | 0.01 | | 0.01 |
| Prestige Power(out*in) | | | -0.05*** | | -0.05*** | | | -0.03 | | -0.03 |
| Structural Power (avg out) | | | | 0.01 | 0.02+ | | | | -0.02 | -0.03 |
| Structural Power (avg in) | | | | -0.02 | 0.00 | | | | 0.03+ | 0.03+ |
| Structural Power(out*in) | | | | -0.01 | -0.01 | | | | -0.03* | -0.03* |
| Constant | *** | *** | *** | *** | *** | *** | *** | *** | *** | ** |
| χ^2 | 4270 | 4319 | 4307 | 4283 | 4391 | 318 | 319 | 343 | 322 | 357 |
| $\Delta \chi^2$ | | 49 | 37 | 13 | 121 | | 1 | 25 | 4 | 39 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control model

Power variables winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX K: SHORT TERM & LONG TERM COMPENSATION

TABLE K - 35. Results of Fixed-Effects Panel Data Analyses Examining Board Power, Short-Term and Long-Term Compensation

| VARIABLES | Salary Proportion | | | | | Contingent Compensation (LTIP + Bonus) | | | | |
|--------------------------------|-------------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.21+ | -0.22+ | -0.22+ | -0.21+ | -0.21+ | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |
| Tobin's Q | -0.15*** | -0.15*** | -0.15*** | -0.15*** | -0.15*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** |
| Firm Performance | -0.04 | -0.04 | -0.03 | -0.03 | -0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Liquidity | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.06 | -0.06 | -0.06+ | -0.06 | -0.06+ |
| Leverage | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Institutional Ownership | -0.04* | -0.04* | -0.04* | -0.04* | -0.04* | -0.01 | -0.01 | -0.00 | -0.01 | -0.00 |
| Large Owner | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Salary Exceed \$1M | 0.04* | 0.04* | 0.04+ | 0.04* | 0.04+ | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Risk | -0.00 | -0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | -0.00 | 0.00 | -0.00 |
| CEO Change | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| CEO Tenure | 0.03 | 0.03 | 0.00 | 0.03 | 0.01 | -0.03 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | -0.54*** | -0.55*** | -0.55*** | -0.55*** | -0.55*** |
| Lagged Salary Proportion | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | | | | | |
| Ownership Power (out/in) | | 0.01 | | | 0.02 | | -0.00 | | | -0.00 |
| Prestige Power(out/in) | | | -0.09*** | | -0.08*** | | | 0.05+ | | 0.05+ |
| Structural Power(out/in) | | | | -0.04+ | -0.03 | | | | 0.01 | 0.00 |
| Lagged Contingent Compensation | | | | | | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| F | 3.64*** | 3.48*** | 4.18*** | 3.53*** | 3.87*** | 29.65*** | 28.64*** | 28.90*** | 28.64*** | 26.15*** |
| R ² | 2.64 | 2.63 | 3.19 | 2.78 | 3.29 | 20.35 | 20.6 | 20.75 | 20.61 | 20.75 |
| Adjusted R ² | 2.11 | 2.11 | 2.68 | 2.26 | 2.72 | 19.95 | 20.17 | 20.33 | 20.18 | 20.28 |
| Δ Adjusted R ² | | 0.00 | 0.53*** | 0.11+ | 0.57*** | | 0.22 | 0.38+ | 0.23 | 0.33+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE K - 36. Results of Fixed-Effects Panel Data Analyses Examining Winsorized Board Power, Short-Term and Long-Term Compensation

| VARIABLES | Salary Proportion | | | | | Contingent Compensation (LTIP + Bonus) | | | | |
|--------------------------------|-------------------|----------|----------|----------|----------|--|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.21+ | -0.22+ | -0.22+ | -0.21+ | -0.21+ | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |
| Tobin's Q | -0.15*** | -0.15*** | -0.15*** | -0.15*** | -0.15*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** |
| Firm Performance | -0.04 | -0.04 | -0.03 | -0.03 | -0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Liquidity | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06+ |
| Leverage | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Institutional Ownership | -0.04* | -0.04* | -0.04* | -0.04* | -0.04* | -0.01 | -0.01 | -0.00 | -0.01 | -0.01 |
| Large Owner | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Salary Exceed \$1M | 0.04* | 0.04* | 0.04+ | 0.04* | 0.04+ | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Risk | -0.00 | -0.00 | 0.01 | -0.00 | 0.01 | 0.01 | 0.00 | -0.00 | 0.00 | -0.00 |
| CEO Change | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| CEO Tenure | 0.03 | 0.03 | 0.01 | 0.03 | 0.01 | -0.03 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | -0.54*** | -0.56*** | -0.55*** | -0.55*** | -0.56*** |
| Lagged Salary Proportion | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | | | | | |
| Lagged Contingent Compensation | | | | | | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Ownership Power (out/in) | | 0.00 | | | 0.01 | | 0.03 | | | 0.03 |
| Prestige Power(out/in) | | | -0.08*** | | -0.07** | | | 0.05+ | | 0.05+ |
| Structural Power(out/in) | | | | -0.04+ | -0.03 | | | | 0.01 | -0.01 |
| F | 3.6443 | 3.4244 | 4.0102 | 3.5249 | 3.6726 | 29.6516 | 28.6620 | 28.9020 | 28.6400 | 26.1634 |
| R ² | 2.64 | 2.62 | 3.1 | 2.77 | 3.19 | 20.35 | 20.65 | 20.74 | 20.6 | 20.8 |
| Adjusted R ² | 2.15 | 2.11 | 2.58 | 2.25 | 2.62 | 19.95 | 20.22 | 20.32 | 20.18 | 20.33 |
| Δ Adjusted R ² | | -0.04 | 0.43*** | 0.1+ | 0.47** | | 0.27 | 0.37+ | 0.23 | 0.38+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

All power ratios winsorized at p=0.01

***p < 0.001, **p < 0.01, *p < 0.05, + p < 0.10

TABLE K - 37. Results of Random-Effects Panel Data Analyses Examining Board Power, Short-term and Long-Term Compensation

| VARIABLES | Salary Proportion | | | | | Contingent Compensation (LTIP + Bonus) | | | | |
|--------------------------------|-------------------|----------|----------|----------|----------|--|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.30*** | -0.30*** | -0.31*** | -0.30*** | -0.31*** | 0.08*** | 0.08*** | 0.09*** | 0.08*** | 0.09*** |
| Tobin's Q | -0.16*** | -0.16*** | -0.16*** | -0.16*** | -0.16*** | 0.19*** | 0.19*** | 0.18*** | 0.19*** | 0.18*** |
| Firm Performance | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Liquidity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.03 | -0.04+ | -0.04+ | -0.04+ | -0.04+ |
| Leverage | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.06* | 0.06* | 0.06* | 0.06* | 0.07* |
| Institutional Ownership | -0.06*** | -0.06*** | -0.06*** | -0.06** | -0.06*** | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Large Owner | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.03 |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.03+ | -0.03 | -0.03 | -0.03 |
| Risk | -0.04 | -0.03 | -0.03 | -0.03 | -0.03 | -0.07* | -0.07* | -0.08* | -0.07* | -0.08* |
| CEO Change | 0.03+ | 0.03* | 0.03* | 0.03* | 0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | 0.02 | 0.02 | 0.00 | 0.02 | 0.01 | -0.01 | -0.01 | 0.00 | -0.01 | 0.00 |
| Lagged Salary Proportion | 0.26*** | 0.26*** | 0.26*** | 0.26*** | 0.26*** | | | | | |
| Lagged Contingent Compensation | | | | | | 0.34*** | 0.34*** | 0.34*** | 0.34*** | 0.34*** |
| Ownership Power (out/in) | | -0.01 | | | -0.01 | | 0.01 | | | 0.01 |
| Prestige Power(out/in) | | | -0.06*** | | -0.05** | | | 0.04* | | 0.04* |
| Structural Power(out/in) | | | | -0.03* | -0.02 | | | | 0.03+ | 0.02 |
| χ^2 | 1409 | 1400 | 1266 | 1418 | 1316 | 976 | 981 | 981 | 1004 | 1005 |
| $\Delta \chi^2$ | | -9 | -143*** | 9* | -93** | | 5 | 5* | 28+ | 29* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control mode

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE K - 38. Results of Random-Effects Panel Data Analyses Examining Winsorized Board Power Ratios, Short-term and Long-Term Compensation

| VARIABLES | Salary Proportion | | | | | Contingent Compensation (LTIP + Bonus) | | | | |
|--------------------------------|-------------------|----------|----------|----------|----------|--|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.30*** | -0.30*** | -0.31*** | -0.30*** | -0.31*** | 0.08*** | 0.08*** | 0.09*** | 0.08*** | 0.09*** |
| Tobin's Q | -0.16*** | -0.16*** | -0.16*** | -0.16*** | -0.16*** | 0.19*** | 0.19*** | 0.18*** | 0.19*** | 0.18*** |
| Firm Performance | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Liquidity | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | -0.03 | -0.04+ | -0.04+ | -0.04+ | -0.04+ |
| Leverage | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.06* | 0.06* | 0.06* | 0.06* | 0.07* |
| Institutional Ownership | -0.06*** | -0.06** | -0.06*** | -0.06** | -0.06*** | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Large Owner | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.03 |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.03+ | -0.03 | -0.03+ | -0.03 |
| Risk | -0.04 | -0.03 | -0.03 | -0.03 | -0.03 | -0.07* | -0.07* | -0.08* | -0.07* | -0.08* |
| CEO Change | 0.03+ | 0.03* | 0.03* | 0.03* | 0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | 0.02 | 0.02 | 0.01 | 0.02 | 0.00 | -0.01 | -0.01 | 0.00 | -0.01 | 0.00 |
| Lagged Salary Proportion | 0.26*** | 0.26*** | 0.26*** | 0.26*** | 0.26*** | | | | | |
| Lagged Contingent Compensation | | | | | | 0.34*** | 0.34*** | 0.34*** | 0.34*** | 0.34*** |
| Ownership Power (out/in) | | -0.01 | | | -0.01 | | 0.01 | | | 0.00 |
| Prestige Power(out/in) | | | -0.05*** | | -0.05** | | | 0.04* | | 0.03+ |
| Structural Power(out/in) | | | | -0.03+ | -0.02 | | | | 0.03+ | 0.02 |
| χ^2 | 1409 | 1380 | 1269 | 1418 | 1312 | 976 | 979 | 981 | 1003 | 1004 |
| $\Delta \chi^2$ | | -29 | -140*** | 9+ | -97** | | 3 | 5* | 27+ | 28+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control mode

Power variables winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE K - 39. Summary of Power Bases, Short Term, and Long Term Pay Components

| | Salary Proportion | | | | Contingent Compensation | | | |
|-------------------------|-------------------|------------|----------|------------|-------------------------|------------|-------|------------|
| | FE | | RE | | FE | | RE | |
| | | Full Model | | Full Model | | Full Model | | Full Model |
| Ownership Power | 0.01 | 0.02 | -0.01 | -0.01 | -0.00 | -0.00 | 0.01 | 0.01 |
| Prestige Power | -0.09*** | -0.08*** | -0.06*** | -0.05** | 0.05+ | 0.05+ | 0.04* | 0.04* |
| Structural Power | -0.04+ | -0.03 | -0.03* | -0.02 | 0.01 | 0.00 | 0.03+ | 0.02 |

APPENDIX L: ALTERNATIVE LONG-TERM COMPENSATION (LTIP)

TABLE L - 40. Results of Fixed-Effects Panel Data Analyses Examining Board Power. Short-Term, Long-Term Pay Components

| VARIABLES | Salary Proportion of the Pay Mix | | | | | Contingent Compensation | | | | |
|--------------------------------|----------------------------------|----------|----------|----------|----------|-------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.21+ | -0.22+ | -0.22+ | -0.21+ | -0.21+ | 0.30* | 0.31* | 0.31* | 0.31* | 0.31* |
| Tobin's Q | -0.15*** | -0.15*** | -0.15*** | -0.15*** | -0.15*** | 0.17*** | 0.17*** | 0.16*** | 0.17*** | 0.17*** |
| Firm Performance | -0.04 | -0.04 | -0.03 | -0.03 | -0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| Liquidity | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 |
| Institutional Ownership | -0.04* | -0.04* | -0.04* | -0.04* | -0.04* | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | -0.01 | -0.01 | -0.01 | -0.00 | -0.01 |
| Salary Exceed \$1M | 0.04* | 0.04* | 0.04+ | 0.04* | 0.04+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Risk | -0.00 | -0.00 | 0.01 | 0.00 | 0.00 | -0.10 | -0.11 | -0.11 | -0.11 | -0.11 |
| CEO Change | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.03+ | -0.03+ | -0.03+ | -0.03+ |
| CEO Tenure | 0.03 | 0.03 | 0.00 | 0.03 | 0.01 | -0.04 | -0.03 | -0.02 | -0.03 | -0.02 |
| Sox | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | -0.22*** | -0.23*** | -0.23*** | -0.23*** | -0.23*** |
| Lagged Salary Proportion | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | | | | | |
| Lagged Contingent Compensation | | | | | | 0.07** | 0.07** | 0.07** | 0.07** | 0.07** |
| Ownership Power (out/in) | | 0.01 | | | 0.02 | | 0.01 | | | 0.02 |
| Prestige Power(out/in) | | | -0.09*** | | -0.08*** | | | 0.06* | | 0.06* |
| Structural Power(out/in) | | | | -0.04+ | -0.03 | | | | 0.00 | -0.01 |
| F | 3.64*** | 3.48*** | 4.18*** | 3.53*** | 3.87*** | 9.68*** | 9.35*** | 9.51*** | 9.36*** | 8.63*** |
| R ² | 2.64 | 2.63 | 3.19 | 2.78 | 3.29 | 9.05 | 9.17 | 9.36 | 9.16 | 9.37 |
| Adjusted R ² | 2.15 | 2.11 | 2.68 | 2.26 | 2.72 | 8.59 | 8.68 | 8.87 | 8.67 | 8.84 |
| Δ Adjusted R ² | | -0.04 | 0.53*** | 0.11+ | 0.57*** | | 0.09 | 0.28* | 0.08 | 0.25* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE L - 41. Results of Fixed-Effects Panel Data Analyses Examining Winsorized Board Power. Short-Term, Long-Term Pay Components

| VARIABLES | Salary Proportion of the Pay Mix | | | | | Contingent Compensation | | | | |
|--------------------------------|----------------------------------|----------|----------|----------|----------|-------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.21+ | -0.22+ | -0.22+ | -0.21+ | -0.21+ | 0.30* | 0.31* | 0.31* | 0.31* | 0.31* |
| Tobin's Q | -0.15*** | -0.15*** | -0.15*** | -0.15*** | -0.15*** | 0.17*** | 0.17*** | 0.16*** | 0.17*** | 0.17*** |
| Firm Performance | -0.04 | -0.04 | -0.03 | -0.03 | -0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| Liquidity | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| Institutional Ownership | -0.04* | -0.04* | -0.04* | -0.04* | -0.04* | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| Large Owner | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | -0.01 | -0.00 | -0.01 | -0.01 | -0.00 |
| Salary Exceed \$1M | 0.04* | 0.04* | 0.04+ | 0.04* | 0.04+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Risk | -0.00 | -0.00 | 0.01 | -0.00 | 0.01 | -0.10 | -0.11 | -0.11 | -0.11 | -0.11 |
| CEO Change | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.03+ | -0.03+ | -0.03+ | -0.03+ |
| CEO Tenure | 0.03 | 0.03 | 0.01 | 0.03 | 0.01 | -0.04 | -0.03 | -0.02 | -0.03 | -0.02 |
| Sox | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | -0.22*** | -0.23*** | -0.23*** | -0.23*** | -0.23*** |
| Lagged Salary Proportion | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | | | | | |
| Lagged Contingent Compensation | | | | | | 0.07** | 0.07** | 0.07** | 0.07** | 0.07** |
| Ownership Power (out/in) | | 0.00 | | | 0.01 | | 0.05 | | | 0.05+ |
| Prestige Power(out/in) | | | -0.08*** | | -0.07** | | | 0.05* | | 0.06* |
| Structural Power(out/in) | | | | -0.04+ | -0.03 | | | | -0.00 | -0.02 |
| F | 3.64*** | 3.42*** | 4.01*** | 3.53*** | 3.67*** | 9.68*** | 9.45*** | 9.47*** | 9.36*** | 8.73* |
| R ² | 2.64 | 2.62 | 3.10 | 2.77 | 3.19 | 9.05 | 9.27 | 9.33 | 9.16 | 9.47 |
| Adjusted R ² | 2.15 | 2.11 | 2.58 | 2.25 | 2.62 | 8.59 | 8.78 | 8.85 | 8.67 | 8.94 |
| Δ Adjusted R ² | | -0.04 | 0.43*** | 0.10+ | 0.47** | | 0.19 | 0.26* | 0.08 | 0.35* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

Power ratios winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE L - 42. Results of Random-Effects Panel Data Analyses Examining Board Power. Short-Term, Long-Term Pay Components

| VARIABLES | Salary Proportion of the Pay Mix | | | | | Contingent Compensation | | | | |
|--------------------------------|----------------------------------|----------|----------|----------|----------|-------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.30*** | -0.30*** | -0.31*** | -0.30*** | -0.31*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** |
| Tobin's Q | -0.16*** | -0.16*** | -0.16*** | -0.16*** | -0.16*** | 0.20*** | 0.20*** | 0.20*** | 0.20*** | 0.20*** |
| Firm Performance | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Liquidity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Leverage | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 |
| Institutional Ownership | -0.06*** | -0.06*** | -0.06*** | -0.06** | -0.06*** | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Large Owner | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | -0.01 | -0.00 | -0.01 | -0.01 | -0.01 |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Risk | -0.04 | -0.03 | -0.03 | -0.03 | -0.03 | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| CEO Change | 0.03+ | 0.03* | 0.03* | 0.03* | 0.03* | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.03+ |
| CEO Tenure | 0.02 | 0.02 | 0.00 | 0.02 | 0.01 | -0.01 | -0.01 | 0.00 | -0.01 | 0.00 |
| Lagged Salary Proportion | 0.26*** | 0.26*** | 0.26*** | 0.26*** | 0.26*** | | | | | |
| Lagged Contingent Compensation | | | | | | 0.35*** | 0.35*** | 0.34*** | 0.34*** | 0.34*** |
| Ownership Power (out/in) | | -0.01 | | | -0.01 | | 0.00 | | | 0.01 |
| Prestige Power(out/in) | | | -0.06*** | | -0.05** | | | 0.03* | | 0.04* |
| Structural Power(out/in) | | | | -0.03* | -0.02 | | | | -0.03+ | -0.04* |
| χ^2 | 1409 | 1400 | 1266 | 1418 | 1316 | 1041 | 1029 | 1030 | 1026 | 1017 |
| $\Delta \chi^2$ | | -9 | -143*** | 9* | -93** | | -12 | -11* | -15+ | -24* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control mode

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE L - 43. Results of Random-Effects Panel Data Analyses Examining Winsorized Board Power. Short-Term, Long-Term Pay Components

| VARIABLES | Salary Proportion of the Pay Mix | | | | | Contingent Compensation | | | | |
|--------------------------------|----------------------------------|----------|----------|----------|----------|-------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | -0.30*** | -0.30*** | -0.31*** | -0.30*** | -0.31*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** | 0.13*** |
| Tobin's Q | -0.16*** | -0.16*** | -0.16*** | -0.16*** | -0.16*** | 0.20*** | 0.20*** | 0.20*** | 0.20*** | 0.20*** |
| Firm Performance | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Liquidity | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Leverage | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 |
| Institutional Ownership | -0.06*** | -0.06** | -0.06*** | -0.06** | -0.06*** | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Large Owner | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | -0.01 | -0.00 | -0.01 | -0.01 | -0.01 |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Risk | -0.04 | -0.03 | -0.03 | -0.03 | -0.03 | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| CEO Change | 0.03+ | 0.03* | 0.03* | 0.03* | 0.03* | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.03+ |
| CEO Tenure | 0.02 | 0.02 | 0.01 | 0.02 | 0.00 | -0.01 | -0.01 | -0.00 | -0.01 | 0.00 |
| Lagged Salary Proportion | 0.26*** | 0.26*** | 0.26*** | 0.26*** | 0.26*** | | | | | |
| Lagged Contingent Compensation | | | | | | 0.35*** | 0.35*** | 0.34*** | 0.34*** | 0.34*** |
| Ownership Power (out/in) | | -0.01 | | | -0.01 | | 0.00 | | | 0.01 |
| Prestige Power(out/in) | | | -0.05*** | | -0.05** | | | 0.03+ | | 0.04* |
| Structural Power(out/in) | | | | -0.03+ | -0.02 | | | | -0.03* | -0.04* |
| χ^2 | 1409 | 1380 | 1269 | 1418 | 1312 | 1041 | 1030 | 1030 | 1026 | 1018 |
| $\Delta \chi^2$ | | -29 | -140*** | 9+ | -97** | | -11 | -11+ | -15* | -23* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Change in χ^2 respect to control mode

Power variables winsorized at p=0.01

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX M: PRE AND POST SARBANES OXLEY ACT OF 2002

After integrating agency and upper echelon theory to examine the relationship between power and monitoring effectiveness, I consider how institutional theory compliments this theoretical integration framework to explain pay-for-performance. Relevant then to board power, institutional pressures affect board decisions. For example, powerful CEOs try to appoint directors who were on passive, not active, monitoring boards because active monitoring board members have experiencing in reducing compensation or making decisions that enhance monitoring effectiveness (Zajac & Westphal, 1996). Consequently, board members from active monitoring boards try to appoint board members from other active boards. Similarly, increased institutional pressure has resulted in increased gender diversity on boards (Milliken & Martin, 1996).

| | INSTITUTIONAL THEORY |
|---|--|
| ASSUMPTIONS | <p>Formal structures (e.g., rules, norms, routines) are both symbolic and action-oriented.</p> <p>Structures have socially-accepted meanings that communicate information about the firm to the external environment.</p> <p>Environment drives managers to align strategy and structure with the environment for legitimacy</p> |
| FOUNDATIONS UNIT OF ANALYSIS | <p>Sociology (Meyer & Rowan, 1977; DiMaggio & Powell, 1983) Group, firm or industry</p> |
| RESEARCH FOCUS | How firms become similar. |
| KEY FACTORS RELEVANT TO MONITORING | <p>Rules, norms and routines in the firm's institutional environment affect managerial decisions and should be considered in the monitoring process.</p> <p>Managers and boards make decisions to adopt practices that are considered to be acceptable by players within the firm's institutional field to increase firm legitimacy.</p> |
| FACTORS RELEVANT TO A POWER MODEL IN THE CONTEXT OF EXECUTIVE PAY | Firm's external environment influences its pay structure, and explains why pay across firms is similar. |
| FACTORS NOT CONSIDERED FOR A POWER MODEL IN THE CONTEXT OF EXECUTIVE PAY | <p>Context of how pay decisions are determined by the board.</p> <p>How individuals perceive and make decisions differently.</p> <p>Why firms differ in their pay packages, and whether these pay packages are efficient.</p> |

TABLE M - 44. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness Pre and Post Sarbanes Oxley

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------------------------|----------|----------|----------|----------|----------|--------|--------|--------|--------|
| | Pre-Sox | | | | | Post-Sox | | | | | Pre-Sox | | | | | Post-Sox | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.29* | 0.29* | 0.30* | 0.29* | 0.30* | 0.15 | 0.15 | 0.15 | 0.17 | 0.17 | -0.53*** | -0.52*** | -0.51*** | -0.52*** | -0.51*** | -0.26 | -0.26 | -0.26 | -0.28 | -0.28 |
| Tobin's Q | 0.23*** | 0.23*** | 0.23*** | 0.23*** | 0.23*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.08* | -0.08* | -0.08* | -0.09* | -0.08* |
| Liquidity | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | -0.11 | -0.12+ | -0.11+ | -0.12+ | -0.11+ | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |
| Leverage | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.08 | -0.08 | -0.08 | -0.09 | -0.09 | 0.19* | 0.17* | 0.17* | 0.17* | 0.17* | -0.10 | -0.10 | -0.10 | -0.10 | -0.10 |
| Institutional Ownership | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04*** | 0.04*** | 0.04*** | 0.04*** | 0.04*** | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.08+ | -0.08+ | -0.08+ | -0.08+ | -0.08+ |
| Large Owner | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Salary Exceed \$1M | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | -0.12 | -0.14 | -0.13 | -0.14 | -0.13 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 |
| CEO Tenure | -0.02 | -0.02 | -0.00 | -0.02 | -0.00 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.03 | -0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 |
| CEO Change | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | -0.18*** | -0.18*** | -0.17*** | -0.18*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** | | | | | | | | | | |
| Ownership Power (out/in) | | 0.02 | | | 0.02 | | -0.00 | | | -0.01 | | -0.01 | | -0.01 | | 0.03 | | | | 0.03 |
| Prestige Power(out/in) | | | 0.07* | | 0.07* | | | 0.01 | | 0.01 | | 0.05 | | 0.06+ | | | -0.01 | | | -0.01 |
| Structural Power(out/in) | | | | 0.02 | 0.01 | | | | 0.02 | 0.02 | | | -0.01 | -0.02 | | | | | -0.03 | -0.03 |
| Observations | 2,034 | 2,034 | 2,034 | 2,034 | 2,034 | 1,547 | 1,547 | 1,547 | 1,547 | 1,547 | 2,034 | 2,034 | 2,034 | 2,034 | 2,034 | 1,547 | 1,547 | 1,547 | 1,547 | 1,547 |
| Number of Firms | 806 | 806 | 806 | 806 | 806 | 744 | 744 | 744 | 744 | 744 | 806 | 806 | 806 | 806 | 806 | 744 | 744 | 744 | 744 | 744 |
| F | 3.97*** | 3.72*** | 4.13*** | 3.75*** | 3.65*** | 6.14*** | 5.69*** | 5.76*** | 5.51*** | 4.85*** | 1.94* | 1.78* | 1.93* | 2.03* | 1.81* | 1.67+ | 1.67+ | 1.55+ | 1.70+ | 1.70+ |
| R ² | 6.59 | 6.67 | 7.21 | 6.7 | 7.24 | 5.93 | 5.93 | 5.95 | 6.02 | 6.03 | 2.5 | 2.51 | 2.72 | 2.51 | 2.78 | 5.43 | 5.52 | 5.46 | 5.56 | 5.7 |
| Adjusted R ² | 5.94 | 5.98 | 6.52 | 6 | 6.46 | 5.13 | 5.07 | 5.09 | 5.16 | 5.05 | 1.87 | 1.83 | 2.05 | 1.84 | 2.01 | 4.69 | 4.72 | 4.66 | 4.76 | 4.78 |
| Δ Adjusted R ² | | 0.04 | 0.58* | 0.06 | 0.52* | | -0.06 | -0.04 | 0.03 | -0.08 | | -0.04 | 0.18 | -0.03 | 0.14 | | 0.03 | -0.03 | 0.07 | 0.09 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE M -45. Results of Fixed-Effects Panel Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness Pre and Post Sarbanes Oxley

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|----------|----------|----------|----------|----------|----------|---------|----------|---------|---------------------------------|----------|----------|----------|----------|----------|--------|--------|--------|--------|
| | Pre-Sox | | | | | Post-Sox | | | | | Pre-Sox | | | | | Post-Sox | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.29* | 0.29* | 0.29* | 0.29* | 0.29* | 0.15 | 0.14 | 0.14 | 0.18 | 0.17 | -0.53*** | -0.52*** | -0.53*** | -0.52*** | -0.53*** | -0.26 | -0.26 | -0.25 | -0.25 | -0.23 |
| Tobin's Q | 0.23*** | 0.23*** | 0.23*** | 0.23*** | 0.23*** | 0.22*** | 0.21*** | 0.22*** | 0.22*** | 0.22*** | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.08* | -0.08* | -0.08* | -0.08+ | -0.07+ |
| Liquidity | -0.06 | -0.06 | -0.06 | -0.07 | -0.07 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | -0.11 | -0.12+ | -0.11 | -0.12+ | -0.11 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 |
| Leverage | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.08 | -0.08 | -0.08 | -0.09 | -0.09 | 0.19* | 0.16* | 0.19* | 0.17* | 0.18* | -0.10 | -0.10 | -0.10 | -0.10 | -0.09 |
| Institutional Ownership | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04*** | 0.04*** | 0.04*** | 0.04*** | 0.04*** | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | -0.08+ | -0.08+ | -0.08+ | -0.08+ | -0.08+ |
| Large Owner | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.04 | -0.04 | -0.03 | -0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Salary Exceed \$1M | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.01 | -0.00 | -0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03+ | 0.02+ |
| Risk | -0.02 | -0.02 | -0.01 | -0.03 | -0.02 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | -0.12 | -0.13 | -0.13 | -0.14 | -0.12 | 0.03 | 0.03 | 0.04 | 0.05 | 0.05 |
| CEO Tenure | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.02 | -0.02 | -0.01 | -0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.01 | 0.01 | 0.00 | -0.01 | -0.01 |
| CEO Change | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 | -0.02 | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | -0.18*** | -0.18*** | -0.17*** | -0.19*** | -0.18*** | -0.17*** | -0.17*** | -0.16** | -0.17*** | -0.16** | | | | | | | | | | |
| Ownership Power (avg out) | | 0.00 | | | 0.00 | | 0.01 | | | 0.01 | | 0.03 | | 0.03 | | 0.03 | | | | 0.03 |
| Ownership Power (avg in) | | 0.01 | | | 0.03 | | 0.01 | | | 0.02 | | 0.03 | | 0.03 | | -0.00 | | | | -0.02 |
| Ownership Power(out*in) | | 0.10*** | | | 0.10*** | | 0.00 | | | -0.02 | | -0.05 | | -0.05 | | -0.01 | | | | -0.03+ |
| Prestige Power (avg out) | | | -0.00 | | -0.00 | | | -0.02 | | -0.03 | | | -0.06 | | -0.05 | | | 0.02 | | 0.02 |
| Prestige Power (avg in) | | | -0.05 | | -0.04 | | | -0.02 | | -0.02 | | | -0.06 | | -0.06 | | | 0.01 | | -0.00 |
| Prestige Power(out*in) | | | -0.06** | | -0.05** | | | -0.04 | | -0.03 | | | -0.06* | | -0.06* | | | -0.06* | | -0.05* |
| Structural Power (avg out) | | | | -0.00 | -0.00 | | | | 0.02 | 0.03 | | | | -0.01 | -0.01 | | | | -0.00 | -0.01 |
| Structural Power (avg in) | | | | -0.03 | -0.03 | | | | 0.01 | -0.00 | | | | 0.01 | -0.00 | | | | 0.06* | 0.06* |
| Structural Power(out*in) | | | | -0.05* | -0.05+ | | | | -0.02 | -0.05 | | | | -0.02 | -0.01 | | | | -0.05* | -0.06 |
| Observations | 2,034 | 2,034 | 2,034 | 2,034 | 2,034 | 1,547 | 1,547 | 1,547 | 1,547 | 1,547 | 2,034 | 2,034 | 2,034 | 2,034 | 2,034 | 1,547 | 1,547 | 1,547 | 1,547 | 1,547 |
| Number of Firms | 806 | 806 | 806 | 806 | 806 | 744 | 744 | 744 | 744 | 744 | 806 | 806 | 806 | 806 | 806 | 744 | 744 | 744 | 744 | 744 |
| F | 3.97*** | 4.07*** | 4.05*** | 3.70*** | 3.98*** | 6.14*** | 5.86*** | 5.73*** | 5.14*** | 5.02*** | 1.94* | 2.09** | 1.80* | 1.80* | 1.81* | 1.67+ | 1.53+ | 1.42 | 1.60+ | 1.46+ |
| R ² | 6.59 | 8.40 | 7.45 | 7.16 | 9.56 | 5.93 | 5.97 | 6.54 | 6.13 | 6.94 | 2.50 | 3.15 | 3.55 | 2.59 | 4.26 | 5.43 | 5.55 | 6.41 | 6.49 | 7.56 |
| Adjusted R ² | 5.94 | 7.63 | 6.67 | 6.38 | 8.52 | 5.13 | 4.99 | 5.56 | 5.15 | 5.60 | 1.87 | 2.38 | 2.79 | 1.82 | 3.22 | 4.69 | 4.63 | 5.49 | 5.58 | 6.29 |
| Δ Adjusted R ² | | 1.69*** | 0.73** | 0.44* | 2.58*** | | -0.14 | 0.43 | 0.02 | 0.47 | | 0.51 | 0.92* | -0.05 | 1.35* | | -0.06 | 0.80* | 0.89* | 1.60* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX N: PRE & POST WORLD TRADE CENTER ATTACKS (WTC)

TABLE N - 46. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness Pre and Post World Trade Center Attacks

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|----------|--------|--------|--------|--------|
| | Pre-WTC | | | | | Post-WTC | | | | | Pre-WTC | | | | | Post-WTC | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.15 | 0.15 | 0.17 | 0.16 | 0.16 | 0.51** | 0.50** | 0.51** | 0.53** | 0.52** | -0.72** | -0.68** | -0.68** | -0.70** | -0.68** | -0.37 | -0.37 | -0.37 | -0.38 | -0.37 |
| Tobin's Q | 0.18*** | 0.19*** | 0.19*** | 0.18*** | 0.19*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | -0.09 | -0.09 | -0.09 | -0.09 | -0.09 | -0.07+ | -0.07+ | -0.07+ | -0.07+ | -0.07+ |
| Liquidity | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | -0.13 | -0.14 | -0.14 | -0.14 | -0.14 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.05 | -0.03 | -0.07 | -0.07 | -0.07 | -0.08 | -0.07 | 0.22+ | 0.21+ | 0.21+ | 0.21+ | 0.21+ | -0.14* | -0.14* | -0.14* | -0.14* | -0.14* |
| Institutional Ownership | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.08+ | -0.08+ | -0.08+ | -0.08+ | -0.08+ |
| Large Owner | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.04+ | -0.04+ | -0.04+ | -0.04 | -0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Salary Exceed \$1M | -0.06* | -0.06* | -0.06* | -0.06* | -0.06* | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Risk | 0.09 | 0.08 | 0.08 | 0.09 | 0.07 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | -0.15 | -0.18 | -0.19 | -0.18 | -0.18 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| CEO Tenure | 0.01 | 0.01 | 0.04 | 0.01 | 0.04 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03 | 0.02 | 0.04 | 0.02 | 0.05 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| CEO Change | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.04* | -0.04* | -0.04* | -0.04* | -0.04* | -0.02 | -0.03 | -0.02 | -0.03 | -0.02 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Lagged Total Compensation | -0.28*** | -0.28*** | -0.27*** | -0.28*** | -0.27*** | -0.10* | -0.10* | -0.10* | -0.10* | -0.10* | | | | | | | | | | |
| Ownership Power (out/in) | | 0.06 | | | 0.05 | | -0.01 | | | -0.02 | | -0.04 | | -0.03 | | 0.01 | | | | 0.01 |
| Prestige Power(out/in) | | | 0.11*** | | 0.12*** | | | 0.01 | | 0.01 | | | 0.07 | | 0.08+ | | | 0.01 | | 0.01 |
| Structural Power(out/in) | | | | 0.01 | -0.02 | | | | 0.05* | 0.05* | | | | -0.04 | -0.05 | | | | -0.01 | -0.01 |
| Observations | 1,457 | 1,457 | 1,457 | 1,457 | 1,457 | 2,124 | 2,124 | 2,124 | 2,124 | 2,124 | 1,457 | 1,457 | 1,457 | 1,457 | 1,457 | 2,124 | 2,124 | 2,124 | 2,124 | 2,124 |
| Number of Firms | 695 | 695 | 695 | 695 | 695 | 816 | 816 | 816 | 816 | 816 | 695 | 695 | 695 | 695 | 695 | 816 | 816 | 816 | 816 | 816 |
| F | 4.58*** | 4.31*** | 5.31*** | 4.27*** | 4.73*** | 4.62*** | 4.32*** | 4.32*** | 4.57*** | 4.04*** | 1.22 | 1.10 | 1.16 | 1.09 | 1.05 | 2.52** | 2.35** | 2.35** | 2.46** | 2.16** |
| R ² | 9.01 | 9.33 | 10.48 | 9.05 | 10.76 | 6.08 | 6.09 | 6.10 | 6.42 | 6.45 | 3.24 | 3.32 | 3.53 | 3.33 | 3.81 | 5.10 | 5.11 | 5.11 | 5.12 | 5.14 |
| Adjusted R ² | 8.19 | 8.45 | 9.61 | 8.17 | 9.77 | 5.46 | 5.42 | 5.43 | 5.75 | 5.70 | 2.44 | 2.45 | 2.67 | 2.46 | 2.81 | 4.52 | 4.49 | 4.48 | 4.49 | 4.43 |
| Δ Adjusted R ² | | 0.26 | 1.42 | -0.02 | 1.58 | | -0.04 | -0.03 | 0.29 | 0.24 | | 0.01 | 0.23 | 0.02 | 0.37 | | -0.03 | -0.04 | -0.03 | -0.09 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE N- 47. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness Pre and Post World Trade Center Attacks

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|----------|--------|---------|---------|---------|
| | Pre-WTC | | | | | Post-WTC | | | | | Pre-WTC | | | | | Post-WTC | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.15 | 0.14 | 0.14 | 0.18 | 0.13 | 0.51** | 0.51** | 0.47* | 0.54** | 0.50* | -0.72** | -0.69** | -0.71** | -0.67** | -0.71** | -0.37 | -0.37 | -0.37 | -0.35 | -0.35 |
| Tobin's Q | 0.18*** | 0.19*** | 0.17** | 0.18*** | 0.17** | 0.22*** | 0.22*** | 0.21*** | 0.22*** | 0.21*** | -0.09 | -0.09 | -0.11 | -0.09 | -0.10 | -0.07+ | -0.07+ | -0.07+ | -0.07+ | -0.07+ |
| Liquidity | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | -0.13 | -0.14 | -0.14 | -0.14 | -0.14 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.05 | -0.03 | -0.07 | -0.07 | -0.06 | -0.07 | -0.06 | 0.22+ | 0.19 | 0.22+ | 0.20 | 0.20 | -0.14* | -0.14* | -0.13* | -0.13* | -0.12* |
| Institutional Ownership | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | -0.08+ | -0.08+ | -0.08+ | -0.08+ | -0.08* |
| Large Owner | 0.01 | 0.01 | 0.00 | 0.02 | 0.01 | -0.04+ | -0.04+ | -0.04+ | -0.04 | -0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 |
| Salary Exceed \$1M | -0.06* | -0.06* | -0.06* | -0.07* | -0.06* | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 |
| Risk | 0.09 | 0.09 | 0.10 | 0.08 | 0.10 | 0.03 | 0.03 | 0.02 | 0.02 | 0.00 | -0.15 | -0.17 | -0.17 | -0.18 | -0.15 | 0.11 | 0.11 | 0.09 | 0.11 | 0.09 |
| CEO Tenure | 0.01 | 0.01 | 0.02 | 0.01 | 0.03 | -0.01 | -0.01 | -0.00 | -0.02 | -0.01 | 0.03 | 0.04 | 0.02 | 0.03 | 0.04 | 0.01 | 0.01 | 0.00 | -0.00 | -0.01 |
| CEO Change | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | -0.04* | -0.04* | -0.03* | -0.04* | -0.04* | -0.02 | -0.03 | -0.03 | -0.03 | -0.03 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Lagged Total Compensation | -0.28*** | -0.28*** | -0.26*** | -0.29*** | -0.27*** | -0.10* | -0.10* | -0.09* | -0.10** | -0.09* | | | | | | | | | | |
| Ownership Power (avg out) | | 0.07* | | | 0.08* | | -0.01 | | | -0.01 | | 0.04 | | 0.05 | | 0.01 | | | | 0.01 |
| Ownership Power (avg in) | | 0.07* | | | 0.07* | | 0.00 | | | 0.01 | | 0.08 | | 0.06 | | 0.00 | | | | -0.02 |
| Ownership Power(out*in) | | 0.13*** | | | 0.13*** | | 0.01 | | | 0.01 | | -0.03 | | -0.04 | | 0.00 | | | | -0.01 |
| Prestige Power (avg out) | | | -0.00 | | 0.00 | | | -0.07** | | -0.09** | | | -0.08 | | -0.08 | | | -0.00 | | -0.00 |
| Prestige Power (avg in) | | | -0.08* | | -0.07* | | | -0.02 | | -0.03 | | | -0.07 | | -0.08 | | | 0.01 | | -0.00 |
| Prestige Power(out*in) | | | -0.08*** | | -0.08*** | | | -0.03+ | | -0.03 | | | -0.05+ | | -0.06+ | | | -0.06* | | -0.06* |
| Structural Power (avg out) | | | | 0.01 | -0.00 | | | | 0.05* | 0.07** | | | | 0.01 | 0.00 | | | | 0.01 | 0.01 |
| Structural Power (avg in) | | | | -0.01 | -0.01 | | | | 0.01 | 0.01 | | | | 0.06 | 0.02 | | | | 0.04* | 0.04* |
| Structural Power(out*in) | | | | -0.06+ | -0.05+ | | | | -0.02 | -0.01 | | | | -0.00 | 0.00 | | | | -0.03+ | -0.02 |
| Observations | 1,457 | 1,457 | 1,457 | 1,457 | 1,457 | 2,124 | 2,124 | 2,124 | 2,124 | 2,124 | 1,457 | 1,457 | 1,457 | 1,457 | 1,457 | 2,124 | 2,124 | 2,124 | 2,124 | 2,124 |
| Number of Firms | 695 | 695 | 695 | 695 | 695 | 816 | 816 | 816 | 816 | 816 | 695 | 695 | 695 | 695 | 695 | 816 | 816 | 816 | 816 | 816 |
| F | 4.58*** | 6.06*** | 5.17*** | 4.64*** | 6.39*** | 4.62*** | 3.86*** | 5.00*** | 4.06*** | 3.92*** | 1.22 | 1.93* | 1.15 | 1.07 | 1.60* | 2.52** | 2.11** | 2.57*** | 2.50*** | 2.28*** |
| R ² | 9.01 | 12.77 | 11.27 | 9.57 | 15.32 | 6.08 | 6.09 | 7.22 | 6.53 | 7.88 | 3.24 | 4.60 | 4.49 | 3.65 | 5.97 | 5.10 | 5.12 | 6.04 | 5.61 | 6.52 |
| Adjusted R ² | 8.19 | 11.81 | 10.28 | 8.57 | 14.02 | 5.46 | 5.33 | 6.47 | 5.77 | 6.87 | 2.44 | 3.61 | 3.50 | 2.65 | 4.60 | 4.52 | 4.40 | 5.33 | 4.90 | 5.54 |
| Δ Adjusted R ² | | 3.62 | 2.09 | 0.38 | 5.83 | | -0.13 | 1.01 | 0.31 | 1.41 | | 1.17 | 1.06 | 0.21 | 2.16 | | -0.12 | 0.81 | 0.38 | 1.02 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX O: INDUSTRY MIMETIC PRESSURES

TABLE O - 48. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness: Industry Mimetic Pressures

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------|-------|-------|-------|-------|---------|---------|---------|---------|---------|
| | <1 SD | | | | | >1SD | | | | | <1 SD | | | | | >1 SD | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.13 | 0.13 | 0.13 | 0.12 | 0.13 | 0.43*** | 0.44*** | 0.44*** | 0.44*** | 0.44*** | -0.35 | -0.35 | -0.34 | -0.37 | -0.34 | -0.34** | -0.33* | -0.33* | -0.33* | -0.32* |
| Tobin's Q | 0.17*** | 0.17*** | 0.17*** | 0.17*** | 0.17*** | 0.19*** | 0.19*** | 0.19*** | 0.19*** | 0.19*** | -0.08 | -0.08 | -0.07 | -0.07 | -0.07 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 |
| Firm Performance | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.00 | 0.00 | -0.01 | 0.00 | -0.01 | -0.01 | -0.02 | -0.02 | -0.02 | -0.02 |
| Liquidity | -0.07 | -0.07 | -0.08 | -0.07 | -0.08 | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Leverage | -0.09 | -0.09 | -0.10 | -0.09 | -0.10 | -0.08 | -0.08 | -0.07 | -0.08 | -0.07 | 0.03 | 0.03 | 0.02 | 0.04 | 0.02 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.04* | 0.04* | 0.04* | 0.04* | 0.04* | 0.03+ | 0.03+ | 0.03 | 0.03+ | 0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Large Owner | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.04+ | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04+ | 0.04* | 0.05* | 0.04* | 0.04* |
| Salary Exceed \$1M | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03+ | 0.03 | 0.03+ | 0.03+ | 0.03+ |
| Risk | -0.05 | -0.05 | -0.04 | -0.05 | -0.04 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | -0.08 | -0.08 | -0.07 | -0.09 | -0.07 | 0.02 | -0.00 | -0.00 | -0.00 | -0.00 |
| CEO Change | 0.00 | -0.00 | -0.00 | 0.00 | -0.00 | -0.03* | -0.03* | -0.04** | -0.03* | -0.04** | 0.04+ | 0.04+ | 0.03 | 0.04+ | 0.04 | -0.02 | -0.02 | -0.02+ | -0.02 | -0.02+ |
| Lagged Total Compensation | 0.07 | 0.07 | 0.08+ | 0.07 | 0.08+ | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | | | | | | | | | | |
| Ownership Power (out/in) | | -0.02 | | | -0.02 | | 0.01 | | | 0.01 | | -0.02 | | | -0.04 | | 0.02 | | | 0.02 |
| Prestige Power(out/in) | | | 0.06* | | 0.06* | | | 0.08** | | 0.07** | | | 0.08* | | 0.07+ | | | 0.05* | | 0.06* |
| Structural Power(out/in) | | | | 0.02 | 0.01 | | | | 0.04+ | 0.03 | | | | 0.07 | 0.06 | | | | -0.00 | -0.01 |
| Observations | 1,217 | 1,217 | 1,217 | 1,217 | 1,217 | 2,364 | 2,364 | 2,364 | 2,364 | 2,364 | 589 | 589 | 589 | 589 | 589 | 2,992 | 2,992 | 2,992 | 2,992 | 2,992 |
| Number of Firms | 542 | 542 | 542 | 542 | 542 | 816 | 816 | 816 | 816 | 816 | 237 | 237 | 237 | 237 | 237 | 859 | 859 | 859 | 859 | 859 |
| F | 6.25*** | 6.07*** | 6.69*** | 5.98*** | 6.14*** | 7.10*** | 7.05*** | 7.61*** | 6.83*** | 7.37*** | 1.54+ | 1.47 | 1.53+ | 1.47 | 1.41 | 3.72*** | 3.75*** | 4.09*** | 3.73*** | 3.74*** |
| R ² | 14.18 | 14.22 | 15.00 | 14.26 | 15.09 | 7.37 | 7.33 | 8.05 | 7.54 | 8.16 | 4.77 | 4.80 | 5.51 | 5.25 | 5.95 | 3.25 | 3.46 | 3.74 | 3.44 | 3.79 |
| Adjusted R ² | 12.96 | 12.98 | 13.72 | 12.98 | 13.67 | 6.72 | 6.73 | 7.36 | 6.85 | 7.40 | 2.10 | 2.13 | 2.69 | 2.43 | 2.81 | 2.74 | 2.92 | 3.20 | 2.90 | 3.19 |
| Δ Adjusted R ² | | 0.02 | 0.76* | 0.02 | 0.71* | | 0.01 | 0.64** | 0.13+ | 0.68** | | 0.03 | 0.59* | 0.33 | 0.71+ | | 0.18 | 0.46* | 0.16 | 0.45* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE O- 49. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness: Industry Mimetic Pressures

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|---------|---------|----------|---------|---------|---------|---------|---------|---------------------------------|-------|-------|-------|-------|---------|---------|---------|---------|---------|
| | <1 SD | | | | | >1SD | | | | | <1 SD | | | | | >1SD | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.13 | -0.00 | 0.09 | 0.11 | 0.06 | 0.43*** | 0.42*** | 0.39** | 0.44*** | 0.38** | -0.35 | -0.33 | -0.36 | -0.38 | -0.36 | -0.34** | -0.33* | -0.33* | -0.33* | -0.32* |
| Tobin's Q | 0.17*** | 0.21** | 0.17*** | 0.17*** | 0.16*** | 0.19*** | 0.22*** | 0.19*** | 0.20*** | 0.20*** | -0.08 | -0.09 | -0.07 | -0.07 | -0.09 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 |
| Firm Performance | 0.04 | 0.10** | 0.03 | 0.05+ | 0.04 | 0.03 | 0.02 | 0.03 | 0.03 | 0.02 | 0.00 | 0.00 | -0.00 | 0.00 | -0.00 | -0.01 | -0.02 | -0.02 | -0.02 | -0.02 |
| Liquidity | -0.07 | 0.04 | -0.07 | -0.08 | -0.08 | -0.01 | -0.00 | -0.01 | -0.01 | -0.01 | -0.06 | -0.05 | -0.05 | -0.06 | -0.04 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Leverage | -0.09 | -0.26* | -0.09 | -0.08 | -0.07 | -0.08 | -0.04 | -0.07 | -0.08 | -0.07 | 0.03 | 0.01 | 0.05 | 0.04 | 0.04 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.04* | 0.08 | 0.04* | 0.04* | 0.04* | 0.03+ | 0.04* | 0.04+ | 0.03+ | 0.04+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Large Owner | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | -0.04+ | -0.03+ | -0.04+ | -0.04+ | -0.03 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.04+ | 0.04+ | 0.04+ | 0.05* | 0.04+ |
| Salary Exceed \$1M | -0.00 | -0.02 | -0.00 | 0.00 | 0.00 | -0.04 | -0.02 | -0.03 | -0.04 | -0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03+ | 0.03+ | 0.03+ | 0.03 | 0.03+ |
| Risk | -0.05 | 0.34** | -0.06 | -0.06 | -0.08 | 0.06 | 0.01 | 0.06 | 0.05 | 0.06 | -0.08 | -0.07 | -0.13 | -0.09 | -0.12 | 0.02 | 0.00 | -0.00 | -0.00 | -0.00 |
| CEO Change | 0.00 | -0.01 | -0.00 | 0.00 | 0.00 | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | 0.04+ | 0.04+ | 0.04 | 0.04* | 0.05+ | -0.02 | -0.02 | -0.02+ | -0.02 | -0.02+ |
| Lagged Total Compensation | 0.07 | -0.03 | 0.10* | 0.07 | 0.10* | 0.00 | 0.01 | 0.02 | 0.00 | 0.02 | | | | | | | | | | |
| Ownership Power (avg out) | | -0.01 | | | -0.02 | | | 0.02 | | 0.01 | | -0.02 | | | -0.04 | | 0.02 | | | 0.03 |
| Ownership Power (avg in) | | 0.01 | | | -0.01 | | | 0.01 | | -0.02 | | -0.00 | | | 0.01 | | -0.01 | | | -0.02 |
| Ownership Power(out*in) | | -0.03 | | | -0.01 | | | 0.06 | | 0.05 | | 0.07 | | | 0.08 | | -0.04 | | | -0.06 |
| Prestige Power (avg out) | | | -0.03 | | -0.04 | | | -0.06* | | -0.07** | | | 0.01 | | -0.02 | | | 0.02 | | 0.03 |
| Prestige Power (avg in) | | | -0.10** | | -0.11*** | | | -0.08** | | -0.08** | | | -0.08 | | -0.08 | | | -0.03 | | -0.04 |
| Prestige Power(out*in) | | | -0.06* | | -0.06* | | | -0.04* | | -0.04+ | | | -0.08 | | -0.08 | | | -0.03 | | -0.03 |
| Structural Power (avg out) | | | | 0.03 | 0.05+ | | | | 0.04 | 0.05* | | | | 0.06 | 0.09 | | | | 0.00 | -0.00 |
| Structural Power (avg in) | | | | 0.01 | 0.04 | | | | -0.01 | 0.01 | | | | -0.02 | -0.01 | | | | 0.02 | 0.02 |
| Structural Power(out*in) | | | | -0.01 | 0.00 | | | | -0.01 | 0.02 | | | | -0.01 | -0.00 | | | | -0.03+ | -0.04* |
| Observations | 1,217 | 1,217 | 1,217 | 1,217 | 1,217 | 2,364 | 2,364 | 2,364 | 2,364 | 2,364 | 589 | 589 | 589 | 589 | 589 | 2,992 | 2,992 | 2,992 | 2,992 | 2,992 |
| Number of Firms | 542 | 542 | 542 | 542 | 542 | 816 | 816 | 816 | 816 | 816 | 237 | 237 | 237 | 237 | 237 | 859 | 859 | 859 | 859 | 859 |
| F | 6.27*** | 4.93*** | 6.49*** | 5.45*** | 5.49*** | 7.09*** | 6.53*** | 6.70*** | 6.29*** | 5.68*** | 1.54+ | 1.37 | 1.37 | 1.33 | 1.16 | 3.71*** | 3.44*** | 3.60*** | 3.38*** | 2.90*** |
| R ² | 14.18 | 19.69 | 16.42 | 14.38 | 17.10 | 7.37 | 7.56 | 9.11 | 7.53 | 10.02 | 4.77 | 5.10 | 5.79 | 5.27 | 6.82 | 3.25 | 3.63 | 3.62 | 3.62 | 4.17 |
| Adjusted R ² | 12.96 | 16.85 | 15.02 | 12.95 | 15.29 | 6.72 | 6.95 | 8.36 | 6.77 | 9.04 | 2.10 | 1.94 | 2.64 | 2.10 | 2.69 | 2.74 | 3.03 | 3.02 | 3.02 | 3.38 |
| Δ Adjusted R ² | | 3.89 | 2.06 | -0.01 | 2.33 | | 0.23 | 1.64 | 0.05 | 2.32 | | -0.16 | 0.54 | 0.00 | 0.59 | | 0.29 | 0.28 | 0.28 | 0.64 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE O - 50. Results of Random-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness: Industry Mimetic Pressures

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| | <1 SD | | | | | >1SD | | | | | <1 SD | | | | | >1SD | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.40*** | 0.40*** | 0.40*** | 0.40*** | 0.40*** | 0.42*** | 0.42*** | 0.42*** | 0.42*** | 0.42*** | - | - | -0.25** | - | -0.26** | -0.28*** | -0.28*** | -0.27*** | -0.28*** | -0.27*** |
| Tobin's Q | 0.18*** | 0.18*** | 0.18*** | 0.18*** | 0.18*** | 0.17*** | 0.17*** | 0.17*** | 0.17*** | 0.17*** | 0.26*** | 0.26*** | 0.26*** | 0.26*** | 0.05 | 0.04 | 0.05 | 0.05 | 0.04 | 0.01 |
| Firm Performance | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.04 | -0.04 | -0.05 | -0.04 | -0.04 | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| Liquidity | -0.05 | -0.05 | -0.06+ | -0.05 | -0.06+ | -0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.05 | -0.05 | -0.04 | -0.04 | -0.04 | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.05* | 0.05* | 0.05* | 0.05* | 0.05* | 0.02 | 0.03 | 0.03 | 0.02 | 0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.03+ | -0.03+ | -0.03+ | -0.03+ | -0.03+ | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04* | 0.04* | 0.04* | 0.04* | 0.04* |
| Salary Exceed \$1M | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03+ | 0.02 | 0.03 |
| Risk | -0.03 | -0.03 | -0.04 | -0.03 | -0.04 | 0.08* | 0.07+ | 0.07+ | 0.07+ | 0.07+ | -0.00 | 0.00 | -0.00 | -0.00 | 0.00 | -0.04 | -0.05 | -0.05 | -0.05 | -0.05 |
| CEO Change | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | -0.02+ | -0.02+ | -0.03+ | -0.02+ | -0.03+ | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | 0.42*** | 0.42*** | 0.42*** | 0.41*** | 0.42*** | 0.28*** | 0.28*** | 0.28*** | 0.28*** | 0.28*** | | | | | | | | | | |
| Ownership Power (out/in) | | -0.00 | | | -0.00 | | 0.01 | | | 0.01 | | -0.02 | | | -0.03 | | -0.01 | | | -0.00 |
| Prestige Power(out/in) | | | 0.08*** | | 0.08*** | | | 0.02 | | 0.02 | | | 0.08 | | 0.08 | | | 0.03 | | 0.04+ |
| Structural Power(out/in) | | | | 0.01 | -0.01 | | | | 0.02 | 0.01 | | | | 0.04 | 0.03 | | | | | -0.02 |
| Constant | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** |
| Observations | 1,217 | 1,217 | 1,217 | 1,217 | 1,217 | 2,364 | 2,364 | 2,364 | 2,364 | 2,364 | 589 | 589 | 589 | 589 | 589 | 2,992 | 2,992 | 2,992 | 2,992 | 2,992 |
| Number of Firms | 542 | 542 | 542 | 542 | 542 | 817 | 816 | 816 | 816 | 816 | 237 | 237 | 237 | 237 | 237 | 860 | 859 | 859 | 859 | 859 |
| χ^2 | 2672 | 2665 | 2616 | 2711 | 2631 | 2072 | 2086 | 2043 | 2055 | 2074 | . | . | . | . | . | 417 | 424 | 445 | 501 | 568 |
| $\Delta \chi^2$ | | -7 | -56 | 39 | -41 | | 14 | -29 | -17 | 2 | . | . | . | . | . | | 7 | 27 | 84 | 151 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE O -51. Results of Random-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness: Industry Mimetic Pressures

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|----------|---------|----------|---------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|----------|----------|----------|----------|----------|
| | <1 SD | | | | | >1SD | | | | | <1 SD | | | | | >1SD | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.40*** | 0.35*** | 0.39*** | 0.40*** | 0.39*** | 0.42*** | 0.39*** | 0.39*** | 0.42*** | 0.39*** | - | - | -0.23** | - | -0.22** | -0.28*** | -0.28*** | -0.26*** | -0.27*** | -0.26*** |
| Tobin's Q | 0.18*** | 0.14** | 0.17*** | 0.18*** | 0.18*** | 0.17*** | 0.17*** | 0.17*** | 0.17*** | 0.17*** | 0.26*** | 0.26*** | | 0.26*** | | | | | | |
| Firm Performance | -0.01 | 0.03 | -0.01 | -0.01 | -0.01 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | -0.04 | -0.03 | -0.04 | -0.03 | -0.03 | -0.08* | -0.07* | -0.08* | -0.08* | -0.07* |
| Liquidity | -0.05 | -0.10** | -0.06+ | -0.05 | -0.06+ | -0.00 | -0.01 | 0.00 | -0.01 | 0.00 | -0.01 | -0.01 | -0.02 | -0.02 | -0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| Leverage | -0.02 | -0.06 | -0.01 | -0.02 | -0.01 | -0.05 | -0.01 | -0.04 | -0.04 | -0.05 | 0.04 | 0.04 | 0.05 | 0.05 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| Institutional Ownership | 0.03* | 0.02 | 0.04* | 0.03+ | 0.04* | 0.05* | 0.04** | 0.05* | 0.05* | 0.05* | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.03+ | -0.02 | -0.03+ | -0.03+ | -0.03+ | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 | 0.04* | 0.04* | 0.04* | 0.04* | 0.04+ |
| Salary Exceed \$1M | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | -0.03 | 0.06 | -0.04 | -0.03 | -0.04 | 0.08* | 0.03 | 0.07* | 0.07+ | 0.07+ | -0.00 | 0.01 | -0.01 | -0.01 | -0.01 | -0.04 | -0.05 | -0.05 | -0.05 | -0.06 |
| CEO Change | -0.01 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02+ | -0.02+ | -0.03+ | -0.02+ | -0.02+ | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | 0.42*** | 0.35*** | 0.43*** | 0.41*** | 0.43*** | 0.28*** | 0.39*** | 0.28*** | 0.28*** | 0.28*** | | | | | | | | | | |
| Ownership Power (avg out) | | -0.02 | | | -0.01 | | 0.01 | | 0.01 | | -0.03 | | | | -0.04 | | 0.00 | | | 0.00 |
| Ownership Power (avg in) | | -0.02 | | | -0.01 | | -0.02 | | -0.03 | | 0.00 | | | | -0.01 | | -0.01 | | | -0.02 |
| Ownership Power(out*in) | | 0.01 | | | -0.00 | | 0.01 | | 0.01 | | 0.03 | | | | 0.03 | | -0.06 | | | -0.08* |
| Prestige Power (avg out) | | | 0.01 | | 0.01 | | | -0.05** | | -0.06** | | | 0.10 | | 0.10 | | | 0.05+ | | 0.06* |
| Prestige Power (avg in) | | | -0.07*** | | -0.08*** | | | -0.03+ | | -0.03+ | | | -0.03 | | -0.04 | | | 0.01 | | 0.00 |
| Prestige Power(out*in) | | | -0.06** | | -0.07** | | | -0.04* | | -0.04* | | | -0.07 | | -0.08 | | | -0.02 | | -0.02 |
| Structural Power (avg out) | | | | 0.01 | 0.01 | | | | 0.01 | 0.02 | | | | 0.05 | 0.04 | | | | -0.02 | -0.03 |
| Structural Power (avg in) | | | | 0.00 | 0.03 | | | | -0.01 | 0.01 | | | | 0.03 | 0.06 | | | | 0.02 | 0.01 |
| Structural Power(out*in) | | | | -0.00 | 0.01 | | | | -0.01 | 0.00 | | | | -0.02 | -0.01 | | | | -0.03* | -0.05** |
| Observations | 1,217 | 1,217 | 1,217 | 1,217 | 1,217 | 2,364 | 2,364 | 2,364 | 2,364 | 2,364 | 589 | 589 | 589 | 589 | 589 | 2,992 | 2,992 | 2,992 | 2,992 | 2,992 |
| Number of Firms | 542 | 542 | 542 | 542 | 542 | 817 | 816 | 816 | 816 | 816 | 237 | 237 | 237 | 237 | 237 | 860 | 859 | 859 | 859 | 859 |
| χ^2 | 2672 | . | 2817 | 2698 | 2720 | 2072 | 2074 | 2057 | 2145 | 2203 | . | . | . | . | . | 417 | 443 | 431 | 447 | 456 |
| $\Delta \chi^2$ | . | . | 145*** | 26 | 48** | . | 2 | -15** | 73 | 131** | . | . | . | . | . | . | 26 | 14+ | 30* | 39** |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX P: FIRM SIZE – SMALL VS. LARGE

TABLE P- 52. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness in Large vs. Small Firms

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | Small | | | | | Large | | | | | Small | | | | | Large | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.21* | 0.22* | 0.22* | 0.22* | 0.22* | 0.31** | 0.32** | 0.31** | 0.30** | 0.31** | -0.20+ | -0.18+ | -0.18+ | -0.18+ | -0.18+ | -0.18 | -0.18 | -0.18 | -0.18 | -0.18 |
| Tobin's Q | 0.25*** | 0.25*** | 0.25*** | 0.26*** | 0.25*** | 0.24*** | 0.24*** | 0.23*** | 0.24*** | 0.24*** | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 |
| Liquidity | -0.07 | -0.08 | -0.08 | -0.08 | -0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | -0.07 | -0.08 | -0.08 | -0.08 | -0.08 | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.01 | -0.02 | -0.00 | -0.01 | -0.00 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Institutional Ownership | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.05*** | 0.05*** | 0.05*** | 0.05*** | 0.05*** | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Large Owner | -0.00 | -0.00 | -0.00 | 0.00 | -0.00 | -0.05+ | -0.06+ | -0.05 | -0.05+ | -0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Salary Exceed \$1M | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Risk | -0.03 | -0.04 | -0.04 | -0.04 | -0.03 | -0.00 | -0.00 | -0.02 | -0.00 | -0.02 | 0.09 | 0.06 | 0.06 | 0.06 | 0.06 | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 |
| CEO Tenure | -0.08+ | -0.08 | -0.06 | -0.08 | -0.06 | -0.04 | -0.04 | -0.00 | -0.04 | -0.01 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.03 | -0.03 | -0.02 | -0.03 | -0.02 |
| CEO Change | -0.04* | -0.05* | -0.05* | -0.05* | -0.05* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.04+ | -0.03 | -0.04+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | 0.01 | 0.01 | 0.02 | 0.01 | 0.02 | 0.04 | 0.03 | 0.04 | 0.04 | 0.04 | | | | | | | | | | |
| Sox | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | -0.09 | -0.12+ | -0.12+ | -0.12+ | -0.12+ | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Ownership Power (out/in) | | -0.01 | | | -0.03 | | 0.04 | | | 0.05 | | 0.01 | | | 0.01 | | -0.00 | | | 0.00 |
| Prestige Power(out/in) | | | 0.09** | | 0.09** | | | 0.10*** | | 0.09*** | | | 0.06+ | | 0.06+ | | | 0.02 | | 0.02 |
| Structural Power(out/in) | | | | 0.04 | 0.03 | | | | 0.05 | 0.03 | | | | 0.00 | -0.01 | | | | 0.00 | -0.00 |
| Observations | 1,745 | 1,745 | 1,745 | 1,745 | 1,745 | 1,836 | 1,836 | 1,836 | 1,836 | 1,836 | 1,745 | 1,745 | 1,745 | 1,745 | 1,745 | 1,836 | 1,836 | 1,836 | 1,836 | 1,836 |
| Number of Firms | 570 | 568 | 568 | 568 | 568 | 470 | 470 | 470 | 470 | 470 | 571 | 569 | 569 | 569 | 569 | 470 | 470 | 470 | 470 | 470 |
| F | 5.66*** | 5.31*** | 6.30*** | 5.38*** | 5.69*** | 4.76*** | 4.52*** | 5.25*** | 4.60*** | 4.92*** | 3.00*** | 3.10*** | 3.09*** | 2.95*** | 2.87*** | 2.50*** | 2.39*** | 2.42*** | 2.36*** | 2.20*** |
| R ² | 9.15 | 9.18 | 9.91 | 9.32 | 10.05 | 6.86 | 6.97 | 7.8 | 7.07 | 8.02 | 3.96 | 4.25 | 4.5 | 4.25 | 4.51 | 3.04 | 3.04 | 3.07 | 3.04 | 3.07 |
| Adjusted R ² | 8.26 | 8.26 | 8.97 | 8.38 | 9 | 5.99 | 6.05 | 6.89 | 6.15 | 7.01 | 3.08 | 3.31 | 3.56 | 3.31 | 3.46 | 2.18 | 2.13 | 2.16 | 2.13 | 2.05 |
| Δ Adjusted R ² | | 0.00 | 0.71** | 0.12 | 0.74** | | 0.06 | 0.90*** | 0.16 | 1.02*** | | 0.23 | 0.48+ | 0.23 | 0.38+ | | -0.05 | -0.02 | -0.05 | -0.13 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low performing firms using median per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE P - 53. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness in Large vs. Small Firms

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|----------|---------|---------|---------|---------|----------|---------|----------|---------------------------------|---------|---------|---------|---------|---------|----------|---------|---------|----------|
| | Small | | | | | Large | | | | | Small | | | | | Large | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.21* | 0.22* | 0.19* | 0.22* | 0.20* | 0.31** | 0.30** | 0.28* | 0.30** | 0.28* | -0.20+ | -0.18+ | -0.18+ | -0.18+ | -0.18+ | -0.18 | -0.16 | -0.20 | -0.17 | -0.18 |
| Tobin's Q | 0.25*** | 0.26*** | 0.25*** | 0.26*** | 0.25*** | 0.24*** | 0.24*** | 0.23*** | 0.23*** | 0.23*** | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 |
| Liquidity | -0.07 | -0.08 | -0.08 | -0.08 | -0.08 | 0.07 | 0.08 | 0.08 | 0.07 | 0.07 | -0.07 | -0.08 | -0.08 | -0.08 | -0.08 | -0.00 | -0.00 | 0.00 | -0.00 | -0.00 |
| Leverage | -0.04 | -0.04 | -0.01 | -0.04 | -0.01 | -0.01 | -0.01 | -0.00 | -0.01 | 0.00 | -0.05 | -0.05 | -0.04 | -0.05 | -0.04 | 0.07 | 0.05 | 0.07 | 0.07 | 0.06 |
| Institutional Ownership | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.05*** | 0.05*** | 0.05*** | 0.05** | 0.05** | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Large Owner | -0.00 | -0.00 | -0.00 | 0.00 | -0.00 | -0.05+ | -0.05+ | -0.05+ | -0.05+ | -0.06+ | 0.05+ | 0.06* | 0.05+ | 0.06* | 0.06* | -0.00 | -0.00 | -0.01 | -0.00 | -0.01 |
| Salary Exceed \$1M | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Risk | -0.03 | -0.04 | -0.05 | -0.04 | -0.05 | -0.00 | -0.01 | -0.00 | -0.02 | -0.02 | 0.09 | 0.06 | 0.06 | 0.06 | 0.05 | -0.01 | -0.00 | -0.01 | -0.01 | 0.00 |
| CEO Tenure | -0.08+ | -0.08 | -0.06 | -0.08 | -0.06 | -0.04 | -0.04 | -0.02 | -0.04 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 | -0.01 | -0.03 | -0.01 |
| CEO Change | -0.04* | -0.05* | -0.05* | -0.05* | -0.05* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.04+ | -0.04+ | -0.04+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | 0.01 | 0.01 | 0.04 | 0.01 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.04 | | | | | | | | | | |
| Sox | 0.06 | 0.05 | 0.03 | 0.06 | 0.04 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | -0.09 | -0.12* | -0.11+ | -0.10+ | -0.10+ | -0.04 | -0.04 | -0.06 | -0.04 | -0.06 |
| Ownership Power (avg out) | | -0.02 | | | -0.02 | | 0.04 | | | 0.05+ | | 0.01 | | | 0.01 | | 0.01 | | | 0.04 |
| Ownership Power (avg in) | | 0.00 | | | 0.00 | | 0.00 | | | -0.00 | | -0.01 | | | -0.04 | | -0.02 | | | -0.04 |
| Ownership Power(out*in) | | 0.02 | | | 0.00 | | 0.11*** | | | 0.10** | | 0.01 | | | -0.00 | | -0.14*** | | | -0.16*** |
| Prestige Power (avg out) | | | -0.04 | | -0.05 | | | -0.01 | | -0.01 | | | 0.03 | | 0.03 | | | | -0.04 | -0.03 |
| Prestige Power (avg in) | | | -0.09** | | -0.09** | | | -0.12*** | | -0.11*** | | | -0.01 | | -0.01 | | | | -0.09* | -0.11** |
| Prestige Power(out*in) | | | -0.08*** | | -0.08** | | | -0.07** | | -0.06* | | | -0.03 | | -0.02 | | | | -0.12* | -0.14** |
| Structural Power (avg out) | | | | 0.04 | 0.05+ | | | | -0.00 | -0.01 | | | | 0.02 | 0.01 | | | | -0.00 | -0.01 |
| Structural Power (avg in) | | | | -0.01 | -0.01 | | | | -0.04 | -0.02 | | | | 0.03 | 0.05 | | | | 0.00 | -0.00 |
| Structural Power(out*in) | | | | -0.03+ | -0.02 | | | | -0.08** | -0.07** | | | | -0.04* | -0.03+ | | | | -0.01 | -0.00 |
| Observations | 1,745 | 1,745 | 1,745 | 1,745 | 1,745 | 1,836 | 1,836 | 1,836 | 1,836 | 1,836 | 1,745 | 1,745 | 1,745 | 1,745 | 1,745 | 1,836 | 1,836 | 1,836 | 1,836 | 1,836 |
| Number of Firms | 570 | 568 | 568 | 568 | 568 | 470 | 470 | 470 | 470 | 470 | 571 | 569 | 569 | 569 | 569 | 470 | 470 | 470 | 470 | 470 |
| F | 5.66*** | 4.82*** | 5.38*** | 5.18*** | 4.40*** | 4.77*** | 7.06*** | 5.55*** | 4.44*** | 6.87*** | 3.00*** | 2.93*** | 2.94*** | 2.72*** | 2.40*** | 2.50*** | 52.59*** | 2.42*** | 2.25*** | 35.21*** |
| R ² | 9.15 | 9.22 | 11.3 | 9.47 | 11.63 | 6.86 | 8.71 | 8.1 | 7.87 | 10.53 | 3.96 | 4.31 | 4.39 | 4.57 | 4.79 | 3.04 | 5.32 | 4.95 | 3.06 | 7.69 |
| Adjusted R ² | 8.17 | 8.17 | 10.27 | 8.42 | 10.29 | 5.99 | 7.71 | 7.08 | 6.86 | 9.25 | 3.08 | 3.26 | 3.34 | 3.52 | 3.41 | 2.18 | 4.33 | 3.95 | 2.04 | 6.41 |
| Δ Adjusted R ² | | 0.00 | 2.01*** | 0.16+ | 2.03** | | 1.72*** | 1.09*** | 0.87** | 3.26*** | | 0.18 | 0.26 | 0.44* | 0.33+ | | 2.15*** | 1.77* | -0.14 | 4.23*** |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low performing firms using median per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX Q: HIGH VS. LOW PERFORMING FIRMS

TABLE Q - 54. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness in High vs. Low Performing Firms

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------------------------------|--------|--------|--------|--------|-----------------|----------|----------|----------|---------|
| | Low Performing | | | | | High Performing | | | | | Low Performing | | | | | High Performing | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.44** | 0.44** | 0.42* | 0.44** | 0.43* | 0.44** | 0.46** | 0.47** | 0.45** | 0.46** | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 | -0.59*** | -0.54*** | -0.53*** | -0.54*** | - |
| Tobin's Q | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.21*** | 0.21*** | 0.20*** | 0.20*** | 0.20*** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.01 | -0.00 | -0.01 | -0.01 | 0.53*** |
| Firm Performance | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Liquidity | -0.06 | -0.07 | -0.07 | -0.06 | -0.07 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | -0.11 | -0.11 | -0.11 | -0.11 | -0.11 | -0.02 | -0.04 | -0.04 | -0.04 | -0.04 |
| Leverage | -0.11 | -0.10 | -0.10 | -0.11 | -0.10 | 0.01 | 0.02 | 0.03 | 0.02 | 0.03 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | -0.04 | -0.03 | -0.01 | -0.02 | -0.02 |
| Institutional Ownership | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 |
| Large Owner | -0.04 | -0.04 | -0.03 | -0.03 | -0.03 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.05* | -0.05* | -0.05+ | -0.05* | -0.05+ | 0.04+ | 0.04 | 0.04+ | 0.04 | 0.04+ | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | -0.04 | -0.06 | -0.08 | -0.06 | -0.08 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.05 | -0.03 | -0.04 | -0.03 | -0.04 |
| CEO Tenure | -0.06 | -0.07 | -0.04 | -0.06 | -0.05 | -0.02 | -0.02 | -0.00 | -0.02 | -0.00 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.02 | -0.02 | -0.00 | -0.01 | -0.00 |
| CEO Change | -0.05* | -0.05* | -0.05* | -0.05* | -0.05* | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.00 | -0.01 | -0.01 | -0.01 | -0.01 |
| Lagged Total Compensation | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | 0.00 | -0.00 | 0.00 | -0.00 | 0.00 | | | | | | | | | | |
| Sox | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | 0.00 | -0.04 | -0.04 | -0.03 | -0.04 |
| Ownership Power (out/in) | | 0.04 | | | 0.03 | | -0.00 | | | -0.01 | | 0.01 | | | 0.01 | | 0.04 | | | 0.05 |
| Prestige | | | 0.08** | | 0.07* | | | 0.08** | | 0.08** | | | 0.04 | | 0.04 | | | 0.06+ | | 0.06* |
| Power(out/in) | | | | 0.04 | 0.02 | | | 0.03 | 0.02 | | | | | -0.02 | -0.02 | | | | -0.00 | -0.02 |
| Structural Power(out/in) | | | | | | | | | | | | | | | | | | | | |
| Observations | 1,794 | 1,794 | 1,794 | 1,794 | 1,794 | 1,787 | 1,787 | 1,787 | 1,787 | 1,787 | 1,794 | 1,794 | 1,794 | 1,794 | 1,794 | 1,787 | 1,787 | 1,787 | 1,787 | 1,787 |
| Number of Firms | 684 | 684 | 684 | 684 | 684 | 625 | 625 | 625 | 625 | 625 | 684 | 684 | 684 | 684 | 684 | 625 | 625 | 625 | 625 | 625 |
| F | 4.66*** | 4.47*** | 4.98*** | 4.49*** | 4.66*** | 4.06*** | 3.94*** | 4.34*** | 3.94*** | 4.27*** | 1.58+ | 1.55+ | 1.49+ | 1.50+ | 1.41 | 3.17*** | 3.32*** | 3.45*** | 3.33*** | 3.27*** |
| R ² | 9.67 | 9.8 | 10.33 | 9.85 | 10.51 | 6.34 | 6.31 | 7.18 | 6.49 | 7.26 | 2.3 | 2.3 | 2.42 | 2.33 | 2.48 | 6.2 | 7.01 | 7.26 | 6.88 | 7.43 |
| Adjusted R ² | 8.76 | 8.83 | 9.37 | 8.88 | 9.45 | 5.31 | 5.31 | 6.18 | 5.48 | 6.15 | 1.37 | 1.31 | 1.44 | 1.34 | 1.38 | 5.3 | 6.06 | 6.32 | 5.93 | 6.39 |
| Δ Adjusted R ² | | 0.07 | 0.61** | 0.12 | 0.69* | | 0.00 | 0.79** | 0.09 | 0.76** | | -0.06 | 0.07 | -0.03 | 0.01 | | 0.76 | 1.02+ | 0.63 | 1.09* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE Q - 55. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness in High vs. Low Performing Firms

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|---------|---------|---------|-----------------|---------|----------|---------|----------|---------------------------------|--------|--------|--------|--------|-----------------|----------|----------|----------|----------|
| | Low Performing | | | | | High Performing | | | | | Low Performing | | | | | High Performing | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.44** | 0.46** | 0.41* | 0.44** | 0.43** | 0.44** | 0.47** | 0.40** | 0.46** | 0.39* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.59*** | -0.54*** | -0.57*** | -0.54*** | -0.56*** |
| Tobin's Q | 0.22*** | 0.23*** | 0.22*** | 0.22*** | 0.23*** | 0.21*** | 0.21*** | 0.20*** | 0.21*** | 0.20*** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.01 | -0.00 | -0.01 | -0.00 | -0.00 |
| Firm Performance | 0.04 | 0.03 | 0.04 | 0.04 | 0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | -0.06 | -0.06 | -0.06+ | -0.06 | -0.06+ |
| Liquidity | -0.06 | -0.06 | -0.07 | -0.07 | -0.06 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | -0.11 | -0.11 | -0.11 | -0.11 | -0.11+ | -0.02 | -0.04 | -0.03 | -0.04 | -0.03 |
| Leverage | -0.11 | -0.09 | -0.10 | -0.10 | -0.08 | 0.01 | 0.02 | 0.04 | 0.02 | 0.04 | -0.05 | -0.05 | -0.05 | -0.06 | -0.06 | -0.04 | -0.03 | -0.01 | -0.03 | -0.01 |
| Institutional Ownership | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 |
| Large Owner | -0.04 | -0.03 | -0.04 | -0.03 | -0.03 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04+ | 0.05+ | 0.05* | 0.05+ | 0.05+ |
| Salary Exceed \$1M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.05* | -0.05* | -0.04+ | -0.05* | -0.04+ | 0.04+ | 0.04 | 0.04+ | 0.04 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.08 | 0.06 | 0.07 | 0.07 | 0.06 | -0.04 | -0.07 | -0.08 | -0.07 | -0.08 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.05 | -0.03 | -0.05 | -0.03 | -0.05 |
| CEO Tenure | -0.06 | -0.07 | -0.06 | -0.06 | -0.07 | -0.02 | -0.02 | 0.01 | -0.02 | 0.00 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.00 | -0.02 | -0.00 |
| CEO Change | -0.05* | -0.05* | -0.05* | -0.05* | -0.05* | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.00 | -0.01 | -0.01 | -0.01 | -0.01 |
| Lagged Total Compensation | 0.04 | 0.04 | 0.06 | 0.04 | 0.06 | 0.00 | -0.00 | 0.02 | -0.00 | 0.02 | | | | | | | | | | |
| Sox | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | -0.05 | -0.05 | -0.05 | -0.04 | -0.04 | 0.00 | -0.03 | -0.04 | -0.01 | -0.01 |
| Ownership Power (avg out) | | -0.00 | | | -0.01 | | 0.03 | | | 0.02 | | 0.01 | | | 0.01 | | 0.05 | | | 0.05 |
| Ownership Power (avg in) | | -0.06* | | | -0.06+ | | 0.04* | | | 0.04+ | | -0.03 | | | -0.04 | | -0.01 | | | -0.01 |
| Ownership Power(out*in) | | 0.02 | | | 0.02 | | -0.00 | | | 0.00 | | -0.06 | | | -0.08 | | -0.03 | | | -0.03 |
| Prestige Power (avg out) | | | -0.00 | | -0.01 | | | -0.03 | | -0.04 | | | 0.01 | | 0.02 | | | 0.01 | | 0.01 |
| Prestige Power (avg in) | | | -0.05 | | -0.04 | | | -0.11*** | | -0.11*** | | | -0.00 | | -0.02 | | | -0.06* | | -0.06* |
| Prestige Power(out*in) | | | -0.05* | | -0.05* | | | -0.10*** | | -0.10*** | | | -0.00 | | 0.00 | | | -0.09** | | -0.09** |
| Structural Power (avg out) | | | | 0.01 | 0.02 | | | | 0.05+ | 0.05+ | | | | -0.00 | -0.01 | | | | 0.00 | -0.01 |
| Structural Power (avg in) | | | | -0.04 | -0.01 | | | | 0.02 | 0.01 | | | | 0.03 | 0.03 | | | | -0.00 | 0.00 |
| Structural Power(out*in) | | | | -0.03 | 0.00 | | | | -0.00 | 0.01 | | | | -0.04* | -0.06* | | | | 0.01 | 0.01 |
| Observations | 1,794 | 1,794 | 1,794 | 1,794 | 1,794 | 1,787 | 1,787 | 1,787 | 1,787 | 1,787 | 1,794 | 1,794 | 1,794 | 1,794 | 1,794 | 1,787 | 1,787 | 1,787 | 1,787 | 1,787 |
| Number of Firms | 684 | 684 | 684 | 684 | 684 | 625 | 625 | 625 | 625 | 625 | 684 | 684 | 684 | 684 | 684 | 625 | 625 | 625 | 625 | 625 |
| F | 1.66*** | 4.66*** | 4.47*** | 4.15*** | 4.16*** | 4.06*** | 3.82*** | 4.63*** | 3.80*** | 4.06*** | 1.58+ | 1.53+ | 1.43+ | 1.47+ | 1.43+ | 3.17*** | 3.14*** | 3.15*** | 3.09*** | 2.70*** |
| R ² | 9.67 | 10.87 | 10.43 | 10.17 | 11.66 | 6.34 | 6.65 | 9.46 | 6.75 | 10.16 | 2.3 | 2.59 | 2.31 | 2.62 | 3.17 | 6.2 | 7.13 | 8.32 | 6.89 | 8.6 |
| Adjusted R ² | 8.76 | 9.81 | 9.37 | 9.1 | 10.31 | 5.39 | 5.54 | 8.39 | 5.64 | 8.79 | 1.37 | 1.49 | 1.21 | 1.52 | 1.75 | 5.3 | 6.08 | 7.28 | 5.84 | 7.26 |
| Δ Adjusted R ² | | 1.05* | 0.61* | 0.34 | 1.55* | | 0.15 | 3.00*** | 0.25+ | 3.40*** | | 0.12 | -0.16 | 0.15* | 0.38* | | 0.78 | 1.98** | 0.54 | 1.96** |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low performing firms using median per year. Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX R: MOST POWERFUL BOARD MEMBER

TABLE R - 56. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness Most Powerful Board Member

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------------|--------------------|---------|----------|---------|----------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.36*** | 0.36*** | 0.36*** | 0.35*** | 0.35*** | -0.29* | -0.29* | -0.29* | -0.29* | -0.28* |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.01 | -0.02 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Leverage | -0.04 | -0.04 | -0.02 | -0.03 | -0.02 | -0.02 | -0.01 | -0.01 | -0.02 | -0.01 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed \$1M | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.03 | -0.03 | -0.02 | -0.03 | -0.02 |
| Sox | 0.06* | 0.06* | 0.05+ | 0.06* | 0.05+ | -0.06+ | -0.06+ | -0.07+ | -0.06+ | -0.07+ |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Lagged Total Compensation | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | | | | | |
| Ownership Power (lg out/lg in) | | 0.01 | | | 0.00 | | 0.01 | | | 0.01 |
| Prestige Power (lg out/lg in) | | | 0.10*** | | 0.10*** | | | 0.03+ | | 0.04+ |
| Structural Power (lg out/lg in) | | | | 0.04* | 0.03 | | | | -0.01 | -0.02 |
| F | 10.23*** | 9.76*** | 12.16*** | 9.87*** | 11.16*** | 3.98*** | 3.83*** | 3.77*** | 3.79*** | 3.46*** |
| R ² | 7.91 | 7.93 | 9.42 | 8.15 | 9.52 | 3.12 | 3.13 | 3.26 | 3.14 | 3.29 |
| Adjusted R ² | 7.45 | 7.44 | 8.94 | 7.66 | 8.99 | 2.66 | 2.64 | 2.77 | 2.65 | 2.75 |
| Δ Adjusted R ² | | -0.01 | 1.49*** | 0.21* | 1.54*** | | -0.02 | 0.11+ | -0.01 | 0.09+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE R- 57. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness Most Powerful Board Member

| VARIABLES | Total Compensation | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | |
|----------------------------|--------------------|---------|---------|----------|----------|----------|---------|----------|---------------------------------|---------|---------|---------|---------|---------|---------|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | |
| Firm Size | 0.36*** | 0.37*** | 0.37*** | 0.32** | 0.32** | 0.36*** | 0.36*** | 0.33** | -0.29* | -0.28* | -0.29* | -0.28* | -0.28* | -0.28* | -0.28* | |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | 0.03 | |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03* | 0.03 | 0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 | |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 | -0.02 | -0.01 | -0.05 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 | |
| Leverage | -0.04 | -0.04 | -0.04 | -0.03 | -0.02 | -0.04 | -0.04 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 | |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | |
| Salary Exceed \$1M | -0.02 | -0.02 | -0.02 | -0.01 | -0.01 | -0.02 | -0.02 | -0.01 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | |
| Risk | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | |
| CEO Tenure | -0.05+ | -0.05+ | -0.05+ | -0.03 | -0.03 | -0.05* | -0.05+ | -0.04 | -0.03 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 | |
| Sox | 0.06* | 0.06* | 0.06* | 0.05+ | 0.05+ | 0.06** | 0.07* | 0.06+ | -0.06+ | -0.08* | -0.08* | -0.08* | -0.08* | -0.07* | -0.07* | |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | -0.03** | -0.03** | -0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02+ | |
| Lagged Total Compensation | 0.03 | 0.02 | 0.02 | 0.04 | 0.04 | 0.03 | 0.02 | 0.04 | | | | | | | | |
| Ownership Power (avg out) | | 0.01 | 0.01 | | | | | 0.01 | | 0.01 | 0.01 | | | | 0.02 | |
| Ownership Power (avg in) | | -0.03 | -0.00 | | | | | -0.01 | | 0.01 | -0.01 | | | | -0.02 | |
| Ownership Power(out*in) | | | 0.04 | | | | | 0.03 | | | -0.03 | | | | -0.04 | |
| Prestige Power (avg out) | | | | -0.05* | -0.04+ | | | -0.04* | | | | 0.00 | 0.01 | | 0.02 | |
| Prestige Power (avg in) | | | | -0.07*** | -0.07*** | | | -0.07*** | | | | -0.01 | -0.02 | | -0.02 | |
| Prestige Power(out*in) | | | | | -0.05*** | | | -0.05*** | | | | | -0.03+ | | -0.03+ | |
| Structural Power (avg out) | | | | | | 0.03+ | 0.03+ | 0.04* | | | | | | -0.00 | -0.00 | |
| Structural Power (avg in) | | | | | | -0.01 | -0.01 | 0.01 | | | | | | 0.02 | 0.02 | |
| Structural Power(out*in) | | | | | | | -0.03* | -0.01 | | | | | | | -0.02+ | |
| F | 10.23*** | 9.10*** | 8.72*** | 10.01*** | 9.77*** | 11.39*** | 8.88*** | 7.75*** | 3.99*** | 3.70*** | 3.65*** | 3.70*** | 3.55*** | 3.65*** | 3.53*** | |
| R ² | 7.91 | 8.01 | 8.21 | 8.78 | 9.26 | 8.03 | 8.18 | 9.77 | 3.12 | 3.31 | 3.37 | 3.3 | 3.44 | 3.35 | 3.44 | |
| Adjusted R ² | 7.45 | 7.5 | 7.67 | 8.27 | 8.72 | 7.53 | 7.64 | 9.08 | 2.66 | 2.79 | 2.83 | 2.79 | 2.9 | 2.84 | 2.9 | |
| Δ Adjusted R ² | | 0.05 | 0.22 | 0.82*** | 1.27*** | 0.08+ | 0.19* | 1.63*** | | 0.13 | 0.17 | 0.13 | 0.24+ | 0.18 | 0.24+ | |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX S: OUTSIDERS PERCENTAGE

TABLE S - 58. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness: High vs. Low Outsiders %

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|-----------------------|--------|--------|--------|--------|------------------------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|------------------------|--------|--------|--------|--------|
| | Low CEO Outsiders (%) | | | | | High CEO Outsiders (%) | | | | | Low CEO Outsiders (%) | | | | | High CEO Outsiders (%) | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.08 | 0.10 | 0.09 | 0.09 | 0.09 | 0.50*** | 0.50*** | 0.50*** | 0.50*** | 0.50*** | -0.65** | -0.62** | -0.62** | -0.62** | -0.62** | -0.04 | -0.04 | -0.04 | -0.04 | -0.03 |
| Tobin's Q | 0.18** | 0.18** | 0.17** | 0.17** | 0.17** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| Firm Performance | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.06+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ | -0.04 | -0.05 | -0.05 | -0.05 | -0.05 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Liquidity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.00 | -0.00 | -0.01 | -0.00 | -0.00 | -0.07 | -0.08 | -0.08 | -0.08 | -0.09+ | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 |
| Leverage | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.12+ | -0.12+ | -0.11+ | -0.12+ | -0.11+ | 0.08 | 0.08 | 0.09 | 0.08 | 0.09 | -0.09 | -0.09 | -0.08 | -0.09 | -0.08 |
| Institutional Ownership | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.09+ | -0.09+ | -0.09+ | -0.09* | -0.09* |
| Large Owner | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.05 | 0.04 | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Salary Exceed > \$1 M | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.02+ | 0.02* | 0.02* | 0.02+ | 0.03* |
| Risk | -0.03 | -0.04 | -0.04 | -0.04 | -0.04 | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 | -0.10 | -0.16 | -0.15 | -0.15 | -0.16 | 0.14 | 0.14 | 0.14 | 0.14 | 0.13 |
| CEO Tenure | -0.08+ | -0.08+ | -0.07 | -0.07+ | -0.07 | -0.06+ | -0.06+ | -0.03 | -0.06+ | -0.04 | -0.05 | -0.05 | -0.04 | -0.05 | -0.04 | -0.01 | -0.01 | 0.01 | -0.01 | 0.02 |
| CEO Change | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | 0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Lagged Total Compensation | -0.02 | -0.03 | -0.02 | -0.03 | -0.02 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | | | | | | | | | | |
| Sox | 0.11* | 0.11* | 0.11* | 0.10* | 0.10* | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 | 0.00 | -0.03 | -0.03 | -0.03 | -0.03 | -0.06 | -0.06 | -0.06 | -0.05 | -0.05 |
| Ownership Power (out/in) | | 0.01 | | | 0.01 | | 0.05 | | | 0.04 | | 0.02 | | 0.02 | | 0.00 | | | | 0.02 |
| Prestige Power (out/in) | | | 0.06+ | | 0.06+ | | | 0.07** | | 0.06* | | | 0.05 | 0.05 | | | 0.06* | | 0.07* | |
| Structural Power (out/in) | | | | 0.03 | 0.02 | | | | 0.04 | 0.03 | | | | 0.03 | 0.02 | | | | -0.05+ | -0.06* |
| Observations | 1,619 | 1,619 | 1,619 | 1,619 | 1,619 | 1,962 | 1,962 | 1,962 | 1,962 | 1,962 | 1,619 | 1,619 | 1,619 | 1,619 | 1,619 | 1,962 | 1,962 | 1,962 | 1,962 | 1,962 |
| Number of Firms | 614 | 614 | 614 | 614 | 614 | 619 | 619 | 619 | 619 | 619 | 616 | 615 | 615 | 615 | 615 | 619 | 619 | 619 | 619 | 619 |
| F | 3.4577 | 3.2411 | 3.6564 | 3.2522 | 3.4467 | 6.2711 | 6.0617 | 6.1135 | 5.9275 | 5.6511 | 3.0133 | 2.8293 | 3.0760 | 2.8479 | 2.7792 | 2.5869 | 2.5026 | 2.4754 | 2.6163 | 2.5101 |
| R ² | 6.74 | 6.59 | 6.96 | 6.70 | 7.04 | 9.90 | 10.01 | 10.46 | 10.10 | 10.65 | 5.24 | 5.75 | 5.98 | 5.80 | 6.06 | 4.34 | 4.34 | 4.67 | 4.59 | 5.04 |
| Adjusted R ² | 5.69 | 5.48 | 5.86 | 5.59 | 5.82 | 9.06 | 9.13 | 9.58 | 9.23 | 9.68 | 4.24 | 4.69 | 4.92 | 4.74 | 4.89 | 3.51 | 3.46 | 3.79 | 3.71 | 4.06 |
| Δ Adjusted R ² | | -0.21 | 0.17+ | -0.10 | 0.13+ | | 0.07 | 0.52** | 0.17 | 0.62* | | 0.45 | 0.68 | 0.50 | 0.65 | | -0.05 | 0.28* | 0.20+ | 0.55* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE S - 59. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness: High vs. Low Outsiders %

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|-----------------------|--------|---------|--------|---------|------------------------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|------------------------|--------|--------|--------|----------|
| | Low CEO Outsiders (%) | | | | | High CEO Outsiders (%) | | | | | Low CEO Outsiders (%) | | | | | High CEO Outsiders (%) | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.08 | 0.10 | 0.04 | 0.10 | 0.04 | 0.50*** | 0.48*** | 0.48*** | 0.49*** | 0.45** | -0.65** | -0.62** | -0.64** | -0.62** | -0.63** | -0.04 | -0.03 | -0.03 | -0.04 | -0.02 |
| Tobin's Q | 0.18** | 0.18** | 0.17** | 0.18** | 0.17** | 0.21*** | 0.22*** | 0.22*** | 0.21*** | 0.22*** | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.06 | 0.05 | 0.06 | 0.06 | 0.05 |
| Firm Performance | 0.04 | 0.04 | 0.04 | 0.03 | 0.04 | 0.06+ | 0.04 | 0.05 | 0.06+ | 0.04 | -0.04 | -0.05 | -0.05 | -0.05 | -0.05 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 |
| Liquidity | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.00 | -0.00 | -0.00 | -0.00 | 0.00 | -0.07 | -0.08 | -0.08 | -0.08 | -0.08 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 |
| Leverage | -0.01 | -0.01 | -0.00 | -0.01 | -0.01 | -0.12+ | -0.13+ | -0.11+ | -0.12+ | -0.11+ | 0.08 | 0.08 | 0.09 | 0.08 | 0.08 | -0.09 | -0.09 | -0.09 | -0.09 | -0.08 |
| Institutional Ownership | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.09+ | -0.09+ | -0.09+ | -0.09* | -0.09* |
| Large Owner | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 |
| Salary Exceed > \$1 M | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.02+ | 0.03* | 0.02 | 0.02+ | 0.02+ |
| Risk | -0.03 | -0.04 | -0.04 | -0.04 | -0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | -0.10 | -0.15 | -0.15 | -0.15 | -0.15 | 0.14 | 0.15 | 0.14 | 0.13 | 0.13 |
| CEO Tenure | -0.08+ | -0.07+ | -0.06 | -0.07 | -0.05 | -0.06+ | -0.06 | -0.05 | -0.06+ | -0.06 | -0.05 | -0.05 | -0.03 | -0.05 | -0.03 | -0.01 | -0.02 | -0.01 | -0.01 | 0.00 |
| CEO Change | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | 0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Lagged Total Compensation | -0.02 | -0.03 | -0.00 | -0.03 | -0.00 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | | | | | | | | | | |
| Sox | 0.11* | 0.11* | 0.10* | 0.10* | 0.09+ | -0.02 | -0.02 | -0.03 | -0.03 | -0.03 | 0.00 | -0.03 | -0.03 | -0.05 | -0.03 | -0.06 | -0.06 | -0.06 | -0.05 | -0.05 |
| Ownership Power (avg out) | | 0.02 | | | 0.02 | | -0.02 | | | -0.03 | | 0.03 | | 0.03 | | 0.05 | | | | 0.08 |
| Ownership Power (avg in) | | 0.01 | | | 0.02 | | 0.01 | | | 0.00 | | 0.01 | | 0.01 | | -0.07 | | | | -0.11+ |
| Ownership Power(out*in) | | 0.00 | | | -0.00 | | 0.10** | | | 0.09** | | 0.01 | | 0.01 | | -0.13** | | | | -0.16*** |
| Prestige Power (avg out) | | | -0.05 | | -0.05 | | | -0.04 | | -0.05 | | | -0.01 | | -0.01 | | | 0.07+ | | 0.09* |
| Prestige Power (avg in) | | | -0.09** | | -0.09** | | | -0.05+ | | -0.05+ | | | -0.06* | | -0.06* | | | -0.01 | | -0.02 |
| Prestige Power (out*in) | | | -0.06* | | -0.06* | | | -0.05* | | -0.05* | | | -0.05 | | -0.05 | | | -0.01 | | -0.01 |
| Structural Power (avg out) | | | | 0.02 | 0.02 | | | | 0.03 | 0.04 | | | 0.03 | 0.02 | | | | -0.05 | | -0.07* |
| Structural Power (avg in) | | | | -0.02 | -0.02 | | | | -0.02 | 0.01 | | | -0.01 | -0.01 | | | | | 0.02 | 0.03 |
| Structural Power (out*in) | | | | -0.02 | -0.02 | | | | -0.04 | -0.03 | | | -0.00 | 0.00 | | | | | -0.04 | -0.06* |
| Observations | 1,619 | 1,619 | 1,619 | 1,619 | 1,619 | 1,962 | 1,962 | 1,962 | 1,962 | 1,962 | 1,619 | 1,619 | 1,619 | 1,619 | 1,619 | 1,962 | 1,962 | 1,962 | 1,962 | 1,962 |
| R-squared | 0.0674 | 0.0662 | 0.0874 | 0.0677 | 0.0899 | 0.0990 | 0.1164 | 0.1076 | 0.1031 | 0.1290 | 0.0524 | 0.0579 | 0.0644 | 0.0581 | 0.0662 | 0.0434 | 0.0585 | 0.0463 | 0.0485 | 0.0718 |
| Number of Firms | 615 | 614 | 614 | 614 | 614 | 619 | 619 | 619 | 619 | 619 | 616 | 615 | 615 | 615 | 615 | 619 | 619 | 619 | 619 | 619 |
| F | 3.4577 | 2.9690 | 3.8214 | 3.0958 | 3.1393 | 6.2711 | 7.3084 | 6.1102 | 5.4227 | 6.7819 | 3.0133 | 2.5952 | 2.8793 | 2.5592 | 2.2296 | 2.5869 | 4.0822 | 2.4298 | 2.5623 | 3.3490 |
| R ² | 6.74 | 6.62 | 8.74 | 6.77 | 8.99 | 9.90 | 11.64 | 10.76 | 10.31 | 12.90 | 5.24 | 5.79 | 6.44 | 5.81 | 6.62 | 4.34 | 5.85 | 4.63 | 4.85 | 7.18 |
| Adjusted R ² | 5.69 | 5.39 | 7.54 | 5.55 | 7.45 | 9.06 | 10.69 | 9.79 | 9.34 | 11.69 | 4.24 | 4.62 | 5.27 | 4.64 | 5.10 | 3.51 | 4.89 | 3.65 | 3.87 | 5.93 |
| Δ Adjusted R ² | | -0.30 | 1.85** | -0.14 | 1.76** | | 1.63** | 0.73* | 0.28** | 2.63** | | 0.38 | 1.03* | 0.40 | 0.86* | | 1.38** | 0.14+ | 0.36 | 2.42*** |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX T: BOARDSIZE

TABLE T - 60. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness: Large vs. Small Board Size

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------------------------------|-------|-------|-------|-------|-----------------|--------|--------|--------|--------|--------|
| | Low Board Size | | | | | High Board Size | | | | | Low Board Size | | | | | High Board Size | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | |
| Firm Size | 0.24* | 0.25* | 0.24* | 0.25* | 0.24* | 0.57*** | 0.57*** | 0.58*** | 0.57*** | 0.58*** | -0.24 | -0.23 | -0.23 | -0.23 | -0.23 | -0.09 | -0.09 | -0.08 | -0.09 | -0.06 | |
| Tobin's Q | 0.24*** | 0.24*** | 0.24*** | 0.25*** | 0.24*** | 0.19*** | 0.19*** | 0.19*** | 0.19*** | 0.19*** | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | |
| Liquidity | -0.05 | -0.05 | -0.05 | -0.04 | -0.05 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | |
| Leverage | -0.02 | -0.02 | -0.01 | -0.03 | -0.01 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 | -0.05 | -0.04 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | |
| Institutional Ownership | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Large Owner | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | |
| Salary Exceed > \$1 M | -0.07* | -0.07* | -0.07* | -0.07* | -0.07* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.05+ | 0.05+ | 0.05* | 0.05* | 0.05* | |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.02 | -0.00 | -0.00 | -0.01 | -0.00 | -0.01 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03 | -0.06 | -0.06 | -0.07 | -0.06 | -0.07 | |
| CEO Tenure | -0.09 | -0.09 | -0.07 | -0.09 | -0.07 | -0.02 | -0.02 | -0.00 | -0.02 | -0.00 | -0.00 | -0.00 | 0.01 | -0.00 | 0.01 | -0.03 | -0.03 | -0.01 | -0.03 | -0.01 | |
| CEO Change | -0.06** | -0.06** | -0.06** | -0.06** | -0.06** | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | |
| Lagged Total Compensation | -0.00 | -0.00 | 0.01 | -0.00 | 0.00 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | | | | | | | | | | | |
| Sox | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | -0.07 | -0.08 | -0.08 | -0.08 | -0.08 | -0.10* | -0.10* | -0.11* | -0.11* | -0.12* | |
| Ownership Power (out/in) | | -0.01 | | | -0.02 | | 0.01 | | | 0.02 | | -0.00 | | -0.00 | | 0.01 | | | | 0.03 | |
| Prestige Power (out/in) | | | 0.08* | | 0.06+ | | | 0.07** | | 0.07** | | | 0.04 | | 0.04 | | | 0.07* | | 0.08* | |
| Structural Power (out/in) | | | | 0.09** | 0.09* | | | | 0.00 | -0.01 | | | | 0.01 | 0.01 | | | | | -0.04 | -0.05+ |
| 52o.sic2_r | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 54o.sic2_r | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Observations | 1,445 | 1,445 | 1,445 | 1,445 | 1,445 | 2,136 | 2,136 | 2,136 | 2,136 | 2,136 | 1,445 | 1,445 | 1,445 | 1,445 | 1,445 | 2,136 | 2,136 | 2,136 | 2,136 | 2,136 | |
| Number of Firms | 529 | 529 | 529 | 529 | 529 | 600 | 600 | 600 | 600 | 600 | 529 | 529 | 529 | 529 | 529 | 600 | 600 | 600 | 600 | 600 | |
| F | 4.8813 | 4.6781 | 4.9553 | 5.1097 | 5.0116 | 6.7448 | 6.5039 | 6.9697 | 6.3867 | 6.4451 | 1.80* | 1.72* | 1.75* | 1.70* | 1.61* | 2.38** | 2.28** | 2.28** | 2.34** | 2.19** | |
| R ² | 9.19 | 9.20 | 9.78 | 10.10 | 10.51 | 8.66 | 8.67 | 9.27 | 8.66 | 9.31 | 3.85 | 4.02 | 4.13 | 4.03 | 4.13 | 2.51 | 2.52 | 3.00 | 2.67 | 3.31 | |
| Adjusted R ² | 8.05 | 7.99 | 8.58 | 8.90 | 9.19 | 7.88 | 7.85 | 8.46 | 7.84 | 8.41 | 2.71 | 2.81 | 2.92 | 2.82 | 2.79 | 1.73 | 1.69 | 2.17 | 1.85 | 2.40 | |
| Δ Adjusted R ² | | -0.06 | 0.53* | 0.85** | 1.14* | | -0.03 | 0.58** | -0.04 | 0.53** | | 0.10 | 0.21 | 0.11 | 0.08 | | -0.04 | 0.44* | 0.12 | 0.67* | |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low board size using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE T - 61. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness: Large vs. Small Board Size

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|---------|---------|---------|-----------------|---------|----------|---------|---------|---------------------------------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|
| | Low Board Size | | | | | High Board Size | | | | | Low Board Size | | | | | High Board Size | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.24* | 0.26* | 0.19 | 0.25* | 0.19 | 0.57*** | 0.57*** | 0.59*** | 0.57*** | 0.59*** | -0.24 | -0.24 | -0.24 | -0.23 | -0.24 | -0.09 | -0.08 | -0.06 | -0.08 | -0.03 |
| Tobin's Q | 0.24*** | 0.25*** | 0.23*** | 0.25*** | 0.24*** | 0.19*** | 0.20*** | 0.19*** | 0.19*** | 0.19*** | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 | -0.01 | -0.02 |
| Liquidity | -0.05 | -0.05 | -0.05 | -0.04 | -0.05 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 |
| Leverage | -0.02 | -0.01 | 0.02 | -0.03 | 0.03 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 | -0.05 | -0.04 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |
| Institutional Ownership | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03* | 0.03* | 0.03* | 0.03+ | 0.03* | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Large Owner | -0.04+ | -0.04 | -0.05+ | -0.04+ | -0.04+ | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Salary Exceed > \$1 M | -0.07* | -0.07* | -0.06+ | -0.07* | -0.07* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Risk | -0.01 | -0.01 | -0.04 | -0.01 | -0.04 | -0.00 | -0.00 | -0.00 | -0.01 | -0.01 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03 | -0.06 | -0.07 | -0.07 | -0.07 | -0.08 |
| CEO Tenure | -0.09 | -0.09 | -0.06 | -0.09 | -0.06 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.03 | -0.02 | -0.01 | -0.03 | -0.00 |
| CEO Change | -0.06** | -0.06** | -0.06** | -0.06** | -0.06** | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 | -0.03 | -0.04 | -0.04 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Lagged Total Compensation | -0.00 | 0.00 | 0.04 | -0.00 | 0.04 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | | | | | | | | | | |
| Sox | 0.06 | 0.06 | 0.04 | 0.05 | 0.03 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | -0.07 | -0.08 | -0.09 | -0.07 | -0.08 | -0.10* | -0.10* | -0.11* | -0.10* | -0.11* |
| Ownership Power (avg out) | | -0.01 | | | -0.02 | | 0.02 | | | 0.02 | | | -0.00 | | 0.00 | | 0.04 | | | 0.05 |
| Ownership Power (avg in) | | 0.01 | | | 0.01 | | | -0.00 | | -0.01 | | | -0.02 | | -0.03 | | 0.05 | | | 0.04 |
| Ownership Power(out*in) | | 0.06 | | | 0.07 | | | 0.02 | | -0.00 | | | -0.04 | | -0.05 | | 0.05 | | | 0.02 |
| Prestige Power (avg out) | | | -0.04 | | -0.05 | | | -0.03 | | -0.03 | | | -0.01 | | -0.00 | | 0.04 | | | 0.06+ |
| Prestige Power (avg in) | | | -0.07* | | -0.05+ | | | -0.13** | | -0.13** | | | 0.01 | | 0.01 | | -0.07 | | | -0.07 |
| Prestige Power (out*in) | | | -0.07** | | -0.07** | | | -0.11** | | -0.10** | | | -0.05+ | | -0.05+ | | -0.03 | | | -0.03 |
| Structural Power (avg out) | | | | 0.08* | 0.09** | | | -0.01 | | -0.00 | | | | 0.03 | 0.03 | | | | -0.03 | -0.05 |
| Structural Power (avg in) | | | | -0.03 | -0.01 | | | 0.00 | | 0.01 | | | | 0.03 | 0.03 | | | | 0.03 | 0.02 |
| Structural Power (out*in) | | | | -0.01 | 0.03 | | | -0.04*** | | -0.03+ | | | | -0.03 | -0.04 | | | | -0.02+ | -0.02 |
| Observations | 1,445 | 1,445 | 1,445 | 1,445 | 1,445 | 2,137 | 2,136 | 2,136 | 2,136 | 2,136 | 1,445 | 1,445 | 1,445 | 1,445 | 1,445 | 2,136 | 2,136 | 2,136 | 2,136 | 2,136 |
| R-squared | 0.0919 | 0.0998 | 0.1133 | 0.1005 | 0.1304 | 0.0866 | 0.0878 | 0.0968 | 0.0913 | 0.1011 | 0.0385 | 0.0420 | 0.0433 | 0.0425 | 0.0482 | 0.0251 | 0.0291 | 0.0307 | 0.0285 | 0.0387 |
| Number of Firms | 529 | 529 | 529 | 529 | 529 | 600 | 600 | 600 | 600 | 600 | 529 | 529 | 529 | 529 | 529 | 600 | 600 | 600 | 600 | 600 |
| F | 4.8813 | 4.4755 | 4.9726 | 4.6351 | 4.4729 | 6.7448 | 6.0729 | 6.9400 | 6.3729 | 5.9968 | 1.80* | 1.65* | 1.82* | 1.58+ | 1.55* | 2.37** | 2.20** | 2.12** | 2.26** | 1.94** |
| R ² | 9.19 | 9.98 | 11.33 | 10.05 | 13.04 | 8.66 | 8.78 | 9.68 | 9.13 | 10.11 | 3.85 | 4.20 | 4.33 | 4.25 | 4.82 | 2.51 | 2.91 | 3.07 | 2.85 | 3.87 |
| Adjusted R ² | 8.05 | 8.65 | 10.02 | 8.72 | 11.38 | 7.88 | 7.87 | 8.78 | 8.22 | 8.96 | 2.71 | 2.86 | 2.99 | 2.91 | 3.07 | 1.73 | 1.99 | 2.16 | 1.93 | 2.69 |
| Δ Adjusted R ² | | 0.60 | 1.97** | 0.67* | 3.33** | | -0.01 | 0.90** | 0.34*** | 1.08** | | 0.15 | 0.28+ | 0.20 | 0.36+ | | 0.26 | 0.43 | 0.20+ | 0.96+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low board size using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX U: CEO OWNERSHIP

TABLE U - 62. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness: High vs. Low CEO Ownership

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|---------|---------------------------------|-------|-------|-------|-------|--------------------|--------|---------|--------|---------|
| | Low CEO Ownership | | | | | High CEO Ownership | | | | | Low CEO Ownership | | | | | High CEO Ownership | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.71*** | 0.71*** | 0.71*** | 0.70*** | 0.70*** | 0.16 | 0.17 | 0.18 | 0.17 | 0.17 | -0.17 | -0.18 | -0.17 | -0.17 | -0.17 | -0.21 | -0.16 | -0.15 | -0.16 | -0.15 |
| Tobin's Q | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.21** | 0.20** | 0.21** | 0.21** | 0.21** | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 |
| Firm Performance | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | -0.08+ | -0.09* | -0.09* | -0.09* | -0.09* |
| Liquidity | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.08 | -0.09 | -0.09 | -0.09 | -0.09 |
| Leverage | -0.10 | -0.10 | -0.09 | -0.10 | -0.09 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 | -0.02 |
| Institutional Ownership | 0.02 | 0.02 | 0.02+ | 0.02+ | 0.02+ | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Large Owner | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | 0.08* | 0.08* | 0.08* | 0.08* | 0.08* | -0.00 | 0.00 | -0.00 | 0.00 | -0.00 |
| Salary Exceed > \$1 M | -0.01 | -0.01 | -0.01 | -0.02 | -0.02 | -0.06* | -0.06* | -0.06* | -0.06* | -0.06* | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Risk | 0.09 | 0.09 | 0.08 | 0.09 | 0.08 | -0.06 | -0.07 | -0.08 | -0.07 | -0.08 | 0.07 | 0.07 | 0.06 | 0.07 | 0.07 | 0.05 | 0.00 | -0.00 | 0.00 | -0.00 |
| CEO Tenure | -0.01 | -0.01 | 0.00 | -0.01 | -0.00 | -0.10+ | -0.09 | -0.07 | -0.09 | -0.07 | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.07+ | -0.07 | -0.05 | -0.07 | -0.05 |
| CEO Change | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.00 | -0.01 | -0.01 | -0.01 | -0.01 |
| Lagged Total Compensation | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 | | | | | | | | | | |
| Sox | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 | 0.14** | 0.14** | 0.14** | 0.13** | 0.14** | -0.05 | -0.04 | -0.05 | -0.04 | -0.04 | -0.07 | -0.10+ | -0.10 | -0.11+ | -0.11+ |
| Ownership Power (out/in) | | -0.00 | | | -0.01 | | -0.01 | | | -0.02 | | -0.03 | | | -0.02 | | 0.04 | | | 0.04 |
| Prestige Power (out/in) | | | 0.03 | | 0.02 | | | 0.08** | | 0.08** | | | 0.00 | | 0.01 | | | 0.08* | | 0.08* |
| Structural Power (out/in) | | | | 0.06* | 0.06* | | | | 0.01 | -0.00 | | | -0.03 | -0.03 | | | | | 0.02 | 0.01 |
| Observations | 1,829 | 1,829 | 1,829 | 1,829 | 1,829 | 1,752 | 1,752 | 1,752 | 1,752 | 1,752 | 1,829 | 1,829 | 1,829 | 1,829 | 1,829 | 1,752 | 1,752 | 1,752 | 1,752 | 1,752 |
| Number of Firms | 593 | 593 | 593 | 593 | 593 | 615 | 615 | 615 | 615 | 615 | 593 | 593 | 593 | 593 | 593 | 615 | 615 | 615 | 615 | 615 |
| F | 5.82*** | 5.52*** | 5.82*** | 5.79*** | 5.44*** | 5.54*** | 5.20*** | 5.82*** | 5.20*** | 5.28*** | 1.94* | 1.89* | 1.84* | 1.84* | 1.72* | 2.14** | 2.31** | 2.47*** | 2.05** | 2.44*** |
| R ² | 8.55 | 8.56 | 8.69 | 9.02 | 9.10 | 8.89 | 8.79 | 9.55 | 8.78 | 9.58 | 3.89 | 3.94 | 3.89 | 4.03 | 4.07 | 4.21 | 4.69 | 5.14 | 4.61 | 5.24 |
| Adjusted R ² | 7.65 | 7.60 | 7.73 | 8.07 | 8.05 | 7.95 | 7.79 | 8.55 | 7.78 | 8.48 | 2.99 | 2.99 | 2.94 | 3.08 | 3.01 | 3.27 | 3.71 | 4.16 | 3.62 | 4.15 |
| Δ Adjusted R ² | | -0.05 | 0.08 | 0.42* | 0.40* | | -0.16 | 0.60** | -0.17 | 0.53** | | 0.00 | -0.05 | 0.09 | 0.02 | | 0.44 | 0.89* | 0.35 | 0.88* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE U - 63. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness: High vs. Low CEO Ownership

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|---------|---------------------------------|-------|-------|--------|--------|--------------------|--------|--------|--------|--------|
| | Low CEO Ownership | | | | | High CEO Ownership | | | | | Low CEO Ownership | | | | | High CEO Ownership | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.71*** | 0.71*** | 0.69*** | 0.72*** | 0.69*** | 0.16 | 0.17 | 0.14 | 0.18 | 0.14 | -0.17 | -0.18 | -0.18 | -0.16 | -0.16 | -0.21 | -0.15 | -0.16 | -0.16 | -0.15 |
| Tobin's Q | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.21** | 0.21** | 0.20** | 0.21** | 0.20** | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.03 | 0.02 | 0.03 | 0.03 |
| Firm Performance | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | -0.08+ | -0.09* | -0.09* | -0.09* | -0.09* |
| Liquidity | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 | 0.01 | 0.01 | 0.01 | -0.00 | -0.00 | -0.08 | -0.09 | -0.09 | -0.09 | -0.09 |
| Leverage | -0.10 | -0.10 | -0.09 | -0.09 | -0.10 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.03 | -0.01 | -0.02 | -0.02 |
| Institutional Ownership | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.02 | -0.02 | -0.02 | -0.02+ | -0.02+ | -0.04 | -0.05 | -0.04 | -0.04 | -0.04 |
| Large Owner | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | 0.08* | 0.08* | 0.08* | 0.08* | 0.08* | -0.00 | 0.00 | -0.00 | 0.00 | -0.00 |
| Salary Exceed > \$1 M | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.06* | -0.06* | -0.05+ | -0.06* | -0.05+ | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Risk | 0.09 | 0.09 | 0.09 | 0.07 | 0.08 | -0.06 | -0.07 | -0.08 | -0.07 | -0.08 | 0.07 | 0.07 | 0.07 | 0.05 | 0.06 | 0.05 | 0.00 | -0.01 | 0.00 | -0.01 |
| CEO Tenure | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.10+ | -0.09 | -0.08 | -0.09 | -0.08 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.07+ | -0.07 | -0.05 | -0.07 | -0.06 |
| CEO Change | -0.03 | -0.03 | -0.03 | -0.03+ | -0.03+ | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.00 | -0.01 | -0.01 | -0.01 | -0.01 |
| Lagged Total Compensation | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 | -0.02 | 0.01 | -0.02 | 0.00 | | | | | | | | | | |
| Sox | -0.02 | -0.02 | -0.03 | -0.03 | -0.03 | 0.14** | 0.14** | 0.13** | 0.14** | 0.13** | -0.05 | -0.04 | -0.05 | -0.04 | -0.04 | -0.07 | -0.11+ | -0.10 | -0.11+ | -0.11+ |
| Ownership Power (avg out) | | 0.00 | | | -0.01 | | -0.01 | | | -0.01 | | -0.00 | | 0.01 | | 0.03 | | | | 0.04 |
| Ownership Power (avg in) | | 0.03 | | | 0.04 | | 0.00 | | | 0.01 | | 0.01 | | -0.00 | | -0.04 | | | | -0.05 |
| Ownership Power(out*in) | | -0.02 | | | -0.03 | | 0.01 | | | 0.00 | | 0.04 | | 0.03 | | -0.01 | | | | -0.00 |
| Prestige Power (avg out) | | | -0.05+ | | -0.07* | | | -0.02 | | -0.02 | | | -0.04 | | -0.03 | | | 0.04 | | 0.04 |
| Prestige Power (avg in) | | | -0.03 | | -0.02 | | | - | | - | | | 0.00 | | -0.00 | | | -0.07* | | -0.07* |
| Prestige Power (out*in) | | | -0.04+ | | -0.03+ | | | 0.11*** | | 0.10*** | | | -0.03 | | -0.02 | | | -0.05+ | | -0.05+ |
| Structural Power (avg out) | | | | 0.04 | 0.05 | | | | | -0.01 | -0.00 | | | -0.04 | -0.03 | | | | 0.02 | 0.01 |
| Structural Power (avg in) | | | | -0.02 | -0.02 | | | | | -0.01 | -0.01 | | | 0.02 | 0.02 | | | | -0.02 | 0.02 |
| Structural Power (out*in) | | | | -0.07** | -0.07** | | | | | -0.01 | -0.01 | | | -0.07* | -0.06* | | | | 0.00 | 0.01 |
| Observations | 1,829 | 1,829 | 1,829 | 1,829 | 1,829 | 1,752 | 1,752 | 1,752 | 1,752 | 1,752 | 1,829 | 1,829 | 1,829 | 1,829 | 1,829 | 1,752 | 1,752 | 1,752 | 1,752 | 1,752 |
| Number of Firms | 593 | 593 | 593 | 593 | 593 | 615 | 615 | 615 | 615 | 615 | 593 | 593 | 593 | 593 | 593 | 615 | 615 | 615 | 615 | 615 |
| F | 5.82*** | 5.09*** | 5.52*** | 5.68*** | 4.96*** | 5.54*** | 4.76*** | 5.89*** | 4.69*** | 4.60*** | 1.94* | 1.77* | 1.80* | 1.81* | 1.52* | 2.14** | 2.44** | 2.25** | 2.03** | 2.10** |
| R ² | 8.55 | 8.63 | 9.23 | 10.00 | 10.84 | 8.89 | 8.80 | 10.71 | 8.84 | 10.74 | 3.89 | 4.11 | 4.20 | 4.91 | 5.22 | 4.21 | 4.78 | 5.25 | 4.64 | 5.51 |

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------|------|-------|-------|--------|--------|------|-------|---------|-------|---------|------|------|------|-------|-------|------|------|-------|------|-------|
| Adjusted R ² | 7.65 | 7.57 | 8.18 | 8.96 | 9.51 | 7.95 | 7.69 | 9.63 | 7.73 | 9.34 | 2.99 | 3.05 | 3.14 | 3.86 | 3.86 | 3.27 | 3.68 | 4.16 | 3.54 | 4.09 |
| Δ Adjusted R ² | | -0.08 | 0.53+ | 1.31** | 1.86** | | -0.26 | 1.68*** | -0.22 | 1.39*** | | 0.06 | 0.15 | 0.87* | 0.87* | | 0.41 | 0.89* | 0.27 | 0.82* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE U -64. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Total Compensation: CEO Ownership Deciles

| | CONTROL | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
|---------------------------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Firm Size | 0.36*** | 0.63+ | 1.21** | 1.30*** | 0.83* | 0.75+ | 0.46 | 0.14 | 0.05 | 0.17 | -0.37 |
| Tobin's Q | 0.21*** | -0.00 | 0.17+ | 0.14 | 0.27* | 0.37* | 0.32** | 0.11 | 0.34** | 0.27* | -0.04 |
| Firm Performance | 0.03 | 0.31** | -0.12+ | -0.00 | 0.01 | -0.00 | 0.06 | 0.15** | 0.07 | -0.09 | -0.06 |
| Liquidity | -0.02 | 0.17 | 0.18 | 0.19+ | -0.06 | 0.29 | -0.03 | -0.04 | 0.02 | -0.10 | -0.04 |
| Leverage | -0.04 | 0.08 | -0.51** | -0.17 | -0.24 | 0.04 | 0.00 | -0.20 | 0.25 | -0.19 | 0.26 |
| Institutional Ownership | 0.03* | 0.14*** | 0.03 | 0.13 | -0.04 | -0.01 | 0.03 | 0.19* | 0.05** | 0.07 | -0.06 |
| Large Owner | -0.02 | -0.13+ | -0.08 | -0.10 | 0.08 | 0.01 | -0.11 | 0.03 | -0.11* | 0.03 | 0.01 |
| Salary Exceed > \$1 M | -0.02 | -0.13** | 0.10 | 0.08+ | 0.02 | 0.03 | -0.02 | -0.04 | -0.01 | -0.07 | -0.04 |
| Risk | -0.01 | 0.05 | 0.63** | 0.05 | 0.26 | 0.20 | -0.09 | 0.07 | -0.46+ | 0.25 | -0.25 |
| CEO Change | -0.03* | 0.01 | -0.09* | -0.06+ | 0.01 | 0.02 | 0.04 | -0.02 | 0.03 | -0.01 | -0.04 |
| CEO Tenure | -0.05+ | 0.06 | -0.12 | -0.23* | 0.06 | -0.03 | -0.04 | -0.28 | -0.60* | -0.09 | -0.02 |
| Sox | 0.06* | 0.04 | -0.11 | -0.06 | | 0.07 | 0.18 | 0.23+ | 0.38* | 0.10 | 0.32* |
| Lagged Total Compensation | 0.03 | -0.03 | -0.13 | -0.11 | 0.12 | -0.35** | -0.15 | -0.17 | -0.19+ | 0.02 | 0.17+ |
| Ownership Power (out/in) | | -0.01 | -0.13 | -0.09** | 0.01 | -0.08 | -0.02 | -0.10 | -0.12* | 0.05 | -0.05 |
| Prestige Power (out/in) | | 0.02 | 0.09 | -0.01 | -0.06 | -0.02 | 0.02 | 0.09 | 0.05 | 0.04 | 0.17* |
| Structural Power (out/in) | | 0.10* | 0.08 | 0.04 | -0.02 | 0.08 | 0.03 | -0.02 | 0.03 | 0.00 | -0.04 |
| Observations | 3581 | 349 | 369 | 376 | 370 | 363 | 358 | 362 | 355 | 339 | 340 |
| Number of Firms | 950 | 190 | 189 | 201 | 201 | 208 | 198 | 192 | 171 | 150 | 138 |
| F | 10.23*** | 14.63*** | 3.94*** | 4.82*** | 1.55*** | 1.45*** | 2.44*** | 3.33*** | 3.93*** | 3.35*** | 2.89*** |
| R ² | 7.91 | 24.60 | 22.31 | 18.47 | 14.95 | 24.79 | 18.08 | 23.42 | 30.79 | 17.57 | 12.78 |
| Adjusted R ² | 7.45 | 19.75 | 17.61 | 13.63 | 9.82 | 20.16 | 12.96 | 18.69 | 26.43 | 12.11 | 7.02 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

| Deciles | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
|------------|-------|------|------|------|------|------|------|------|------|-------|
| CEO Own(%) | 0.002 | 0.03 | 0.07 | 0.12 | 0.19 | 0.30 | 0.48 | 0.88 | 1.96 | 10.95 |
| Obs. | 349 | 369 | 376 | 370 | 363 | 358 | 362 | 355 | 339 | 340 |

TABLE U -65. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Pay-for-Performance Sensitivity: CEO Ownership Deciles

| | CONTROL | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
|---------------------------|---------|--------|---------|---------|--------|--------|--------|--------|----------|--------|--------|
| Firm Size | -0.29* | 0.22 | -0.29 | 0.52 | 0.63+ | 0.29 | -0.34 | -0.22 | -0.64 | 0.05 | 0.09 |
| Tobin's Q | 0.04 | -0.09 | -0.15+ | -0.11 | 0.18+ | 0.02 | 0.01 | -0.08 | 0.07 | -0.14 | -0.03 |
| Firm Performance | -0.02 | 0.07 | -0.05 | -0.05* | 0.03 | 0.06 | -0.10* | -0.01 | -0.13 | -0.24 | -0.09 |
| Liquidity | -0.05 | 0.37 | 0.08 | -0.05 | -0.16 | -0.12 | 0.02 | -0.01 | -0.05 | -0.12 | -0.09 |
| Leverage | -0.02 | 0.14 | 0.03 | -0.05 | 0.29 | -0.03 | 0.03 | -0.24 | -0.24 | -0.26 | 0.02 |
| Institutional Ownership | -0.03 | -0.07 | 0.03 | -0.16 | -0.02 | -0.03 | 0.00 | -0.04 | -0.21*** | 0.08 | -0.08 |
| Large Owner | 0.04+ | 0.19 | -0.21** | 0.02 | 0.05 | 0.17* | -0.00 | 0.05 | -0.06 | -0.07 | 0.13 |
| Salary Exceed > \$1 M | 0.03* | 0.08+ | 0.03 | 0.06* | 0.03 | 0.09 | 0.02 | 0.04 | -0.00 | -0.01 | -0.07 |
| Risk | 0.03 | -0.02 | 0.31+ | -0.15 | -0.33 | 0.20 | -0.01 | -0.26 | 0.02 | 0.46 | 0.00 |
| CEO Change | -0.02 | -0.15* | -0.01 | -0.05 | -0.04 | 0.00 | 0.01 | -0.02 | 0.02 | -0.03 | 0.01 |
| CEO Tenure | -0.03 | -0.04 | -0.10+ | -0.17* | -0.01 | -0.02 | 0.25* | 0.26 | -0.14 | -0.16+ | 0.37 |
| Sox | -0.06+ | -0.24 | -0.14* | -0.04 | | 0.03 | -0.08 | -0.30 | -0.09 | -0.13 | -0.22 |
| Ownership Power (out/in) | | -0.14+ | 0.51* | 0.04** | -0.00 | 0.03 | -0.04 | -0.05 | 0.08 | 0.06 | -0.10 |
| Prestige Power (out/in) | | -0.04 | 0.08 | 0.05 | 0.11 | 0.01 | -0.02 | 0.08 | 0.03 | 0.37* | 0.09 |
| Structural Power (out/in) | | 0.06 | -0.01 | 0.00 | 0.02 | 0.07 | -0.05 | -0.06 | 0.03 | -0.05 | -0.05 |
| Observations | 3581 | 349 | 369 | 376 | 370 | 363 | 358 | 362 | 355 | 339 | 340 |
| Number of Firms | 950 | 192 | 189 | 201 | 201 | 209 | 198 | 192 | 171 | 150 | 139 |
| F | 3.98*** | 0.77 | 3.34*** | 2.87*** | 1.31 | 0.76 | 1.54+ | 1.01 | 215*** | 2.39** | 1.15 |
| R-Squared | 0.0312 | 0.2141 | 0.3700 | 0.2133 | 0.1715 | 0.1728 | 0.1175 | 0.1241 | 0.3327 | 0.2295 | 0.0629 |
| Adjusted R-Squared | 0.0266 | 0.1666 | 0.3339 | 0.1690 | 0.1240 | 0.1245 | 0.0651 | 0.0727 | 0.2927 | 0.1811 | 0.0047 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE U -66. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Total Compensation: CEO Ownership Quartiles

| VARIABLES | Control | (1) | (2) | (3) | (4) |
|---------------------------|----------|---------|---------|---------|---------|
| Firm Size | 0.36*** | 0.69*** | 0.91*** | 0.30 | 0.08 |
| Tobin's Q | 0.21*** | 0.13* | 0.32*** | 0.22*** | 0.16 |
| Firm Performance | 0.03 | 0.10* | 0.01 | 0.12** | -0.08 |
| Liquidity | -0.02 | 0.06 | 0.07 | -0.06 | -0.05 |
| Leverage | -0.04 | -0.15 | -0.09 | 0.05 | 0.09 |
| Institutional Ownership | 0.03* | 0.06* | -0.01 | 0.05 | 0.01 |
| Large Owner | -0.02 | -0.04 | 0.03 | -0.06+ | -0.02 |
| Salary Exceed > \$1 M | -0.02 | -0.02 | -0.01 | -0.08* | -0.05 |
| Risk | -0.01 | 0.18 | 0.08 | -0.15 | -0.10 |
| CEO Change | -0.03* | -0.06* | -0.00 | 0.02 | -0.04 |
| CEO Tenure | -0.05+ | -0.07 | 0.00 | 0.01 | -0.05 |
| Sox | 0.06* | -0.03 | -0.02 | 0.15+ | 0.13+ |
| Lagged Total Compensation | 0.03 | -0.03 | -0.09 | -0.11 | 0.07 |
| Ownership Power (out/in) | | -0.05+ | -0.03 | -0.04 | -0.00 |
| Prestige Power (out/in) | | 0.02 | -0.00 | 0.06 | 0.12* |
| Structural Power (out/in) | | 0.09** | 0.01 | 0.03 | -0.02 |
| Constant | *** | *** | ** | *** | *** |
| Observations | 3,581 | 909 | 923 | 903 | 854 |
| Number of Firms | 950 | 375 | 383 | 363 | 318 |
| F | 10.23*** | 3.58*** | 2.73*** | 6.24*** | 2.52*** |
| R-Squared | 0.0791 | 0.1147 | 0.1451 | 0.1651 | 0.0760 |
| Adjusted R-Squared | 0.0745 | 0.0936 | 0.1252 | 0.1451 | 0.0526 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE U -67. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Pay-for-Performance Sensitivity: CEO Ownership Quartiles

| VARIABLES | Control | (1) | (2) | (3) | (4) |
|---------------------------|---------|---------|--------|--------|--------|
| Firm Size | -0.29* | -0.17 | 0.11 | -0.26 | 0.01 |
| Tobin's Q | 0.04 | -0.09+ | 0.02 | 0.01 | 0.01 |
| Firm Performance | -0.02 | 0.06 | 0.00 | -0.10+ | -0.10 |
| Liquidity | -0.05 | 0.11 | -0.15 | -0.08 | -0.11 |
| Leverage | -0.02 | -0.07 | 0.04 | 0.04 | -0.04 |
| Institutional Ownership | -0.03 | -0.04 | -0.02 | -0.00 | -0.06 |
| Large Owner | 0.04+ | 0.06 | 0.06+ | 0.00 | 0.00 |
| Salary Exceed > \$1 M | 0.03* | 0.05* | 0.03 | 0.02 | -0.01 |
| Risk | 0.03 | 0.18 | -0.16 | -0.23 | 0.08 |
| CEO Change | -0.02 | -0.08** | -0.01 | -0.02 | -0.02 |
| CEO Tenure | -0.03 | -0.13** | -0.04 | -0.01 | -0.01 |
| Sox | -0.06+ | -0.09+ | -0.05 | -0.08 | -0.12 |
| Ownership Power (out/in) | | -0.04 | 0.01 | 0.02 | 0.02 |
| Prestige Power (out/in) | | 0.02 | 0.03 | 0.05 | 0.11+ |
| Structural Power (out/in) | | -0.04 | 0.02 | 0.01 | 0.02 |
| Constant | *** | . | . | + | . |
| Observations | 3,581 | 909 | 923 | 903 | 854 |
| Number of Firms | 950 | 375 | 383 | 363 | 318 |
| F | 3.99*** | 1.27 | 1.44+ | 2.07** | 1.29 |
| R-Squared | 0.0312 | 0.0750 | 0.0645 | 0.0857 | 0.0543 |
| Adjusted R-Squared | 0.0266 | 0.0542 | 0.0437 | 0.0650 | 0.0316 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX V: INCENTIVE ALIGNMENT

TABLE V - 68. Results of fixed-effects Regression Analysis – Managerial Incentive Alignment

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|---------|----------|---------|---------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.37*** | 0.37*** | 0.37*** | 0.36*** | 0.37*** | -0.28* | -0.28* | -0.28* | -0.28* | -0.28* |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.02 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.02 | -0.02 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed > \$1 M | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03** | -0.03* | -0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02+ |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.06* | 0.06* | 0.06* | 0.06* | 0.06* | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | | | | | |
| Ownership Power (in/out) | | -0.05 | | | -0.05 | | 0.02 | | | 0.02 |
| Prestige Power (out/in) | | | 0.07*** | | 0.07*** | | | 0.04* | | 0.04* |
| Structural Power (out/in) | | | | 0.04* | 0.02 | | | | -0.01 | -0.01 |
| Constant | *** | *** | *** | *** | *** | *** | *** | ** | *** | ** |
| F | 10.13*** | 9.58*** | 10.49*** | 9.70*** | 9.53*** | 4.08*** | 3.85*** | 3.94*** | 3.85*** | 3.55*** |
| R ² | 7.87 | 8.25 | 8.49 | 8.07 | 8.92 | 3.28 | 3.33 | 3.44 | 3.30 | 3.52 |
| Adjusted R ² | 7.41 | 7.76 | 8.00 | 7.58 | 8.39 | 2.82 | 2.84 | 2.95 | 2.81 | 2.98 |
| Δ Adjusted R ² | | 0.35 | 0.59*** | 0.17* | 0.98*** | | 0.02 | 0.13* | -0.01 | 0.16* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE V - 69. Results of fixed-effects Regression Analysis – Managerial Incentive Alignment and Winsorized Power Ratios

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|---------|----------|---------|---------|---------------------------------|---------|---------|---------|---------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.37*** | 0.37*** | 0.36*** | 0.36*** | 0.36*** | -0.28* | -0.28* | -0.28* | -0.28* | -0.28* |
| Tobin's Q | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.21*** | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |
| Leverage | -0.04 | -0.04 | -0.03 | -0.04 | -0.03 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 |
| Institutional Ownership | 0.03* | 0.03+ | 0.03* | 0.03* | 0.03* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.04+ | 0.04+ | 0.04+ | 0.04+ | 0.04+ |
| Salary Exceed > \$1 M | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | -0.01 | -0.01 | -0.02 | -0.01 | -0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 |
| CEO Change | -0.03* | -0.03* | -0.03* | -0.03* | -0.03* | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CEO Tenure | -0.05+ | -0.05+ | -0.03 | -0.05+ | -0.03 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.06* | 0.06* | 0.06* | 0.06* | 0.06* | -0.08* | -0.08* | -0.08* | -0.08* | -0.08* |
| Lagged Total Compensation | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | | | | | |
| Ownership Power (in/out) | | -0.04 | | | -0.04 | | 0.00 | | | 0.00 |
| Prestige Power (out/in) | | | 0.06*** | | 0.06** | | | 0.04* | | 0.04* |
| Structural Power (out/in) | | | | 0.04* | 0.02 | | | | -0.01 | -0.02 |
| Constant | *** | *** | *** | *** | *** | *** | ** | ** | *** | ** |
| F | 10.13*** | 9.58*** | 10.26*** | 9.70*** | 9.34*** | 4.07*** | 3.90*** | 3.95*** | 3.85*** | 3.61*** |
| R ² | 7.87 | 8.13 | 8.35 | 8.06 | 8.66 | 3.28 | 3.28 | 3.42 | 3.30 | 3.45 |
| Adjusted R ² | 7.41 | 7.64 | 7.86 | 7.57 | 8.12 | 2.82 | 2.79 | 2.93 | 2.81 | 2.91 |
| Δ Adjusted R ² | | 0.23 | 0.45*** | 0.16* | 0.71** | | -0.03 | 0.11* | -0.01 | 0.09* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

Power ratios winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE V -70. Results of Random-Effects Regression Analyses: Board Power & Managerial Incentive Alignment

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.39*** | 0.39*** | 0.40*** | 0.39*** | 0.39*** | -0.31*** | -0.31*** | -0.31*** | -0.31*** | -0.31*** |
| Tobin's Q | 0.18*** | 0.17*** | 0.17*** | 0.18*** | 0.17*** | 0.05+ | 0.05 | 0.05+ | 0.05 | 0.05 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.08** | -0.07** | -0.08** | -0.08** | -0.07** |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.07 | 0.07 | 0.07+ | 0.07 | 0.07 |
| Institutional Ownership | 0.04** | 0.04* | 0.04** | 0.04** | 0.04* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03+ |
| Salary Exceed > \$1 M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -0.10+ | -0.10+ | -0.10+ | -0.09+ | -0.10+ |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | -0.00 | -0.04+ | -0.04+ | -0.03 | -0.04+ | -0.03 |
| Lagged Total Compensation | 0.37*** | 0.37*** | 0.37*** | 0.37*** | 0.37*** | | | | | |
| Ownership Power (in/out) | | -0.04* | | | -0.04* | | 0.03 | | | 0.03 |
| Prestige Power (out/in) | | | 0.04*** | | 0.04** | | | 0.03 | | 0.04* |
| Structural Power (out/in) | | | | 0.02* | 0.01 | | | | -0.03+ | -0.03+ |
| χ^2 | 4241 | 4310 | 4234 | 4281 | 4331 | 316 | 317 | 335 | 326 | 337 |
| $\Delta \chi^2$ | | 69* | -7*** | 40* | 90** | | 1 | 19 | 10+ | 21* |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE V - 71. Results of *Random-effects* Regression Analysis: Winsorized Board Power & Managerial Incentive Alignment

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.39*** | 0.39*** | 0.39*** | 0.39*** | 0.39*** | -0.31*** | -0.31*** | -0.31*** | -0.31*** | -0.31*** |
| Tobin's Q | 0.18*** | 0.18*** | 0.17*** | 0.18*** | 0.17*** | 0.05+ | 0.05 | 0.05+ | 0.05 | 0.05 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.08** | -0.07** | -0.08** | -0.08** | -0.08** |
| Liquidity | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Leverage | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.07 | 0.07 | 0.07+ | 0.07 | 0.07 |
| Institutional Ownership | 0.04** | 0.04* | 0.04** | 0.04** | 0.04* | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03+ |
| Salary Exceed > \$1 M | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Risk | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | -0.10+ | -0.10+ | -0.10+ | -0.09+ | -0.10+ |
| CEO Change | -0.02* | -0.02* | -0.02* | -0.02* | -0.02* | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | -0.00 | -0.04+ | -0.04+ | -0.03 | -0.04+ | -0.03 |
| Lagged Total Compensation | 0.37*** | 0.37*** | 0.37*** | 0.37*** | 0.37*** | | | | | |
| Ownership Power (in/out) | | -0.04* | | | -0.04* | | 0.02 | | | 0.02 |
| Prestige Power (out/in) | | | 0.04** | | 0.04** | | | 0.03 | | 0.03+ |
| Structural Power (out/in) | | | | 0.02* | 0.01 | | | | -0.03+ | -0.03+ |
| χ^2 | 4241 | 4263 | 4221 | 4282 | 4288 | 316 | 318 | 336 | 316 | 341 |
| $\Delta \chi^2$ | | 22* | 20** | 41* | 47** | | 2 | 20 | 0+ | 25+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

Power ratios winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE V - 72. Results of OLS Regression Analysis: Board Power & Managerial Incentive Alignment

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|-----------|-----------|-----------|-----------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.30*** | 0.29*** | 0.30*** | 0.30*** | 0.30*** | -0.23*** | -0.23*** | -0.22*** | -0.23*** | -0.23*** |
| Tobin's Q | 0.14*** | 0.14*** | 0.13*** | 0.14*** | 0.13*** | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.17*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** |
| Liquidity | -0.02 | -0.02 | -0.03 | -0.02 | -0.03 | 0.09** | 0.09** | 0.08** | 0.09** | 0.08** |
| Leverage | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04* | 0.04* | 0.04* | 0.04* | 0.04* |
| Salary Exceed > \$1 M | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.09** | -0.09** | -0.10** | -0.09* | -0.09** |
| CEO Change | -0.02* | -0.02+ | -0.02* | -0.02* | -0.02+ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CEO Tenure | -0.01 | -0.01 | -0.00 | -0.01 | 0.00 | -0.02 | -0.02 | -0.01 | -0.02 | -0.01 |
| Sox | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | -0.13*** | -0.13*** | -0.13*** | -0.13*** | -0.13*** |
| Lagged Total Compensation | 0.51*** | 0.51*** | 0.51*** | 0.51*** | 0.51*** | | | | | |
| Ownership Power (in/out) | | -0.04* | | | | -0.04* | 0.03 | | | 0.03 |
| Prestige Power (out/in) | | | 0.03** | | | 0.03** | | 0.03 | | 0.04+ |
| Structural Power (out/in) | | | | 0.01 | 0.00 | | | | -0.02 | -0.03 |
| F | 143.07*** | 140.70*** | 140.72*** | 140.62*** | 135.94*** | 16.31*** | 16.00*** | 16.21*** | 16.02*** | 15.65*** |
| R ² | 63.91 | 64.10 | 64.02 | 63.93 | 64.21 | 21.66 | 21.76 | 21.76 | 21.69 | 21.91 |
| Adjusted R ² | 63.40 | 63.59 | 63.50 | 63.41 | 63.67 | 20.57 | 20.65 | 20.65 | 20.59 | 20.77 |
| Δ Adjusted R ² | | 0.19* | 0.10** | 0.01 | 0.27** | | 0.08 | 0.08 | 0.02 | 0.20+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE V - 73. Results of OLS Regression Analysis: Winsorized Board Power & Managerial Incentive Alignment

| VARIABLES | Total Compensation | | | | | Pay-for-Performance Sensitivity | | | | |
|---------------------------|--------------------|-----------|-----------|-----------|-----------|---------------------------------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Firm Size | 0.30*** | 0.30*** | 0.30*** | 0.30*** | 0.30*** | -0.23*** | -0.23*** | -0.23*** | -0.23*** | -0.23*** |
| Tobin's Q | 0.14*** | 0.14*** | 0.13*** | 0.14*** | 0.13*** | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 |
| Firm Performance | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.17*** | -0.17*** | -0.17*** | -0.17*** | -0.17*** |
| Liquidity | -0.02 | -0.03 | -0.03 | -0.02 | -0.03 | 0.09** | 0.09** | 0.08** | 0.09** | 0.09** |
| Leverage | -0.00 | -0.00 | 0.00 | -0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| Institutional Ownership | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Large Owner | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.04* | 0.04* | 0.04* | 0.04* | 0.04* |
| Salary Exceed > \$1 M | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.02+ | 0.03* | 0.03* | 0.03* | 0.03* | 0.03* |
| Risk | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | -0.09** | -0.09* | -0.09** | -0.09* | -0.09** |
| CEO Change | -0.02* | -0.02+ | -0.02* | -0.02* | -0.02+ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CEO Tenure | -0.01 | -0.00 | -0.00 | -0.01 | 0.00 | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 |
| Sox | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | -0.13*** | -0.13*** | -0.13*** | -0.13*** | -0.13*** |
| Lagged Total Compensation | 0.51*** | 0.51*** | 0.51*** | 0.51*** | 0.51*** | | | | | |
| Ownership Power (in/out) | | -0.04* | | | | -0.04* | | 0.03 | | 0.03 |
| Prestige Power (out/in) | | | 0.03** | | | 0.03** | | 0.03 | | 0.03 |
| Structural Power (out/in) | | | | 0.02 | 0.00 | | | | -0.02 | -0.02 |
| F | 143.07*** | 140.94*** | 140.73*** | 140.63*** | 136.15*** | 16.31*** | 16.01*** | 16.22*** | 16.02*** | 15.67*** |
| R ² | 63.91 | 64.03 | 64.00 | 63.93 | 64.11 | 21.66 | 21.73 | 21.72 | 21.69 | 21.84 |
| Adjusted R ² | 63.40 | 63.51 | 63.48 | 63.41 | 63.57 | 20.57 | 20.63 | 20.61 | 20.58 | 20.69 |
| Δ Adjusted R ² | | 0.11* | 0.08** | 0.01 | 0.17** | | 0.06 | 0.04 | 0.01 | 0.12 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

Data separated into high and low CEO ownership using mean per year.

^a Change in R-Squared in respect to the control model.

Power ratios winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

APPENDIX W: CEO TENURE

TABLE W - 74. Results of Fixed-Effects Panel Data Analyses Examining Board Power and Monitoring Effectiveness: High vs. Low CEO Tenure

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|---------------------------|--------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------------------------------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|
| | Low CEO Tenure | | | | | High CEO Tenure | | | | | Low CEO Tenure | | | | | High CEO Tenure | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.45** | 0.45** | 0.43** | 0.45** | 0.43** | 0.21 | 0.21 | 0.20 | 0.21 | 0.20 | -0.35 | -0.35 | -0.35 | -0.35 | -0.36 | -0.20 | -0.18 | -0.19 | -0.19 | -0.19 |
| Tobin's Q | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.20*** | 0.21*** | 0.20*** | 0.21*** | 0.20*** | -0.16* | -0.16* | -0.16* | -0.16* | -0.16* | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Firm Performance | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | 0.05 | -0.08* | -0.09* | -0.09* | -0.09* | -0.09* |
| Liquidity | -0.02 | -0.02 | -0.03 | -0.03 | -0.03 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.09+ | -0.10+ | -0.10+ | -0.10+ | -0.10+ |
| Leverage | -0.11 | -0.11 | -0.11 | -0.11 | -0.11 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | -0.17+ | -0.17+ | -0.16+ | -0.17+ | -0.17+ | 0.01 | -0.00 | 0.01 | -0.00 | 0.00 |
| Institutional Ownership | 0.03+ | 0.03+ | 0.03+ | 0.03+ | 0.03* | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.11* | -0.11* | -0.11* | -0.11* | -0.11* |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.06+ | 0.06+ | 0.07+ | 0.06+ | 0.07+ | 0.06+ | 0.06+ | 0.06+ | 0.06+ | 0.06+ |
| Salary Exceed > \$1 M | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 | -0.01 | -0.01 | -0.00 | -0.00 | -0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 |
| Risk | 0.11 | 0.11 | 0.11 | 0.10 | 0.11 | -0.07 | -0.07 | -0.08 | -0.07 | -0.08 | 0.18 | 0.21+ | 0.18 | 0.19 | 0.21+ | -0.03 | -0.05 | -0.06 | -0.05 | -0.06 |
| CEO Tenure | 0.05* | 0.05* | 0.06* | 0.04* | 0.06* | -0.18* | -0.19* | -0.18+ | -0.19* | -0.18+ | -0.00 | -0.00 | 0.00 | 0.00 | 0.01 | -0.07 | -0.06 | -0.05 | -0.07 | -0.06 |
| Sox | 0.09* | 0.09* | 0.08* | 0.08+ | 0.07 | 0.11+ | 0.11+ | 0.12+ | 0.11+ | 0.11+ | -0.10 | -0.10 | -0.11 | -0.11+ | -0.12+ | -0.10+ | -0.12* | -0.11* | -0.12* | -0.11+ |
| CEO Change | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | | | | | | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.04+ | | | | | |
| Lagged Total Compensation | -0.06 | -0.06 | -0.05 | -0.06 | -0.05 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | | | | | | | | | | |
| Ownership Power (out/in) | | 0.00 | | | -0.01 | | 0.01 | | | 0.01 | | -0.10* | | | -0.08* | | 0.01 | | | 0.01 |
| Prestige Power (out/in) | | | 0.08** | | 0.07* | | | 0.07* | | 0.07* | | | 0.03 | | 0.05 | | | 0.06 | | 0.05 |
| Structural Power (out/in) | | | | 0.06* | 0.05+ | | | | 0.01 | -0.00 | | | | - | - | | | | 0.04 | 0.03 |
| | | | | | | | | | | | | | | 0.08** | 0.08** | | | | | |
| F | 4.5719 | 4.4405 | 4.6546 | 4.3918 | 4.3871 | 2.9571 | 2.7888 | 3.1504 | 2.7559 | 2.8733 | 2.6426 | 2.7763 | 2.4771 | 2.5846 | 2.5008 | 3.3567 | 3.4010 | 3.3210 | 3.3955 | 3.1365 |
| R ² | 10.17 | 10.17 | 10.99 | 10.73 | 11.36 | 5.02 | 5.02 | 5.45 | 5.01 | 5.47 | 10.17 | 10.17 | 10.99 | 10.73 | 11.36 | 5.02 | 5.02 | 5.45 | 5.01 | 5.47 |
| Adjusted R ² | 9.15 | 9.09 | 9.92 | 9.66 | 10.18 | 4.20 | 4.15 | 4.59 | 4.14 | 4.50 | 9.15 | 9.09 | 9.92 | 9.66 | 10.18 | 4.20 | 4.15 | 4.59 | 4.14 | 4.50 |
| Δ Adjusted R ² | | -0.06 | 0.77** | 0.51* | 1.03* | | -0.05 | 0.39* | -0.06 | 0.30* | | -0.06* | 0.77 | 0.51** | 1.03** | | -0.05 | 0.39 | -0.06 | 0.30 |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

TABLE W- 75. Results of Fixed-Effects Panel Data Analyses Examining Outsiders' and Insiders' Power Interactions and Monitoring Effectiveness: High vs. Low CEO Tenure

| VARIABLES | Total Compensation | | | | | | | | | | Pay-for-Performance Sensitivity | | | | | | | | | |
|----------------------------|--------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------------------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|
| | Low CEO Tenure | | | | | High CEO Tenure | | | | | Low CEO Tenure | | | | | High CEO Tenure | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) |
| Firm Size | 0.45** | 0.43** | 0.42** | 0.46** | 0.42** | 0.21 | 0.21 | 0.18 | 0.21 | 0.17 | -0.35 | -0.35 | -0.35 | -0.35 | -0.35 | -0.20 | -0.18 | -0.19 | -0.19 | -0.19 |
| Tobin's Q | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.22*** | 0.20*** | 0.21*** | 0.20*** | 0.21*** | 0.20*** | -0.16* | -0.16* | -0.16* | -0.16* | -0.16* | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Firm Performance | 0.03 | 0.02 | 0.03 | 0.03 | 0.01 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.07 | 0.04 | 0.05 | 0.06 | -0.08* | -0.09* | -0.09* | -0.09* | -0.09* |
| Liquidity | -0.02 | -0.01 | -0.02 | -0.04 | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | 0.01 | 0.00 | 0.00 | 0.00 | -0.01 | -0.09+ | -0.10+ | -0.09+ | -0.10+ | -0.09+ |
| Leverage | -0.11 | -0.09 | -0.11 | -0.10 | -0.09 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | -0.17+ | -0.18+ | -0.16+ | -0.17+ | -0.18+ | 0.01 | -0.00 | 0.01 | -0.00 | 0.00 |
| Institutional Ownership | 0.03+ | 0.03+ | 0.03* | 0.03+ | 0.03+ | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | -0.11* | -0.11* | -0.11* | -0.11* | -0.11* |
| Large Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | 0.06+ | 0.06 | 0.06+ | 0.06+ | 0.06+ | 0.06+ | 0.06+ | 0.06* | 0.06+ | 0.06* |
| Salary Exceed > \$1 M | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.01 | -0.01 | 0.00 | -0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 |
| Risk | 0.11 | 0.10 | 0.13 | 0.09 | 0.10 | -0.07 | -0.07 | -0.07 | -0.07 | -0.07 | 0.18 | 0.22+ | 0.18 | 0.19 | 0.21+ | -0.03 | -0.05 | -0.06 | -0.05 | -0.05 |
| CEO Tenure | 0.05* | 0.05* | 0.05* | 0.05* | 0.05* | -0.18* | -0.18* | -0.16+ | -0.19* | -0.16+ | -0.00 | -0.00 | -0.00 | 0.00 | 0.01 | -0.07 | -0.07 | -0.04 | -0.07 | -0.05 |
| CEO Change | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 | | | | | | -0.04+ | -0.04+ | -0.04+ | -0.04+ | -0.04+ | | | | | |
| Lagged Total Compensation | -0.06 | -0.06 | -0.05 | -0.07 | -0.05 | 0.00 | 0.00 | 0.02 | -0.00 | 0.02 | | | | | | | | | | |
| Sox | 0.09* | 0.08* | 0.08* | 0.08+ | 0.07+ | 0.11+ | 0.11+ | 0.09 | 0.11+ | 0.09 | -0.10 | -0.10 | -0.10 | -0.11 | -0.12+ | -0.10+ | -0.12* | -0.13* | -0.12* | -0.13* |
| Ownership Power (avg out) | | -0.05+ | | | -0.06* | | 0.02 | | | 0.03 | | -0.07** | | | -0.06* | | -0.01 | | | 0.00 |
| Ownership Power (avg in) | | -0.02 | | | -0.00 | | 0.00 | | | 0.00 | | 0.04 | | | 0.05 | | -0.05 | | | -0.05 |
| Ownership Power(out*in) | | 0.10*** | | | 0.11*** | | 0.00 | | | -0.00 | | -0.06+ | | | -0.06+ | | -0.03 | | | -0.03 |
| Prestige Power (avg out) | | | -0.04 | | -0.05 | | | -0.04 | | -0.04 | | | 0.01 | | 0.04 | | | -0.01 | | -0.02 |
| Prestige Power (avg in) | | | -0.09** | | -0.09** | | | -0.07* | | -0.07* | | | 0.01 | | -0.01 | | | -0.06* | | -0.06+ |
| Prestige Power (out*in) | | | -0.04* | | -0.03+ | | | -0.05+ | | -0.05+ | | | -0.00 | | -0.01 | | | -0.05+ | | -0.05+ |
| Structural Power (avg out) | | | | 0.04 | 0.05 | | | | 0.00 | 0.01 | | | | -0.09* | -0.09** | | | | 0.04 | 0.04 |
| Structural Power (avg in) | | | | -0.02 | 0.00 | | | | -0.00 | -0.00 | | | | 0.02 | 0.00 | | | | -0.01 | 0.01 |
| Structural Power (out*in) | | | | -0.06* | -0.06* | | | | -0.01 | -0.01 | | | | -0.03 | -0.04 | | | | -0.00 | -0.00 |
| F | 4.57*** | 9.27*** | 4.78*** | 4.03*** | 9.73*** | 2.96*** | 2.59*** | 3.21*** | 2.51*** | 2.57*** | 2.64*** | 5.14*** | 2.29*** | 2.31*** | 3.57*** | 3.36*** | 3.34*** | 2.90*** | 3.06*** | 2.50*** |
| R ² | 10.17 | 13.43 | 11.73 | 11.50 | 16.35 | 5.02 | 5.04 | 6.22 | 5.04 | 6.31 | 5.83 | 8.05 | 5.85 | 6.99 | 9.04 | 5.69 | 6.30 | 6.81 | 6.27 | 7.17 |
| Adjusted R ² | 9.15 | 12.28 | 10.56 | 10.32 | 14.91 | 4.20 | 4.07 | 5.27 | 4.08 | 5.06 | 4.82 | 6.88 | 4.65 | 5.81 | 7.53 | 4.93 | 5.40 | 5.91 | 5.36 | 5.99 |
| Δ Adjusted R ² | | 3.13*** | 1.41* | 1.17* | 5.76*** | | -0.13 | 1.07* | -0.12 | 0.86* | | 2.06+ | -0.17 | 0.99* | 2.71** | | 0.47 | 0.98* | 0.43 | 1.06+ |

n= 3,581 firm-year observations. All models include controls for year and two-digit SIC industry controls that are not shown for space constraints.

^a Change in R-Squared in respect to the control model.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

APPENDIX X: MERGERS & ACQUISITIONS: OUTSIDERS/INSIDERS POWER RATIO

TABLE X-76. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +1)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|--------|-------|-------|-------|-------|
| Firm Size | -0.00 | -0.00 | -0.00 | -0.00 | 0.00 |
| Tobin's Q | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Firm Performance | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Same Industry Acq & Target | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Hostile Takeover | 0.05+ | 0.05* | 0.05* | 0.05* | 0.05* |
| Institutional Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Largest Institutional Owner | -0.04 | -0.03 | -0.03 | -0.04 | -0.03 |
| Post Sox 2002 | -0.04 | -0.04 | -0.05 | -0.05 | -0.05 |
| Board size | -0.02 | -0.02 | -0.02 | -0.03 | -0.03 |
| Ownership Power(out/in) | | -0.01 | | | -0.01 |
| Prestige Power(out/in) | | | -0.02 | | -0.01 |
| Structural Power(out/in) | | | | -0.04 | -0.03 |
| Observations | 1,517 | 1,516 | 1,516 | 1,516 | 1,516 |
| F | 0.8208 | 1.64+ | 1.37+ | 1.37+ | 1.32+ |
| R ² | 2.12 | 2.15 | 2.15 | 2.24 | 2.27 |
| Adjusted R ² | -0.46 | -0.51 | -0.5 | -0.41 | -0.52 |
| Δ Adjusted R ² | | -0.05 | -0.04 | 0.05 | -0.06 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X - 77. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-2, +1)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.08* | -0.08* | -0.09* | -0.08* | -0.08* |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.09* | 0.09* | 0.09* | 0.09* | 0.10* |
| Previous M&A Experience | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Percentage Acquired | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Institutional Owner | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 |
| Largest Institutional Owner | -0.04 | -0.04 | -0.05 | -0.04 | -0.04 |
| Post Sox 2002 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Board size | -0.03 | -0.03 | -0.02 | -0.04 | -0.03 |
| Ownership Power(out/in) | | -0.06* | | | -0.05* |
| Prestige Power(out/in) | | | 0.05 | | 0.06+ |
| Structural Power(out/in) | | | | -0.04 | -0.05+ |
| R-squared | 0.0466 | 0.0502 | 0.0491 | 0.0483 | 0.0541 |
| F | 1.91*** | 1.98*** | 1.93*** | 1.94*** | 2.01*** |
| R ² | 4.66 | 5.02 | 4.91 | 4.83 | 5.41 |
| Adjusted R ² | 2.07 | 2.37 | 2.26 | 2.18 | 2.63 |
| Δ Adjusted R ² | | 0.3 | 0.19 | 0.11 | 0.56 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X- 78. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-2, +2)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.08+ | -0.08+ | -0.08* | -0.07+ | -0.08+ |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.10* | 0.10* | 0.10* | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 |
| Percentage Acquired | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Same Industry Acq & Target | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Hostile Takeover | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Institutional Owner | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 |
| Largest Institutional Owner | -0.06 | -0.05 | -0.06+ | -0.06 | -0.06 |
| Post Sox 2002 | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 |
| Board size | -0.03 | -0.03 | -0.03 | -0.04 | -0.03 |
| Ownership Power(out/in) | | -0.04* | | | -0.04+ |
| Prestige Power(out/in) | | | 0.04 | | 0.04 |
| Structural Power(out/in) | | | | -0.03 | -0.04 |
| F | 1.78** | 1.84** | 1.78** | 1.78** | 1.85*** |
| R ² | 4.39 | 4.58 | 4.56 | 4.48 | 4.82 |
| Adjusted R ² | 1.8 | 1.93 | 1.9 | 1.82 | 2.04 |
| Δ Adjusted R ² | | 0.13 | 0.1 | 0.02 | 0.24 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X - 79. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-3, +3)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.08* | -0.08* | -0.09* | -0.08* | -0.08* |
| Tobin's Q | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Firm Performance | 0.11* | 0.11* | 0.11* | 0.11* | 0.11* |
| Previous M&A Experience | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 |
| Percentage Acquired | -0.10*** | -0.10*** | -0.10*** | -0.10*** | -0.10*** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.05* | 0.05* | 0.06* | 0.05* | 0.06* |
| Institutional Owner | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 |
| Largest Institutional Owner | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Post Sox 2002 | -0.06 | -0.05 | -0.06 | -0.06 | -0.06 |
| Board size | -0.03 | -0.03 | -0.03 | -0.04 | -0.03 |
| Ownership Power(out/in) | | -0.05* | | | -0.04+ |
| Prestige Power(out/in) | | | 0.04 | | 0.04 |
| Structural Power(out/in) | | | | -0.03 | -0.04 |
| F | 2.06*** | 2.11*** | 2.02*** | 2.04*** | 2.04*** |
| R ² | 4.96 | 5.19 | 5.1 | 5.07 | 5.4 |
| Adjusted R ² | 2.38 | 2.55 | 2.45 | 2.43 | 2.63 |
| Δ Adjusted R ² | | 0.17 | 0.07 | 0.05 | 0.25 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X -80. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +2)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.06 | -0.06 | -0.07+ | -0.06 | -0.06 |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.11** | 0.10* | 0.11** | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.09*** | -0.09*** | -0.09*** | -0.09*** | -0.09*** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 |
| Institutional Owner | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Largest Institutional Owner | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Post Sox 2002 | -0.05 | -0.05 | -0.06 | -0.06 | -0.05 |
| Board size | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 |
| Ownership Power(out/in) | | -0.04+ | | | -0.04 |
| Prestige Power(out/in) | | | 0.03 | | 0.04 |
| Structural Power(out/in) | | | | -0.04 | -0.04 |
| F | 1.64** | 1.69** | 1.62** | 1.66** | 1.68** |
| R ² | 4.15 | 4.35 | 4.26 | 4.28 | 4.56 |
| Adjusted R ² | 1.55 | 1.68 | 1.59 | 1.62 | 1.76 |
| Δ Adjusted R ² | | 0.13 | 0.04 | 0.07 | 0.21 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X - 81. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +3)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.06 | -0.06 | -0.07+ | -0.06 | -0.06 |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.11** | 0.10* | 0.11** | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.09*** | -0.09*** | -0.09*** | -0.09*** | -0.09*** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 |
| Institutional Owner | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Largest Institutional Owner | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Post Sox 2002 | -0.05 | -0.05 | -0.06 | -0.06 | -0.05 |
| Board size | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 |
| Ownership Power(out/in) | | -0.04+ | | | -0.04 |
| Prestige Power(out/in) | | | 0.03 | | 0.04 |
| Structural Power(out/in) | | | | -0.04 | -0.04 |
| F | 1.64** | 1.69** | 1.62** | 1.66** | 1.68** |
| R ² | 4.15 | 4.35 | 4.26 | 4.28 | 4.56 |
| Adjusted R ² | 1.55 | 1.68 | 1.59 | 1.62 | 1.76 |
| Δ Adjusted R ² | | 0.13 | 0.04 | 0.07 | 0.21 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X -82. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +1)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|--------|-------|-------|-------|-------|
| Firm Size | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Tobin's Q | 0.00 | -0.00 | 0.00 | 0.00 | 0.00 |
| Firm Performance | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Same Industry Acq & Target | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Hostile Takeover | 0.05+ | 0.05* | 0.05* | 0.05* | 0.05* |
| Institutional Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Largest Institutional Owner | -0.04 | -0.03 | -0.03 | -0.04 | -0.03 |
| Post Sox 2002 | -0.04 | -0.04 | -0.05 | -0.05 | -0.05 |
| Board size | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 |
| Ownership Power(out/in) | | -0.02 | | | -0.01 |
| Prestige Power(out/in) | | | -0.02 | | -0.01 |
| Structural Power(out/in) | | | | -0.04 | -0.03 |
| F | 0.8208 | 1.33+ | 1.37+ | 1.37+ | 1.31+ |
| R ² | 2.12 | 2.15 | 2.15 | 2.24 | 2.26 |
| Adjusted R ² | -0.46 | -0.51 | -0.5 | -0.41 | -0.52 |
| Δ Adjusted R ² | | -0.05 | -0.04 | 0.05 | -0.06 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X - 83. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-2, +1)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.08* | -0.09* | -0.09* | -0.08* | -0.09* |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.02 |
| Firm Performance | 0.09* | 0.09* | 0.09* | 0.09* | 0.10* |
| Previous M&A Experience | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Percentage Acquired | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Institutional Owner | 0.03 | 0.04 | 0.04 | 0.03 | 0.04 |
| Largest Institutional Owner | -0.04 | -0.04 | -0.05 | -0.04 | -0.04 |
| Post Sox 2002 | -0.05 | -0.05 | -0.05 | -0.05 | -0.05 |
| Board size | -0.03 | -0.02 | -0.02 | -0.04 | -0.02 |
| Ownership Power(out/in) | | -0.07* | | | -0.06+ |
| Prestige Power(out/in) | | | 0.05 | | 0.05 |
| Structural Power(out/in) | | | | -0.04 | -0.04+ |
| F | 1.91*** | 1.94*** | 1.93*** | 1.94*** | 1.97*** |
| R ² | 4.66 | 5.19 | 4.91 | 4.83 | 5.52 |
| Adjusted R ² | 2.07 | 2.54 | 2.26 | 2.18 | 2.75 |
| Δ Adjusted R ² | | 0.47 | 0.19 | 0.11 | 0.68 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X- 84. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-2, +2)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.08+ | -0.08* | -0.08* | -0.07+ | -0.08* |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.11** | 0.10* | 0.10* | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 |
| Percentage Acquired | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Same Industry Acq & Target | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Hostile Takeover | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Institutional Owner | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Largest Institutional Owner | -0.06 | -0.06 | -0.06+ | -0.06 | -0.06+ |
| Post Sox 2002 | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 |
| Board size | -0.03 | -0.03 | -0.03 | -0.04 | -0.03 |
| Ownership Power(out/in) | | -0.05+ | | | -0.05 |
| Prestige Power(out/in) | | | 0.04 | | 0.04 |
| Structural Power(out/in) | | | | -0.03 | -0.03 |
| F | 1.78** | 1.80** | 1.78** | 1.78** | 1.81** |
| R ² | 4.39 | 4.68 | 4.56 | 4.48 | 4.89 |
| Adjusted R ² | 1.8 | 2.02 | 1.9 | 1.82 | 2.1 |
| Δ Adjusted R ² | | 0.22 | 0.1 | 0.02 | 0.3 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X - 85. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-3, +3)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.04 | -0.05 | -0.05 | -0.04 | -0.05 |
| Tobin's Q | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Firm Performance | 0.11** | 0.12** | 0.11** | 0.11** | 0.12** |
| Previous M&A Experience | -0.03 | -0.03 | -0.03 | -0.04 | -0.03 |
| Percentage Acquired | -0.08** | -0.08** | -0.08** | -0.08** | -0.08** |
| Same Industry Acq & Target | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Hostile Takeover | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Institutional Owner | 0.08+ | 0.08* | 0.08+ | 0.08+ | 0.08* |
| Largest Institutional Owner | -0.06+ | -0.06+ | -0.06+ | -0.06+ | -0.06+ |
| Post Sox 2002 | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Board size | -0.04 | -0.03 | -0.03 | -0.04 | -0.03 |
| Ownership Power(out/in) | | -0.06* | | | -0.05+ |
| Prestige Power(out/in) | | | 0.03 | | 0.03 |
| Structural Power(out/in) | | | | -0.03 | -0.03 |
| F | 1.76** | 1.82** | 1.74** | 1.76** | 1.78** |
| R ² | 0.0411 | 0.0447 | 0.0419 | 0.0420 | 0.0459 |
| Adjusted R ² | 0.0151 | 0.0181 | 0.0152 | 0.0154 | 0.0179 |
| Δ Adjusted R ² | | | | | |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X -86. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +2)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.08* | -0.09* | -0.09* | -0.08* | -0.09* |
| Tobin's Q | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Firm Performance | 0.11* | 0.11* | 0.11* | 0.11* | 0.11* |
| Previous M&A Experience | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 |
| Percentage Acquired | -0.10*** | -0.10*** | -0.10*** | -0.10*** | -0.10*** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.05* | 0.05* | 0.06* | 0.05* | 0.06* |
| Institutional Owner | 0.04 | 0.05 | 0.05 | 0.04 | 0.05 |
| Largest Institutional Owner | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Post Sox 2002 | -0.06 | -0.05 | -0.06 | -0.06 | -0.05 |
| Board size | -0.03 | -0.02 | -0.03 | -0.04 | -0.02 |
| Ownership Power(out/in) | | -0.06* | | | -0.06+ |
| Prestige Power(out/in) | | | 0.04 | | 0.04 |
| Structural Power(out/in) | | | | -0.03 | -0.03 |
| F | 2.06*** | 2.08*** | 2.02*** | 2.04*** | 2.01*** |
| R ² | 4.96 | 5.35 | 5.10 | 5.07 | 5.52 |
| Adjusted R ² | 2.38 | 2.72 | 2.45 | 2.43 | 2.75 |
| Δ Adjusted R ² | | 0.34 | 0.07 | 0.05 | 0.37 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE X - 87. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +3)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.06 | -0.07+ | -0.07+ | -0.06 | -0.07+ |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.11** | 0.10* | 0.11** | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.09*** | -0.09*** | -0.09*** | -0.09*** | -0.09*** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Institutional Owner | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 |
| Largest Institutional Owner | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Post Sox 2002 | -0.05 | -0.05 | -0.06 | -0.06 | -0.05 |
| Board size | -0.04 | -0.03 | -0.04 | -0.05 | -0.04 |
| Ownership Power(out/in) | | -0.07* | | | -0.06+ |
| Prestige Power(out/in) | | | 0.03 | | 0.03 |
| Structural Power(out/in) | | | | -0.04 | -0.03 |
| F | 1.64** | 1.70** | 1.62** | 1.66** | 1.69** |
| R ² | 4.15 | 4.58 | 4.26 | 4.28 | 4.74 |
| Adjusted R ² | 1.55 | 1.92 | 1.59 | 1.62 | 1.95 |
| Δ Adjusted R ² | | 0.37 | 0.04 | 0.07 | 0.40 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

APPENDIX Y: MERGERS & ACQUISITIONS: INSIDERS/OUTSIDERS RATIO

TABLE Y- 88. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +1)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|-------|-------|-------|-------|-------|
| Firm Size | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Tobin's Q | 0.00 | -0.00 | 0.00 | 0.00 | 0.00 |
| Firm Performance | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 |
| Same Industry Acq & Target | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Hostile Takeover | 0.05+ | 0.05* | 0.05* | 0.05* | 0.05* |
| Institutional Owner | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Largest Institutional Owner | -0.04 | -0.03 | -0.03 | -0.04 | -0.03 |
| Post Sox 2002 | -0.04 | -0.04 | -0.05 | -0.05 | -0.04 |
| Board size | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 |
| Ownership Power(in/out) | | 0.02 | | | 0.02 |
| Prestige Power(out/in) | | | -0.02 | | -0.01 |
| Structural Power(out/in) | | | | -0.04 | -0.03 |
| F | 0.82 | 1.62+ | 1.37+ | 1.37+ | 1.61+ |
| R ² | 2.12 | 2.18 | 2.15 | 2.24 | 2.28 |
| Adjusted R ² | -0.46 | -0.48 | -0.50 | -0.41 | -0.50 |
| Δ Adjusted R ² | | -0.02 | -0.04 | 0.05 | -0.04 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE Y-89. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-2, +1)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.08* | -0.09* | -0.09* | -0.08* | -0.09* |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.09* | 0.09* | 0.09* | 0.09* | 0.10* |
| Previous M&A Experience | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Percentage Acquired | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Institutional Owner | 0.03 | 0.04 | 0.04 | 0.03 | 0.04 |
| Largest Institutional Owner | -0.04 | -0.04 | -0.05 | -0.04 | -0.05 |
| Post Sox 2002 | -0.05 | -0.04 | -0.05 | -0.05 | -0.04 |
| Board size | -0.03 | -0.02 | -0.02 | -0.04 | -0.02 |
| Ownership Power(in/out) | | 0.08 | | | 0.07 |
| Prestige Power(out/in) | | | 0.05 | | 0.06+ |
| Structural Power(out/in) | | | | -0.04 | -0.04 |
| F | 1.91*** | 1.90*** | 1.93*** | 1.94*** | 1.95*** |
| R ² | 4.66 | 5.24 | 4.91 | 4.83 | 5.58 |
| Adjusted R ² | 2.07 | 2.60 | 2.26 | 2.18 | 2.82 |
| Δ Adjusted R ² | | 0.53 | 0.19 | 0.11 | 0.75 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE Y- 90. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-2, +2)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.08+ | -0.08* | -0.08* | -0.07+ | -0.08* |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.11* | 0.10* | 0.10* | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.03 | -0.02 |
| Percentage Acquired | -0.09** | -0.09** | -0.09** | -0.09** | -0.09** |
| Same Industry Acq & Target | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Hostile Takeover | 0.05+ | 0.05+ | 0.05+ | 0.05+ | 0.05+ |
| Institutional Owner | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Largest Institutional Owner | -0.06 | -0.06 | -0.06+ | -0.06 | -0.06+ |
| Post Sox 2002 | -0.04 | -0.04 | -0.04 | -0.05 | -0.04 |
| Board size | -0.03 | -0.02 | -0.03 | -0.04 | -0.02 |
| Ownership Power(in/out) | | 0.06 | | | 0.05 |
| Prestige Power(out/in) | | | 0.04 | | 0.04 |
| Structural Power(out/in) | | | | -0.03 | -0.03 |
| F | 1.78** | 1.78** | 1.78** | 1.78** | 1.80** |
| R ² | 4.39 | 4.71 | 4.56 | 4.48 | 4.93 |
| Adjusted R ² | 1.80 | 2.06 | 1.90 | 1.82 | 2.14 |
| Δ Adjusted R ² | | 0.26 | 0.10 | 0.02 | 0.34 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE Y-91. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-3, +3)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|---------|---------|---------|---------|---------|
| Firm Size | -0.04 | -0.05 | -0.05 | -0.04 | -0.05 |
| Tobin's Q | -0.03 | -0.03 | -0.03 | -0.03 | -0.03 |
| Firm Performance | 0.11** | 0.12** | 0.11** | 0.11** | 0.12** |
| Previous M&A Experience | -0.03 | -0.03 | -0.03 | -0.04 | -0.03 |
| Percentage Acquired | -0.08** | -0.08** | -0.08** | -0.08** | -0.08** |
| Same Industry Acq & Target | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Hostile Takeover | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Institutional Owner | 0.08+ | 0.08* | 0.08+ | 0.08+ | 0.08* |
| Largest Institutional Owner | -0.06+ | -0.06+ | -0.06+ | -0.06+ | -0.06+ |
| Post Sox 2002 | -0.03 | -0.02 | -0.03 | -0.03 | -0.02 |
| Board size | -0.04 | -0.03 | -0.03 | -0.04 | -0.03 |
| Ownership Power(in/out) | | 0.07* | | | 0.06+ |
| Prestige Power(out/in) | | | 0.03 | | 0.03 |
| Structural Power(out/in) | | | | -0.03 | -0.03 |
| F | 1.76** | 1.82** | 1.74** | 1.76** | 1.78** |
| R ² | 4.11 | 4.55 | 4.19 | 4.20 | 4.67 |
| Adjusted R ² | 1.51 | 1.89 | 1.52 | 1.54 | 1.87 |
| Δ Adjusted R ² | | 0.38 | 0.01 | 0.03 | 0.36 |

n=1,477 observations

Ownership power ratio winsorized at p=0.01

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE Y- 92. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +2)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.08* | -0.09* | -0.09* | -0.08* | -0.09* |
| Tobin's Q | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Firm Performance | 0.11* | 0.11* | 0.11* | 0.11* | 0.11* |
| Previous M&A Experience | -0.02 | -0.02 | -0.01 | -0.02 | -0.02 |
| Percentage Acquired | -0.10*** | -0.10*** | -0.10*** | -0.10*** | -0.10*** |
| Same Industry Acq & Target | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Hostile Takeover | 0.05* | 0.05* | 0.06* | 0.05* | 0.05* |
| Institutional Owner | 0.04 | 0.05 | 0.05 | 0.04 | 0.05 |
| Largest Institutional Owner | -0.03 | -0.03 | -0.03 | -0.03 | -0.04 |
| Post Sox 2002 | -0.06 | -0.05 | -0.06 | -0.06 | -0.05 |
| Board size | -0.03 | -0.02 | -0.03 | -0.04 | -0.02 |
| Ownership Power(in/out) | | 0.06 | | | 0.06 |
| Prestige Power(out/in) | | | 0.04 | | 0.04 |
| Structural Power(out/in) | | | | -0.03 | -0.03 |
| F | 2.06*** | 2.04*** | 2.02*** | 2.04*** | 1.99*** |
| R ² | 4.96 | 5.35 | 5.10 | 5.07 | 5.52 |
| Adjusted R ² | 2.38 | 2.71 | 2.45 | 2.43 | 2.76 |
| Δ Adjusted R ² | | 0.33 | 0.07 | 0.05 | 0.38 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

TABLE Y - 93. Board Power & Mergers & Acquisitions Activity: Cumulative Abnormal Returns_(-1, +3)

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|-----------------------------|----------|----------|----------|----------|----------|
| Firm Size | -0.06 | -0.07+ | -0.07+ | -0.06 | -0.07+ |
| Tobin's Q | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| Firm Performance | 0.10* | 0.11** | 0.10* | 0.11** | 0.11** |
| Previous M&A Experience | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| Percentage Acquired | -0.09*** | -0.09*** | -0.09*** | -0.09*** | -0.09*** |
| Same Industry Acq & Target | -0.04 | -0.03 | -0.04 | -0.04 | -0.03 |
| Hostile Takeover | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Institutional Owner | 0.07 | 0.07+ | 0.07 | 0.07 | 0.07+ |
| Largest Institutional Owner | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| Post Sox 2002 | -0.05 | -0.05 | -0.06 | -0.06 | -0.05 |
| Board size | -0.04 | -0.03 | -0.04 | -0.05 | -0.03 |
| Ownership Power(in/out) | | 0.07+ | | | 0.06 |
| Prestige Power(out/in) | | | 0.03 | | 0.04 |
| Structural Power(out/in) | | | | -0.04 | -0.03 |
| F | 1.64** | 1.67** | 1.62** | 1.66** | 1.67** |
| R ² | 4.15 | 4.60 | 4.26 | 4.28 | 4.77 |
| Adjusted R ² | 1.55 | 1.94 | 1.59 | 1.62 | 1.98 |
| Δ Adjusted R ² | | 0.39 | 0.04 | 0.07 | 0.43 |

n=1,477 observations

*** p < 0.001, ** p < 0.01, * p < 0.05, + p < 0.10

APPENDIX Z. Ownership Power: Outsiders * Insiders Interactions Summary

Figure Z - 9. Contextual Implications of Sarbanes-Oxley Act of 2002: Interaction Effects of Outsiders' and Insiders' Ownership Power and Monitoring Effectiveness

Figure Z-9a: Total Compensation: Ownership Power Pre-Sox

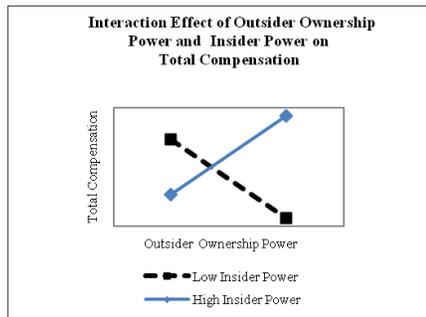


Figure Z-9b: Pay-for-Performance: Ownership Power – Post-Sox

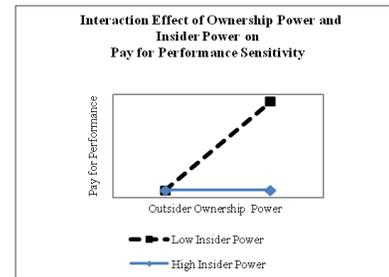


Figure Z- 10. Contextual Implications of World Trade Center Attacks of 2001: Interaction Effects of Outsiders' and Insiders' Ownership Power and Monitoring Effectiveness

Figure Z-10: Total Compensation: Ownership Power Pre-WTC

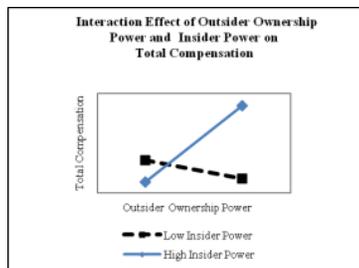


Figure Z- 11. Contextual Implications of Industry Mimetic Pressures: Random-Effects Regression Interaction Effects of Outsiders' and Insiders' Ownership Power and Monitoring Effectiveness

Figure Z-11: Pay-for-Performance: Ownership Power(>1SD)

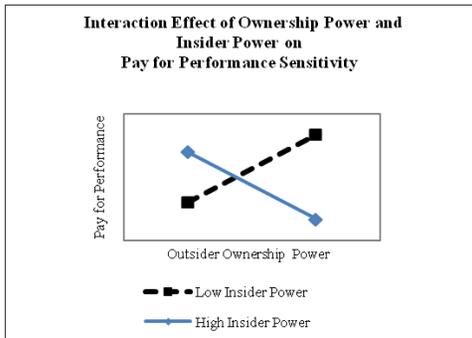


Figure Z- 12. Contextual Implications of Firm Size: Interaction Effects of Outsiders’ and Insiders’ Ownership Power and Monitoring Effectiveness

Figure Z-12a: Total Compensation: Ownership Power and Large Firms

Figure Z-12b: Pay-for-Performance: Ownership Power and Large Firms

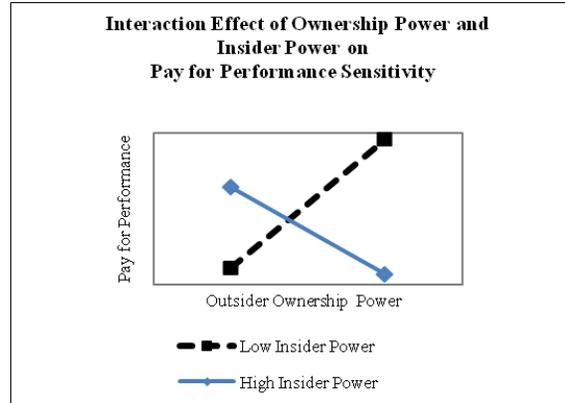
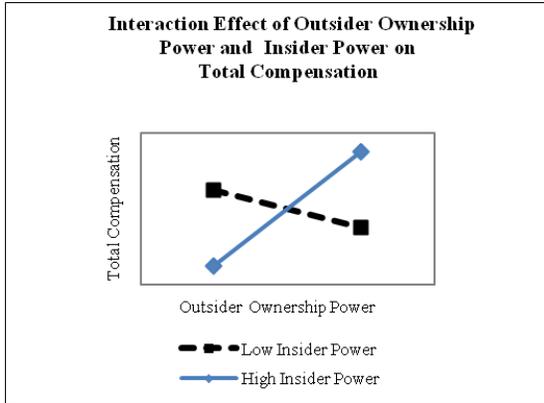


Figure Z- 13. Contextual Implications of Outsiders (%) on Board: Interaction Effects of Outsiders’ and Insiders’ Ownership Power and Monitoring Effectiveness

Figure Z-13a: Total Compensation: Ownership Power & High Out

Figure Z-13b: Pay-for-Performance: Ownership Power & High Out

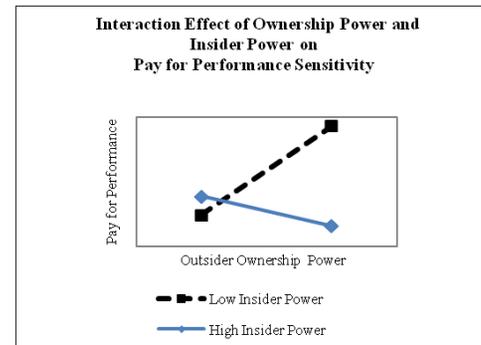
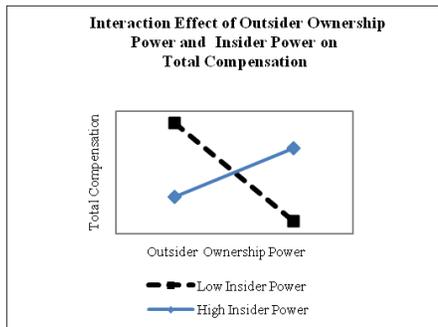


Figure Z- 14. Contextual Implications of CEO Tenure: Interaction Effects of Outsiders’ and Insiders’ Ownership Power and Monitoring Effectiveness

Figure Z-14a: Total Compensation: Ownership Power & Low CEO Tenure

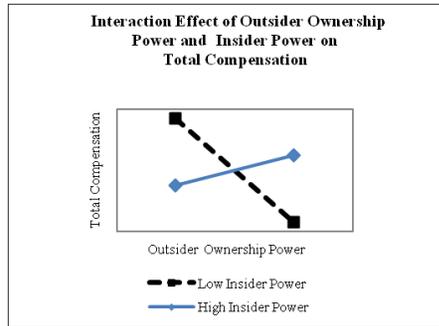
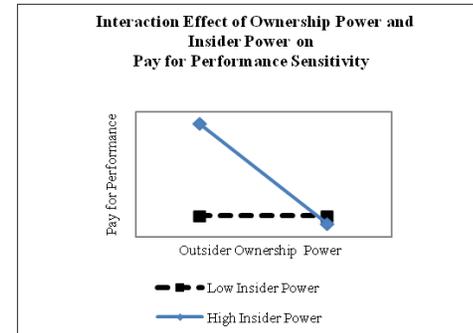


Figure Z-14b: Pay-for-Performance: Ownership Power & Low CEO Tenure



APPENDIX AA. Prestige Power: Outsiders * Insiders Interactions Summary

Figure AA - 15. Contextual Implications of Sarbanes-Oxley Act of 2002: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -15A: Total Compensation: Prestige Power Pre-Sox

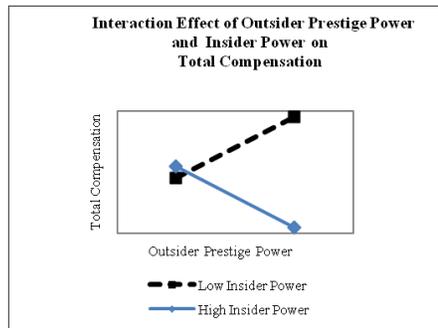


Figure AA -15B: Pay-for-Performance: Prestige Power – Pre & Post-Sox

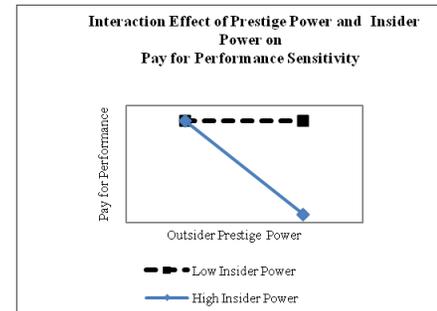


Figure AA - 16. Contextual Implications of World Trade Center Attacks of 2001: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -16A: Total Compensation: Prestige Power – Pre & Post-WTC

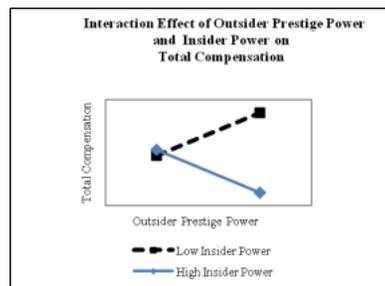


Figure AA -16B: Pay-for-Performance: Prestige Power Pre/Post-WTC

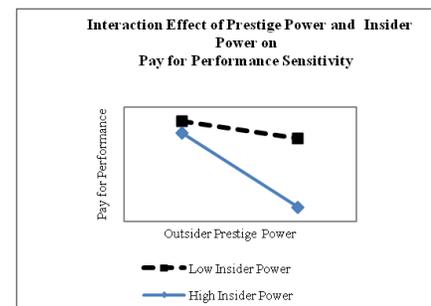


Figure AA - 17. Contextual Implications of Industry Mimetic Pressures: Random-Effects Regression Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -17a: Total Compensation: Prestige Power – (<1SD)

Figure AA -17b: Total Compensation: Prestige Power – (>1SD)

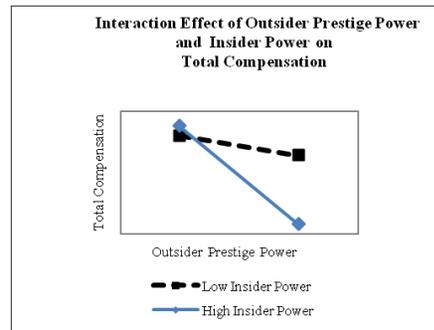
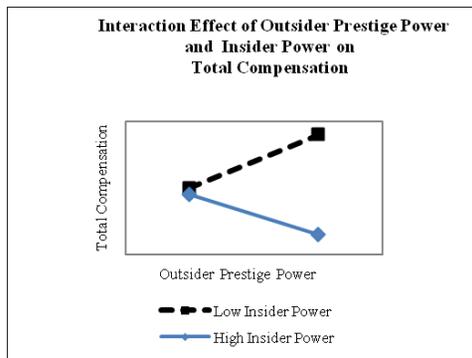


Figure AA - 18. Contextual Implications of Firm Size: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -18a: Total Compensation: Prestige Power and Small/Large Firms

Figure AA -18b: Pay-for-Performance: Prestige Power and Large Firms

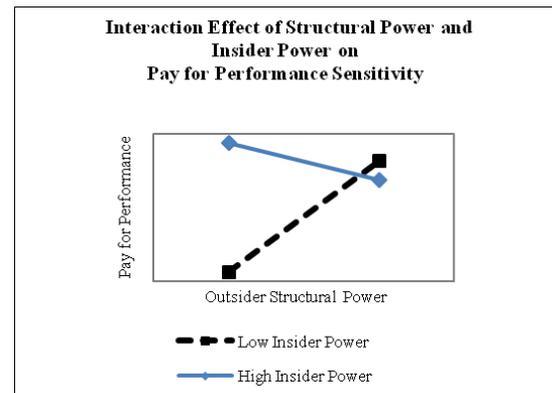
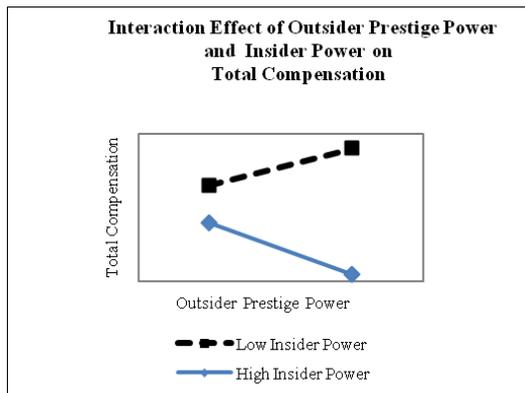


Figure AA - 19. Contextual Implications of Firm Performance: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -19a: Pay-for-Performance: Prestige Power and High-Performing Firms

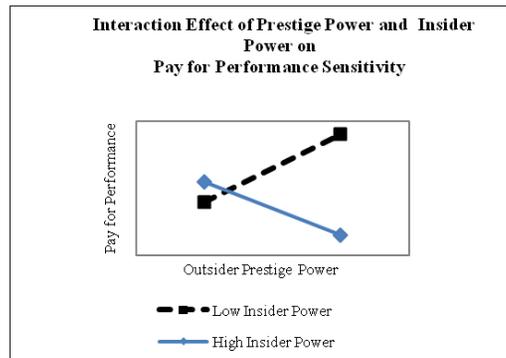


Figure AA - 20. Contextual Implications of Most Powerful Board Member: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -20a: Total Compensation: Prestige Power

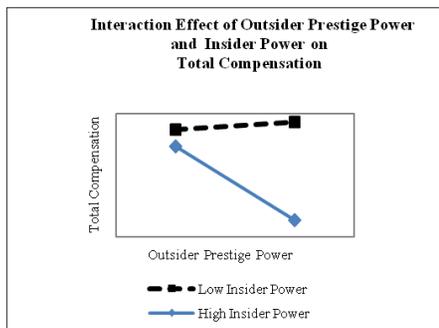


Figure AA -20b: Pay-for-Performance: Prestige Power

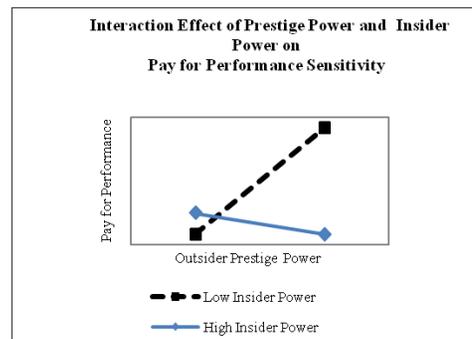


Figure AA - 21. Contextual Implications of Board Size: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -21a: Pay-for-Performance: Prestige Power & Small Board

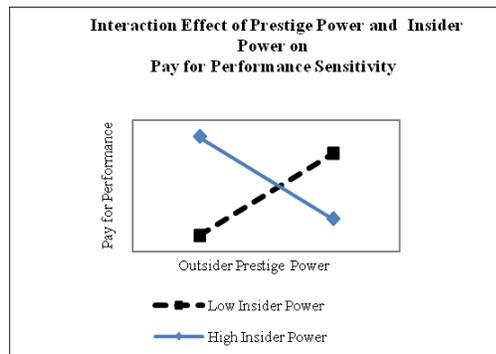


Figure AA - 22. Contextual Implications of CEO Ownership: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -22a: Pay-for-Performance: Prestige Power & High CEO Ownership

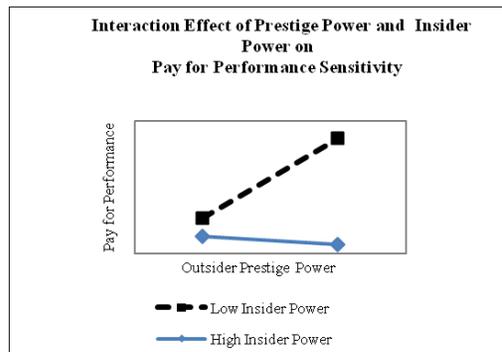
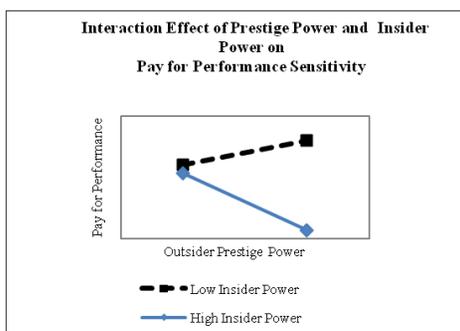


Figure AA - 23. Contextual Implications of CEO Tenure: Interaction Effects of Outsiders' and Insiders' Prestige Power and Monitoring Effectiveness

Figure AA -23a: Pay-for-Performance: Prestige Power & High CEO Tenure



APPENDIX BB. Structural Power: Outsiders * Insiders Interactions Summary

Figure BB - 24. Contextual Implications of Sarbanes-Oxley Act of 2002: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -24a: Total Compensation: Structural Power Pre-Sox

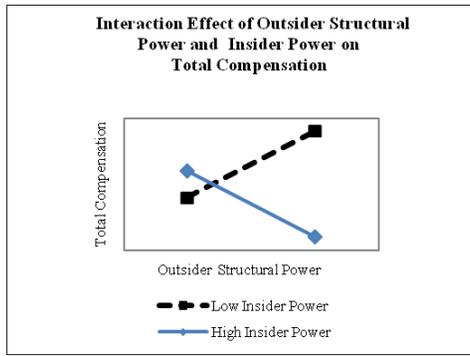


Figure BB -24b Pay-for-Performance: Structural Power – Post-Sox

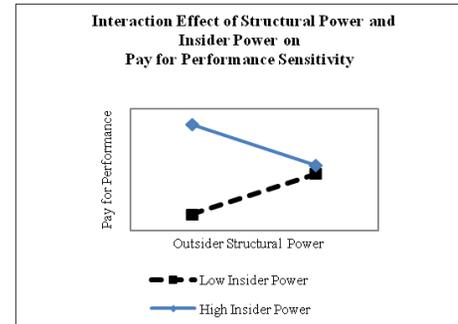


Figure BB - 25. Contextual Implications of World Trade Center Attacks of 2001: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -25a: Total Compensation: Structural Power – Pre-WTC

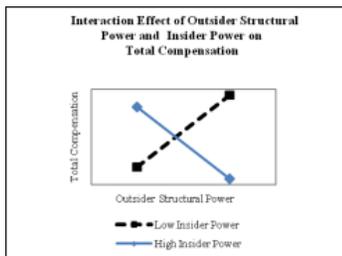


Figure BB -25b: Pay-for-Performance: Structural Power Post-WTC

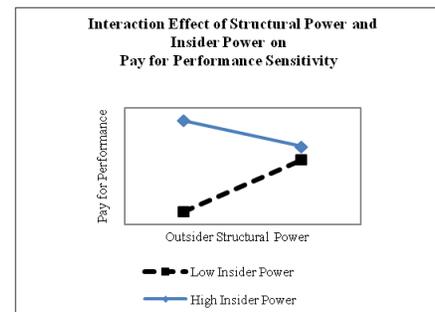


Figure BB - 26. Contextual Implications of Industry Mimetic Pressures: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -26: Pay-for-Performance: Structural Power (>1SD)

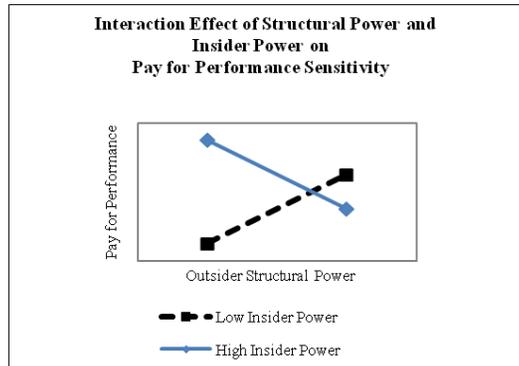


Figure BB - 27. Contextual Implications of Industry Mimetic Pressures: Random-Effects Regression Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -27: Pay-for-Performance: *Structural Power(>1SD)*

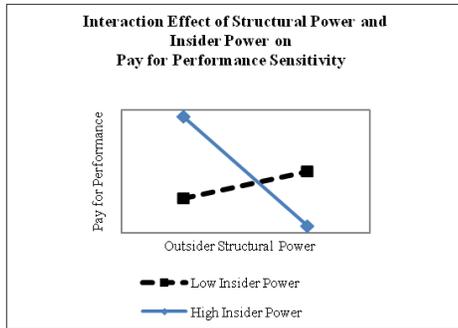


Figure BB - 28. Contextual Implications of Firm Performance: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -28a: Pay-for-Performance: *Structural Power and Small Firms*

Figure BB -28a: *Structural Power and Less-Performing Firms*

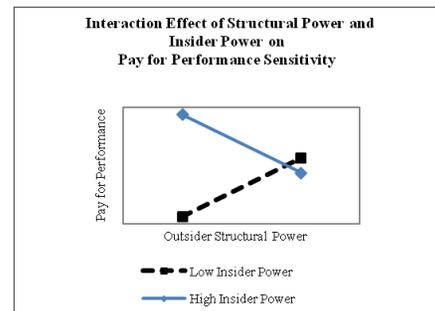
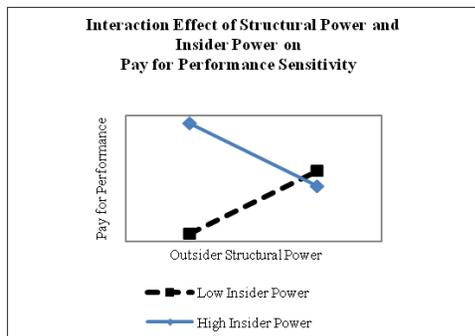


Figure BB - 29. Contextual Implications of Most Powerful Board Member: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -29a: Total Compensation: Structural Power

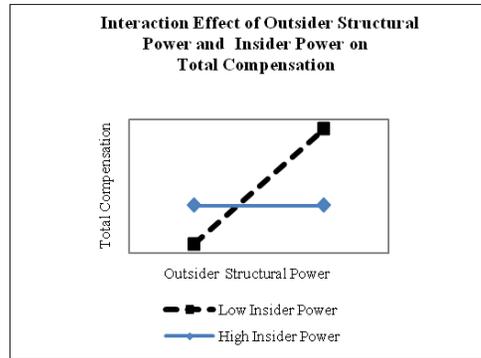


Figure BB -29b: Pay-for-Performance: Structural Power

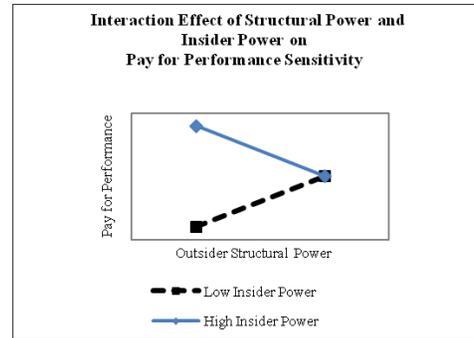


Figure BB - 30. Contextual Implications of Outsiders (%) on Board: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -30: Pay-for-Performance: Structural Power & High Out

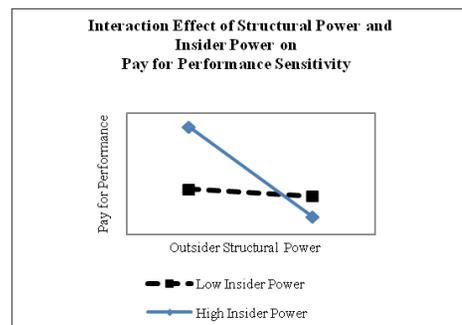


Figure BB - 31. Contextual Implications of Board Size: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -31a: Total Compensation: Structural Power & Large Board Large Board

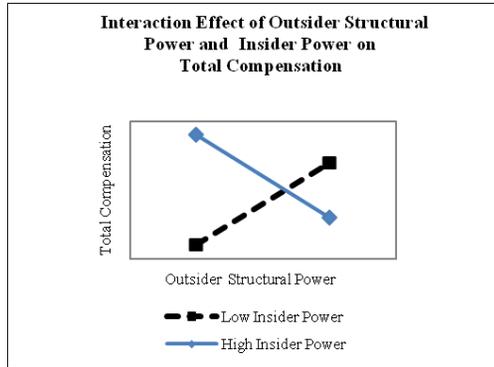


Figure BB -31b: Pay-for-Performance: Structural Power & Large Board Large Board

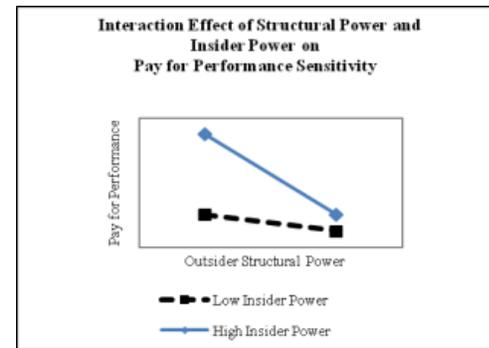


Figure BB - 32. Contextual Implications of CEO Ownership: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -32a: Total Compensation: Structural Power & Low CEO Own

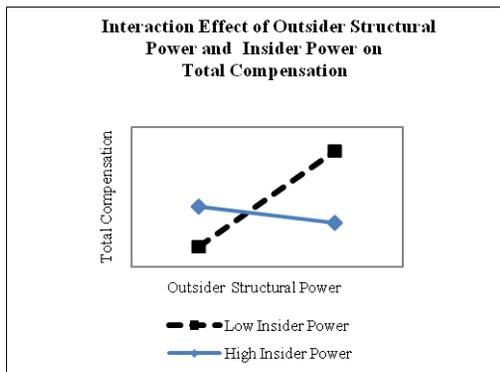


Figure BB -32b: Pay-for-Performance: Structural Power & Low CEO Own

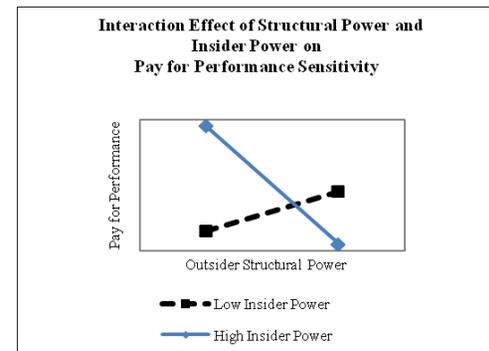
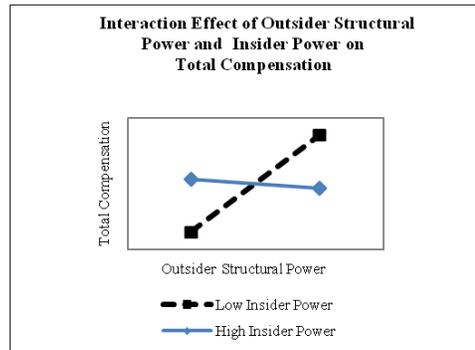


Figure BB - 33. Contextual Implications of CEO Tenure: Interaction Effects of Outsiders' and Insiders' Structural Power and Monitoring Effectiveness

Figure BB -33: Total Compensation: Structural Power& Low CEO Tenure



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EDUCATION

- Ph.D.** **Syracuse University**, Syracuse, NY (Expected November 2012)
Major Concentration: Strategic Management
Minor Concentration: Organizational Behavior
Ronald McNair Fellowship, 2011-2012
Dissertation: *The Struggle for Power and Pay: Implications of Board Power for Monitoring Effectiveness and Pay-for-Performance Sensitivity*
Chair: Ravi Dharwadkar, Ph.D.
- M.S.** **Oklahoma State University**, Stillwater, OK
Counseling & Student Personnel Administration
Graduated with honors
Thesis: *Leadership Education through Drama*
- B.A.** **Boston College**, Newton, MA
Major: Political Science - Honors, *Cum Laude*

School of the Arts and Sciences Honors Program
Department of Political Science Honors Program
Thesis: *Impact of Totalitarianism on Nationalism: Comparative Study of Hitler and Stalin*

WORKING PAPERS (not under review)

- Lebrón, M.J. "Strategic sabotage and firm performance: Top management team and middle management power influence in an innovative context."
- Lebrón, M.J. & Arora, P. "Corporate sustainability antecedents: Governance, board monitoring and environmental regulation."
- Lebrón, M.J. "A Schumpeterian typology for green entrepreneurship innovation"

PUBLICATIONS

- Lebrón, M.J. "Leading for Change" (2004). In S. Hurd & R. Stein (Eds.), *Building and Sustaining Learning Communities* (p.110-120). Bolton, MA: Anker Publishing.

CONFERENCE PRESENTATIONS AND ACTIVITIES

Refereed Conference and Professional Meeting Presentations (selected):

- Lebrón, M.J. “Strategic sabotage and firm performance: Top management team and middle management power influence in an innovative context.” *Academy of Management Conference*, Montreal, Canada August 2010.
- Lebrón, M.J. & Arora, P. “Corporate sustainability antecedents: Governance, board monitoring and environmental regulation.” *Academy of Management Conference*, Chicago, IL, August 2009.
- Lebrón, M.J. “A Schumpeterian typology for green entrepreneurship innovation.” *Academy of Management Conference*, Chicago, IL, August 2009.
- Lebrón, M.J. “A seamless intellectual experience: Syracuse University's shared reading program.” *National Association of College Personnel Administrators (ACPA) 2006 Convention*, Indianapolis, IN, March 2006.
- Lebrón, M.J. “Seamless learning through the student-centered first-year experience.” Half-day pre-convention workshop for the *National Association of College Personnel Administrators (ACPA) 2006 Convention* in Indianapolis, IN, March 2006.
- Lebrón, M.J. “Enhancing retention through ‘no-hate’ and diversity education.” Half-Day Pre-Conference Workshop, *American College Personnel Association National Conference*, Los Angeles, CA, 2002.
- Lebrón, M.J. “Developing learning-based partnerships: the impact of learning styles on supervision.” State and International Division Program Showcase Award, *American College Personnel Association National Conference*, California, 2002.
- Lebrón, M.J. “JumpStart SummerStart: Recruiting and retaining diverse students in leadership initiatives.” *American College Personnel Association National Conference*, California, 2002.
- Lebrón, M.J. “Plotting freedom’s destiny: Understanding the complex relationship among diversity, the law, and retention.” Convention Institute four-hour workshop, *American College Personnel Association National Conference*, Boston, MA, 2001.

Invited Presentations (selected):

- Lebrón, M.J. “The power of you – social change in action.” *Fire It Up: Lead the Way to Change*. First Annual Leadership Development Conference, SUNY Cortland, Cortland, NY, 2009.
- Lebrón, M.J. “Carrying the torch of leadership.” Keynote Presenter, Syracuse University, *Student of Color Leadership Retreat*, White Eagle Retreat Center, Hamilton, NY, 2009.
- Lebrón, M. J. “Torchbearers.” Keynote Presentation for the *National Association of College and University Residence Halls National Convention*, Syracuse, NY, 2005.
- Lebrón, M.J. “Dream Catchers.” Keynote Address. *Women of Influence Awards Ceremony* Syracuse University, Syracuse, NY, 2001.

TEACHING EXPERIENCE

- Strategic Management & Leadership, Instructor (full responsibility), Whitman School, Syracuse University, Spring 2010, undergraduate, 1 section (Evaluation Score: 4.8/5.0); Spring 2009, 1 section (Score: 4.6/5.0)
- Strategic Human Resources, Instructor (full responsibility), Whitman School, Syracuse University, Summer 2009, undergraduate, 1 section (Evaluation Score: 4.8/5.0)
- GOLD Leadership Class, Adjunct Faculty, Public Affairs Program, Syracuse University, 2001-2002, undergraduate, 1 section
- Leadership Development, Adjunct Instructor, Arts and Sciences, Kansas State University, 1999-2000, undergraduate, 1 section
- University Experience Success Course, Adjunct Instructor, Arts and Sciences, Kansas State University, 1998-1999, undergraduate, 1 section
- First Year Experience, Adjunct Instructor, Arts and Sciences, Oklahoma State University, 1995, undergraduate, 1 section
- Teaching Assistant Experience:
 - Strategic Management (iMBA), Whitman School, Syracuse University, Spring 2011
 - Leadership and Organization Change, Whitman School, Syracuse University, Fall 2010
 - Strategic Human Resources, Whitman School, Syracuse University, Fall 2007, Spring 2008

ACADEMIC WORK EXPERIENCE

Martin J. Whitman School of Management, Syracuse University, Syracuse, NY, 2007-present

- **Research Assistantship Experience:**
 - *Board Governance Culture and Association Performance*, 2009-2010 (assisted with literature review, empirical analysis, written report)
 - *CEO Organizational Identification*, 2008-Present (literature review)
 - *Employee Stock Ownership Program*, 2007-2009 (literature review)
 - *Executive Compensation*, 2007-2009 (literature review)
- **Research Grants:**
 - 2011 Whitman Summer Research Grant (\$4,000) “*A Board Power Perspective on Strategic Value Creation: Monitoring Implications on R&D Investment Spending*”
 - 2010 Whitman Summer Research Grant (\$4,000) “*How do CEO’s Matter? Implications of Managerial Discretion for the Agency Conflict and Executive Pay*”
- **Future Professoriate Program, 2007-2010**

AWARDS (selected)

- Ideas to Innovation Challenge – *World Issues Focus on Integrity Innovation Multi-Disciplinary Course*, 3rd place (650 entries worldwide), Graduate Management Admission Challenge, Management Education for Tomorrow (MET) Fund, (\$10,000 award), 2011. (<http://www.gmac.com/gmac/AboutUs/MET-Fund/i2iWinner7.htm>)
- National First-Year Student Advocate Award, National Center for the First Year Experience, 2006.
- Olympic Torchbearer, “Inspirational Torch Relay”, Olympic Games, Salt Lake, UT, 2002.
- Outstanding Service to Commission III American College Student Personnel Association Housing and Residence Life Commission, 2002 (Chair, National Housing & Residential Life Professional Staff Recruitment and Retention Study)
- Office of Residence Life Award for Excellence in Professional Development, Syracuse University, 2002.
- Vice President’s Students First Award, Syracuse University, 2001.
- Excellence in Advising Award, Syracuse University, 2001.
- Staff Member of the Year, Kansas State University at Salina, 2000.
- Advisor of the Year, Kansas State University at Salina, 1998.
- Distinguished Alumni Service Award, Oklahoma State University, 1997.

PROFESSIONAL SERVICE

- Reviewer for Academy of Management Conference, Business Policy & Strategy Division, 2011.
- Reviewer for Academy of Management Conference, Organization & Management Theory Division, 2009.

PROFESSIONAL ASSOCIATIONS

- PhD Project, Management Doctoral Student Association, 2007-Present.
- Academy of Management, Business Policy & Strategy and Organizational Behavior Divisions, 2008-Present.
- Strategic Management Society, 2010-Present.

UNIVERSITY AND COMMUNITY SERVICE

- Syracuse University Minority Graduate Student Organization, 2007- Present.
- Leadership Program Founder and Coordinator, AIDS Community Resources DiversityYouth Group, Syracuse, NY, 2006-2008.
- Chair, Syracuse University Light the Night Walk for Cancer Research, Leukemia & Lymphoma Society, Syracuse, NY, 2004-2006.
- University Committee Experiences at Syracuse University(2000-2007) and/or Kansas State University (1996-2000): Retention Council, Academic Coordinating Committee, Alumni Relations Council; Diversity Team

PROFESSIONAL EXPERIENCE

- *Facilitator, Diversity Inc.'s Annual Event – Theme: Corporate Citizenship*, Washington, DC, 2011
- *Founder and Owner, Soul Vision (Leadership Consulting)*, 2007- present.
- *Director of Orientation, the First-Year Experience, and Transitions Services*, Syracuse University, 2003-2007 (developed and implemented nationally-recognized program).
- *Assistant Director of Leadership Development for Residence Life*, Syracuse University, 2000-2003 (developed and implemented nationally-recognized leadership program for 7,500 students).
- *Assistant Director of College Advancement*, Kansas State University, 1996-2000 (Responsible for \$1 million budget; developed and implemented new departments and initiatives to enhance student retention, including residence life, orientation, student life, student union, recreation center, and counseling center; developed and instructed leadership development course, leadership certificate program proposal; implemented student retention study; and, developed and implemented diversity climate assessment study).