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ABSTRACT

Interactions between CEOs and their boards of directors are a prominent focus of management and strategy research. Despite the extensive literature on CEO–board relations, to date there has been limited integration regarding both theoretical perspectives and measurement schemes. Through an extensive analysis of published studies, we hope to facilitate future research on CEO–board relations. We begin with a comparison of key theoretical approaches. Next, we conduct a content analysis of 51 empirical articles. We find that prior studies have an unbalanced focus regarding both topics and theoretical perspectives, and that there is limited consistency in the choice of measures. Based on this review, we lay out a number of promising directions for future research. We also find that, while there has been progress in international research on CEO–board relations, there are still many unanswered questions regarding the generalizability of governance theories across different geographic settings.
How do CEOs and their boards interact, and what are the implications for firm performance? As recent examples attest, this is a complex and multi-faceted relationship. A first intersection between boards and executives is the support or challenge the board may provide to the CEO. At General Motors, board members steadfastly supported CEO Rick Wagoner, despite extensive losses – essentially the same position that the board took with CEO Stempel during large losses in the early 1990s (Wall Street Journal, 2008a). In contrast, activist board member Carl Icahn has managed to topple two chief executives that he felt were underperforming: John Anticono at Blockbuster, and Jerry Yang at Yahoo. CEO departures are not always driven by performance issues, however. Giancarlo Di Risio was brought into Versace as a turnaround executive. While successful at his mission to restore profitability, his cost-cutting efforts ran afoul of Versace members on the board. In a similar episode, the top executives at Gucci – CEO Domenico De Sole and chief designer Tom Ford – also left after a conflict with owners. Another critical intersection between boards and their top executives concerns oversight. Satyam Computer Systems, India’s fourth largest IT firm, had a blue ribbon board, complied with Sarbanes-Oxley, and received an award for excellence from the World Council for Corporate Governance. Despite these accolades, the firm conducted unapproved related-party transactions, was banned from World Bank contracts due to allegations of corruption, and overstated cash reserves by $1 billion (Tripathi, 2009). Satyam’s founder was subsequently arrested, and board members fired. At the opposite end of the size spectrum, cash-strapped British biotech start-ups have been criticized for excessive levels of compensation, for both directors and officers (Wall Street Journal, 2009a).

As seen in these examples, there are many factors that shape how boards relate to top executives. Research on CEO – board relations describe these interactions with a variety of labels, including power, control, involvement, and vigilance, among others. Consequently, both the framing and focus of studies varies widely, depending on the theoretical perspective in use. For instance,
studies based in resource dependence emphasize collaboration between the board and CEO, focusing on the information and resources that the board can provide. In contrast, studies rooted in agency theory paint the relationship between a board and CEO in a more adversarial manner. Institutional theory takes yet another perspective: Rather than focusing on performance outcomes, it seeks to explain how various pressures affect decisions made by the board and top executives. Not surprisingly, these theories offer disparate, and often competing, explanations for interactions between CEOs and boards of directors.

To address these problems, we analyze 25 years of empirical studies on CEO-board relations. Our review identifies the most widely used theories that have been utilized in this literature, the most commonly used constructs, their indicators and measures. There are five key findings from our content analysis: (1) The bulk of research is dominated by a handful of topics; (2) nearly all of the studies are based on US samples; (3) agency theory is by far the dominant framework; (4) there is little consistency in the measurement schemes used across studies; and (5) the bulk of studies rely on a single theoretical perspective. Based on our review, we identify a need for further research that explicitly tests competing hypotheses based on alternate theoretical perspectives. We also describe how contingency tools can be used to frame these hypotheses. Also, we illustrate how international topics are particularly suited for these comparative analyses. Finally, we offer some opportunities to extend the scope of individual theories as well.

THEORETICAL PERSPECTIVES

In this section, we describe the central theoretical perspectives used to examine CEO – board relations. Our focus includes six perspectives: agency, resource dependence, upper echelons, stewardship, social network, and institutional.\(^1\)

\(^1\) In our subsequent content analysis, there are a number of additional theoretical perspectives which have been used in empirical studies. We focus on the six main perspectives in our review in the interests of parsimony.
Agency theory

A central assumption of agency theory is that the separation of ownership from control leads to conflict between managers and shareholders (Berle and Means, 1932; Fama and Jensen, 1983a, b). The combination of information asymmetry, difference in risk profiles, and the inability of managers to diversify their risk is conducive to managerial opportunism. Consequently, the board is charged with monitoring management to keep opportunism in check (Goodstein, Gautam and Boeker, 1994; Pearce and Zahra, 1992.) The board’s fiduciary duty to shareholders includes monitoring the CEO, setting compensation for top management, approving major strategic decisions, and monitoring implementation of strategies. While support has been found for many agency hypotheses regarding CEOs and boards, a meta-analysis of board composition studies (Dalton and colleagues, 1998) reported mixed results about the basic tenets of agency theory. Agency theory developed largely in the Anglo-American context, and has consequently been criticized for its limited applicability to different institutional settings (Aguilera, Filatotchev, Gospel and Jackson, 2008). One response to this concern has been the development of new branches of agency theory such as social agency theory (Wiseman, Cuevas-Rodriguez and Gomez-Mejia, working paper) and the behavioral agency theory (Wiseman and Gomez-Mejia, 1998).

Resource dependence theory

Resource dependence theory views the corporation as an open-system. A firm survival is dependent upon its ability to procure critical resources from the external environment (Pfeffer and Salancik, 1978). Through cooptation of directors, the dependent organization relaxes constrains upon the flow of valued resources, by socializing members of the resource provider or by exchanging other valuable goods, such as status, friendship, or information. Boards of directors provides four types of benefits: (1) advice and counsel; (2) legitimacy; (3) channels for communicating information between external organizations and the firm and (4) preferential access to resources (Pfeffer and Salancik, 1978).
A recent review (Hillman, Withers and Collins, 2009) identifies multiple research streams on resource dependence theory, one of these being boards of directors. Resource dependence studies of boards can be organized around three broad themes: First, some studies demonstrate how board characteristics such as size and composition represent organizational responses to external environment. A second group of studies have analyzed how changes in environmental conditions lead to changes in board composition. Third, other studies have explored the types of firms most likely to benefit from the board resource provision.

**Upper echelons theory**

The upper echelon perspective is based on the Carnegie school’s study of behavioral decision making and bounded rationality. In this framework, a firm’s strategic choices reflect the values, cognitive bases and perceptions of the top management team (Hambrick and Mason, 1984). These values and cognitions cannot be directly observed, and are observed through various demographic proxies, including age, education, and functional background. In turn, these proxies are associated with organizational outcomes such as diversification, acquisitions, and administrative complexity. The diverse stream of upper echelon literature gives ground to a number of debates, including the definition of the top management team, the usefulness of demographic proxies, and the importance of capturing decision making processes and power relations within the TMT (Carpenter, Geletkanycz and Sanders, 2004). Yet a relatively unexplored area is the relationship between the board and the top management team. Most studies that build on the upper echelons perspective include board-related measures as control variables with few exceptions (e.g., Jensen and Zajac, 2004; Mueller and Barker, 1997). Forbes and Milliken (1999) showed the promise of applying upper echelons to boards of directors via a conceptual model that linked board member demography to a number of governance processes, and, ultimately, to firm performance.
Stewardship theory

Stewardship theory is diametric to agency theory, as it proposes that stewards are motivated to act in the best interests of their principals (Donaldson and Davis, 1991; Davis, Schoorman and Donaldson, 1997). Thus, if the firm’s primary goal is to maximize returns to shareholders, the steward will work toward this goal. Moreover, when different stakeholders express competing objectives, the executive, as steward, makes decisions that are in the best interest of the overall organization (Davis et al., 1997). The steward’s behavior is strongly oriented toward cooperation and is motivated by intrinsic rather than extrinsic rewards. Therefore, not only do stewards place higher values on pro-organizational behaviors, they will internalize organizational objectives in their individual cognitive structures.

Stewardship theorists argue that the board’s primary role is to support the CEO’s decision-making, and to provide advice and counsel. It has been shown that board-management social ties foster trust, helping executives to seek greater input from directors and engage less in impression management (Westphal, 1999). Stewardship theory predicts that combining the positions of the CEO and Chairpersons enhances firm performance, because CEO duality removes role ambiguities and conflicts which might arise with the sharing of power between two leaders. A study by Donaldson and Davis (1989) has provided some empirical evidence in support of this proposition. Other empirical studies have supported the stewardship predictions by showing the costs associated with non-duality structures (Alexander, 1993; Brickley et al., 1997). Insiders on the board also enhance firm performance, as inside directorship increases the expertise available to the board and provides status reward for the executives.

Institutional Theory

Institutionalism rejects the “rational” and “efficiency” explanations of social behavior (Barley and Tolbert, 1997) and highlights cultural influences on decision making and formal structures.
Organizations conform to accepted prescriptions of appropriate behavior in order to gain legitimacy vis-à-vis external constituencies, and thus improve their chance of survival. Organizations conform to accepted norms of their populations either voluntarily or through coercion (DiMaggio and Powell, 1983). In sum, the institutional perspective offers a relatively deterministic approach to organizational conduct, as organizations tend to passively conform to the external environment (Judge and Zeithaml, 1992). As such, interactions between boards and CEOs focus on very different outcomes as compared to previously described theories.

Two prominent institutional pressures for CEO – board relations are rating agencies and governance codes. Spurred by articles rating the best and worst corporate boards, a number of firms have emerged to rate the quality of firm governance. While these rating are widely used, their validity is arguable: a comparison of the four leading firms found their respective indices to be unrelated to each other, and largely unrelated to subsequent firm performance (Daines, Gow, and Larcker, 2009). Separately, governance codes often advocate the use of structures such as use of committees, independent directors, and separation of CEO and chairman positions. However, code adoption is often driven more by the provisions of other codes, versus specific issues in a given setting. Additionally, mimetic adoption of certain practices can be counterproductive in some settings. In Turkey, for instance, governance codes encourage the use of unaffiliated board members. These directors have often been found to be ineffective, however (Colpan, in press).

Social network theory

Social network theory seeks to understand how firm behavior and performance may be explained via a pattern of ties with external contacts. Organizations are interconnected with other entities through a range of social networks, including supplier relationships, resource flows, association memberships, relationships among individual employees, and alliances. Social networks shape firm behavior and performance, because the organizational network allows the focal firm to
obtain external resources and information. In contrast to resource dependence theory, social network theory emphasizes the role of social context versus resource constraint: a firm’s social network consists of its prior inter-firm ties; it is the informational advantages from such a social network that enable a firm to create new ties and enhance the reliability, capabilities and trustworthiness of new potential partners (Gulati, 1995; Burt, 1992).

Research on CEO-board relationships has benefited from application of the social network theory, particularly with respect to explaining the causes and consequences of interlocking directorates. “The board of directors is a unique formal mechanism linking top managers of large corporations; it provides opportunity for leaders to exchange information, observe the leadership practices and style of their peers, and witness firsthand the consequences of those practices” (Gulati and Westphal, 1999, p. 473). As such, the network of a firm’s interlocks likely shapes firm outcome as illustrated by a number of studies on board interlocks disseminating new policies and practices across firms (Mizruchi, 1992; Haunschild, 1993; Palmer, Jennings, and Zhou, 1993; Westphal and Zajac, 1997).

Integration of perspectives

Table 1 presents a comparative overview of these six perspectives. Agency theory and stewardship theory occupy two ends of a continuum with respect to the model of the actor. Agency theory is based in economics and promotes a rationally opportunistic model of the agent. The role of governance, and in particular, of the board is to reward and punish the CEO, in part via compensation schemes that are intended to align the interest of the shareholder principal with that of the agent manager. For example, agency theory views CEO duality negatively, since it allows for too much power to accumulate in the hands of one person. Similarly, agency theory predicts that insider and

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**Insert Table 1 about here**

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non-independent directors decrease the board’s ability to objectively control the CEO, thus the ratio of such directors should be decreased.

Unlike stewardship theory that has its roots in sociology and psychology, the economic perspective inherent in agency theory explanations does not account for the possibility of the actor’s non-opportunistic behavior. As opposed to the agent’s opportunistic pursuit of individualistic, material and financial goals, the steward’s utility is greater when pursuing organizational goals in cooperation. In the stewardship model of governance, the need for control is replaced by empowerment and autonomy, since the underlying assumption of the theory is that the steward will under any circumstances put the needs of the organization first. Agency and resource dependence theory also take different stances on the main roles of the board. Agency theory emphasizes control and monitoring, while resource dependence theory focuses on the board’s role in resource acquisition. Resource dependence theory is more closely linked to social network theory, since both examine how social relations impact inter-firm linkages with respect to power, control and uncertainty.

Resource dependence theory and institutional theory are similar in that both contend that organizations must adapt to a constantly changing and uncertain environment. As opposed to agency theory however, institutional theory rejects the model of a rational actor, instead promoting that rules and norms over time become authoritative guidelines that govern social behavior. While acting in accordance with the institutional norm may appear rational to the actor himself or herself, the actor may not realize that the institution is governing his or her behavior. The behaviorally-based upper echelons theory is consistent with several of the other theories (agency, resource dependence, social network and stewardship) in that the central actor’s actions are affected by his or her social and human capital. However, this actor is boundedly rational and is selected into the firm to solve the
problems presented by the uncertain external environment, which differs and changes from firm to firm. In the followings section, we examine how these perspectives have been studied empirically.

**CONTENT ANALYSIS OF PRIOR STUDIES**

Using the Proquest database, we ran a search for papers that focused on CEO – board relations, using combinations of the keywords CEO, board, executive, top management, governance, and director. Our journal pool included *Academy of Management Journal, Administrative Science Quarterly, Journal of Management, Journal of Management Studies*, and *Strategic Management Journal*. These journals were selected for both their quality, and broad coverage of management topics. In order to provide a comprehensive review, we decided to cover a twenty five year span, which included articles published in 1982 or later. Our initial screen included all papers with topics that included both chief executive officers and boards of directors. Additionally, we conducted a manual scan of abstracts in these journals as well, over the same time period. We then excluded qualitative and conceptual papers, since our emphasis is on tests of relevant theories. Additionally, we excluded articles where CEO – board relations were addressed only as a secondary or peripheral issue, such as a control variable. Overall, we identified 51 empirical studies that focused on CEO – board relations. AMJ was the primary source, with 18 articles, followed by ASQ with 12 articles. Roughly even proportions came from the remaining three journals. Studies that utilized a single theoretical perspective are described in Table 2, and studies using multiple theoretical perspectives are listed in Table 3. For each article, we identify the topic areas, theoretical perspectives used, key variables used for analyses, and geographic focus. In the following paragraphs, we will summarize overall patterns regarding topics, theories, and geographic orientation. Next, we describe the use of different constructs and measures.

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Insert Tables 2 and 3 about here

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Despite the wealth of empirical analyses, the coverage of topic areas is relatively narrow. Executive compensation is the most commonly represented topic in our study pool, followed closely by executive succession and turnover. Together, roughly half of the studies reported in Tables 2 and 3 focus on the pay and turnover of top executives. There are also a number of secondary topics – those which have been the subject of multiple papers, but in far fewer numbers when compared to succession and executive pay. Firm performance, including bankruptcy, is a prominent secondary topic, as is the study of diversification and mergers and acquisitions. The remaining topics cover a broad array of issues, including corporate entrepreneurship, illegal acts, executive hubris, initial public offerings, and other topics.

Similarly, the theoretical framing of studies is also quite uneven. By far, agency theory is the dominant perspective: It is utilized in well over half of the published papers that we reviewed. However, there are also a substantial number of papers that are framed in strategic choice, resource dependence, and stewardship theories. Additionally, there are a number of studies which are rooted in institutional theory, social psychology, and political/power frameworks. As noted previously, the principal – agent conflict is particularly suited to the study of American firms. Given the US-centric focus of most management journals (Pisano, 2009), and the development of agency theory over the decades in this same context, the emphasis on agency theory should come as little surprise. One encouraging aspect of the papers that we reviewed is the use of multiple theoretical perspectives. Corporate governance is a complex phenomenon, and there are many theories to explain the interaction between boards and CEOs, with multiple areas of both overlap and disagreement. As such, it is an oversimplification to expect a single theoretical framework to fully explain governance issues. Studies based in multiple theories have great potential to advance our understanding, as they explore the strength and weakness of different theories in a particular setting. Consequently, it is encouraging that a substantial minority of the studies we reviewed drew on multiple theories to frame
their hypotheses and analyses. In particular, while agency studies dominate our sample, the bulk of these papers contrast agency against other theoretical perspectives.

Another important finding from our content analysis is the ambiguity and overlap in theoretical perspectives. While we identify the central theories on CEO – board relations in Table 1, the empirical studies in Tables 2 and 3 do not always fall neatly into these categories. For example, a popular topic in our article pool concerns the role of power between boards and top executives. Power can relate to multiple theoretical perspectives, including agency, resource dependence, and upper echelons. Consequently, several of the papers we reviewed were not readily classifiable; in these cases, we chose to use the labels provided by authors, versus force a label that may have not been an author’s intent. Separately, our review in Table 1 focused on six of the most prominent theoretical perspectives. Consequently, there are a handful of studies in Tables 2 and 3 whose theoretical framing was not addressed in the prior review, in the interests of parsimony.

Not only do the topics and theories studied have an uneven focus, but the geographic orientation of papers is also skewed: Roughly ninety six percent of the papers we reviewed were based on samples of U.S. firms. As a point of comparison, the proportion of international studies on CEO – board relations in our sample is appreciably lower than the norm for the management journals that served as the source of our content analysis (Pisano, 2009). From the perspective of CEO – board relations, then, very little is known outside the domain of American boardrooms.

The articles summarized in these Tables are characterized by a diverse set of both labels and indicators. Overall, there is relatively little consistency between studies: The same variable is used to measure a number of different constructs, and a particular construct will be measured by different indicators from study to study. For example, consider board representation by insiders, which is one of the most widely used measures. Insiders have been used as an indicator for many different constructs, including dominance, control, vigilance, independence, and monitoring. While there is
undoubtedly overlap between these labels, the degree of similarity or departure from other constructs is rarely discussed. The specific definition of insiders also varies from study to study. Separately, while many studies rely on the concept of CEO power, individual measures are rarely consistent across papers, with measures such as CEO tenure, ownership structure, the presence of dominant groups, duality, board size, and firm performance. More broadly, the labels used within a theoretical perspective also show little consistency. As an example, one of the central aspects of agency theory is the board’s duty to oversee the chief executive. This role has been framed variously as power, dominance, control, monitoring, structure, and composition. The use of inconsistent schemes to both define and measure key constructs represents a major barrier to the advancement of knowledge in this area. While construct measurement problems are not unique to our topic, variability in measurement has been linked to inconsistent findings in governance studies (Boyd, Gove & Hitt, 2005). The lack of consistency between studies limits both comparison of cross-study findings and the generalizability of results, and ultimately slows the development of theory.

**IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE STUDIES**

As shown in our review, there has been a sizeable body of research to date on CEO – board relations. Despite this progress, there remain many opportunities for further research. One limitation of many governance reform initiatives is the tendency to take a ‘one size fits all’ approach (Finkelstein and Mooney, 2003; Norburn, Boyd, Fox, and Muth, 2000). For example, most codes universally consider CEO duality to be inherently undesirable, and the presence of more outsiders/non-executive directors to be beneficial. However, meta-analyses have shown both variables to be unrelated to firm performance in the aggregate. More critically, these variables have been found to have important roles that differ according to the circumstance. Duality can have both positive and negative effects on firm performance in different market settings, for example (Boyd, 1995), and insiders can have important effects in conjunction with other governance variables (e.g., Combs, et al., 2007; Conyon
and Peck, 1998). Two related approaches offer great potential for revealing the subtle nuance of effective governance: combination of multiple theories and the use of contingency modeling.

**Integrating perspectives: Use of multiple theories**

In our sample, about half of the studies draw on multiple theories to explain the CEO-board relations. We have identified three different approaches for combining multiple theories to enhance hypothesis development and knowledge advancement. The first approach adopts multiple theories to develop more comprehensive explanations of the focal topic: with each theory providing the rationale for developing a specific hypothesis. As the different theories are not integrated, they make a separate contribution to the study: each theory applies to specific areas/dimensions of analysis and provides non-mutually exclusive interpretations of reality. This approach enriches the study’s explanatory power, by providing complementary explanations and widening the set of the explanatory variables, thus allowing the development of a more comprehensive understanding of complex, multi-faceted phenomena. For example, Singh and Harianto’s (1989) study of golden parachutes is based in both managerial influence and agency theories. They found that CEO tenure is a significant, positive predictor of golden parachute in firms with no takeover attempts. However, firms having higher percentages of outside directors on their boards are more likely to adopt golden parachutes, which contradicts predictions of agency theory. The unexpected results sparked the conclusion that both the underlying theory as well as interactions between key variables need to be re-examined.

A second approach offers competing explanations for the same phenomenon. This approach is essentially a tournament, testing which theory or model is best suited to explain a specific phenomenon, or the conditions under which a specific theory provides more powerful predictions. For instance, Ocasio (1994) compares circulation of power against the institutionalization of power. These models provide contrasting predictions regarding CEO tenure and succession. Rather than leading to reject one model in favor of the other, the empirical test shows that the model of
circulation is best suited to explain CEO succession early in CEO tenure, whereas the model of institutionalization best applies later in CEO tenure.

Two theories may also be compared by considering how one single construct affects different variables specific to each of the two theories. Westphal (1999), for example, identifies two models of board involvement: the independent board, based on agency theory, and the collaborative board, based on resource dependence. He then illustrates how social ties are expected to differently affect board involvement in monitoring and advice-oriented interactions. Such an approach may be particularly beneficial to theory advancement, as it may lead to challenge consolidated beliefs and assumptions of well-established theories. For example, this article challenges the common agency rationale that social ties reduce the involvement and effectiveness of outside directors and engender passive boards.

A third approach to multi-theoretic studies integrates different theories to show how alternative theoretical frameworks may be combined to increase the study’s explanatory power. In such approach, insightful predictions stem from integrating different perspectives via interaction effects. Interaction effects allow multiple constructs – related to different theories – to jointly affect one phenomenon. Empirical validation of interaction effects provides an important and fruitful basis for theoretical advancement. Westphal and Stern (2007), for instance, integrate self-categorization theory, agency theory and behavioral perspectives on corporate boards, in the aim to analyze how in-group/out-group biases influence directors’ interpretations of the behavior of their colleagues. They integrate predictions from self-categorization theory within the more established and consolidated frameworks of agency theory and behavioral perspectives on boards.

While any study that draws on multiple theories has value, we believe that the greatest utility comes from papers that directly test competing hypotheses. To make an analogy, choosing a theoretical perspective for a governance study is similar to choosing a mobile phone provider: There
are many choices, and each provider has unique features and options. Additionally, providers will have varying coverage: In some locations, all carriers will perform equally well, while individual carriers may outperform in other locations. A goal of integrative research should be to map the boundary conditions of respective theories. Studies that force theories to directly compete yield valuable information to future subscribers (i.e., researchers), as data on signal strength (i.e., robustness of theories) and dropped calls (i.e., failed hypothesis tests) helps to shape future studies. Studies based on a single theoretical lens offer inherently limited explanatory power, while studies that are grounded in multiple perspectives regularly provide more nuanced insights. For example, CEO duality routinely reports a minimal or null relationship with firm performance. However, one study (Boyd, 1995) integrated agency and stewardship theories to explain how the effect of duality on performance systematically varies as a function of market structure. Thus, an important role for both authors and reviewers in future studies is to be the devil’s advocate, and question how a given hypothesis might be framed from a competing viewpoint. As we have observed earlier, there are a substantial minority of studies which draw on multiple perspectives. Hopefully, the proportion of such studies will continue to grow over time.

**Integrating perspectives: Use of contingency methods**

Studying main effects alone can yield inaccurate or misleading results: this conclusion emerges from the many studies that explored interaction effects. Combs and colleagues (2007), for example, find that the proportion of outsiders is non-significant as a main effect in predicting stock returns. The outsider ratio interacted significantly with duality and ownership structure, though, and these interactions boosted levels of explained variance by about one third. Judge and Dobbins (1995) reports a similar pattern, where duality was non-significant as a main effect. As a moderator, however, duality led to much higher levels of explained variance. Similarly, Wu’s (2008) study of new product development finds significant interaction effects for board involvement and interlocks.
These studies offer substantial contribution to both theory and practice, through integration of different theories and by providing statistically superior results.

Interactions are just one type of contingency tool. In general, contingency models offer tremendous benefits for governance researchers, as they allow studying the fit between three or more variables (Venkatraman, 1989). Moderation, the most commonly used contingency tool (Hitt, Boyd and Li, 2004), comes in two varieties: Form moderation occurs when the nature of the xy relationship is determined by z, and is analyzed by interaction. Strength moderation occurs when the intensity of the xy relationship differs at various levels of z, and is analyzed by subgroups. A number of governance studies have utilized subgroups models. Boyd (1995), for example, concluded that the effect of duality on performance could be positive, negative, or null, depending on market conditions. Other examples of subgroups include Conyon and Peck (1998), and Salancik and Pfeffer (1980).

Another type of contingency seen in our review is mediation. This approach examines how some variables serve as an intermediary between two or more others. Westphal (1998), for example, used a structural equation model to examine board independence, CEO behaviors, and the effects on compensation and diversification. Such models are helpful in parsing out direct and indirect effects of a given predictor on outcomes. Contingency studies offer the potential for findings that are both more powerful and more nuanced. In the following section, we identify a number of research opportunities that draw on the themes of international comparison and contingency models.

**Future Research: International Opportunities**

As demonstrated by Tables 2 and 3, there are few studies of CEO – board relations that are based on samples outside the US. The international arena consequently represents a major opportunity for future studies. In this section, we identify opportunities in four areas: culture, macro-institutional and firm-level institutional differences, regional differences in dominant ownership patterns, and family firms.
A promising under-researched area is the applicability of theories largely developed in the Anglo-American context in foreign contexts, (also see Hambrick, 2007), such as the impact of national, cultural and institutional differences on predictions based on agency, institutional or social network theories. Examining the conditions under which theories hold up in different contexts in international governance contributes to expanding theories in question. Each perspective summarized in Table 1 has important assumptions about human behavior that underlie the general predictions of the theory. Stewardship, for instance, views executives as collectivistic and acting in the long term interest of owners. Consequently, the board is intended to create conditions of empowerment and support for the CEO. In contrast, agency theory predicts managers act in their own self-interest, with the board thereby expected to emphasize monitoring of top management. The accuracy of the predictions in different settings, however, depends heavily on the local conditions. Since most empirical studies presenting agency hypotheses rely on a US or UK sample, our knowledge of the applicability of the theory is asymmetrical – we know more about the accuracy of agency predictions in the Anglo-American context than in other regions. Hence, different types of CEO – board relations, such as cooperation versus monitoring, are likely to be observed in different institutional contexts.

Countries differ substantially in cultural values, norms and traditions that govern the behaviors, attitudes and actions of individuals. Long versus short-term orientation (Trompenaars & Hampden-Turner, 1998), performance orientation (Javidan, 2004) the tolerance or avoidance of ambiguous and uncertain situations, (Hofstede, 2001; Sully de Luque & Javidan, 2004) may all be important moderators of agency problems between the CEO and the board. For example, Indian and Chinese business leaders’ focus on profits ten years out, whereas Western business leaders’ focus on profits achievable within a year (Hofstede, 2002). These differences illustrate the effect of national
culture on long and short-term orientation. In countries that score high on performance orientation\(^2\),
assertiveness, competitiveness and materialism are highly valued and individual achievement is
rewarded with bonuses and other financial means (Javidan, 2004). Consequently, it is in countries
with high performance orientation scores that boards are more likely to effectively align managerial
and shareholder interests through performance-based compensation. Finally, uncertainty avoidance\(^3\)
(e.g. Hofstede, 2001; Sully de Luques & Javidan, 2004) has implications for executive compensation
design (e.g. Devers, McNamara, Wiseman & Arrfelt, 2008) bank lending practices (Nguyen, Le &
Freeman, 2006) and competitive selection and adaptation (Denrell & March, 2001). These examples
illustrate that cultural dimensions are a promising avenue for future work, including single-country
analyses to test the boundary conditions of different theories, and comparative analyses to provide a
more robust assessment on this topic.

Aside from the cultural differences\(^4\) that affect the applicability of agency theory
internationally, the variety of macro-institutions that exist across countries might also change the
explanatory power of agency arguments outside the Anglo-American context. The assumptions and
predictions of agency theory take certain formal (North, 1990) macro-institutional variables for
given (e.g. the legal system, the enforcement of laws, ownership patterns specific to a common law
environment). Accordingly, research that takes into account international differences, such as the
existence of the principal-principal conflict (Young et al., 2008), can significantly advance theory.

Multi-country, comparative corporate governance studies allow authors to highlight variations in the

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\(^2\) Performance orientation is the extent to which a community encourages and rewards high standards,
innovation and performance improvements (Javidan, 2004).

\(^3\) Uncertainty avoidance is the extent to which a community seeks “orderliness, consistency, structure,
formalized procedures and laws” (Sully de Luque & Javidan, 2004)

\(^4\) While our examples focused cultural dimensions proposed by Hofstede’s and the GLOBE study, other
frameworks (such as those presented by Trompenaars, Inglehardt, Schwartz and others) are also relevant.
CEO-board relationship within or across regions, uncover systematic differences and variation in governance contexts and principles, taking corporate governance research to a new level.

At the firm level, institutional theory provides another direction for international studies of CEO–board relations. According to this perspective, firms adopt processes in the pursuit of legitimacy (DiMaggio and Powell, 1983). How do institutional forces vary across national settings? Firms in emerging economies often replicate practices of Western economies in the pursuit of legitimacy. However, such firms also frequently have weaknesses when it comes to implementing these practices effectively (Newman, 2000). Consequently, institutional theory might explain why firms in different regions adopt governance practices such as the separation of CEO and chairman positions, and why the performance implications of these practices may vary from region to region.

Another promising area of research is related to dominant ownership patterns that vary around the world. Ownership patterns shape the manner in which owners discipline managers – e.g., via corporate holdings in Germany and Japan, family and state owners in Spain and Italy, and equity markets in the U.K. (Hoskisson, Johnson, Yiu, and Wan, 2001). Business groups represent another important aspect of ownership structure. While groups are pervasive in the global economy, ownership structure is anything but monolithic: pyramidal groups, for example, have unidirectional ownership chains, while other groups utilize cross-holding of equity. Still other groups have little or no equity connection among members. The board’s interaction with the CEO will vary substantially depending on ownership structure. For example, the need for, and type of, monitoring will vary for family- and state-owned firms, versus pyramids or firms with diluted ownership. Similarly, the board’s contribution to strategy, and subsequent coordination role, will differ as each ownership structure faces distinct institutional pressures. A promising avenue of inquiry is to conduct surveys and interviews with directors and executives (e.g., Zona and Zattoni, 2007) to examine how the roles of boards and CEOs change in different ownership settings. Configurational studies – examining
how performance is affected by the match between ownership and board/CEO interactions – are also desirable.

For example, the agency conflict is expected to be addressed by the board using the CEO pay mechanism. However, boards in countries with different dominant ownership patterns resolve this issue differently. To the extent that monitoring of the CEO is more difficult in widely held public corporations, the incentive alignment portion of pay (equity) is expected to be more significant in countries where this ownership structure dominates over others. This occurs because equity pay is the incentive alignment component of CEO pay and a substitute for monitoring: if strong monitoring mechanisms are in place, incentive alignment may be weaker, and vice versa (Tosi, Katz and Gomez-Mejia, 1997). Conversely, under ownership structures where close monitoring is more possible, (e.g. family ownership) the equity portion of pay is likely to be reduced or insignificant. Thus, dominant ownership structure affects the amount of equity pay the board allocates to the CEO.

Family firms represent a unique ownership pattern and are quite common around the world. The prominence of family firms differs significantly across countries (LaPorta, Lopez-de-Silanes, and Shleifer, 1999), depending on factors such as national culture and institutional voids (Chakrabarty, 2009). Ownership in family firms is often concentrated and the ownership structure also implies more risk aversion (Gomez-Mejia, Larraza-Kintana and Makri, 2003). Monitoring of the CEO by the board in family firms differs from monitoring in professionally managed firms, since both the CEO and several directors might be members of the same family, who apart from the economic interest also have a socio-emotional investment in the firm (Gomez-Mejia, Takacs Haynes, Nunez-Nickel and Jacobson, 2008). The socio-emotional attachment family members have for the firm might paradoxically render family firms risk averse to the extent that they forgo “healthy” risk that would benefit the long-term survival of the family firm. Agency issues are particularly important for family controlled firms. Some scholars have argued (e.g., Chang, 2003), that agency problems are more
Acute in family firms than their more widely held counterparts. Conflict between owners, described as principal – principal agency theory (Dharwadkar, George, and Brandes, 2000), constitutes a potential for expropriation that is distinct from principal – agency conflicts. Combined with the presence of family board members, and often powerless independent directors (e.g., Colpan, 2010 describes the limited role of independent directors on Turkish boards), board – CEO relations among family firms are an important, yet largely untapped, research domain.

**Future Research: Theory Extension Opportunities**

As mentioned previously, one promising avenue for future studies is to better identify the boundary conditions of different theories. For example, social network theory and resource dependence theory not only share a common origin, they also make similar predictions about how the social capital of board members can improve the firm’s chances of survival and success. Another example is the treatment of boards in upper echelons theory. In the original Hambrick and Mason (1984) article, boards were not included in the upper echelons. In fact, there is no reference to boards or directors in the original 1984 document. In the 2007 review however, Hambrick describes several ways that boards relate to the upper echelons model. First, a demanding board can act as the precursor to a moderator (executive job demands) in the upper echelons model. Second, the board might contribute to the problem of endogeneity in the upper echelons model. The board directly impacts the executive characteristics of the top management team due to executive selection. Thus, executives take certain actions not because of biased information processing as proposed by the original upper echelons model, rather due to the board’s selection of executives to lead the firm and to “execute the board’s desire [for change].” Finally, while the board-CEO relationship has been explored to some extent, much less has been done on the interaction of the top management team, the board and the CEO. Of particular interest could be studies investigating the relationship between insider directors and non-director members of the top management team, that between the CEO and
outsider directors, and the issues surrounding external directorships of top management team members.

As an extension of multiple theory studies discussed earlier, other contingency models might also be introduced to the literature, based on existing thematic/theoretical and methodological contingencies. The former contingencies might include business, corporate and international strategy, the size, age, lifecycle stage of the firm, the firm’s industry or industries, and the macro-institutional environment including the political risk environment the firm faces. Beyond mediation and moderation, theoretical contingencies could be tested using a number of under-utilized contingency methods of fit, such as matching, gestalt, co-variation and profile deviation (Venkatraman, 1989).

While scholars are beginning to uncover the applicability of agency theory in different firm and external environmental contexts, the different aspects of the resource provision role are still open for empirical inquiry. Pfeffer and Salancik (1978) delineate four distinct areas of resource provision for the board, namely, advice and counsel, access to information outside the firm, preferential access to valuable resources through personal connections and expertise, and legitimacy. These areas likely carry different levels of significance to firms operating in different industries, single or multiple country environments as well as at different stages of their lifecycle. Possibly over time, and in some contexts, not only might the significance of these roles change over time, the change might also be influenced by the relationship between the CEO and the board. Studies that draw on multiple theories and examine the simultaneous roles of the board and the multi-layered relationships between the board and the CEO could be an extension of the inquiry into the various resource dependence roles. For example, boards must simultaneously monitor management and provide resources to the firm, but the relative importance of these two major roles might change over the lifecycle of the firm and might be different across countries as well. To our knowledge no study exists that relies on empirical
information to trace changes in the relationship between the board and top management in these contexts.

CONCLUSION

We identified 51 empirical studies on CEO – board relations, evidence that academic researchers recognize the salience of this topic. This research stream benefits from a wealth of theoretical perspectives, which can offer both competing and complementary perspectives, depending on the specific topic. A primary goal for future studies should be to test these areas of overlap and omission between theories, with special emphasis on their applicability in different national settings. Second, a focus on two methodological issues – consistency of measurement schemes and use of contingency methods – would facilitate both the utility and comparability of future studies. Finally, the focus of prior work should be more diverse. As noted in our review, a handful of topics on CEO – board relations has received extensive review, while others have languished in the shadows. Similarly, geographic coverage has disproportionately emphasized the Anglo-American sphere. While researchers have made progress in studying how CEOs and boards interact in different settings, additional emphasis is warranted. By summarizing prior work and identifying promising research questions, we hope to stimulate further research on this topic.
REFERENCES


## TABLE 1

### KEY THEORETICAL PERSPECTIVES ON CEO – BOARD RELATIONS

<table>
<thead>
<tr>
<th>Conceptual foundations</th>
<th>Stewardship theory</th>
<th>Institutional perspective</th>
<th>Social network theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donaldson and Davis (1989); Donaldson (1990); Donaldson and Davis (1991); Davis, Schoorman and Donaldson (1997)</td>
<td>Mayer and Rowan (1977); Zucker (1977); Meyer and Rowan (1983); DiMaggio and Powell (1983); Tolbert and Zucker (1983); Meyer and Scott (1983)</td>
<td>Barnes (1954); Milgram (1967); Granovetter (1973)</td>
<td></td>
</tr>
</tbody>
</table>

| Research question | Why and how - in a context whereby tasks and responsibilities are delegated - an individual (i.e., the steward) acts in the best interest of his principal | How and why organizations behave as they do, and with what consequences | Why and how the social network of external ties influences firm behavior and performance |

| Key concepts | Steward, principal, delegation | Institution, isomorphism, legitimation | Social network, organizational network |

| Assumptions | Model of man: collectivistic and cooperative; motivated by intrinsic rewards; identification and trust | Social action can be understood by reference to institutions, i.e., more or less taken for granted repetitive social behavior | Social action is embedded in a social network of relationships. Information not diffuse and readily available |

| Key ideas | Stewards are motivated to act in the best interests of their principals; behavior-interest alignment mediated by the organization; influence of the organization/governance context on steward behavior. Boards provide advice and counsel. | Organizations are influenced by their institutional context. In order to match external expectations for rational behaviors, and gain legitimacy, organizations become "isomorphic", i.e., conform to accepted prescriptions of appropriate behavior. Legitimacy increases probability of survival. Board as a primary mechanism to gain legitimacy. | Organizations are influenced by social networks of external contacts, because networks allow the focal firm to obtain resources and information from environment. Board interlocks are unique mechanisms linking top managers and organizations |
| Predictions | Empowering and enabling governance structures enhance opportunities for achievement and self-actualization, which, in turn, enhance firm performance. | Board structure and behavior are responses to external institutional pressures. Decoupling of symbolic practices from the board ‘technical core’ (i.e., ceremonial conformity) may occur whenever conformity conflicts with requirements of technical efficiency of CEO-board relations. | Boards interlocks with third-parties which enrich the endowment of resources and information. |
| - board provides advice and counsel | - boards conform with standards of best practices, independently on their effectiveness for board task performance. | - board actual behavior responds to intensity of external pressures and is subjected to isomorphism. |
| - CEO duality and inside directors enhance firm performance | Board involvement in strategic-decision process is stronger when multiplicity of external constituencies dilutes environmental pressures (Judge and Zeithami, 1992); adoption of golden parachutes and poison pills as explained by mimetic isomorphism (Davis and Greeve, 1997); inertia of succession rules (Ocasio, 1999). | Interlocks disseminate new policies and practices across firms (Mizruchi, 1992; Haunschild, 1993; Palmer, Jennings and Zhou, 1993; Westphal and Zajac (1997); board interlock types increase or decrease the likelihood of alliance formation depending on the CEO-board relations. |

| Findings | CEO duality positively associated with firm performance (Donaldson and Davis, 1989); Non-duality negatively associated with firm performance (Alexander, 1993; Brickley et al., 1997). | | |

<p>| Recent debate | Principal-steward and principal agent relationship as depending on choices of parties involved in a relationship (Davis et al., 1997); contingency view on CEO duality (Boyd, 1995); control-collaboration tensions (Sundaramurthy and Lewis, 2003). | | |</p>
<table>
<thead>
<tr>
<th>Conceptual foundations</th>
<th><strong>Agency theory</strong></th>
<th><strong>Resource dependence theory</strong></th>
<th><strong>Upper echelons theory</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research question</strong></td>
<td>How do firms solve the principal-agency conflict that arises due to the separation of ownership and control?</td>
<td>How do firms deal with dependencies on critical resources? By what means are these resources accessed?</td>
<td>Do top management teams matter? What features of the top management team matter?</td>
</tr>
<tr>
<td><strong>Key concepts</strong></td>
<td>Principal, agent, self-interest, opportunism, risk, control</td>
<td>Resources, linkages, power, external environment, interlockings</td>
<td>TMT cognition, behavior, group, process</td>
</tr>
<tr>
<td><strong>Assumptions</strong></td>
<td>Principals are risk neutral, agents are risk-averse; agent and principal have diverging interests; agent is rational and opportunistically acts in own self-interest.</td>
<td>Organizations as open systems whose survival depends on procurement of critical resources from the external environment. Survival based on an organization’s ability to manage its relations with resource providers. Resource dependence leading organizations to initiate actions aimed to manage interdependencies, hence producing interorganizational as well as intraorganizational power relations.</td>
<td>Demographic characteristics are valid indicators of the cognitions of top management team members, since cognitions are not measured directly. Bounded rationality.</td>
</tr>
<tr>
<td><strong>Key ideas</strong></td>
<td>Agents are motivated to act in their own self-interest (Williamson, 1975). The interests of boards and principals diverge and board’s role is to monitor management and use compensation to align the interests of the principals and of managers. Agency problems arise because contracts incur costs (Fama and Jensen, 1983) Three types of costs exist: cost of monitoring, the cost of bonding and residual claims.</td>
<td>Firms use internal resources (e.g. boards, social networks of managers, etc.) to gain access to scarce resources outside the firm, decreasing the uncertainty on procurement of environmental resources. Boards use social and human capital to provide: advice and counsel to executives; legitimacy to the firm; informations; accesso to resources.</td>
<td>Strategic choices are a function of managerial cognitions and interpretations. Firm performance is influenced by the decisions made by the top management team. The TMT’s strategy choices however, are a function of the human and social capital of its members, through their previous experiences, which shape their cognitions.</td>
</tr>
<tr>
<td>Predictions</td>
<td>Incentive pay aligns the interest of shareholders and managers. CEO duality and insider dominated boards increase potential for opportunism by weakening the board’s monitoring power (Boyd, 1995).</td>
<td>Directors “may provide ongoing advice to top managers on possible strategic changes” (Carpenter and Westphal, 2001:639; also Demb and Neubauer, 1992; Lorsch and MacIver, 1989). Social ties between the CEO and the board “enhance the provision of advice and counsel from outside directors on strategic issues” (Westphal, 1999:18).</td>
<td>Focus on the characteristics of an overall group will have stronger predictive power than focus on individual members. Discretion and executive job demand are key moderators of upper echelon predictions. (Hambrick, 2007).</td>
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<tr>
<td>Findings</td>
<td>Results of numerous studies on the impact of monitoring on firm performance are mixed in spite of the strong theoretical foundations linking board monitoring to firm performance (Dalton, Daily, Certo and Roengpitya, 2003; Dalton, Daily, Ellstrand and Johnson, 1998).</td>
<td>Resource provision by directors is positively associated with firm performance (e.g. Boyd, 1990; Hillman, Cannella and Paetzold, 2000). Board involvement in strategic-decision process (e.g. Carpenter and Westphal, 2001; Jensen and Zajac, 2004; Judge and Zeithaml, 1992).</td>
<td>Numerous studies have linked TMT demography to both TMT processes and firm outcomes (Carpenter, Geletkanycz and Sanders, 2004).</td>
</tr>
<tr>
<td>Recent debate</td>
<td>Agency in family firms (e.g. Gomez-Mejia, Nunez-Nickel and Gutierrez, 2001); Agency in the international context; Principal-principal conflict; principal opportunism.</td>
<td>The board’s roles in strategy is not a resource dependence, rather an agency issue:</td>
<td>Aggregate units of analysis (e.g. TMTs or boards) is problematic (Jensen and Zajac, 2004); Demographic variables are problematic</td>
</tr>
</tbody>
</table>
TABLE 2
SINGLE THEORY STUDIES OF CEO – BOARD RELATIONS

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Journal</th>
<th>Topic</th>
<th>Theoretical Framing</th>
<th>Key Variables</th>
<th>Region</th>
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</thead>
<tbody>
<tr>
<td>Kesner, Victor and Lamont</td>
<td>1986</td>
<td>AMJ</td>
<td>Illegal corporate acts</td>
<td>Agency</td>
<td>Dominance measured by proportion of outside directors, majority of outside directors, changes in proportion of outside directors, and duality</td>
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<tr>
<td>Friedman and Singh</td>
<td>1989</td>
<td>AMJ</td>
<td>Succession</td>
<td>Organizational change</td>
<td>Initiating forces, measured by survey items</td>
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<tr>
<td>Hill and Phan</td>
<td>1991</td>
<td>AMJ</td>
<td>Compensation</td>
<td>Agency</td>
<td>Power measured by CEO tenure.</td>
<td>US</td>
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<tr>
<td>Pearce and Zahra</td>
<td>1991</td>
<td>SMJ</td>
<td>Relative power</td>
<td>Power</td>
<td>Survey measures of CEO power and board power. Other measures include board independence, expertise, involvement, orientation, ethics, and decision styles.</td>
<td>US</td>
</tr>
<tr>
<td>Boeker</td>
<td>1992</td>
<td>ASQ</td>
<td>CEO dismissal</td>
<td>Agency</td>
<td>Insiders and relative tenure of directors.</td>
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<tr>
<td>Boyd</td>
<td>1994</td>
<td>SMJ</td>
<td>Compensation</td>
<td>Agency</td>
<td>Control measured by duality, insiders, director equity, board representation by external owners, and director pay.</td>
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<tr>
<td>Daily and Dalton</td>
<td>1995</td>
<td>SMJ</td>
<td>Bankruptcy</td>
<td>Agency</td>
<td>Outside directors and duality</td>
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<td>Westphal and Zajac</td>
<td>1995</td>
<td>ASQ</td>
<td>Compensation</td>
<td>Social psychology</td>
<td>Board-CEO power measured by insider ratio, duality, director equity, and relative board tenure. Demographic similarity measured by age, education, and outsider status.</td>
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<td>Daily</td>
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<td>Ratio of outsiders, duality, and CEO tenure.</td>
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<td>Judge and Dobbins</td>
<td>1995</td>
<td>JOM</td>
<td>CEO decision style</td>
<td>Strategic decision-making and upper echelons</td>
<td>Director awareness measured by survey items. Other variables include CEO tenure, duality, and ratio of insiders.</td>
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<td>Pearce</td>
<td>1995</td>
<td>JOM</td>
<td>Dominant coalitions</td>
<td>Power</td>
<td>Dominant groups measured using network analysis indicators of influence.</td>
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<td>Zahra</td>
<td>1996</td>
<td>AMJ</td>
<td>Entrepreneurship</td>
<td>Agency</td>
<td>Ratio of insiders, equity ownership by outside directors, and executive stock ownership</td>
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<td>Relative power measured by duality, relative tenure, independent outsiders, and outsider equity. Board size also included.</td>
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<td>Zajac and Westphal</td>
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<td>ASQ</td>
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<td>Social networks</td>
<td>Board control measured by ratio of insiders, duality, change in diversification, and change in</td>
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<td>Kroll, Wright, Toombs and Leavell</td>
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<td>SMJ</td>
<td>Acquisitions</td>
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<td>Westphal and Zajac</td>
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<td>ASQ</td>
<td>Diversification and compensation</td>
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<td>Hayward and Hambrick</td>
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<td>ASQ</td>
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<td>Upper echelons</td>
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<td>1998</td>
<td>AMJ</td>
<td>Compensation</td>
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<td>Westphal</td>
<td>1998</td>
<td>ASQ</td>
<td>Diversification and compensation</td>
<td>Agency</td>
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<td>Beekun, Stedham and Young</td>
<td>1998</td>
<td>JOM</td>
<td>Board’s role in strategy</td>
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<td>Gulati and Westphal</td>
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<td>ASQ</td>
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<td>Social networks</td>
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<td>Frankforter, Berman and Jones</td>
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<td>JMS</td>
<td>Anti-takeover provisions</td>
<td>Agency</td>
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<td>Entrepreneurship</td>
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<td>Certo, Covin, Daily and Dalton</td>
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<td>Initial public offerings</td>
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<td>Ellstrand, Tihanyi and Johnson</td>
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<td>Political risk</td>
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<td>Davidson, Jiraporn, Kim and Nemec</td>
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<td>AMJ</td>
<td>Earnings management</td>
<td>Agency</td>
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<td>Authors</td>
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<td>Journal</td>
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<td>Country</td>
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<tr>
<td>Rutherford, Buchholtz and Brown</td>
<td>2007</td>
<td>JMS</td>
<td>Quality of information gathered by board.</td>
<td>US</td>
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<td>Rutherford, Buchholtz and Brown</td>
<td>2007</td>
<td>JMS</td>
<td>Director information measured by quality of information available to directors, proactiveness of information acquisition, and frequency of board interaction. CEO controls measured by proportion of incentive pay, and formalization of CEO – board relationship.</td>
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<td>Zhang</td>
<td>2008</td>
<td>SMJ</td>
<td>Board independence measured by proportion of outsiders on nominating committee. Board information measured by interlocks of outside directors serving on nominating committee.</td>
<td>US</td>
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### TABLE 3

MULTIPLE THEORY STUDIES OF CEO – BOARD RELATIONS

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<tr>
<th>Authors</th>
<th>Year</th>
<th>Journal</th>
<th>Topic</th>
<th>Theories</th>
<th>Key Variables</th>
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<tr>
<td>Singh and Harianto</td>
<td>1989</td>
<td>AMJ</td>
<td>Golden parachutes</td>
<td>Agency</td>
<td>Characteristics of boards measured by number of directors and percentage of outsiders. CEO influence measured by CEO relative tenure</td>
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<td>Managerialism</td>
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<td>Finkelstein</td>
<td>1992</td>
<td>AMJ</td>
<td>Managerial power</td>
<td>Power</td>
<td>Power measured using multiple survey and archival items.</td>
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<td></td>
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<td></td>
<td>Strategic choice</td>
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<td>Alexander, Fennell, and Halperin</td>
<td>1993</td>
<td>ASQ</td>
<td>Leadership instability</td>
<td>Agency</td>
<td>Board-CEO relations measured by CEO influence on board, formal contacts between CEO and board, board size, board experience, and board heterogeneity</td>
<td>US</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Power</td>
<td></td>
<td></td>
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<tr>
<td>Boeker and Goodstein</td>
<td>1993</td>
<td>AMJ</td>
<td>Succession</td>
<td>Power</td>
<td>Board composition measured by proportion of inside directors</td>
<td>US</td>
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<td></td>
<td>Agency</td>
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<tr>
<td>Ocasio</td>
<td>1994</td>
<td>ASQ</td>
<td>Succession</td>
<td>Institutional Power</td>
<td>Power measured by CEO tenure, CEO board experience, directors appointed by CEO, board size, and firm performance. Control measured by duality.</td>
<td>US</td>
</tr>
<tr>
<td>Finkelstein and D'Aveni</td>
<td>1994</td>
<td>AMJ</td>
<td>Antecedents of duality</td>
<td>Agency</td>
<td>Leadership structure measured by duality. Board vigilance measured by proportion of outside directors and equity held by outside directors. Informal CEO power measured by a 7 item index score. CEO shareholdings also included.</td>
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<td>Leadership</td>
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<td>Boyd</td>
<td>1995</td>
<td>SMJ</td>
<td>Firm performance</td>
<td>Agency</td>
<td>Duality</td>
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<td>Stewardship</td>
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<td>Resource dependence</td>
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<td>Daily, Johnson, Ellstrand and Dalton</td>
<td>1998</td>
<td>AMJ</td>
<td>Compensation</td>
<td>Agency</td>
<td>CEO influence measured by proportion of affiliated directors, proportion of independent directors, and proportion of CEOs serving on compensation committee. Other variables include CEO tenure, CEO equity, and equity held by outside directors.</td>
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<td>Demography</td>
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<td>Author(s)</td>
<td>Year</td>
<td>Journal</td>
<td>Focus</td>
<td>Board Power Measured</td>
<td>Institution</td>
<td>Board Structure Measured</td>
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<td>Ocasio</td>
<td>1999</td>
<td>ASQ</td>
<td>Succession</td>
<td>Power measured by CEO tenure</td>
<td>Institutional</td>
<td>Board structure measured by proportion of insiders.</td>
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<td>Porac, Wade and Pollock</td>
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<td>Compensation</td>
<td>Board power measured by board size and staggered elections</td>
<td>Tournament Agency</td>
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<td>Westphal</td>
<td>1999</td>
<td>AMJ</td>
<td>Firm performance</td>
<td>Board involvement measured by survey items for both board monitoring and advice/counsel interactions. CEO – board friendship ties measured by survey items. Other variables include portion of board appointed after CEO, CEO equity, CEO long-term pay, duality, CEO tenure, affiliated directors, and director equity.</td>
<td>Agency Resource dependence</td>
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<td>Young, Stedham and Beekun</td>
<td>2000</td>
<td>JMS</td>
<td>CEO performance appraisal</td>
<td>Monitoring measured by duality, outsiders, and director tenure</td>
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<td>Westphal and Zajac</td>
<td>2001</td>
<td>ASQ</td>
<td>Decoupling stock buyback from practice</td>
<td>Power measured by relative tenure, directors appointed by CEO, duality, and CEO stock ownership relative to board. Interlocks measured by one- and two-step ties.</td>
<td>Institutional Agency</td>
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<td>Westphal and Fredrickson</td>
<td>2001</td>
<td>SMJ</td>
<td>Diversification</td>
<td>Director equity, duality, director tenure, institutional ownership, board size, performance of outside director’s focal firm, and tenure of outside directors.</td>
<td>Agency Upper echelons</td>
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<td>Coles, Victoria, McWilliams and Sen</td>
<td>2001</td>
<td>JOM</td>
<td>Performance</td>
<td>Monitoring measured by duality, proportion of independent directors, and director equity. Incentive alignment measured by CEO equity and compensation plan. CEO tenure also included.</td>
<td>Agency Stewardship</td>
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<td>Pollock, Fischer and Wade</td>
<td>2002</td>
<td>AMJ</td>
<td>Compensation</td>
<td>Ownership power measured by CEO equity. Structural power measured by duality, number of directors appointed after CEO, and staggered board provisions.</td>
<td>Power Agency</td>
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<td>Boeker and Karichalil</td>
<td>2002</td>
<td>AMJ</td>
<td>Turnover</td>
<td>Power/influence measures by founder equity, proportion of inside directors, and whether founder is current CEO.</td>
<td>Life cycle Agency Power</td>
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<td>Judge and Zeithaml</td>
<td>2002</td>
<td>AMJ</td>
<td>Strategic decision making</td>
<td>Board involvement measured by multiple survey items. Insiders and board size also used.</td>
<td>Institutional Strategic choice</td>
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<td>Author(s)</td>
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<td>Journal</td>
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<td>Ruigrok, Peck, and Keller</td>
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<td>JMS</td>
<td>Decision making</td>
<td>Agency Resource dependence, Board involvement measured by five survey items. Other variables include outsiders, duality, and interlocks.</td>
<td>Switzerland</td>
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<td>Grossman and Cannella</td>
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<td>Compensation</td>
<td>Agency Strategic change, Board structure measured by insiders and duality. Other variables include ownership by insiders, CEN tenure, and CEO age.</td>
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<td>Westphal and Stern</td>
<td>2007</td>
<td>AMJ</td>
<td>Board appointments</td>
<td>Social psychology, Monitoring and control behavior measured by survey items. Provision of advice and information measured by survey items. Ingratiation measured survey items. Other variables include social interaction, self-presentation, friendship ties, demographic similarity, number of board appointments, top management experience, independence, and director recommendations.</td>
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<td>Combs, Ketchen, Perryman and Donahue</td>
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<td>JMS</td>
<td>Firm performance</td>
<td>Agency Power, Power measured by CEO tenure, CEO equity, and duality.</td>
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