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Citation: Krause, R., Filatotchev, I. & Bruton, G. (2016). When in Rome, look like caesar? investigating the link between demand-side cultural power distance and CEO power. Academy of Management Journal, 59(4), pp. 1361-1384. doi: 10.5465/amj.2014.0532

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When in Rome, Look Like Caesar? Investigating the Link between Demand-side Cultural Power Distance and CEO Power

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WHEN IN ROME, LOOK LIKE CAESAR? INVESTIGATING THE LINK BETWEEN DEMAND-SIDE CULTURAL POWER DISTANCE AND CEO POWER

ABSTRACT

Agency theory-grounded research on boards of directors and firm legitimacy has historically viewed CEO power as de-legitimating, often taking this fact for granted in theorizing about external assessors' evaluations of a firm. With few exceptions, this literature has focused exclusively on capital market participants (e.g., investors, securities analysts) as the arbiters of a firm's legitimacy and has accordingly assumed that legitimate governance arrangements are those derived from the shareholder-oriented prescriptions of agency theory. We extend this line of research in new ways by arguing that customers also externally assess firm legitimacy, and that firms potentially adjust their governance characteristics to meet customers' norms and expectations. We argue that the cultural-cognitive institutions prevalent in customers' home countries influence their judgments regarding a firm's legitimacy, such that firms competing heavily in high-power distance cultures are more likely to have powerful CEOs, with CEO power a source of legitimacy—rather than illegitimacy—among customers. We also argue that the more dependent a firm is on its customers and the more salient cultural power distance is as a demand-side institutional norm, the greater this relationship will be. Data from 151 U.S. semiconductor and pharmaceutical firms over a 10-year period generally support our predictions.

> "*The Company has found that in our industry having a combined Chairman and CEO is particularly advantageous when doing business internationally, especially with foreign government customers who value unified leadership and a single ultimate executive decision maker"* (Raytheon Company, 2010: 7)

INTRODUCTION

Corporate governance scholars have long argued that boards of directors can serve a legitimizing role for their organizations (e.g., Arthaud-Day, Certo, Dalton, & Dalton, 2006; Pfeffer & Salancik, 1978; Westphal & Graebner, 2010). Such a role is consistent with the resource dependence view of boards, with Pfeffer and Salancik (1978) listing legitimacy as one of the primary factors that help reduce uncertainty and increase organizational access to externally generated resources. Legitimacy is "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574), and is therefore a form of social judgment, existing only in the minds of external assessors (Bitektine, 2011). Scholars examining the legitimacy role of boards have historically focused on how boards "affect a firm's legitimacy through perceptions of external assessors" (Bell, Filatotchev, & Aguilera, 2014: 303), with the main focus being on capital market participants and regulators as the key audiences.

However, the above quote from Raytheon's proxy statement indicates that cultural-cognitive expectations of customers, especially those outside the focal firm's home country, may be equally important for its corporate governance development. Legitimacy among customers, what we term "demand-side" legitimacy (cf. Priem, 2007), becomes even more important to consider when customers' standards of legitimacy conflict with capital markets' standards of legitimacy, as seems to be possible with regard to CEO power. This is particularly important for multi-national companies (MNCs) operating outside their home product markets but whose corporate governance is shaped by domestic institutions. At present, understanding of the

underlying theoretical mechanisms that link governance characteristics with the demand-side legitimation process is limited, and we aim to address this theoretical gap.

In corporate governance research, the theoretical perspective most widely employed to identify external assessors and their associated standards of legitimacy has been agency theory (e.g., Fama & Jensen, 1983; Hermalin & Weisbach, 1998). Though agency theory focuses on economic efficiency rather than legitimacy, financial market participants' general embrace of the agency logic has institutionalized agency theory-based governance prescriptions as standards of legitimacy in and of themselves (Bednar, 2012; Westphal & Graebner, 2010; Zajac & Westphal, 2004). Given that agency theory emphasizes the board's fiduciary responsibility to shareholders above all other concerns (Fama & Jensen, 1983), scholars adopting this theoretical perspective typically argue that low CEO power relative to the board is the most logical standard by which to judge a board's legitimacy (e.g., Westphal & Graebner, 2010; Westphal & Zajac, 1998). Though some scholars have argued for the benefits of CEO power from an organizational efficiency perspective (e.g., Boyd, 1995), studies specifically focusing on legitimacy typically adopt an agency-based perspective to the exclusion of other frameworks.

Despite the value of this research stream, financial market participants are hardly the only stakeholders from whom firms must procure resources and support, and therefore are hardly the only assessors whose legitimacy judgments are salient to firm decision-making (Bitektine, 2011; Mitchell, Agle, & Wood, 1997; Suchman, 1995). Agency theory's dominance as a corporate governance logic has crowded out the consideration of non-stockholder-related external assessors who possess great power to confer legitimacy on a firm (for rare exceptions, see Hillman, 2005; Luoma & Goodstein, 1999), and who could potentially view CEO power very differently than financial market participants do. In particular, customers as a key group of

external assessors remain noticeably absent, not only from research on the legitimacy role of boards, but also from research on legitimacy in general (see Bitektine, 2011), and yet customer participation is indispensable to a firm's continued existence, to say nothing of competitive advantage (Priem, 2007; Priem, Butler, & Li, 2013). So, if customers view a strong and powerful leader as more legitimate than one dominated by a strong board, agency theory offers few insights with regard to applicable norms and standards. Corporate governance scholars must, then, identify alternative theoretical bases for understanding the legitimacy standards of external assessors outside the financial markets.

Therefore, the present research draws on neo-institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 2014) to develop and test a theoretical model of CEO power and legitimation in the eyes of customers. Developing such a model requires identifying factors likely to influence customers' judgments about the legitimacy of a firm's governance. As such, we focus our research on customers' home culture and how neo-institutional theory predicts that culture will affect legitimacy judgments. We propose that U.S. firms will seek to match their CEOs' power with the cultural-cognitive legitimacy standards that are dominant in the geographic regions in which they compete for sales (Scott, 2014; Suchman, 1995) even when high CEO power contradicts the agency-driven perceptions of the investor community at home. Specifically, we hypothesize that firms selling their products in institutional environments characterized by a cultural-cognitive respect for power distance will exhibit greater CEO power on their boards, because CEO power carries legitimacy among the firm's customers.

To test this hypothesis, we collected panel data from 151 publicly traded U.S. pharmaceutical and semiconductor firms between 2003 and 2012, inclusive. We focused on these two industries because while they differ in many respects (e.g., product differentiation, market

concentration), they both are characterized by the presence of large, institutional customers (i.e., corporations and/or governments). The prevalence of such customers is an important boundary condition for our theory for two reasons. According to resource dependence theory as well as industrial organization economics (e.g., Pfeffer & Salancik, 1978; Porter, 1979), large, institutional customers have significant power over their suppliers, and thus it is more important for the suppliers in such environments to be seen as legitimate. In addition, large, institutional customers are more likely to engage regularly with a firm's top managers, CEO, and board of directors, thus making them more likely to be aware of the power structure atop the firm. Awareness is required for an external assessor to form a legitimacy judgment.

The present research contributes to theory and practice in four ways. First, we expand the current understanding of the legitimacy role of boards, which to date has focused predominantly on capital market participants as external assessors (e.g., Bell et al., 2014; Westphal & Graebner, 2010). Specifically, we introduce the idea that boards conform to the institutional expectations of *customers*. Scholars rarely conceptualize boards as tools firms can use to manage demand-side uncertainty, but the results of our study suggest they should. The present research contributes to institutional theory more broadly, as little research has discussed the issue of legitimacy among customers in any context (Bitektine, 2011). We also expand knowledge of the legitimacy role of boards by drawing on resource dependence theory and research on institutional multiplicity to identify boundary conditions that help to contextualize the basic theoretical relationship we predict. We explore how the confluence of external, macro-institutional factors frames the firm's response to demand-side, cultural-cognitive pressures by focusing on three such moderating factors: geographic concentration of firm sales, demand-side cultural variance, and industry context.

Second, existing research in comparative corporate governance (Aguilera & Jackson, 2003, 2010) has argued that national institutions affect firm-level governance mechanisms, but this research focuses almost exclusively on home-country institutions (e.g., Crossland & Hambrick, 2011; Sanders & Tuschke, 2007). We expand the focus of comparative corporate governance research and suggest that institutional characteristics of *foreign product markets* can also exhibit an association with a firm's governance, even for firms incorporated and headquartered in the U.S. Therefore, we contribute to the "embedded governance" perspective by extending it from home to host countries (e.g., Aguilera & Jackson, 2003; Lubatkin, Lane, Collin, & Very, 2007).

Third, our research offers a unique perspective on CEO power. Agency theory unambiguously argues for the limitation of CEO power for maximum firm efficiency (Daily & Johnson, 1997). As a result, prior work examining the legitimacy role of boards has adopted the view that reductions in CEO power enhance firm legitimacy (e.g., Bednar, 2012; Westphal & Graebner, 2010), because such reductions correspond to the notion of "pragmatic" (e.g., Suchman, 1995) or "instrumental" (e.g., Tost, 2011) legitimacy within agency theory-based institutional logics (Westphal & Zajac, 1998; Zajac & Westphal, 2004). However, a cultural-cognitive legitimacy perspective, such as we employ in this research, suggests that firms must meet the legitimacy expectations of all its main external assessors, including customers (Scott, 2014). Our research indicates that, when competing in product markets characterized by high cultural power distance, cultural-cognitive legitimacy might actually require *higher* CEO power. This theoretical tension indicates that prior research has provided a rather restricted view on factors affecting CEO power, and our study helps to develop a more holistic approach to studying this key governance factor.

Finally, our research offers new knowledge for corporate governance practitioners such as institutional investors, proxy advisors and regulatory bodies since it provides a new perspective on the distribution of board power in an era of globalization. From a practitioner standpoint, our research suggests that the power balance on boards has implications for demand-side legitimacy. As a result, stockholders and securities analysts who balk at the consolidation of CEO power should consider the potential benefits that such consolidation of power might grant the firm when competing in foreign markets. Of course, the factors influencing CEO power in large multinational firms are complex, incorporating home-country institutions and involving many stakeholders other than customers. As such, we caution scholars and practitioners from inferring from our study that demand-side cultural power distance affects CEO power in isolation. What our research does indicate, however, is that scholars and practitioners may be well-served by broadening their corporate governance schema to consider the role of customers in influencing power at the top.

THEORY AND HYPOTHESES

The Legitimacy Role of Boards

Research on boards of directors has focused on the monitoring and/or the resource provision role that boards play at their firms (Finkelstein, Hambrick, & Cannella, 2009; Hillman & Dalziel, 2003), with the agency theory-derived monitoring role garnering the most research attention to date (Eisenhardt, 1989; Fama & Jensen, 1983). Scholars viewing boards through an agency lens typically focus on issues related to executive compensation (e.g., Boyd, 1994), succession (e.g., Zajac & Westphal, 1996), risk-taking (e.g., Beatty & Zajac, 1994), wrongdoing (e.g., O'Connor, Priem, Coombs, & Gilley, 2006), and/or overall firm performance (e.g., Dalton, Daily, Ellstrand, & Johnson, 1998). Throughout the literature examining the monitoring role of

boards, the power of the CEO relative to the board features prominently (Daily & Johnson, 1997), as agency theorists argue that CEO power inhibits the board's ability to monitor effectively (Tuggle, Sirmon, Reutzel, & Bierman, 2010).

Less studied than the monitoring role, while still boasting an impressive literature, the resource provision role is grounded in resource dependence theory, which holds that boards' primary purpose is to help the organization manage its external interdependencies in a variety of ways (Pfeffer, 1972; Pfeffer & Salancik, 1978), such as influencing legislation and regulation in their favor (Hillman, 2005), or by co-opting important and influential stakeholder groups (Pfeffer, 1972). Hillman et al. (2009: 1408) summarize the four types of resources that boards can provide to their firms as "(a) information in the form of advice and counsel, (b) access to channels of information between the firm and environmental contingencies, (c) preferential access to resources, and (d) legitimacy." Considerable empirical research over the course of four decades has demonstrated support for all four types of resources (e.g., Haynes & Hillman, 2010; Hillman, 2005; Hillman, Cannella, & Paetzold, 2000).

While research on the board's role in providing advice and counsel, access to information, and access to resources has proliferated since the publication of Pfeffer and colleagues' (Pfeffer, 1972, 1973; Pfeffer & Salancik, 1978) original work, research on the legitimacy role of boards remained for many years a widely assumed, but rarely tested, aspect of the theory. Only in the last several years have scholars begun to empirically test the proposition that boards of directors can serve as instruments of firm legitimacy (e.g., Arthaud-Day et al., 2006; Certo, 2003). These scholars generally adopt an institutional theory perspective (Scott, 2014), arguing that firms actually manipulate the structure and composition of their boards in

order to conform to norms and expectations of external assessors such as investors (e.g., Bell et al., 2014) and stock analysts (e.g., Westphal & Graebner, 2010).

As a "generalized perception or assumption" (Suchman, 1995: 574), legitimacy is a socially constructed reality existing only in the minds of external assessors (Bitektine, 2011). While any assessor can form a legitimacy judgment of a firm and its governance, not all assessors' judgments are equally salient to a firm's board and CEO. If a given external assessor is not salient to the firm's business, then whether that assessor views the firm as legitimate or not is immaterial to the firm's ability to access resources and ensure its survival (Dowling & Pfeffer, 1975; Meyer & Rowan, 1977; Scott, 2014). Mitchell et al. (1997) argue that to achieve salience for firms, external assessors must have a legitimate claim on the organization, must possess the power to influence the organization, and must present a sufficiently urgent claim. Most scholars would agree that a firm's "primary" stakeholders (e.g., customers, employees, investors, suppliers) generally meet these criteria (e.g., Hillman & Keim, 2001); however, most work on corporate governance and firm legitimacy focuses only on legitimacy in the eyes of capital market participants. We build on this prior work by specifically examining legitimacy among customers, what we term "demand-side legitimacy" (cf. Priem, 2007).

The extant literature on the legitimacy role of boards provides clear insights regarding the theoretical mechanisms involved in the legitimation process. Pfeffer and Salancik (1978: 145) observed that by appointing board members who reinforce institutional norms and values, a firm can "provide confirmation to the rest of the world of the value and worth of the organization". Consistent with Scott's (2014: 72) assertion that "the importance of legitimacy becomes immediately and painfully apparent only if lost," most of the empirical work in this area focuses on firms suffering from a legitimacy deficit or a threat to existing legitimacy.

To study organizations with legitimacy deficits, scholars often focus on firms undergoing initial public offering (IPO). Certo (2003) argues that IPO firms can circumvent their liability of newness in capital markets by signaling organizational legitimacy to investors. IPO firms do this, he argues, through the appointment of prestigious directors (i.e., directors with significant human and social capital) to their boards (see also Certo, Daily, & Dalton, 2001). More recently, Bell et al. (2014) examine firms that not only suffer from a liability of newness in financial markets, but also a liability of foreignness, in that they go public on a stock exchange outside their home country (see also Bell, Filatotchev, & Rasheed, 2012). Bell et al. (2014) found that the legitimacy of foreign IPO firms differs depending on the configuration of both firm-level governance attributes—including the board—*and* home country institutions.

When not analyzing firms facing a legitimacy deficit, research on the legitimacy role of boards typically focuses on firms facing a threat to existing legitimacy. For example, Arthaud-Day et al. (2006) examine a sample of firms issuing financial restatements. Accuracy in financial reporting is a deeply held norm among U.S. publicly traded companies, and so firms having to restate their prior financial reports face a considerable loss to their legitimacy among investors and regulators. Building on prior research showing that firms dismiss executives to counter legitimacy threats (e.g., Boeker, 1992), Arthaud-Day et al. (2006) found that not only were CEOs and CFOs dismissed following the issuance of financial restatements, but outside directors experienced greater turnover as well. They concluded that boards can serve a legitimacy function by demonstrating outwardly visible accountability for the body charged with monitoring management. Of course, legitimacy in their framework consists of adherence to the agency theory-derived norms that predominate in the financial community.

Westphal and Graebner (2010) conducted one of the most complete tests of the *strategic* use of boards to bolster firm legitimacy. Arguing that negative appraisals from securities analysts threaten a firm's legitimacy (see Zuckerman, 1999), the authors theorize that CEOs with influence over their boards' nominating committees would respond to negative analyst appraisals by increasing the structural independence of their boards (i.e., higher percentage of outside directors). Westphal and Graebner's (2010) analysis reveals that not only do influential CEOs act in a manner consistent with this theory, but securities analysts respond to increases in structural board independence by issuing more positive subsequent appraisals; this positive response occurs despite the fact that increases in the board's structural independence had no effect on the board's actual control over the CEO. Bednar (2012) found similar results examining media reporting rather than securities analysts' reports.

In their study of the dismissal of directors tied to financial fraud—echoing the work of Arthaud-Day et al. (2006)—Cowen and Marcel (2011: 511) provide a concise summary of the legitimacy role that boards play, a summary which fairly accurately reflects the extant body of work on the legitimacy role of boards:

> *Both resource providers and the intermediaries that serve them…monitor board conduct and are sensitive to information that raises doubts about whether a firm warrants the commitment of resources or support. Given this, managers and directors pursue a* strategic approach to board legitimacy *by actively seeking to foster "perceptions of desirability, propriety and appropriateness" (Suchman, 1995: 577). Boards protect their legitimacy by publicly adhering to norms of good governance, which signals their consonance with the interests and values of external audiences* (emphasis added).

Despite the great strides that governance scholars have made in recent years, research on the legitimacy role of boards remains nascent. One limitation with this body of work is that scholars have almost always assumed that the "norms of good governance" to which Cowen and Marcel (2011) refer derive solely from the prescriptions of agency theory. More specifically, this

body of research tends to suggest that the "resource providers and the intermediaries that serve them" are limited to capital market participants.

As noted earlier, another core theoretical perspective on corporate governance is resource dependence. A key tenet of the resource dependence view on corporate boards is that a board has a formal obligation to help gain preferential access to resources that its firm needs to operate. "A board's ability to do this effectively rests, in part, on the degree to which it can build and maintain legitimacy with external audiences that provide or mediate access to resources" (Cowen & Marcel, 2011: 510). Despite its explanatory power, however, the resource dependence approach to the study of boards' legitimacy function has a number of theoretical shortcomings. First, this theoretical framework views legitimacy as a competitive advantage that accrues to companies able to obtain and protect "superior" resources with their associated ongoing revenue streams, without any reference to the source of those streams (Priem, 2007). Second, by emphasizing value capture in factor markets—usually capital markets—this approach de-emphasizes product markets as key arenas in which boards can actually create value for firms (Priem, Li, & Carr, 2012). Customers, however, must factor into firms' resource dependence-based governance considerations, because value creation for customers is integral to long-term firm success (Priem, 2007; Priem et al., 2013).

Finally, previous studies on board legitimacy have yet to recognize the role of customer heterogeneity, especially with regard to cultural-cognitive institutions—that is, practices that external assessors view as comprehensible, recognizable, and culturally supported (Scott, 2014: 60). In other words, models of board legitimacy rarely, if ever, take into account the possibility that customers' standards of cultural-cognitive legitimacy differ from the agency theory-based normative standards of good governance to which Cowen and Marcel (2011) refer, such as

restraint on CEO power. However, since firms must create value for customers before they can capture value upstream in the business system (Priem, 2007), the potential for cultural-cognitive heterogeneity among customers raises the question of how board legitimation may differ when customers, rather than financial market participants, are the arbiters of board legitimacy.

In sum, the demand-side framework of legitimacy suggests it is important that the organization conforms to the cultural-cognitive institutions of its customers, what Suchman (1995: 583) refers to as "the most powerful source of legitimacy identified to date". Unfortunately, the extant literature generally pays little attention to cultural-cognitive forces, and no attention to *demand-side* cultural-cognitive forces. To initiate scholarship in this area, we identify customers' home countries as a key source of cultural-cognitive institutions; thus, firms competing in multiple countries must contend with heterogeneous standards of cultural-cognitive legitimacy. As Tihanyi, Griffith and Russell (2005: 270) argue, "Although national boundaries do not always correspond with homogeneous value systems, there are strong forces within nations to create and maintain a shared culture… Adapting to local cultural values…may create an additional burden for multinational enterprises (MNEs) operating in different countries".

Demand-Side Legitimacy

Cultural-cognitive legitimacy. Research linking the cultural-cognitive institutional pillar (see Scott, 2014) to boards of directors has focused almost exclusively on how the cultural-cognitive institutions in a firm's home environment influence firm decision-makers. A wealth of evidence exists to suggest that the culture of a firm's home country influences the structure and composition of the firm's board (e.g., Crossland & Hambrick, 2007; Li & Harrison, 2008), as well as other aspects of the firm's corporate governance (e.g., Tosi & Greckhamer, 2004). Stewardship studies (e.g., Davis, Schoorman, & Donaldson, 1997) argue that national culture

(including cultural power distance) can influence the firm's choice between agency and stewardship relationships and, hence, the extent of CEO power, although this research is focused on the roles of home country culture. In the context of boards' strategic roles, however, the cultural-cognitive institutional pillar and its corollary concept of cognitive legitimacy (see Suchman, 1995) remain virtually unexplored.

According to Scott (2014), the cultural-cognitive institutional pillar operates on a logic of orthodoxy, rather than of instrumentality or moral propriety. Whereas an organization pursues regulative legitimacy in order to demonstrate compliance with rules and normative legitimacy in order to demonstrate moral worth, it pursues cognitive legitimacy in order to reduce stakeholders' uncertainty about the organization (Suchman, 1995). An organization possesses legitimacy within the cultural-cognitive sphere when external assessors of a firm's legitimacy perceive the firm as acting—or just existing—in ways that are comprehensible, recognizable, and culturally supported (Scott, 2014: 60). By conforming to cultural-cognitive norms, firms can construct a social reality in which they are "predictable, consequentially legitimate organizations engaged in valued exchanges" (Suchman, 1995: 584). Organizations achieve this legitimacy, first and foremost, by mimicking the predominant organizational standards of the culture in which a firm is seeking to build legitimacy, conforming to a culture's "structural template" of organizations (Scott, 2014: 74).

Cultural-cognitive elements are, according to Scott (2014: 79), "amenable to strategic manipulation." For whom, though, is the firm manipulating these cultural-cognitive elements? In other words, who is the audience that evaluates a firm's conformity to cultural-cognitive norms and thus confers legitimacy? According to Bitektine (2011), the most extensively studied audience-based types of legitimacy are media legitimacy and legitimacy with regulators; he also

lists legitimacy with investors, advocacy groups, and organizational insiders (i.e., employees). As far as we are aware, legitimacy with customers appears nowhere in the literature, with the exception of Luoma and Goodstein's (1999) study, in which they included customers in an aggregation of all non-shareholder stakeholders. The dearth of research notwithstanding, customers are the audience that makes a first-order legitimacy judgment (Bell et al., 2014), and thus a firm needs customers to view it and its activities as legitimate if it is to continue earning revenues from them. When targeting overseas markets, the firm needs to understand and conform to "how local customers think, what they value, how they behave" (Webb, Ireland, Hitt, Kistruck, & Tihanyi, 2011: 574).

Cultural power distance and CEO power. In the literature on boards of directors, the power dynamic between the CEO and the board has garnered more research attention than any other board attribute by far (e.g., Daily & Johnson, 1997; Haynes & Hillman, 2010; Westphal & Zajac, 1995; Zajac & Westphal, 1996). According to Finkelstein, Hambrick, and Cannella (2009), the CEO's power on the board is an integral component of agency theory-based board research, which is why it has featured prominently in prior studies of boards' legitimacy among investors and analysts (e.g., Westphal & Graebner, 2010). In addition, while the balance of board legitimacy research has treated CEO power as de-legitimating, some scholars and practitioners argue that the benefits of a single, strong CEO outweigh the risk of agency abuses (e.g., Brickley, Coles, & Jarrell, 1997; Dalton & Dalton, 2009; Krause & Semadeni, 2013), especially in the context of high environmental uncertainty (e.g., Boyd, 1995). CEO power's prevalence in the board legitimacy literature and ambiguity regarding its effects on the organization make the construct an ideal board attribute to examine as we develop our theoretical model. What remains to be determined, then, is what cultural-cognitive institution firms are most likely to use as a

standard for maximizing the demand-side legitimacy of their CEO's power. To answer this, we look to the literature on national culture and cultural power distance.

Power distance is one of Hofstede's (1980a, 1980b) core dimensions of national culture, and as such, comparative corporate governance scholars frequently use it to predict national differences in corporate governance norms and standards (Aguilera & Jackson, 2010), including CEO compensation (Tosi & Greckhamer, 2004), CEO discretion (Crossland & Hambrick, 2011), and board structure and composition (Li & Harrison, 2008). Power distance as a general concept refers to the difference in status and influence between people in an organization (Hofstede, 1980a); at the level of a national culture, power distance refers to "the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally" (Hofstede, 1980b: 45). In nations with high power distance cultures, organizational structures characterized by a strong centralization of power are likely to enjoy greater cultural-cognitive legitimacy than are organizational structures characterized by evenly distributed power.

Therefore, we expect that firms will attain greater cultural-cognitive demand-side legitimacy to the extent that the power dynamic on their boards matches the cultural-cognitive respect for power in their product markets. Customers in nations with high power distance cultures will view the firm as comprehensible (Scott, 2014; Suchman, 1995) to the extent that the CEO wields clear power over the board (and the firm). Customers who appreciate power distance will comprehend a powerful CEO more fully, seeing the CEO as a single decision-making authority. The reverse applies to customers in nations with low power distance cultures.

The idea that CEO power can actually grant the firm legitimacy with customers has emerged in the literature on board leadership structure. In their review of the CEO duality literature, Krause, Semadeni, and Cannella (2014: 280) noted that in some cultures, "a CEO who

does not also serve as board chair might be perceived as weak and ineffective," such that for many multinational firms, combination of the CEO and board chair positions "might be the pivotal signal that secures their legitimacy in foreign markets." In the introduction to this research, we provided one illustration of this phenomenon with defense contractor Raytheon's explanation for investing the power of the chair position in its CEO. Similarly, L-3 Communications argues in its proxy statement that pressures to seek international sales have made consolidation of CEO power more important for legitimacy purposes:

> *With the expected declines in the US Department of Defense budget, it has become more important than ever for L-3 to seek out business opportunities in the international community. In L-3's industry, the Board of Directors believes that access to decision-makers in foreign countries is made easier when the roles of Chairman and CEO are combined as their customs often dictate having comparable titles when conducting negotiations.* (L-3 Communications Holdings Inc., 2013: 31)

We expect that many firms who do business with institutional customers in foreign markets adopt a perspective similar to Raytheon's and L-3's, and alter the power balance on their boards to match the cultural-cognitive institutions prevalent in their product markets. This process might involve combining or separating the CEO and board chair titles (e.g., Krause & Semadeni, 2014), increasing the CEO's stock ownership (e.g., Core & Larcker, 2002), or changing the proportion of independent directors (e.g., Westphal & Graebner, 2010). While we highlight cases of firms specifically identifying CEO duality as a mechanism for managing demand-side legitimacy, board independence and CEO equity are also discretionary sources of CEO power that—research has shown—external observers take into account when evaluating firms (e.g., Certo, Daily, Cannella, & Dalton, 2003; Westphal & Graebner, 2010). Sources of power are combinative, as evidenced by the fact that Finkelstein and D'Aveni (1994) found that boards tend to match CEO duality with high board independence and CEO non-duality with low

board independence so as to keep CEO power at a moderate level. Truly high CEO power results from the combination of contributing factors (Daily & Johnson, 1997), and so the reflection of demand-side cultural-cognitive institutions is likely to manifest in an aggregate of visible firm attributes. Therefore, we predict that demand-side exposure to cultural power distance will lead firms to exhibit greater levels of CEO power.

Hypothesis 1. CEO power is positively related to demand-side cultural power distance.

Boundary Conditions

While we expect that CEO power will *generally* reflect the firm's demand-side exposure to cultural power distance, we also recognize that firms differ in terms of external legitimation pressures and in their responses to those pressures. Institutional theorists recognize that organizational interests and capacities do not exist independent of the external environment (e.g., Edelman & Suchman, 1997), including the organization's industry and target markets. We build on this research and suggest that the process of legitimation is framed by the firm's industry and market characteristics, which impact either the extent of the firm's resource dependence or the legitimacy challenges associated with institutional polycentrism.

Geographic concentration of sales. The legitimacy role of boards is grounded in resource dependence theory, because legitimacy is considered a necessary condition for firms to access resources from external organizations (Pfeffer & Salancik, 1978; Suchman, 1995). However, some firms are more resource-dependent on their customers than others, and as Cowen and Marcel (2011: 512) argue, "greater dependence on external audiences increases a board's need to defend its legitimacy". Though all firms rely on their customers for resources, firms that compete in multiple countries are less resource-dependent on a particular national group of customers (Hitt, Tihanyi, Miller, & Connelly, 2006), making demand-side legitimacy a less

salient concern than it is for firms that compete in only a few countries. As we discussed above, a boundary condition on the legitimacy role of boards is that stakeholders must have sufficient power over the firm to justify legitimation activities at the board level (Mitchell et al., 1997). Large, institutional customers meet this criterion, and thus they provide the context for our theory. However, even large customers' power is reduced if the firm must interact with a wide array of customers spread across the globe.

Consistent with resource dependence theory, we argue that firms are more dependent on their customers, and are therefore in greater need of legitimation, when their customer base is geographically concentrated than when it is spread across many countries. In a study of boards' resource provision role, Boyd (1990: 420) argued that "as a firm becomes more dependent on its environment, the firm may adapt by acquiring additional access or control over resources." Boyd (1990) focused on linkages with the environment as a means of acquiring access to resources, but as we have argued, legitimacy is another means through which boards can secure access to resources (Pfeffer & Salancik, 1978; Suchman, 1995). Reliance on a small set of large, institutional customers reduces the firm's bargaining power (Porter, 1979), and as such, increases the importance of maintaining and/or building legitimacy with those customers. Therefore, we offer the following hypothesis:

> *Hypothesis 2. The positive relationship between demand-side cultural power distance and CEO power is positively moderated by the geographic concentration of the firm's product markets.*

Cultural variance. Geographically dispersed sales weaken the effect of demand-side cultural power distance, because they reduce the firm's dependence on a particular customer group. Even if the firm is dependent and thus faces a demand-side legitimacy imperative, however, it remains unclear whether cultural power distance is a salient institutional norm

through which to secure such legitimacy. One factor that confounds the effect of institutional forces on organizational activity is the fact that many organizations operate within multiple, conflicting institutional environments (Kraatz & Block, 2008). When a firm's structures and processes can be segmented and localized, adaptation to cultural norms is relatively feasible (Kostova & Zaheer, 1999). With a corporate board of directors, however, the firm has but one lever to manipulate so as to achieve maximal cultural-cognitive legitimacy in all its markets. Therefore, the legitimating effect of CEO power should be stronger the fewer conflicting cultural-cognitive institutions the firm faces. According to Scott (2014: 73), "Actors confronting conflicting normative requirements and standards typically find it difficult to take action since conformity to one undermines the normative support of other bodies."

Institutional theorists argue that external assessors make legitimacy judgments in "action spaces" where individual entities interact socially. However, one problem with legitimacy studies is that "research has unnecessarily focused on single-dimensional definitions of institutional contexts, thereby implying that each firm is embedded in a single institutional environment… Yet many firms' institutional contexts are actually multidimensional, and opportunities and constraints confront firms not only from their primary institutional environment, but also from others in which they are simultaneously embedded" (Sanders & Tuschke, 2007: 33). Overlapping external factors may affect interactions in action spaces, in line with the "institutional polycentrism" framework (Ostrom, 2010; Ostrom & Basurto, 2011). As Ostrom (2010: 647) argues: "The set of external variables impacts an action situation to generate patterns of interactions and outcomes that are evaluated by participants in the action situation."

In our arguments leading to Hypothesis 2 we suggest that the concentration of a firm's geographic markets may affect the relationship between demand-side cultural power distance

and CEO power. In addition, firms may vary in the degree to which their foreign markets share similar cultural-cognitive characteristics; variance among a firm's foreign markets provides another theoretical mechanism affecting our core relationship. If the firm's foreign sales are split among countries with widely varying institutional environments, the marginal benefit of adapting CEO power to any one particular country's cultural understanding of power distance—or an aggregate of all of them—is relatively low, and may even be negative if it reduces the firm's legitimacy in countries with incompatible cultures. In such cases, a firm is more likely to rely on the cultural-cognitive institutions in its home country, as the home country institutional forces will weigh more heavily on executives' and directors' decision-making than will a cacophony of demands from divergent cultural institutions. Hence, we suggest the following moderating role of the variance in demand-side cultural power distance the firm may face:

> *Hypothesis 3. The positive relationship between demand-side cultural power distance and CEO power is negatively moderated by the variance in demand-side cultural power distance across the firm's geographic markets.*

Industry bargaining power. Considerable research has demonstrated that levels of resource-dependence differ by industry (e.g., Boyd, 1990; Boyd, 1995), and it is therefore important to consider what differences might exist between the two industries we examine and how these differences might impact the link between demand-side cultural power distance and CEO power. As Finkelstein (1997: 808) indicates "Both established industry patterns of response, and variability in the extent to which firms in some industries may benefit from reducing constraint, affect the likelihood that strategies designed to reduce dependencies will be employed." One key driver of industry variability in terms of demand-side resource dependence, specifically, is firms' bargaining power over their customers. Greater bargaining power makes firms less dependent on their customers for resources (Porter, 1979, 1980), and thus reduces the importance of demand-side legitimation.

Industries attain bargaining power over customers to the extent that they offer differentiable products. As Hambrick and Abrahamson (1995: 1429) argue, "In a differentiable industry, there is a wide array of decision domains…means-ends linkages are relatively complex, and hence, a wide range of options are acceptable to stakeholders". In such industries, the pressure to conform to customers' expectations and demands weakens, fostering greater diversity, both at the product level and at the organizational level. In the context of legitimacy, this suggests that firms in industries with high bargaining power over customers face less pressure to adjust their board characteristics to fit customers' cultural-cognitive expectations.

In our theorizing, we made an effort to integrate our study context with theoretical arguments. We chose the semiconductor and pharmaceuticals industries as our study context because both industries met the primary boundary condition of our theory, which is that for CEO power to serve a legitimating function, firms must sell primarily to large, institutional customers. At the same time, while both industries meet the key assumption of our theory, they differ in terms of bargaining power over their customers, with semiconductor firms enjoying far less market power than pharmaceutical firms, *ceteris paribus*, due to the unique nature of pharmaceutical products. So, we predict that semiconductor firms will seek demand-side legitimacy through CEO power to a greater extent than pharmaceutical firms will, because semiconductor firms face greater demand-side resource dependence.

While not universal, pharmaceutical firms generally offer a portfolio of branded products, each of which provides the firm with near-monopoly bargaining power for the length of its patent. Even off-patent pharmaceutical products can potentially offer firms some monopolistic—or at least oligopolistic—bargaining power due to the idiosyncratic nature of drug compounds. Patients who have the same affliction may require different firms' products for treatment

depending on how the specific compounds affect them. As such, institutional buyers of pharmaceuticals must re-stock products from a wide array of firms, even if the products treat the same illness. In addition, pharmaceutical firm customers tend to be non-branded wholesalers that act as intermediaries between manufacturers and pharmacies. This reality affords pharmaceutical firms considerable bargaining power relative to their customers.

In contrast, although semiconductor firms frequently patent their products, patents provide them with only minimal monopolistic bargaining power due to the high rate of technological change in the semiconductor industry (Hall & Ziedonis, 2001). Innovations occur much more frequently in the semiconductor industry, and are driven primarily by applied research, whereas innovation in the pharmaceutical industry generally begins with basic research (Lim, 2004). The rapid advancement in technology in the semiconductor industry reduces semiconductor firms' ability to extract rents from their customers because the benefits a given firm's product offers to the customer over competitors' products will be short-lived. Also, whereas pharmaceutical firms generally sell branded products to homogeneous wholesalers, semiconductor firms generally sell homogeneous products to customers with well-known brands (Gartner, 2015), creating the inverse resource-dependence relationship.

Demonstrating cultural-cognitive legitimacy through CEO power is a means of achieving firm-level differentiation through greater comprehensibility to customers. In doing so, the firm reduces its resource dependence on customers—at least as far as the resource of legitimacy is concerned—and somewhat compensates for lack of bargaining power. Therefore, we predict that CEO power will be more reflective of demand-side cultural power distance in industries with low bargaining power over customers (e.g., semiconductors) than in industries with high bargaining power over customers (e.g., pharmaceuticals).

Hypothesis 4. The positive relationship between demand-side cultural power distance and CEO power is greater for firms in industries with low bargaining power over customers (e.g., semiconductors) than for firms in industries with high bargaining power over customers (e.g., pharmaceuticals).

METHODS

Study Context and Sample

Consistent with the theoretical rationale previously developed, we limited our sample to publicly traded U.S.-incorporated firms in the pharmaceutical (SIC 2834) and semiconductor (SIC 3674) manufacturing industries. Firms in both industries normally sell to large, institutional customers. The sample includes all firms with data available in both the Compustat and Corporate Library databases; we limit the sample to those firms reporting their sales broken down by specific countries. Our theory focuses on how a firm's demand-side exposure to the cultural-cognitive institution of power distance influences the power of the firm's CEO. Since large pharmaceutical and semiconductor firms typically compete in several countries with varying cultures, it is important to ascertain a firm's demand-side exposure to specific countries so as to determine the relative importance of a particular country's culture. To do this, we obtained net sales broken out by country from Compustat's Historical Segments database, and obtained cultural power distance values for a specific national market from the Global Leadership and Organizational Behavior Effectiveness (GLOBE) Phase 2 2004 dataset (for recent usage, see Holmes, Miller, Hitt, & Salmador, 2013), as well as Hofstede's (2013) VSM 2013 dataset. Financial data were obtained from Compustat's Annual Fundamentals database, and all firm-level governance data were obtained from the Corporate Library's Directors and Companies databases. After excluding observations with missing data, our sample consisted of 801 observations from 151 firms for the years 2003 through 2012, inclusive.

Variables

Dependent variable. Our dependent variable was the power of the CEO on the board of directors at a focal firm in a given year. We operationalize CEO power as a summative index of three widely used measures, consistent with recent approaches to capturing CEO power (e.g., Cannella & Shen, 2001; Krause, Priem, & Love, In Press). The components of this index included CEO duality, measured as a dichotomous variable with a value of 1 reflecting a combined CEO/board chair and a value of 0 reflecting a separate CEO and board chair (Finkelstein & D'Aveni, 1994); board independence, measured as the percentage of board members classified as independent (Westphal & Graebner, 2010); and CEO stock ownership, measured as the percentage of outstanding firm stock owned by the CEO (Boeker, 1992). We selected these components because, unlike other sources of CEO power, these components are mostly discretionary. Boards can choose to separate or combine their CEO and board chair positions (e.g., Krause & Semadeni, 2013), increase or decrease board independence (e.g., Westphal & Graebner, 2010), and increase or decrease a CEO's equity stake in the firm (e.g., Core & Larcker, 2002). Given that our theory assumes firms manipulate CEO power strategically, it is important that such manipulation is at least possible.

To create our composite index, we standardized all components, reverse-coded board independence because it is a measure of the board's power over the CEO (Westphal & Zajac, 1995), and summed the components together. We believe it is important to use a summative index to measure CEO power because the components we use, which are among the most common measures, are typically considered sources of CEO power (e.g., Daily & Johnson, 1997); in other words, they each contribute to power individually. As such, many firms will impose checks on CEO power by limiting some of these components but not others (Finkelstein & D'Aveni, 1994; Misangyi & Acharya, 2014). The power a CEO gains from each component,

then, is distinct from the power the CEO gains from each other component. Nevertheless, as a robustness check we created an alternative measure using principal components factor analysis. The results remained robust to this alternative measure, and so we are confident that our measure is a valid reflection of CEO power.

Independent variable. Our primary independent variable is the firm's demand-side exposure to cultural power distance. We followed several steps to measure this construct. First, we obtained the percentage of a firm's net sales emanating from specific countries. Firms provide this information in their annual reports if sales in a particular country are sizable enough to mention. There is, however, no standard system for classifying countries, and so firms report the information in completely different formats. Therefore, we obtained the information from Compustat's Historical Segments database, but the nature of these data required that we code each listed country by hand, as firms use many different names for the same country—often with typographical errors. We specifically focus on sales because our theory relates to legitimacy among *customers*, and thus the influence of a given set of customers' cultural-cognitive expectations on firm behavior must be weighted by the importance of those customers to the firm's overall sales. In addition, within the Historical Segments database, net sales is one of the most complete data fields, slightly more complete than—and highly correlated with—revenues. As a robustness check, we used revenues instead of net sales, and the results did not change.

Once we had the percentage of each firm's sales emanating from specific countries, we matched these percentages with cultural power distance values to create a sales-weighted average of each firm's demand-side exposure to cultural power distance. To ascertain country-specific cultural power distance, we incorporated data from two separate sources. Studies examining national cultural power distance have historically relied on Hofstede's (1980a) measures,

available in the VSM 2013 dataset. These values exist on a 100-point scale, with higher values indicating greater cultural power distance. In recent years, however, Hofstede's measures have come under intense criticism with regard to their construct validity (e.g., Javidan, House, Dorfman, Hanges, & de Luque, 2006). As such, we relied primarily on the most widely used alternative to Hofstede's measures, the GLOBE measures (House, Hanges, Javidan, Dorfman, & Gupta, 2004). The GLOBE data include a measure of cultural power distance that is modeled on Hofstede's, but based on a different original survey instrument and a different original survey population. The GLOBE measure of cultural power distance is also provided on a different scale than Hofstede's. We used Hofstede's measure of cultural power distance only when GLOBE data were not available for a specific country. Doing this required scaling them to the same range of values. We did this by regressing the GLOBE data on the Hofstede data and obtaining predicted values. These predicted values had the same distribution as the originals, but now existed on a common, intuitive 100-point scale.

In some cases, firms report sales for a group of countries, especially if the sales to any one particular country are not large enough to mention. This lack of specificity could potentially pose a problem, as countries could be grouped together that have completely divergent cultural power distance values. In such a case, averaging power distance values across countries would make little sense, and so we set a decision rule for our analyses. If the standard deviation of the cultural power distance values for all the countries in such a grouping was less than 15, which is the standard deviation for all countries' power distance values (i.e., the countries in the group all share relatively similar cultural power distance values), then we averaged the power distance values across countries and included the observation; if not, we dropped the observation. As a

robustness check, we also tried using the maximum power distance value among the grouped countries, and the results remained the same.

Sales are also frequently provided by region (e.g., "Eastern Europe") in the Segments dataset, rather than by country. Unfortunately, we could not include these data, as the countries involved are ambiguous. The one exception we applied to this rule was that we chose to recognize "North America" as an average of the United States, Canada, and Mexico. Including or excluding these cases had no bearing on our final results. To determine the extent of information lost due to excluding regional segments, we examined the percentage of sales reported by country for firms in our sample. Only 12.5 percent of firms in the segments dataset for our two industries reported country-specific sales accounting for less than 50 percent of total firm sales. For the other 87.5 percent of firms, country-specific segments accounted for over half of total reported firm sales, and for 65 percent of firms, country-specific segments accounted for over 70 percent of reported firm sales. As a robustness check, we ran our models excluding the 12.5 percent for which country-specific segments accounted for less than 50 percent of sales, and separately excluding the 35 percent for which country-specific segments accounted for less than 70 percent of sales, and our results remained robust under either condition.

With country-level cultural power distance measures calculated, we then multiplied the cultural power distance value for each country, including the United States, by the percentage of sales a firm derived from the respective country, creating a weighted cultural power distance value. For each firm-year observation, we summed the weighted values across all countries to create a weighted average of the firm's demand-side exposure to cultural power distance in that year. This weighted average served as our primary independent variable, demand-side cultural

power distance, which is abbreviated "DSCPD" in the results. To reduce collinearity, the DSCPD measure was standardized prior to analysis.

Moderating variables. In addition to our primary independent variable, our theoretical framework included three moderating factors: the geographic concentration of a firm's product markets, the variance in demand-side cultural power distance, and industry. We calculated product market geographic concentration using a Herfindahl-Hirschman Index (HHI) of each firm's sales to different countries. We relied on the same geographic segments data used to create the measure of a firm's exposure to cultural power distance. We constructed the HHI by squaring the percentage of a firm's sales in each country for each year, and then summing these squared percentages, so that the HHI had a potential minimum value of 0 and a potential maximum value of 1. A value of 1 would indicate that all revenues emanate from the same geographic location, and a value of 0 indicating that sales are evenly distributed across an infinite number of locations. To reduce collinearity with the demand-side cultural power distance measure, we standardized the HHI prior to analysis. We measured the variance in a firm's demand-side cultural power distance as the standard deviation of cultural power distance values across all countries in which a firm competed in each year. Finally, we accounted for industry with a dichotomous variable labeled "Pharmaceuticals", which took a value of 1 for firms in the pharmaceuticals industry and a value of 0 for firms in the semiconductors industry.

Control variables. Our analyses included several control variables so as to rule out alternative explanations for variance in CEO power. Older and larger firms are more likely to be on institutional investors' radar, leading to a higher opposition to power concentration. They also may have developed a larger internal resource base to buffer their dependence on external resources. To account for this potential opposition to power concentration, we measured firm

size as the natural log of the number of people (in thousands) employed at the firm in a given year. For a similar reason, we included firm age measured as the number of years the firm has been in business. Prior agency-grounded research has identified a number of governance factors that may affect CEO power. To account for these alternative explanations we included a dichotomous variable for institutional ownership, with a value of 1 indicating that institutional investors (e.g., pension funds) collectively owned a majority of firm stock, and a value of 0 indicating that institutional investors did not. Family- and founder-led firms often allocate considerable power to their CEOs, so we included a dichotomous variable that took a value of 1 if the firm was family- or founder-controlled and a value of 0 otherwise. In addition, because older CEOs might be able to accumulate or command greater power than younger CEOs, we included a control for CEO age in years. This variable was standardized prior to analysis to reduce collinearity. Longer-tenured CEOs are also more likely to accumulate power as we have measured it than are shorter-tenured CEOs. As such, we controlled for the number of years the CEO has been in that position.

Firm performance can impact a CEO's power, so we controlled for firm performance in two ways. First, because firms in financial distress are more likely to reduce CEO power (Daily & Dalton, 1995), we controlled for a firm's risk of bankruptcy with Altman's Z (Altman, 1968). Second, to account for firm profitability, we controlled for return on assets (ROA). Also, because prior work has demonstrated that firms respond to pressure from securities analysts with changes in CEO power (Westphal & Graebner, 2010), we controlled for the median analyst rating for each firm in each year, ranging from 1 (Strong Sell) to 5 (Strong Buy). This variable was standardized prior to analysis to reduce collinearity. Finally, we included year fixed effects in all our models to account for contemporaneous correlation (Certo & Semadeni, 2006).

Method of Analysis

We relied on the method of generalized estimating equations (GEE) to test our hypotheses. Scholars have employed GEE extensively in recent corporate governance studies (e.g., Quigley & Hambrick, 2012). The method is well-suited to examining differences between firms with multiple observations over time because it allows for error terms to be correlated within groups (Ballinger, 2004). We specified an identity link function and a Gaussian distribution for our dependent variable, as the measure of CEO power was continuous and normally distributed. We also specified an exchangeable error correlation structure. In all our analyses, the independent variables were lagged one year behind the dependent variable.

In addition, we included in our models an inverse Mills ratio to account for any selection bias resulting from the fact that some firms in the industries we examine did not report the geographic sources of their sales in a manner conducive to coding for cultural power distance (see Greene, 2008). Out of 1,142 observations available in The Corporate Library datasets for the two industries we studied, we were able to match 833 with demand-side cultural power distance data. After adding control variables to our models, the number of observations dropped to 801. To account for possible selection bias, we predicted selection from the population of pharmaceutical and semiconductor firms, specifying a probit model with two exclusion restrictions: logged total firm revenues and Tobin's Q. The results of the probit analysis, available upon request, revealed that observations included in the sample exhibited higher revenues ($\beta = 0.29$, $p < 0.001$), and lower Tobin's Q ($\beta = -0.10$, $p < 0.001$). We derived the inverse Mills ratio from the probit results and included it as a control in all models.

RESULTS

Table 1 provides descriptive statistics and pairwise correlations for our variables. Tables 2 and 3 provide the results of the GEE models in which we tested our hypotheses. Hypothesis 1 states that a firm's demand-side exposure to cultural power distance is positively associated with the power of its CEO. As Model 2 shows, the coefficient for the main effect of demand-side cultural power distance is positive and significant ($\beta = 0.17$, $p < 0.05$), providing support for Hypothesis 1. The main effect is positive and statistically significant in all models, gaining in magnitude and significance as interaction effects are added, suggesting further support for the theory we have articulated.

Insert Table 1 About Here

Hypothesis 2 states that the effect of demand-side cultural power distance is positively moderated by the geographic concentration of a firm's product markets. As Model 3 shows, the coefficient for the interaction term is positive and significant ($\beta = 0.34$, $p < 0.01$), providing support for Hypothesis 2. In Figure 1, we have plotted predicted values of CEO power at 1 standard deviation above and below the mean of both independent variables. As the figure shows, the positive relationship between demand-side cultural power distance and CEO power is very strong when the firm competes in geographically concentrated markets and almost non-existent when the firm competes in geographically dispersed markets.

Insert Table 2 About Here

Hypothesis 3 states that cultural variance will negatively moderate the relationship between demand-side cultural power distance and CEO power. As Model 4 shows, the coefficient for the interaction term is negative and significant ($\beta = -0.06$, $p < 0.05$), providing support for Hypothesis 3. The interaction retains its significance when the other interactions are added to the model, adding further empirical support. In Figure 2, we have plotted predicted values of CEO power at 1 standard deviation above and below the mean of both independent

variables. As the figure shows, the relationship between demand-side cultural power distance and CEO power is positive regardless of whether cultural variance is high or low, but the relationship is more positive for firms facing low variance. Therefore, we interpret the results as providing empirical support for Hypothesis 3.

Finally, Hypothesis 4 states that industry will moderate the relationship between demand-side cultural power distance and CEO power, such that the effect will be greater for semiconductor firms than for pharmaceutical firms. As Model 5 shows, the coefficient for the interaction term is negative and significant ($\beta = -0.52$, $p < 0.001$), providing support for Hypothesis 4. In Figure 3, we have plotted predicted values of CEO power at 1 standard deviation above and below the mean of demand-side cultural power distance for each industry. As the figure shows, the relationship between demand-side cultural power distance and CEO power is positive for both industries, but is clearly more positive for semiconductor firms. Therefore, we interpret the results as providing empirical support for Hypothesis 4.

Insert Figures 1, 2, and 3 About Here

In Table 3 we include full models. As Model 8 shows, when all interactions are included in the model, the coefficient for the interaction of demand-side cultural power distance and geographic concentration loses significance. We anticipated that this might be due to the relatively strong negative correlation between geographic concentration and cultural variance—which is to be expected, given the theoretical relatedness of the constructs—and so we specified the full model, with either the cultural variance interaction or the geographic concentration interaction excluded. These models are shown in Models 6 and 7, respectively. As Model 6 shows, without the cultural variance interaction included, the geographic concentration interaction retains significance. We interpret our results as still demonstrating empirical support for Hypothesis 2, with the caveat that in the full model, the interaction loses significance.

Insert Table 3 About Here

Robustness Checks

We conducted several robustness checks following our analyses. We acknowledge that the correlations between our independent variable and our moderator variables are high, and thus introduce the potential for multicollinearity. On concerns that multicollinearity might be biasing our results, we obtained the variance inflation factors (VIFs) for our models. The mean VIF was 2.20 and the VIF for demand-side cultural power distance was 2.32. Therefore, we are fairly confident that multicollinearity does not threaten the validity of our findings. We also tested our interaction hypotheses using subgroup analyses rather than multiplicative terms, and found the same support for our hypotheses. In addition, on concerns that autocorrelation might be present in our data, we re-tested our hypotheses specifying an autoregressive error correlation structure of order 1 in our GEE models, and the results did not change. We also tested the hypotheses using random-effects regression instead of GEE and obtained similar results. Finally, we ran the models without the inverse Mills ratio, and the results were unchanged. As such, we are confident that our model specification is not biasing our findings.

We were also concerned that our analyses might suffer from reverse causality; that is, firms might seek out markets to which their CEO's level of power is most suited culturally. While this possibility does not altogether contradict our theory—firms would still be pursuing legitimacy through CEO power—it calls into question what is the stimulus and what is the response in the firm's pursuit of legitimacy. To determine the presence of endogeneity, we conducted the Durbin-Wu-Hausman test, consistent with best practice recommendations (Semadeni, Withers, & Certo, 2014). Our instruments included the two from the selection test plus the percentage of firm sales derived from outside the United States. This additional

instrument is empirically strong and theoretically meaningful, as firms with a greater percentage of foreign sales are likely to differ in demand-side cultural power distance than are firms with mostly U.S. sales. At the same time, the percentage of sales that are foreign is unlikely, by itself to impact CEO power. The Durbin-Wu-Hausman test was far from significant ($F = 1.45$, $p = 0.23$), and as such, we find no evidence of reverse-causality threatening our results.

DISCUSSION

Implications for Theory

By focusing on the role of board governance as a mechanism to gain legitimacy, our research raises a number of theoretical questions and makes several contributions. First, this research brings an important, but largely ignored, group of external assessors into the discussion of boards' legitimacy role: non-shareholder customers. By introducing customers as grantors of firm legitimacy, we acknowledge that firms routinely contend with multiple, and often competing, institutional forces (Kraatz & Block, 2008). In the context of research on gaining legitimacy through governance, our analysis offers a broader perspective on the roles and functions of firm-level governance compared to previous studies grounded in agency and resource-dependence perspectives. We argue theoretically and explore empirically an assumption that, apart from the capture and protection of rents associated with factor markets, governance may also be an integral part of the cultural-cognitive mechanism of value creation for non-shareholder customers who are concerned with products rather than stock-prices. Margolis and Walsh (2003: 284) call for a reorienting perspective that illuminates this "point of tension," and they encourage inductive, normative theory to clarify the competing considerations, probe what gives them weight, and explore their relationship "to craft a purpose for the firm that builds internal coherence among incommensurable objectives, duties, and concerns." By suggesting a

role for foreign customers in determining the legitimacy of a firm's leadership, we offer a richer perspective on the antecedent factors of firm-level governance systems.

Second, corporate governance researchers increasingly recognize that governance depends both on country-level as well as firm-level factors (Aggarwal, Erel, Stulz, & Williamson, 2009), and the effectiveness of firm-level governance systems is contingent on the institutional environments in which firms operate (Bruton, Filatotchev, Chahine, & Wright, 2010). The country-level governance mechanisms include a country's laws, its culture and norms, and the institutions that enforce the laws. However, previous studies have focused mostly on how the firm's governance parameters are affected by its home country institutions (Aguilera & Jackson, 2003, 2010). We expand comparative governance research by suggesting that it is also important to consider host country institutional effects, especially when firms participate in global markets. Our evidence suggesting that the firm's exposure to high cultural power distance in its product markets may materially affect the power of its CEO represents an important extension of comparative corporate governance research. This is a particularly important finding considering that MNCs operate in foreign markets, but prior research has primarily focused on the link between MNCs' corporate governance and their *domestic* institutions. Our study, therefore, complements other research examining the spread of agency theory ideas (most notably equity-based compensation) into non-U.S. countries (e.g., Sanders & Tuschke, 2007). This research had outlined a process whereby "organizations learn from other institutional contexts, import practices that have gained legitimacy elsewhere but that transgress local pillars of legitimacy, and spread through organizational networks in a way that results in the possible gradual legitimization of institutionally contested practices" (Sanders & Tuschke, 2007: 51).

Although we use a different theoretical lens, we make a similar argument that corporate governance decisions are influenced by foreign perceptions of legitimacy.

Third, our research brings fresh insights on CEO power and legitimacy. Prior research has typically viewed lower CEO power as increasing firm legitimacy, in a vein consistent with agency theory (Westphal & Graebner, 2010). Shareholders, however, are only one group of external assessors whose legitimacy judgments the firm must court; other external assessors may not even evaluate a firm according to agency norms at all. The evidence presented here suggests that in product markets characterized by high cultural power distance, external assessors actually expect high CEO power. Thus, we urge corporate governance scholars not to assume that all external assessors in all institutional environments evaluate CEO power the same way. We further contribute to research on board legitimacy by identifying moderating factors drawn from both resource dependence theory and research on institutional polycentrism. These moderating factors have significant theoretical importance since they allow contextualization of the firm's legitimation process through board characteristics.

Implications for Practice

This study also contributes to practice. Board independence and heightened CEO accountability have become widely accepted features of "good corporate governance" codes around the world (Bell et al., 2014). For example, the OECD (2004: 63-64) asserts that "Separation of the [CEO and board chair] posts may be regarded as good practice, as it can help to achieve an appropriate balance of power, increase accountability and improve the board's capacity for decision making independent of management". Institutional investors, proxy voting advisors, and regulators advocate for greater board power over the CEO as a solution to governance-related problems (Monks & Minow, 2008). Our paper, however, provides a new

perspective on the distribution of board power in the era of globalization. From a practitioner standpoint, our research demonstrates that firms can use CEO-dominated boards to gain legitimacy in foreign product markets where power distance is an acceptable norm. As a result, shareholders, securities analysts, and corporate governance advisors should carefully weigh the potential costs and benefits of a specific board configuration vis-à-vis product markets where the firm operates, since potential gains from restraining CEO discretion in terms of reduced agency costs may not necessarily outweigh a loss in legitimacy when competing in certain cultures. Despite being focused on CEO power, our theorizing is also highly relevant for debates concerning other governance factors which may be sensitive to cultural-cognitive legitimacy judgments, such as director nationality or gender. Our research also indicates that the regulator's and investor's evaluations of board effectiveness should move from the currently predominant consideration of structural characteristics embedded in various codes of "good governance" to a more contextualized approach that takes into account not only institutional characteristics of product markets the firm operates in but also firm contingencies, such as geographic concentration of sales, cultural variance, and industry.

Limitations and Future Research Directions

Our study is subject to limitations that suggest promising avenues for future research. First, though we tested for possible endogeneity, our key assumption about firms matching CEO power with demand-side cultural power distance can manifest via two potential mechanisms, in line with Suchman (1995): the firm could alter its CEO's power to match the cultural power distance of its geographic markets, and/or the firm could target geographic markets with cultures that are likely to find the power of its CEO more comprehensible (i.e. legitimate). It is important to acknowledge either possibility, because while CEO power is the channel through which a firm

seeks cultural-cognitive legitimacy along the power distance dimension in our framework, neither CEO power nor exposure to demand-side cultural power distance is universally malleable. Thus, while many firms arguably have more control over the power dynamics on their boards than they do over the geographic segmentation of their sales, a firm with very inert CEO power might seek cultural-cognitive legitimacy by focusing sales efforts on customers who comprehend and appreciate the firm's relatively fixed level of CEO power (Moore, Bell, Filatotchev, & Rasheed, 2012). Therefore, future research may explore possibility that the relationship we find between CEO power and demand-side cultural power distance is the product of a continuous and iterative combination of adjusting CEO power to match demand-side legitimacy standards with targeting certain geographic markets to achieve the best fit with the firm's level of CEO power.

Second, our use of geographic segment-based sales data to create a measure of demand-side cultural power distance relied on a strong assumption with regard to what those data reflect. We used a firm's sales to a specific country, as a percentage of total sales, to reflect the firm's exposure to the cultural-cognitive institutions of that country. Doing so is based on the assumption that the individuals making the actual purchases included in those sales were, in fact, located in the specified country. It is possible, however, that a firm sold its product in one country, but interacted with a purchasing agent in a different country. For example, a pharmaceutical firm may have sold its product to Walmart's retail operations in South America, but interacted with a purchasing agent in Arkansas when making the sale.[1] Unfortunately, a lack of granular customer data prevents us from identifying the specific location of purchasers, so the link between cultural cognitive institutions and geographic segments as provided by Compustat

[1] We thank an anonymous AMJ reviewer for highlighting this possibility and for providing the example.

remains a strong assumption of this study. We see an opportunity for more in-depth research to focus on the exact location of customers and thereby more accurately assess the influence of demand-side cultural-cognitive institutions on firms' structures.

Third, the present research is limited in that we focus solely on demand-side institutions and demand-side legitimacy. We noted a gap in the existing resource dependence and corporate governance literatures with regard to customers, legitimacy, and strategic leadership; we sought to address this specific gap. However, firms must maintain legitimacy among all their salient stakeholders if they are to function properly (Mitchell et al., 1997; Suchman, 1995), and thus it is likely that in some contexts, other stakeholders' legitimacy judgments impact firm decisions with regard to CEO power and other board attributes. It is possible that some firms face supply-side legitimation concerns, wherein it is imperative that suppliers view them as comprehensible and appropriate. The theory and data required to develop and test hypotheses related to this speculation are different from what is in the present research, but we hope that future research extends the framework we have identified to include stakeholders other than customers.

Finally, we develop our theoretical and empirical analyses in the context of firms that sell their products primarily to large, institutional customers. Although this covers a substantial number of organizations engaged in B2B and B2G ("business-to-government") transactions, there may be a question with regard to the generalizability of our framework. Bell et al. (2012) however, argue that any firm operating in foreign markets is subject to the close scrutiny of its primary stakeholders, with governance attributes included as the objects of scrutiny. In addition, we were not able to distinguish sales to businesses from sales to governments, as such fine-grained data were not available. Future studies can add value by differentiating among types of

non-shareholder customers, such as government agencies, large local business partners, or professional associations, with regard to each type's contributions to "demand-side legitimacy".

CONCLUSION

Prior studies suggest that national institutions play an important role in shaping firm-level governance. By focusing on demand-side legitimacy, rather than legitimacy in capital markets, we hope to expand the boundaries of inquiry into the legitimizing role that CEOs and boards play at their firms, as well as to further understanding of the firm's relationship with the multiple institutions in its environment. CEO power, our results suggest, is not only a source of agency costs, but can in fact constitute a legitimizing attribute for certain customer segments. We hope that future corporate governance research will take note of the present study and draw demand-side legitimacy further into theoretical understandings of board phenomena.

REFERENCES

Aggarwal, R., Erel, I., Stulz, R., & Williamson, R. 2009. Differences in governance practices between US and foreign firms: Measurement, causes, and consequences. ***Review of Financial Studies***, 22(8): 3131-3169.

Aguilera, R. V. & Jackson, G. 2003. The cross-national diversity of corporate governance: Dimensions and determinants. ***Academy of Management Review***, 28(3): 447-465.

Aguilera, R. V. & Jackson, G. 2010. Comparative and international corporate governance. ***Academy of Management Annals***, 4: 485-556.

Altman, E. I. 1968. Financial ratios, discriminant analysis and prediction of corporate bankruptcy. ***Journal of Finance***, 23(4): 589-609.

Arthaud-Day, M. L., Certo, S. T., Dalton, C. M., & Dalton, D. R. 2006. A changing of the guard: Executive and director turnover following corporate financial restatements. ***Academy of Management Journal***, 49(6): 1119-1136.

Ballinger, G. A. 2004. Using generalized estimating equations for longitudinal data analysis. ***Organizational Research Methods***, 7(2): 127-150.

Beatty, R. P. & Zajac, E. J. 1994. Managerial incentives, monitoring, and risk bearing: A study of executive compensation, ownership, and board structure in initial public offerings. ***Administrative Science Quarterly***, 39(2): 313-335.

Bednar, M. K. 2012. Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism. ***Academy of Management Journal***, 55(1): 131-150.

Bell, R. G., Filatotchev, I., & Rasheed, A. A. 2012. The liability of foreignness in capital markets: Sources and remedies. ***Journal of International Business Studies***, 43(2): 107-122.

Bell, R. G., Filatotchev, I., & Aguilera, R. V. 2014. Corporate governance and investors' perceptions of foreign IPO value: An institutional perspective. ***Academy of Management Journal***, 57(1): 301-320.

Bitektine, A. 2011. Toward a theory of social judgments of organizations: The case of legitimacy, reputation, and status. ***Academy of Management Review***, 36(1): 151-179.

Boeker, W. 1992. Power and managerial dismissal: Scapegoating at the top. ***Administrative Science Quarterly***, 37(3): 400-421.

Boyd, B. 1990. Corporate linkages and organizational environment: A test of the resource dependence model. ***Strategic Management Journal***, 11(6): 419-430.

Boyd, B. K. 1994. Board control and CEO compensation. ***Strategic Management Journal***, 15(5): 335-344.

Boyd, B. K. 1995. CEO duality and firm performance: A contingency model. ***Strategic Management Journal***, 16(4): 301-312.

Brickley, J. A., Coles, J. L., & Jarrell, G. 1997. Leadership structure: Separating the CEO and chairman of the board. ***Journal of Corporate Finance***, 3(3): 189-220.

Bruton, G. D., Filatotchev, I., Chahine, S., & Wright, M. 2010. Governance, ownership structure, and performance of IPO firms: The impact of different types of private equity investors and institutional environments. ***Strategic Management Journal***, 31(5): 491-509.

Cannella, A. A. & Shen, W. 2001. So close and yet so far: Promotion versus exit for CEO heirs apparent. ***Academy of Management Journal***, 44(2): 252-270.

Certo, S. T., Daily, C. M., & Dalton, D. R. 2001. Signaling firm value through board leadership structure: An investigation of initial public offerings. ***Entrepreneurship Theory and Practice***, 26: 33-50.

Certo, S. T., Daily, C. M., Cannella, A. A., & Dalton, D. R. 2003. Giving money to get money: How CEO stock options and CEO equity enhance IPO valuations. ***Academy of Management Journal***, 46(5): 643-653.

Certo, S. T. 2003. Influencing initial public offering investors with prestige: Signaling with board structures. ***Academy of Management Review***, 28(3): 432-446.

Certo, S. T. & Semadeni, M. 2006. Strategy research and panel data: Evidence and implications. ***Journal of Management***, 32(3): 449-471.

Core, J. E. & Larcker, D. F. 2002. Performance consequences of mandatory increases in executive stock ownership. ***Journal of Financial Economics***, 64(3): 317-340.

Cowen, A. P. & Marcel, J. J. 2011. Damaged goods: Board decisions to dismiss reputationally compromised directors. ***Academy of Management Journal***, 54(3): 509-527.

Crossland, C. & Hambrick, D. C. 2007. How national systems differ in their constraints on corporate executives: A study of CEO effects in three countries. ***Strategic Management Journal***, 28(8): 767-789.

Crossland, C. & Hambrick, D. C. 2011. Differences in managerial discretion across countries: How nation-level institutions affect the degree to which CEOs matter. ***Strategic Management Journal***, 32(8): 797-819.

Daily, C. M. & Dalton, D. R. 1995. CEO and director turnover in failing firms: An illusion of change? ***Strategic Management Journal***, 16(5): 393-400.

Daily, C. M. & Johnson, J. L. 1997. Sources of CEO power and firm financial performance: A longitudinal assessment. ***Journal of Management***, 23(2): 97-117.

Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. 1998. Meta-analytic reviews of board composition, leadership structure, and financial performance. ***Strategic Management Journal***, 19(3): 269-290.

Dalton, D. R. & Dalton, C. M. 2009. Let's get real on role separation: Is splitting the CEO and chairperson positions leading edge...or over the edge? ***Directors & Boards***, 33(5): 30-32.

Davis, J. H., Schoorman, F. D., & Donaldson, L. 1997. Toward a stewardship theory of management. ***Academy of Management Review***, 22(1): 20-47.

DiMaggio, P. J. & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. ***American Sociological Review***, 48(2): 147-160.

Dowling, J. & Pfeffer, J. 1975. Organizational legitimacy: Social values and organizational behavior. ***Pacific Sociological Review***, 18: 122-136.

Edelman, L. B. & Suchman, M. C. 1997. The legal environments of organizations. ***Annual Review of Sociology***, 23: 479-515.

Eisenhardt, K. M. 1989. Agency theory: An assessment and review. ***Academy of Management Review***, 14(1): 57-74.

Fama, E. F. & Jensen, M. C. 1983. Separation of ownership and control. ***Journal of Law and Economics***, 26: 301-325.

Finkelstein, S. & D'Aveni, R. A. 1994. CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. ***Academy of Management Journal***, 37(5): 1079-1108.

Finkelstein, S. 1997. Interindustry merger patterns and resource dependence: A replication and extension of Pfeffer (1972). ***Strategic Management Journal***, 18(10): 787-810.

Finkelstein, S., Hambrick, D. C., & Cannella, A. A. 2009. ***Strategic leadership : Theory and research on executives, top management teams, and boards***. New York: Oxford University Press.

Gartner. 2015. Market insight: Top 10 semiconductor chip buyers, worldwide, 2014. Stamford, CT: Gartner, Inc.

Greene, W. H. 2008. ***Econometric analysis*** (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Hall, B. H. & Ziedonis, R. H. 2001. The patent paradox revisited: An empirical study of patenting in the US semiconductor industry, 1979-1995. ***Rand Journal of Economics***, 32(1): 101-128.

Hambrick, D. C. & Abrahamson, E. 1995. Assessing managerial discretion across industries: A multimethod approach. ***Academy of Management Journal***, 38(5): 1427-1441.

Haynes, K. T. & Hillman, A. 2010. The effect of board capital and CEO power on strategic change. ***Strategic Management Journal***, 31(11): 1145-1163.

Hermalin, B. E. & Weisbach, M. S. 1998. Endogenously chosen boards of directors and their monitoring of the CEO. ***American Economic Review***, 88(1): 96-118.

Hillman, A. J., Cannella, A. A., Jr., & Paetzold, R. L. 2000. The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. ***Journal of Management Studies***, 37(2): 235-255.

Hillman, A. J. & Keim, G. D. 2001. Shareholder value, stakeholder management, and social issues: What's the bottom line? ***Strategic Management Journal***, 22(2): 125-139.

Hillman, A. J. & Dalziel, T. 2003. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. ***Academy of Management Review***, 28(3): 383-396.

Hillman, A. J. 2005. Politicians on the board of directors: Do connections affect the bottom line? ***Journal of Management***, 31(3): 464-481.

Hillman, A. J., Withers, M. C., & Collins, B. J. 2009. Resource dependence theory: A review. ***Journal of Management***, 35(6): 1404-1427.

Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. 2006. International diversification: Antecedents, outcomes, and moderators. ***Journal of Management***, 32(6): 831-867.

Hofstede, G. 1980a. ***Culture's consequences, international differences in work-related values***. Beverly Hills, Calif.: Sage Publications.

Hofstede, G. 1980b. Motivation, leadership and organization: Do American theories apply abroad? ***Organizational Dynamics***, 9(1): 42-63.

Hofstede, G. & Hofstede, G. J. VSM 2013. http://www.geerthofstede.eu/vsm2013. 2 March, 2014.

Holmes, R. M., Miller, T., Hitt, M. A., & Salmador, M. P. 2013. The interrelationships among informal institutions, formal institutions, and inward foreign direct investment. ***Journal of Management***, 39(2): 531-566.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. 2004. ***Culture, leadership, and organizations : The GLOBE study of 62 societies***. Thousand Oaks, Calif.: Sage Publications.

Javidan, M., House, R. J., Dorfman, P. W., Hanges, P. J., & de Luque, M. S. 2006. Conceptualizing and measuring cultures and their consequences: A comparative review of GLOBE's and Hofstede's approaches. ***Journal of International Business Studies***, 37(6): 897-914.

Kostova, T. & Zaheer, S. 1999. Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. ***Academy of Management Review***, 24(1): 64-81.

Kraatz, M. S. & Block, E. S. 2008. Organizational implications of institutional pluralism. In R. Greenwood & C. Oliver & K. Sahlin & R. Suddaby (Eds.), ***The SAGE handbook of organizational institutionalism***: 243-275. Thousand Oaks, CA: Sage Publications Inc.

Krause, R. & Semadeni, M. 2013. Apprentice, departure, and demotion: An examination of the three types of CEO-board chair separation. ***Academy of Management Journal***, 56(3): 805-826.

Krause, R., Semadeni, M., & Cannella, A. A. 2014. CEO duality: A review and research agenda. ***Journal of Management***, 40(1): 256-286.

Krause, R. & Semadeni, M. 2014. Last dance or second chance? Firm performance, CEO career horizon, and the separation of board leadership roles. ***Strategic Management Journal***: 808-825.

Krause, R., Priem, R. L., & Love, L. G. In Press. Who's in charge here? Co-CEOs, power gaps, and firm performance. ***Strategic Management Journal***.

L-3 Communications Holdings Inc. 2013. Proxy statement. New York, NY.

Li, J. T. & Harrison, J. R. 2008. National culture and the composition and leadership structure of boards of directors. ***Corporate Governance-an International Review***, 16(5): 375-385.

Lim, K. 2004. The relationship between research and innovation in the semiconductor and pharmaceutical industries (1981-1997). ***Research Policy***, 33(2): 287-321.

Lubatkin, M., Lane, P. J., Collin, S., & Very, P. 2007. An embeddedness framing of governance and opportunism: Towards a cross-nationally accommodating theory of agency. ***Journal of Organizational Behavior***, 28(1): 43-58.

Luoma, P. & Goodstein, J. 1999. Stakeholders and corporate boards: Institutional influences on board composition and structure. ***Academy of Management Journal***, 42(5): 553-563.

Margolis, J. D. & Walsh, J. P. 2003. Misery loves companies: Rethinking social initiatives by business. ***Administrative Science Quarterly***, 48(2): 268-305.

Meyer, J. W. & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. ***American Journal of Sociology***, 83(2): 340-363.

Misangyi, V. F. & Acharya, A. G. 2014. Substitutes or complements? A configurational examination of corporate governance mechanisms. ***Academy of Management Journal***, 57(6): 1681-1705.

Mitchell, R. K., Agle, B. R., & Wood, D. J. 1997. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. ***Academy of Management Review***, 22(4): 853-886.

Monks, R. A. G. & Minow, N. 2008. ***Corporate governance*** (4th ed.). Chichester, England ; Hoboken, NJ: John Wiley & Sons.

Moore, C. B., Bell, R. G., Filatotchev, I., & Rasheed, A. A. 2012. Foreign IPO capital market choice: Understanding the institutional fit of corporate governance. ***Strategic Management Journal***, 33(8): 914-937.

O'Connor, J. P., Priem, R. L., Coombs, J. E., & Gilley, K. M. 2006. Do CEO stock options prevent or promote fraudulent financial reporting? ***Academy of Management Journal***, 49(3): 483-500.

OECD. 2004. OECD principles of corporate governance. Paris: OECD Publishing.

Ostrom, E. 2010. Beyond markets and states: Polycentric governance of complex economic systems. ***American Economic Review***, 100(3): 641-672.

Ostrom, E. & Basurto, X. 2011. Crafting analytical tools to study institutional change. ***Journal of Institutional Economics***, 7(3): 317-343.

Pfeffer, J. 1972. Size and composition of corporate boards of directors: The organization and its environment. ***Administrative Science Quarterly***, 17(2): 218-228.

Pfeffer, J. 1973. Size, composition, and function of hospital boards of directors - study of organization-environment linkage. ***Administrative Science Quarterly***, 18(3): 349-364.

Pfeffer, J. & Salancik, G. R. 1978. ***The external control of organizations: A resource dependence perspective***. New York: Harper & Row.

Porter, M. E. 1979. How competitive forces shape strategy. ***Harvard Business Review***, 57(2): 137-145.

Porter, M. E. 1980. ***Competitive strategy: Techniques for analyzing industries and competitors***. New York: Free Press.

Priem, R. L. 2007. A consumer perspective on value creation. ***Academy of Management Review***, 32(1): 219-235.

Priem, R. L., Li, S. L., & Carr, J. C. 2012. Insights and new directions from demand-side approaches to technology innovation, entrepreneurship, and strategic management research. ***Journal of Management***, 38(1): 346-374.

Priem, R. L., Butler, J. E., & Li, S. L. 2013. Toward reimagining strategy research: Retrospection and prospection on the 2011 AMR decade award article. ***Academy of Management Review***, 38(4): 471-489.

Quigley, T. J. & Hambrick, D. C. 2012. When the former CEO stays on as board chair: Effects on successor discretion, strategic change, and performance. ***Strategic Management Journal***, 33(7): 834-859.

Raytheon Company. 2010. Proxy statement. Waltham, MA.

Sanders, W. G. & Tuschke, A. 2007. The adoption of institutionally contested organizational practices: The emergence of stock option pay in Germany. ***Academy of Management Journal***, 50(1): 33-56.

Scott, W. R. 2014. ***Institutions and organizations : Ideas, interests and identities***. Los Angeles: Sage.

Semadeni, M., Withers, M. C., & Certo, S. T. 2014. The perils of endogeneity and instrumental variables in strategy research: Understanding through simulations. ***Strategic Management Journal***, 35(7): 1070-1079.

Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. ***Academy of Management Review***, 20(3): 571-610.

Tihanyi, L., Griffith, D. A., & Russell, C. J. 2005. The effect of cultural distance on entry mode choice, international diversification, and mne performance: A meta-analysis. ***Journal of International Business Studies***, 36(3): 270-283.

Tosi, H. L. & Greckhamer, T. 2004. Culture and CEO compensation. ***Organization Science***, 15(6): 657-670.

Tost, L. P. 2011. An integrative model of legitimacy judgments. ***Academy of Management Review***, 36(4): 686-710.

Tuggle, C. S., Sirmon, D. G., Reutzel, C. R., & Bierman, L. 2010. Commanding board of director attention: Investigating how organizational performance and CEO duality affect board members' attention to monitoring. ***Strategic Management Journal***, 31(9): 946-968.

Webb, J. W., Ireland, R. D., Hitt, M. A., Kistruck, G. M., & Tihanyi, L. 2011. Where is the opportunity without the customer? An integration of marketing activities, the entrepreneurship process, and institutional theory. ***Journal of the Academy of Marketing Science***, 39(4): 537-554.

Westphal, J. D. & Zajac, E. J. 1995. Who shall govern? CEO/board power, demographic similarity, and new director selection. ***Administrative Science Quarterly***, 40(1): 60-83.

Westphal, J. D. & Zajac, E. J. 1998. The symbolic management of stockholders: Corporate governance reform and shareholder reactions. ***Administrative Science Quarterly***, 43(1): 127-153.

Westphal, J. D. & Graebner, M. E. 2010. A matter of appearances: How corporate leaders manage the impressions of financial analysts about the conduct of their boards. ***Academy of Management Journal***, 53(1): 15-44.

Zajac, E. J. & Westphal, J. D. 1996. Who shall succeed? How CEO/board preferences and power affect the choice of new CEOs. ***Academy of Management Journal***, 39(1): 64-90.

Zajac, E. J. & Westphal, J. D. 2004. The social construction of market value: Institutionalization and learning perspectives on stock market reactions. ***American Sociological Review***, 69(3): 433-457.

Zuckerman, E. W. 1999. The categorical imperative: Securities analysts and the illegitimacy discount. ***American Journal of Sociology***, 104(5): 1398-1438.

TABLE 1

Correlations and Descriptive Statistics

	Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1	CEO Power	-0.19	1.33													
2	DSCPD	52.17	2.49	0.04												
3	Geographic Concentration	0.26	0.14	0.02	-0.49											
4	Cultural Variance	2.59	2.72	0.12	0.64	-0.41										
5	Pharmaceuticals	0.65	0.48	-0.07	0.49	-0.43	0.28									
6	Institution-Owned	0.73	0.44	-0.12	-0.01	-0.25	-0.03	-0.03								
7	CEO Tenure	8.38	7.63	0.31	0.11	-0.14	0.18	0.18	0.06							
8	Founder/Family Firm	0.18	0.39	0.17	0.13	-0.16	0.10	0.10	0.30	0.25						
9	CEO Age	54.14	8.31	0.22	0.09	0.04	0.18	0.18	-0.02	0.40	0.06					
10	Firm Size	0.62	1.87	0.00	0.02	-0.13	0.14	0.14	0.33	0.01	0.09	0.10				
11	Median Analyst Rating	2.51	0.61	0.02	-0.01	0.01	-0.02	-0.02	-0.15	0.00	-0.12	0.05	-0.12			
12	Altman's Z	7.14	10.13	0.12	0.03	-0.02	0.00	0.00	0.01	0.02	0.01	-0.02	0.04	-0.01		
13	ROA	-0.01	0.24	0.04	0.04	-0.09	0.07	0.07	0.01	0.01	0.00	0.00	0.03	-0.01	0.92	
14	Firm Age	31.01	29.84	0.00	-0.18	0.03	-0.01	-0.01	0.35	-0.05	0.03	0.12	0.59	-0.07	0.01	0.00

N = 801; all correlations with absolute value greater than 0.03 are significant at the $p < 0.05$ level

TABLE 2
GEE Models of CEO Power

	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	0.89**	1.00***	1.11***	1.17***	1.13***
	(0.30)	(0.30)	(0.30)	(0.31)	(0.30)
Inverse Mills Ratio	0.39	0.42	0.53	0.48	0.58
	(0.49)	(0.49)	(0.48)	(0.48)	(0.48)
Institution-Owned	-0.30***	-0.29**	-0.30***	-0.28**	-0.30***
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
CEO Tenure	4.68***	4.73***	4.93***	4.71***	5.00***
	(0.84)	(0.84)	(0.84)	(0.84)	(0.84)
Family/Founder Firm	0.19	0.19	0.19	0.20	0.20†
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
CEO Age	0.18**	0.17**	0.16**	0.17**	0.17**
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Firm Size	-0.05	-0.06	-0.07	-0.08	-0.09
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Median Analyst Rating	0.02	0.02	0.03	0.02	0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
Altman's Z	0.01	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
ROA	0.02	0.02	0.02	0.03	0.01
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Firm Age	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Geographic Concentration	0.15	0.22*	0.39**	0.23*	0.22*
	(0.10)	(0.11)	(0.12)	(0.11)	(0.10)
Cultural Variance	0.03	0.01	0.01	-0.01	0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Pharmaceuticals	-0.44**	-0.50**	-0.54***	-0.58***	-0.65***
	(0.16)	(0.16)	(0.16)	(0.16)	(0.17)
DSCPD		0.17*	0.37***	0.47***	0.59***
		(0.08)	(0.11)	(0.14)	(0.15)
DSCPD X Geographic Concentration			0.34**		
			(0.12)		
DSCPD X Cultural Variance				-0.06*	
				(0.02)	
DSCPD X Pharmaceuticals					-0.52***
					(0.15)
Observations	801	801	801	801	801
Number of Firms	151	151	151	151	151
χ^2	282.42	288.01	300.79	297.04	307.20

Standard errors in parentheses; Year dummies omitted for parsimony; all t-tests for significance are two-tailed
† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 3
GEE Models of CEO Power

	Model 6	Model 7	Model 8
Constant	1.21***	1.31***	1.33***
	(0.30)	(0.31)	(0.31)
Inverse Mills Ratio	0.65	0.65	0.69
	(0.48)	(0.48)	(0.48)
Institution-Owned	-0.30***	-0.28**	-0.29***
	(0.09)	(0.09)	(0.09)
CEO Tenure	5.13***	4.98***	5.08***
	(0.84)	(0.84)	(0.84)
Family/Founder Firm	0.20†	0.21†	0.20†
	(0.12)	(0.12)	(0.12)
CEO Age	0.16**	0.17**	0.16**
	(0.06)	(0.06)	(0.06)
Firm Size	-0.10	-0.12	-0.12
	(0.09)	(0.09)	(0.09)
Median Analyst Rating	0.02	0.02	0.02
	(0.02)	(0.02)	(0.02)
Altman's Z	0.01	0.01	0.01
	(0.00)	(0.00)	(0.00)
ROA	0.01	0.01	0.01
	(0.19)	(0.19)	(0.19)
Firm Age	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)
Geographic Concentration	0.36**	0.23*	0.33**
	(0.12)	(0.10)	(0.12)
Cultural Variance	0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.03)
Pharmaceuticals	-0.66***	-0.72***	-0.71***
	(0.17)	(0.17)	(0.17)
DSCPD	0.72***	0.90***	0.92***
	(0.16)	(0.19)	(0.19)
DSCPD X Geographic Concentration	0.28*		0.20
	(0.12)		(0.13)
DSCPD X Cultural Variance		-0.06**	-0.05†
		(0.02)	(0.02)
DSCPD X Pharmaceuticals	-0.46**	-0.52***	-0.48**
	(0.15)	(0.15)	(0.15)
Observations	801	801	801
Number of Firms	151	151	151
χ^2	315.97	316.83	321.19

Standard errors in parentheses; Year dummies omitted for parsimony; all t-tests for significance are two-tailed
† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

FIGURE 1
Interaction of Demand-Side Cultural Power Distance and Geographic Concentration

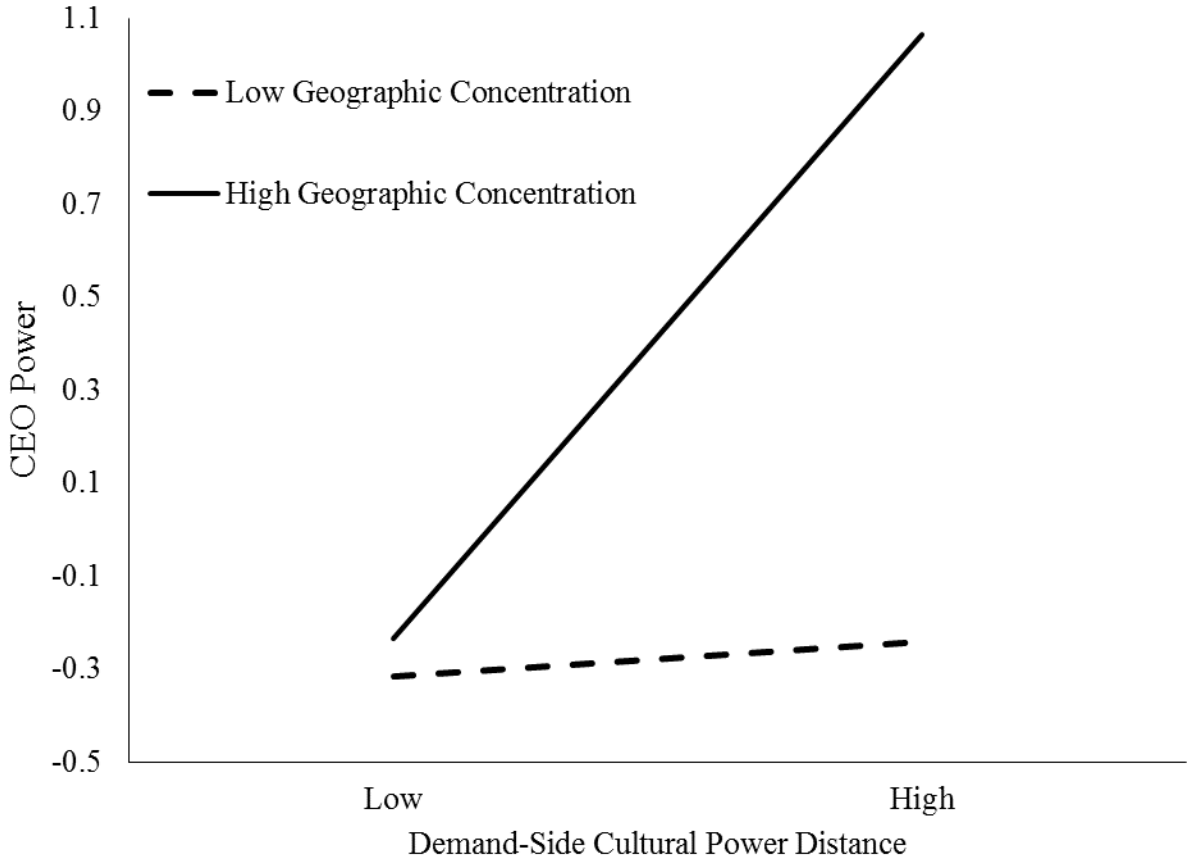


FIGURE 2
Interaction of Demand-Side Cultural Power Distance and Cultural Variance

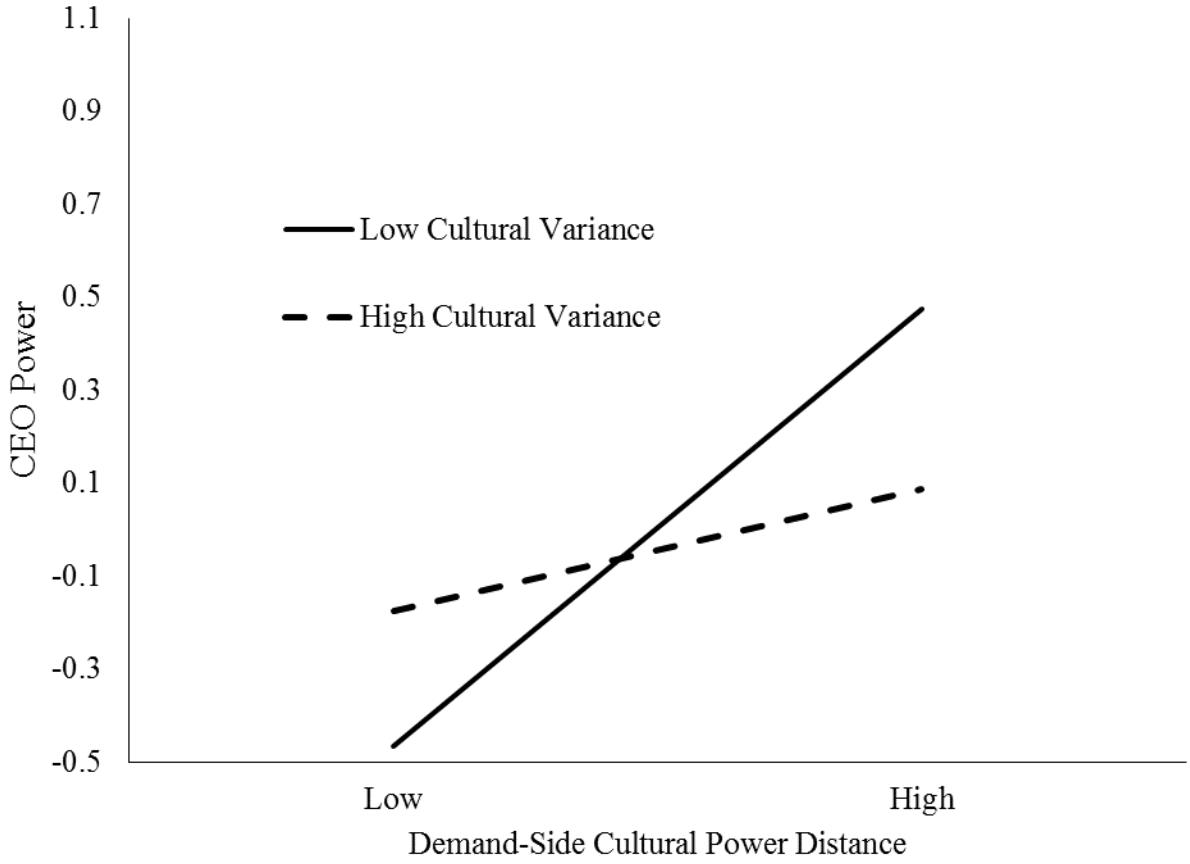
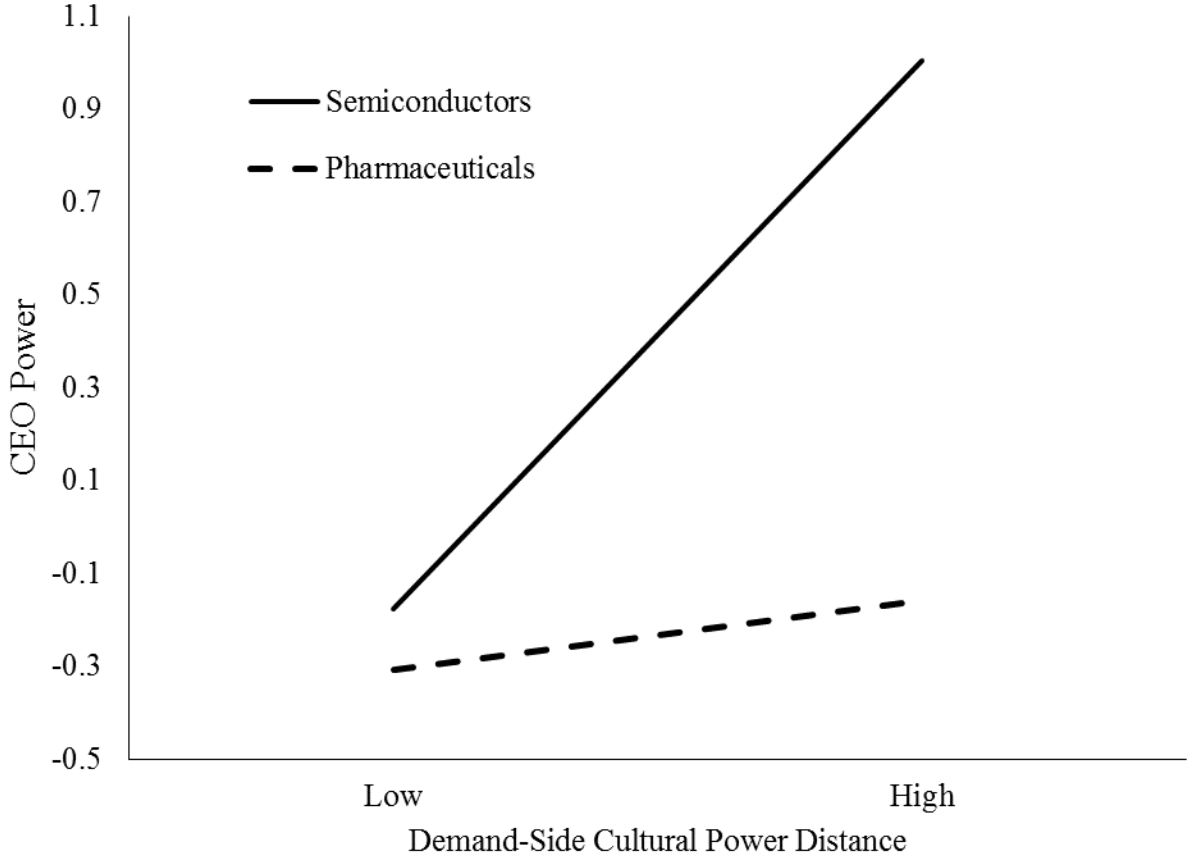


FIGURE 3
Interaction of Demand-Side Cultural Power Distance and Industry



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