

CEO-Board relationships in a Post Sarbanes-Oxley Era.
The Moderating Effect of the Board of Directors in the CEO Power-Firm
Performance Relationship

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ABSTRACT

Research on upper echelons consistently tried to identify relationships between top executives' characteristics and different kinds of corporate outcomes. Along this line, we focus on the construct of CEO power to investigate the impact on firm financial performance. The reason motivating the choice to consider the CEO as the most appropriate level of analysis is twofold. From one side, we aim reconsidering the CEO power-firm performance relationship in a post Sarbanes-Oxley era. From the other side, moving from the evidence that prior research on top executives and boards of directors have often proceeded in separate streams, we investigate the moderating effect of board of directors on the relationship between CEO power and firm performance. To this purpose, we consider board independence, directors' incentives and board activity as potential moderators of the relationship between CEO power and firm financial performance. We tested our hypotheses using a sample of 288 large US industrial firms. Results indicate that CEO power has a strong positive impact on firm financial performance, and that the board of directors moderates such relationship. Specifically, our findings suggest that enhanced board activity negatively moderates the CEO power-firm performance link, while a higher proportion of outsiders strengthens the relationship above. The article has several implications both for theory and practice, and supports that the new regulatory context in the US has a potential to reverse predictions of positive agency theory about CEOs' misbehaviours, rather favouring novel interpretations of the principal-agent paradigm. In other terms, CEOs will be more reluctant to

misuse their power to expropriate shareholders for their own personal interests. The Sarbanes-Oxley context has, in our opinion, constrained the opportunity for managerial opportunism.

Keywords: CEO power, CEO-board relationships, Sarbanes-Oxley, boards of directors

INTRODUCTION

The upper echelon perspective has traditionally investigated how executives' characteristics may affect their choices, and ultimately various outcomes at the firm level (Hambrick and Mason, 1984, Hambrick, 2007). Such perspective relies on two major assumptions. The first is that executives often act on the basis of their intimate interpretations of the strategic situation they face. The second is that executives' construals of reality are a consequence of their experiences, values, and personalities (Hambrick, 2007). Along this line, a significant amount of research has explored the potential relationships between top executives' characteristics and various corporate outcomes. Some scholars investigated the influence of top executives on strategic outcomes such as strategic persistence (Finkelstein and Hambrick, 1990), international expansion (Sambharya, 1996), and global strategic posture (Carpenter and Fredrickson, 2001). Other scholars considered the influence of top executives' characteristics on firm financial performance (see e.g. Cannella, Finkelstein and Hambrick, 2008 for a review). As such, the impact of top executives on different corporate outcomes remains one of the most widely investigated relationships in the strategic management literature (Certo, Lester, Dalton and Dalton, 2006).

Literature on top executives characterizes also for investigating different potential predictors of the corporate outcomes above. While some of the studies investigate TMT-level attributes (Carpenter, 2002; Carpenter, Sanders and Gregersen, 2001; Hambrick and D'Aveni, 1992; Haleblian and Finkelstein, 1993; Henderson and Fredrickson, 1996; Wiersema and

Bantel, 1992), other studies focus mostly on the CEO as a central component of the TMT. These studies rely on unique CEOs' attributes such as CEO tenure (e.g. Barker and Mueller, 2002; Hambrick and Fukutomi, 1991; Miller, 1991; Miller and Shamsie, 2001; Wu, Levitas and Priem, 2005), CEO charisma (e.g. Agle, Nagarajan, Sonnenfeld and Srinivasan, 2006; Fanelli and Misangyi, 2006), or CEO transformational leadership (Colbert, Kristof-Brown, Bradley and Barrick, 2008). Alternatively, scholars investigated complex constructs of CEOs' characteristics, including different dimensions of CEO power (Finkelstein, 1992). Consequently, some studies investigated the relationship between CEO power and corporate outcomes, such as strategic refocusing (Bigley and Wiersema, 2002), or firm financial performance (Daily and Johnson, 1997).

Although all the previous studies provide some evidence on the top executives-corporate outcomes relationship, a recent meta-analytic examination (Certo et al., 2006) revealed a lack of clear evidence on the relationship between top executives' characteristics and corporate outcomes, and specifically firm financial performance (Carpenter, 2002; Certo et al., 2006; Miller et al., 1998). Consequently, our article reinforces such investigation and aims to move a step further in understanding the relationship between CEO power and firm financial performance.

There are two reasons motivating the choice to focus on the CEO as the most appropriate level of analysis, which is of crucial importance in the debate on upper echelons (Cannella and Holcomb, 2005). The first relates to our will to investigate the CEO power-firm performance relationship in a post Sarbanes-Oxley context, basing on evidence that recent research substantially overlooked the new scenario emerged after the recent corporate scandals in the US. The new regulatory context, we argue, has a potential to offer novel insights to reconsider such relationship. An underlying assumption of this article is that top executives – and particularly those at the apex of organizations as the CEOs – will be more

reluctant to misuse their power to expropriate shareholders for their own personal interests (Gomez-Mejia, Tosi and Hinkin, 1987). In other words, the new regulatory context facilitates the alignment of interests and values between managers and shareholders, reversing assumptions about managerial misbehaviours the positive agency theory anticipates (Eisenhardt, 1989). Hence, our article suggests reconsidering predictions about CEOs' misbehaviours, and rather favours novel interpretations of the principal-agent paradigm (Eisenhardt, 1989).

The second reason to focus on CEOs relates to the will to investigate whether and how corporate boards might have an impact on the relationship above. Relying on evidence that research on top executives and boards of directors have often proceeded in separate streams (Westphal and Fredrickson, 2001), we investigate the moderating effect of board of directors on the relationship between CEO power and firm performance. Given the CEO is often the sole executive on the board, and hence the one having formal relationships with outside directors, the interaction between boards and CEOs is of particular interest. There are different reasons supporting this argument. From one side, the implicit assumptions scholars made about CEO domination in corporate boardrooms (Gulati and Westphal, 1999) lowered the interest in knowing how CEOs and corporate boards interact to make decisions (Finkelstein, 1992; Finkelstein and Hambrick, 1996). Literature on boards and governance traditionally suggested that boards serve mostly as rubber stamps for strategic choices conceived by management (Mace, 1971; Herman, 1981; Westphal and Fredrickson, 2001), and that 'boards of directors are not involved in strategy formation' (Finkelstein and Hambrick, 1996: 228). As a result, evidence about the impact boards and board members have on corporate outcomes is still equivocal (e.g. Geletkanycz and Hambrick 1997), and the potential of interaction with top executives is considered to be limited. Consequently, scholars devoted limited efforts in the empirical investigation of the relative power of CEOs with

respect to corporate boards since Pearce and Zahra (1991), and likely underestimated the impact and relevance of boards.

The recent move towards assertive boards exerting effective oversight on CEOs (Daily et al., 2003; Finkelstein and Mooney, 2003), though, suggests that the CEO-board relationship should be reconsidered (Gulati and Westphal, 1999). As such, recent studies emphasized the importance to delve into the performance effects of CEO-board relationship (Combs, Ketchen, Perryman and Donahue, 2007), which deserves renewed attention (Westphal and Fredrickson, 2001; Shen, 2003; Gulati and Westphal, 1999). Specifically, it has been argued that ‘upper echelon research should devote greater attention to how boards of directors may determine the relationships between top management characteristics and organizational outcomes’ (Westphal and Fredrickson, 2001: 1130). This approach emphasizes the need to develop models that distinguish the relative influence of top executives from the influence of boards on corporate outcomes, and invites scholars avoiding the tendency to undervalue the impact and relevance of the boards themselves (Westphal and Fredrickson, 2001).

This article aims filling the gaps in the literature in two related ways. First, we provide novel insights to reconsider both the CEO power-firm performance relationship. Second, we investigate the moderating effect boards might have on such relationship, and thus encourage studies that cross the hedge between top executives and board literatures. In other terms, we want to show the relevance of studying how top executives and corporate boards interact in real life. In this way, we want to provide support for our theoretical assumption according to which CEOs and corporate boards do not act in a vacuum, and rather interact substantially in the accomplishment of their relative tasks. Our results support that increased rules and constraints characterizing the post Sarbanes-Oxley scenario persuade CEOs to exert their power to the interest of the corporation rather than to their personal interests. These contextual circumstances reverse thus the agency assumptions, and show how CEOs’

opportunism under Sarbanes-Oxley regulation is replaced by a stronger alignment of interests among shareholders and CEOs. Moreover, despite board characteristics hardly have a direct impact on firm performance, a strengthened focus on control role of corporate boards actually determines moderating effects of board characteristics on the CEO power-firm performance relationship. In this way, the article tries to capture the complexity of such relationship in the will to open room and providing guidance in further understanding the impact of corporate actors on firm's outcomes.

THEORETICAL BACKGROUND

CEO Power

Chief Executive Officers have been widely recognized as being the central members of top management teams (Jackson, 1992), the principal architects of corporate strategy and organizational change (Andrews, 1971), and the prominent actors having influence over other top executives, and over corporate outcomes (Finkelstein, 1992). At the leadership level, the CEO is generally regarded as the most important and powerful organizational actor. The potential effects of CEO characteristics on firm financial performance have traditionally fascinated both the academic literature and the popular press (Daily and Johnson, 1997). The CEO is the executive who has the overall responsibility for the conduct and performance of the entire organization, and has a broad set of tasks to fulfil (Finkelstein and Hambrick, 1996). Besides the classical tasks of planning, organizing, coordinating, commanding and controlling (Fayol, 1949), the CEO has other extremely important tasks. First, CEO is the charismatic representative of the organization in its environment. CEO charisma has its effects on the broad sets of outside stakeholders primarily through an identification process (Fanelli and Misangyi, 2006). Second, the CEO is the leader of the top management team (Wu et al., 2005), and dominates the distribution of responsibilities and tasks within the team itself (Haleblian and Finkelstein, 2005). Moreover, CEO dominance inside the organization has the

potential to enhance firm performance, especially if the other top executives recognize and support his or her charisma (Agle et al., 2006).

The influence CEOs have over top executives and corporate outcomes has been characterized in the past literature with the concept of CEO power. Research on CEO power moves from the article by Finkelstein (1992), which presented the traditional bases of managerial power. First of all, power is defined as the capacity of individual actors to exert their will (Finkelstein, 1992), and is characterized as the ability to manage uncertainty both inside and outside the firm (Daily and Johnson, 1997; Ocasio, 1994). Finkelstein (1992) identified and empirically validated four dimensions of executive power, i.e. structural power, ownership power, expert power and prestige power. These dimensions of power represent a mean for top executives and particularly for CEOs to effectively reduce both internal and external sources of uncertainty. Specifically, structural power and ownership power are primarily intended to reduce internal sources of uncertainty, while expert power and prestige power might be helpful to face external sources of uncertainty both in the competitive and institutional environments (Daily and Johnson, 1997). Along this line, past research tried to find support for the hypothesized relationship between CEO power and different kinds of firm outcomes (Daily and Johnson, 1997). Halebian and Finkelstein (1993), for instance, found that top management teams with ‘centralized’ or dominant CEOs contributed to poor performance in turbulent environments, confirming evidence from previous research (e.g. Eisenhardt and Bourgeois, 1988). Bigley and Wiersema (2002), then, found that CEO power moderates the relationship between the CEO cognitive orientation and strategic refocusing. Other scholars relied on the concept of CEO power in relation to promotion or exit of CEO heir apparent (Cannella and Shen, 2001). They found a strongly negative association between CEO power and promotion, suggesting that powerful CEOs are reluctant to lose their power, and may thus attempt to postpone heir apparent promotion (Cannella and Shen, 2001). Other

studies in the governance literature address the relative power distribution between the CEO and the board of directors to understand when potential agency issues might develop (Ocasio, 1994; Pollock, Herald and Wade, 2002).

Despite the interest scholars devoted to the impact of CEO power on corporate outcomes, research on the topic is not plentiful (Cannella et al., 2008) and is far from being conclusive. Moreover, most of the previous literature provided evidence in line with assumptions of positive agency theory (Heisenardt, 1989), according to which agents are opportunistic actors and are strongly motivated to take profit from the information asymmetry between them and their principals (Fama, 1980; Jensen and Meckling, 1976). In this perspective CEOs are viewed as agents of shareholders, but their personal interests, agendas and priorities diverge from those of the shareholders they are supposed to represent (Eisenhardt, 1989). It is hence a primary responsibility of boards of directors to secure shareholders against the possibility that CEOs pursue self-interested behaviours (e.g. Johnson, Daily, and Ellstrand, 1996; Stiles and Taylor, 2001; Zahra and Pearce, 1989). Coherently, enhanced CEO power may provide enough discretion to pursue personal goals which are inconsistent with maximizing shareholder wealth (Daily and Johnson, 1997). Despite its theoretical brightness and its applicability, positive agency theory has been criticized as it tends to ‘vilify’ organizational leaders (Cannella and Monroe, 1997). Accordingly, several scholars argued for the need to thoroughly consider alternative views on top executives and CEOs (Cannella and Monroe, 1997; Finkelstein and D’Aveni, 1994), and recent studies on CEO power follow this argument (Combs et al., 2007). Consistent with this approach, research on CEOs has demonstrated the existence of several potential benefits of powerful CEOs, such as unity of command, clear line of authority, faster strategic response, clearer accountability and an easier leverage on external resources (Cannella and Monroe, 1997; Finkelstein and D’Aveni, 1994). Most of the previous arguments rely on a strategic leadership view of corporate actors, which on the

opposite tends to ‘glorify’ leaders in the purpose to question the simplistic assumptions of the agency frame (Cannella and Monroe, 1997).

The CEO Power-Firm Performance Relationship in a Post-Sarbanes Oxley Era

Top executives’ behaviours are the logical consequence of competing sets of incentives, which take into account both firm internal and external contexts. As such, previous considerations show the reasons for the supremacy of some theoretical interpretations over others. In this vein, assumptions about managerial misbehaviours result from a tendency of past research to overlook contextual variables in explaining such behaviours. Although the corporate scandals in the early decade of this century dramatically supported the assumptions of positive agency theory about CEOs’ misbehaviours, there is still an open question about what is happening now, and what would be next. The increased attention on corporate actors both by public opinion, financiers and judiciary systems, indeed, is likely to determine drastic changes in CEOs’ attitudes. Particularly in the US, the Sarbanes-Oxley Act requires that both the Chief Executive Officer and the Chief Financial Officer personally certify accounting statements prior to sending them to shareholders and filing them with the Securities and Exchange Commission (SEC). Certification must be made periodically in order to secure that each of the quarterly or annual report issued in the market is truthful, does not omit material facts, and represents all the significant firm’s financial conditions and operation results for the reporting period (Raiborn and Schorg, 2004). To secure the effectiveness of both internal and external controls, thus, the Act has significantly heightened the penalties for CEOs operating organizations that fail to comply with the Act provisions (Lansing and Grgurich, 2004). The strict rules and requirements that characterize the disclosure of information corporations have to provide to various external stakeholders, we argue, may deeply influence the CEOs’ behaviours and determine shifts towards the oversight function of corporate boards. In other terms, the financial reporting and the strict enforcement of disclosure rules can mitigate the

conflict between owners and managers agency theory predicts (Mintz, 2005). Such approach overcomes undersocialized views of governance and managerial behaviours, and rather stresses the embeddedness of corporations in a nexus of formal and informal rules (Aguilera and Jackson, 2003). It also shows how constraints stemming from coercive political regulation or from normative pressures to establish legitimacy might determine a shift in the corporate actors' attitudes toward the firm and its shareholders (Aguilera and Jackson, 2003).

The previous considerations urge the need to thoroughly assess the relationship between CEO power and performance under the circumstances described above. In this vein, the post Sarbanes-Oxley context promotes a shift from a positivist approach to agency theory, which offers general prescriptions to reduce agency conflicts, to a principal-agent theory to understand CEOs' and managers' behaviours (Heisenhardt, 1989). It follows recommendations to avoid general framing of problems and remedies, and rather grounding theories on "theory-relevant contexts" (Eisenhardt, 1989: 71). Although the positivist agency theory argue for high power as representing the contextual situation for CEOs to behave in self-interested ways (Jensen and Meckling, 1976), the post Sarbanes-Oxley context has the potential to counterbalance CEOs' inclination to opportunism and align their personal interests to those of shareholders. In other terms, in the Sarbanes-Oxley context CEOs and managers have an incentive to pursue shareholders' interests and to genuinely play their role inside corporations. This is because the new rules severely constrain the opportunity for managerial opportunism, driving CEOs refraining from opportunistic behaviors. Perhaps it is not so much that CEOs are now using their power for the good of the corporation, but simply they have fewer opportunities to abuse it.

The previous arguments allow investigating how CEO power-firm performance relationship manifest in the context of corporate reforms we are experiencing, avoiding glorifications or vilifications of corporate leaders (Cannella and Monroe, 1997). Rather, we

argue that assumptions of principal-agent theory allows to contextualize implications, and to recognize how contextual constraints make CEOs and managers extrinsically motivated (not intrinsically) to behave in the interest of the corporation. Hence, we argue that the post Sarbanes Oxley scenario favours managerial behaviours which are consistent with the strategic leadership predictions about the positive impact of powerful leaders on corporate outcomes. Thus, powerful CEOs will use their power in the interest of the corporation, but also in their own interest to gain value and reputation in the managerial labour market (Fama, 1980), and to protect themselves against severe liabilities. In other terms, the contextual constraints are likely to emphasize the positive benefits of powerful CEOs on corporate level outcomes (Cannella and Monroe, 1997; Finkelstein, 1992; Finkelstein and D'Aveni, 1994), and facilitate an alignment of interests between principals and agents in the situation we consider. Following the previous arguments, we thus hypothesize:

Hypothesis 1. In a post Sarbanes-Oxley era there will be a positive relationship between CEO power and firm financial performance.

The moderating effect of boards of directors

Similarly to the upper echelon literature, boards and governance research has been dominated by the search for relationships among board characteristics and different strategic or financial outcomes (Daily, Dalton and Cannella, 2003). Governance scholars in the management field tried to identify the determinants of board effectiveness, and the impact boards might have on corporate outcomes (e.g. Baysinger and Butler, 1985; Baysinger and Hoskisson, 1990; Dalton et al., 1998; Hermalin and Weisbach, 1991). However, such literature was characterized by an inability to provide strong empirical evidence on the relationship between board characteristics and various corporate outcomes, especially with respect to firm financial performance (Dalton et al., 1998; Dalton et al., 1999; Hermalin and Weisbach, 1991; Johnson et al., 1996).

Another stream of research on boards and governance argues that boards of directors contribute to firm performance through the different roles they are expected to perform (Hillman and Dalziel, 2003). Although a typology of board roles has never been conclusive (e.g. Carpenter and Westphal, 2001; Forbes and Milliken, 1999; Johnson et al., 1996; Stiles and Taylor, 2001; Zahra and Pearce, 1989), the field has been substantially dominated by agency and resource-dependence theories (Hillman and Dalziel, 2003). Despite the various translations of these theories into board roles, there is a broad consensus on the two prominent roles of service and control corporate boards should perform (Hillman and Dalziel, 2003). With respect to this, our argument is that although research in the late 90's has noticed a move toward emerging models of collaborative boards with a major commitment in the provision of qualified service to management (Gulati and Westphal, 1999), the recent corporate scandals emphasized the urgency for boards to provide more effective control over managerial behaviour, and to re-focus on their typical oversight role. Such a renewed attention on the focal role boards of directors have in monitoring top executives, along with the increased liabilities corporate actors have to face in the post Sarbanes-Oxley context, are likely to influence the relationships between boards of directors and the top executives themselves, and particularly the CEO.

Basing on the previous arguments, we combine the traditional search for relationships between boards and firm financial performance with the renewed emphasis on control and monitoring on top executives the post Sarbanes-Oxley context suggest. In other terms, although board characteristics hardly show direct impact on corporate outcomes, the previous argument suggest investigating how board characteristics moderate the aforementioned relationship between CEO power and firm financial performance. To this purpose, we consider board independence (Johnson, Daily and Ellstrand, 1996; Westphal, 1998), directors' incentives (Mallette and Fowler, 1992; Zahra, Neubaum and Huse, 2000) and board activity

(Demb and Neubauer, 1992; Huse, 2000; Zahra and Pearce, 1989) as potential moderators of such relationship. The previous characteristics of boards of directors have been widely investigated both in the governance literature (Dalton et al., 1998; Dalton et al., 1999; Finkelstein and Mooney, 2003; Johnson, Daily, and Ellstrand, 1996; Mallette and Fowler, 1992), and also in the CEO-board relationship studies (e.g. Combs et al., 2007).

Board independence

Board independence has been traditionally characterized as the proportion of outside directors inside the boardroom (Mallette and Fowler, 1992). According to the mainstream literature, outside domination in corporate boardrooms should enhance the likelihood to exert proper control over CEOs since outside directors are not in employment relationship with the firm (Combs et al., 2007). In theory, outside directors should intervene to question CEOs' preferences on corporate diversifications, executive compensation, and other strategic choices which potentially conflict with shareholders interests (Gulati and Westphal, 1999). In this perspective, outside directors are thought to be more aligned with shareholders interests than insiders (Hill and Snell, 1988), representing the locus of control over CEOs' decisions. The previous arguments root in an agency perspective, according to which outside directors' contribution becomes critical to restrain powerful CEOs from promoting self-interested decisions.

The recent corporate reforms seem though to favour a shift in CEOs' behaviours, leading CEOs using their power for the corporation itself, and determining strong disincentives for power abuses. In this context, the oversight on CEOs' behaviours from outside directors is likely to be looser as long as outsiders perceive CEOs are using their competence and power to the best interest of the corporation. Further, outsiders have been traditionally characterized for the lack of proper information and company knowledge, and thus for their limited contribution in information processing and in enhancing the effectiveness of CEO and board

decision-making (Baysinger and Hoskisson, 1990). In this respect, the significant pressures boards have suffered from investors, media, public opinion and corporate authorities after the wave of the recent scandals is forcing boards' chairmen and secretaries to secure board effectiveness through a timely provision of inside information to outside board members. The availability of information for outside directors should allow outsiders to go beyond the formal oversights, as it happened in the recent past. Rather, outsiders should actively support CEOs in their most relevant decisions (Baysinger and Hoskisson, 1990; Pearce and Zahra, 1992). Along this line, pressures from the institutional context emphasize the importance of outside directors' role inside boardrooms, and make outsiders willing to actively participate in board meetings. Under these circumstances, and when the CEOs are using their power in the interest of the corporation, outside directors will be more inclined to actively support management along with the sole monitoring. The higher information and knowledge they possess, then, secure the possibility for outsiders to actually contribute in boards' decisions. We thus hypothesize the following:

Hypothesis 2. Board independence moderates the CEO power-firm performance relationship. Specifically, a higher proportion of outside directors strengthens the positive relation between CEO power and firm financial performance.

Directors' incentives

Boards and governance research focused also on the incentives directors have to act in the best interest of the shareholders they represent. Past research explored various potential incentives for directors to properly exert their role. Hermalin and Weisbach (1988; 1991) argued that directors have certain legal obligations to shareholders and they can be held liable if they fail to meet these obligations. The Sarbanes-Oxley Act in the US is an example of how legislation is increasingly addressing the directors' liability, while the wave of codes of good governance promises moral and reputational sanctions for unethical or unprofessional

behaviours (Aguilera and Cuervo-Cazurra, 2003). Hence, directors have a desire to maintain or establish reputation as good monitors, and mostly as competent business people (Hermalin and Weisbach, 1988).

However, most of the past literature on boards and governance traditionally indicated directors' shareholding as the most effective way to align the interests of both inside and outside directors to those of firm shareholders (Mallette and Fowler, 1992). According to this literature, the most relevant guarantee that boards will actively defend shareholders interests is the presence of directors with personal interests which ultimately compel them to monitor CEOs actively and to exert proper scrutiny on managerial proposals (Kosnik, 1990). Directors' shareholding is considered to be one of the main incentives for board involvement, and particularly for directors' involvement in their oversight function (Kosnik, 1987). In this vein, directors' shareholding may empower directors to challenge management (Finkelstein, 1992). Shareholding directors are more prone to question CEOs and to seek in-depth knowledge about the firm and its environment (Zahra et al., 2000) since they benefit from the firm's increased value-creation. The interest to increase their personal wealth can also encourage directors to become more attentive to the firm's strategic moves and ensure a strong commitment to creating value for shareholders (Zahra et al., 2000). The incentive created by directors' shareholding roots in positive agency perspective, in which CEOs need to be carefully monitored to avoid expropriations. Nevertheless, directors' incentive in front of powerful CEOs who create value for the firm is hardly that to control their behaviors. Rather, shareholding directors will be motivated to support CEOs in creating value for the firm, and ultimately for themselves. The alignment of interests between CEOs and shareholders, and the disincentive for CEOs to abuse power in the post Sarbanes-Oxley context, we contend, determine a shift in shareholder directors' attitudes. Thus, the presence

of shareholding directors is a case for boards to be more cooperative than controlling (Gulati and Westphal, 1999). Basing on these arguments, we thus hypothesize the following:

Hypothesis 3. Directors' incentive moderates the CEO power-firm performance relationship. Specifically, a higher proportion of shareholding directors strengthens the positive relation between CEO power and firm financial performance.

Board activity

Board activity has been characterized in several ways. However, the frequency of board meetings is still considered a strong indicator of board activity, since the effort boards devote to meet and discuss significantly relates to the degree to which boards perform their roles (Forbes and Milliken, 1999; Lorsch and MacIver, 1989). As some scholars argued, 'it is during board meetings that much of the work of boards is accomplished, and it is here that the processes of group interaction play out in such a substantive way' (Finkelstein and Mooney, 2003: 110). An active board requires careful planning of board meetings, and the time devoted to discussions is also considered an important determinant of board involvement in its roles (Demb and Neubauer, 1992). Reduced board activity due to insufficient board meetings risks to create serious constraints for boards performing their oversight function over CEOs, and also for boards performing other roles (Hitt et al., 1996). Time is often a main constraint for many directors, and frequent meetings may be difficult to manage for directors sitting in several boards, or for directors who are also CEOs of other firms. However, outside directors cannot be expected to monitor the firm (Demb and Neubauer, 1992) if they are not given enough opportunities to discuss and evaluate alternatives during an adequate number of board meetings. Effective and frequent meetings are essential for boards successfully fulfilling their roles. Specifically, effective meetings are essential for board service role, while frequent meetings are required in performing control (Zahra and Pearce, 1989). Hence, board activity actually represents an indicator of board control role performance. Along this line,

board activity may be also counterproductive. An excessive number of board meetings, along with the formal requirements for more rigorous controls on CEOs' actions, risk to determine an increase in bureaucracy within boards of directors. In other terms, the severe limitations to CEOs' delegations and the need for formal controls and approvals by the board of directors, may determine significant reductions in the speed of strategic decision-making processes. In line with the previous assumptions, we should expect corporate boards to be more active as a result of the increased attention on control boards have after the Sarbanes-Oxley. This context thus determines a paradox. From one side, institutional constraints refrain CEOs from behaving opportunistically, and favour CEOs to use their power for the corporation and not for themselves. From the other side, the increased liabilities directors face determines increased attention to formal oversight and control, which conversely limits the CEOs to exert their power. In other words, there is a concrete risk to place disproportionate emphasis on board activity in control and monitoring of powerful CEOs. Following the arguments we developed above, it may reduce the CEOs value creating potential, and negatively impact on firm financial performance. We thus hypothesize the following:

Hypothesis 4. Board activity moderates the CEO power-firm performance relationship. Specifically, a higher number of board meetings reduces the positive relation between CEO power and firm financial performance.

METHODS

Sample and collection of data

The hypotheses of our study were tested on a sample of the largest 500 US industrial firms for turnover. The sample was built by using *Compustat Industrial Annual* to identify a list of public corporations ordered by annual turnover, from which the largest 500 industrial firms were identified. Data on both CEOs and boards of directors were collected for the year 2004, while performance measures have been collected both for 2004 and 2005 to avoid

idiosyncratic effects. Data were collected through publicly available sources. Specifically, we collected information about the ownership structure and the board of directors from IRRC (*Investor Responsibility Research Center*), *Board Analyst*, and *Bureau Van Dijk*. In order to have more in-depth information on CEOs we gathered information on CEO curricula and profiles from Hoover (International Company Directory), IRRC, and from the Company Websites. We used also *Dun & Bradstreet Reference Book of Corporate Management* to collect demographic information about the CEOs. Information on corporate financial performance, then, was collected through COMPUSTAT North America, Nyse, Compustat Global and Osiris. The collection of data has been realized through the Wharton Data Research Services (WRDS), which included most of the previous public sources. Given the fairly large number of missing values especially with respect to the CEO-related variables (such as e.g. elite education and family links to founders), the final number of firms on which we have complete information is 288.

Variables and measures

Dependent variable

To assess firm performance we used a measure of profitability which is the *return on investment* (ROI), measured as net profit/capital employed. ROI is a common measure used to assess the impact of top executives and board characteristics on firm performance (e.g. Daily and Johnson, 1997), and is particularly appropriate to investigate operational performance of manufacturing firms (e.g. Cannella and Shen, 2001; Carpenter, 2002; Finkelstein and D'Aveni, 1994; Geletkanycz and Hambrick, 1997; Henderson, Miller and Hambrick, 2006; Shen and Cannella, 2001). Besides this, *return on investment* is particularly relevant for this article, since operating performance is largely determined by actions and decisions taken from top executives, and specifically the CEOs. However, since the impact of executives on corporate level outcomes can be detected only with a appropriate performance windows of

two or three years (Shen, 2003; Westphal, 1999), we relied on a averaged measure of firm performance over time t and $t + 1$, in order to smooth any potential aberrations associated with a single year's performance (Carpenter, 2002). The practice to average multiple years of performance is widely acknowledged, since extraneous factors might introduce variability into single-year measures (Geletkanycz and Hambrick 1997). This choice allowed also to account for some yearly fluctuations in performance, and to avoid results influenced by external contingent events such as market conjunctures.

Independent variables

The main independent variable of our study is the CEO power. We relied on the measures developed by Finkelstein (1992) on the four determinants of CEO power, i.e. structural power, ownership power, expert power and prestige power. Although most of the previous studies considered all the different determinants of CEO power separately (e.g. Bigley and Wiersema, 2002; Combs et al., 2007), the purpose to explore the moderating effect of board characteristics on the CEO power-firm performance relationship suggested using a composite measure of CEO power. Since our purpose was to build a unique measure of CEO power, we considered one indicator for each of the four determinants of power presented by Finkelstein (1992). We followed Cannella and Shen (2001), which derived an index of CEO power as a sum of some (three) of the Finkelstein's 1992 indicators. We relied also on arguments from Zajac and Westphal (1996), who developed a composite and synthetic measure of CEO characteristics across multiple dimensions to investigate how CEO-board relative power can predict whose preferences are realized in selecting the CEO successor (Zajac and Westphal, 1996).

Structural power relies on hierarchical authority (Finkelstein, 1992). This is especially true for CEOs, who have an *a priori* higher structural power than other top executives (Daily and Johnson, 1997, Mizruchi, 1983; Ocasio, 1994). To measure structural power we

considered the compensation of the CEOs (Finkelstein, 1992). The reason to focus on CEO compensation is that CEOs' compensation packages have been consistently linked with their power (Boyd, 1994; Bigley and Wiersema, 2002), and CEO compensation represents a suitable indicator of formal power (Finkelstein, 1992; Hambrick and D'Aveni, 1992). We thus computed the CEO compensation as the total cash compensation, including salary and bonus (Boyd, 1994; Hambrick, 1989). We did not divided the CEO total cash compensation by the compensation of the highest paid manager in the same firm (as Finkelstein 1992 did), since we created standardized measures for each of the four indicators of power we considered in our analyses.

Ownership power roots in the agency relationships between managers and firm shareholders, and relies on the assumption that increased managerial ownership enhances managerial dominance over the board of directors (Finkelstein, 1992). For the ownership power we relied on the CEO stock ownership. Stock ownership has been characterized as an important source of power in the upper echelons (Bigley and Wiersema, 2002; Finkelstein, 1992; Westphal and Zajac, 1995; Daily and Johnson, 1997). This is particularly true for the CEO position, since research has demonstrated that CEOs with considerable ownership are likely to heavily influence the directors' selection, and thus exert power over the corporate board (Bigley and Wiersema, 2002). As to the other measures of ownership power suggested by Finkelstein (1992), i.e. the family shares and the founder or relative, we did not consider them as appropriate to our sample frame. First, information about family shares (i.e. shares held by brothers, father and so forth of the focal executive) is explicitly considered as 'an additional aspect of ownership structure' (Finkelstein, 1992: 513), which actually represents more a base of outside support to internal power, than a base of firm internal power *per se*. As to the founder or relative, evidence from our sample indicates that only few firms have CEOs

with founder or relative connections (only 2.8% of the cases), and thus the variance is minimal.

Expert power implies that managers with relevant expertise likely have significant influence on strategic choices, and are actively sought for their advice (Finkelstein, 1992). For the expert power we used the CEO tenure as a proxy. The choice to focus on the CEO allows considering his or her tenure in the office as a measure of expertise. Although Finkelstein (1992) indicated the critical expertise, the number of functional areas the executive had experience in, and the number of different positions the manager has had in a firm as measures of expert power, research on CEO tenure showed as in this particular office tenure is a proper measure of expertise (Hambrick and Fukutomi, 1991; Miller and Shamsie, 2001; Shen, 2003). CEO tenure in its office has been studied as a predictor of CEO knowledge, behaviour and adaptation to firm specific needs. According to the dominant literature in the field, CEOs often experience evolutionary patterns across their tenure. Hambrick and Fukutomi (1991) and Miller (1991), for instance, argued that most top managers, and especially the CEOs, experience at least two stages along their tenure cycle. When CEOs are early in their tenures, they typically show a high commitment to understand the firm routines and strategies, and to overcome the gaps in skills and critical knowledge of the firm they have at the entry stage (Hambrick and Fukutomi, 1991). Newly appointed CEOs have fairly clear ideas on the reasons why they have been appointed and how they should proceed, but still lack of expertise and critical knowledge on the concrete tasks they have to execute, regardless previous CEO appointments in other firms (Henderson et al., 2006). Moreover, although new CEOs have equal formal power than long-tenured, in the early stages of their office they likely devote efforts to institutionalize their power inside the TMT, through a process of internal legitimacy that desirably create a personal mystique or ‘patriarchal aura’ (Hambrick and Fukutomi, 1991). As the time passes, surviving CEOs are likely to acquire a deep

knowledge about their business and the firm routines (Miller and Shamsie, 2001). For these reasons, we considered CEO tenure as a proxy of his or her expert power.

Prestige power is a relevant source of personal prestige or status, and may also provide firms with an easy access to critical external resources (Daily and Johnson, 1997). Prestige power facilitates the ‘absorption of uncertainty from the institutional environment both informationally and symbolically’ (Finkelstein, 1992: 510), and encourages firm legitimacy in the marketplace. For prestige power we relied on the elite education. The choice to focus on elite education allows then to include the prestige of being part of prestigious associations (e.g. alumni of top business schools), and secure access to relevant personal networks. Elite education was measured as the number of degrees received by a CEO from universities or colleges rated as elite educational institutions in the list developed by Finkelstein (1992). The value for the measure ranged from 0 to 3, with higher values indicating greater prestige power. Moreover, to the purpose of our study, we did not consider the presence in non-profit boards and the average board rating (Finkelstein, 1992) as relevant measures.

The four indicators we considered with respect to each of the four determinants of power were then factor analysed together with the other indicators we left outside from the CEO power measure (i.e. the number of other titles, the founder or relative, the number of other boards). We also included the CEO duality in this confirmatory factor analysis. Results show that all the four indicators we selected (in relation to each of the four power dimensions we considered) loaded on the same factor, while the other indicators scattered on other two factors. We thus computed a unique measure of CEO power using median-centred standardizations of the four indicators. In this way we obtained four dummy variables, and we sum the four dummy indicators of CEO compensation, CEO ownership, CEO tenure and CEO elite education in a synthetic measure of CEO power ranging from 0 to 4. Highest values of this measure indicate highest power the CEO has. Building a composite measure

using median-centred dummy variables allows then to weight all the four components of the CEO power measure in the same way. The standardized measures of CEO compensation, ownership, tenure and elite education showed indeed different variances. Their sum would have thus implied different weights for different variables included in the measures.

Moderator variables and interaction terms

In order to test our hypotheses on interaction variables, then, we considered the following variables related to board independence and functioning. As to the board independence, we considered the *outside ratio* as the percentage of outside directors over the total number of directors (Mallette and Fowler, 1992); the *directors' shareholding* as the proportion of directors owning shares of the firm (Kosnik, 1987, 1990; Zahra et al., 2000); the *number of annual board meetings* as a proxy of board activity within a particular firm (Demb and Neubauer, 1992; Zahra and Pearce, 1989). Each of the interaction variable has been calculated as the product of the CEO power variable with each of the previous variables (respectively, CEO power*outside ratio, CEO power*directors' shareholding and CEO power*board meetings).

Control variables

As to the control variables, we considered both industry, organizational, and CEO controls. The *industry and organizational controls* included 7 industry dummies out of the 8 industry categories identified, i.e. electricity, oil&gas, food, chemical, automotive, hi-tech, media and manufacturing. The organizational control was the firm size, measured as the natural log of the firm sales in the year we considered for the analyses (2004). On the other hand, *CEO controls* included different variables. First, as CEOs become older they may diminish their abilities (Henderson, Miller and Hambrick, 2006). Thus, we controlled for CEO age, measured as the natural log of the age of CEOs. Second, we controlled for newly appointed CEOs, basing on the assumption that the performance of CEOs in the early stages

of their offices will be lower (Hambrick and Fukutomi, 1991). The variable newly appointed CEOs was coded 1 if the CEO was hired during the year considered in our analyses (2004), and 0 otherwise. We also controlled for CEO duality, which is often considered a potential indicator of CEO power (Finkelstein and D'Aveni, 1994). The variable CEO duality was coded 1 if the CEO was also the Chairman of the firm, and 0 otherwise. Finally, we included the CEO controls for the indicators of power we did not include in our measure for the reasons above. Particularly, we controlled for the number of corporate boards outside the focal firm in which the CEO served as a board member. Further, we controlled for CEO founder or relative. This measure ranges from 0 to 2 according to Finkelstein (1992). Finally, we checked for the CEO titles, that is the number of other formal titles besides that of CEO. This measure ranges from 0 to 2, depending on the number of other positions the CEO has within the firm (Finkelstein, 1992; Wiersema and Bantel, 2002).

Analyses and results

Table 1 presents the means, standard deviations, and correlations among all predictors, outcome and control variables.

Insert Table 1 about here

First of all, the correlation among the core predictors of our study and the dependent variable we selected to assess firm performance (ROI_{04-05}) is not particularly high. Among the other variables, the only significant correlation with the dependent variable emerges between the number of board meetings and the firm performance ($-.21^{**}$). This evidence is of particular importance, and will be discussed thoroughly later on in the article. As to the interaction variables, we did not include interactions in the correlation analysis give the high correlation among the interaction and the originating variables.

The hypotheses were tested through hierarchical multiple regression analyses, entered in four steps. Before running these analyses we examined potential problems in their distribution with respect to the assumptions of hierarchical regression analysis. The only logarithmic transformation suggested by a significant level of skewness relate to firm size and CEO age, which are common transformation in hierarchical regressions (Boeker, 1997). The first model considers all the control variables, and specifically both the industry and organizational controls, and the CEO controls. The second model includes controls on board characteristics. Although we do not present hypotheses on board characteristics-firm performance relationship, we still considered appropriate to appreciate the board-related effects separated from the other control variables. The model III is the fully specified model which includes CEO power, with the exception of interaction effects. The R^2 for the model is .15, while the adj R^2 is .09. The last model includes then the interaction variables. The R^2 for this model is .18, while the adj R^2 is .12. This result is in line with most of the other studies on the CEO and board-performance relationship considering accounting measures as dependent variables (Carpenter, 2002; Carpenter et al., 2001; Haleblian and Finkelstein, 1993; Hambrick and D'Aveni, 1992; Henderson and Fredrickson, 1996; Wiersema and Bantel, 1992). Moreover, the F-changes from the model II to model III (2.66***), and from the model III to the model IV (2.85***) are significant. It reinforces the significance of the variables we selected as predictors in our analyses. Results are presented in table 2.

Insert Table 2 about here

The table shows support for most of our hypotheses. Specifically, hypothesis 1 predicts a positive impact of CEO power on corporate financial performance. Model III shows a strong support for this hypothesis (.26***). The other hypotheses relate to the CEO-board relationships and are measured as interaction variables. Given the high correlation among the

interactions and the originating variables, we reduced collinearity building each of the interactions as a product of mean-centred originating variables (Jaccard and Turrisi, 2003). It reduced the VIF values were within acceptable ranges (1-3) in all the models, including the last model with the interactions. Thus, multicollinearity is not a problem in our study (Pelled et al., 1999).

The results on CEO power-board relationships are as follow. First, the interaction between CEO power and outside ratio has a positive impact on firm performance (.12*), and thus strengthens the positive effects of CEO power on corporate financial results. Unlike the previous case, though, the standalone effect of outside ratio is not significant in all the models. It indicates that outside ratio does not have any direct effect of firm performance, and rather shows only moderating effects on the CEO power-firm performance relationship. This evidence supports our hypothesis 2. On the contrary, interaction between CEO power and directors shareholding is not significant. Thus, hypothesis 3 is not supported by our results. Finally, the interaction between CEO power and board meetings shows a negative effect on firm performance (-.12*), and thus negatively moderates the positive relationship discussed above. This result is consistent also with the main effect that the number of board meetings has on firm performance (-.14*). Thus, hypothesis 4 is supported by our data. The figure 1 presents the plots of significant relationships, including the CEO power-firm performance positive relationship, and the two significant interactions.

Insert Figure 1 about here

The first interaction is about CEO power and the proportion of outside directors sitting in the boardroom. A higher presence of outside directors actually strengthens the positive relationship between powerful CEOs and corporate financial outcomes. The second interaction is about CEO power and the number of board meetings, considered as a proxy of

board activity. In this circumstance, a higher board activity negatively moderates the CEO power-firm performance relationship. In other terms, the higher the number of board meetings, the less will be the positive impact of powerful CEOs on corporate financial results.

DISCUSSION

The purpose of this study was twofold. From one side, our objective was to reconsider the CEO power-firm performance relationship at the light of recent corporate reforms following the worldwide wave of scandals. Insights from this study emphasize the principal-agent paradigm as the dominant framework to assess and discriminate managerial behaviours, rather than the classical assumptions about CEOs misbehaviours the positivist agency paradigm proposed (Eisenhardt, 1989). From the other side, our purpose was to open room for further investigation of relationships between corporate boards and corporate leaders. Despite recent emphasis on the need to allow a convergence between upper echelons and boards and governance literatures (Combs et al., 2007), research on CEO-board relationships is still scant. Hence, our results have relevant theoretical implications, and offer several novel insights which deserve further attention in future research.

The CEO power-firm performance relationship

The first main evidence relates to the positive impact CEO power has on firm financial performance. It supports that CEOs with proper knowledge, education and incentives have a potential to secure firms with positive results. This evidence is in line with previous research suggesting relationships between CEO power and firm financial outcomes (Daily and Johnson, 1997). Specifically, our study emphasizes the positive impact that powerful top executives may have in the corporations they serve as a consequence of their unity of command, authority, faster strategic response and clearer accountability towards shareholders (Cannella and Monroe, 1997). This evidence supports strategic leadership assumptions about the positive impact of powerful executives on firm level outcomes. At the same time, it

challenges the traditional interpretation of the agency paradigm, according to which top executives with consistent power and freedom to act have significant incentive to misuse their power and expropriate shareholders for their own personal interests (Gomez-Mejia, Tosi and Hinkin, 1987). Our purpose, however, is not to fall into the temptation to ‘glorify leaders’ as most of the strategic leadership literature often did (Cannella and Monroe, 1997). The post Sarbanes Oxley regulatory context, we contend, is likely to offer alternative explanations for this evidence. Specifically, increased liabilities and significant pressures from multiple external constituencies are likely refraining CEOs from opportunistic behaviours and to align top executives’ priorities to those of firms’ shareholders.

The moderating effect of boards of directors

The second main evidence is the support for the CEO-board relationships. As we argued before, corporate boardrooms represent the only venues for interactions between CEOs and outside directors. And being often the CEO the sole executive on the board, the use of a composite measure of CEO power allowed a more detailed investigation of the moderating effects of board variables on the CEO power-firm performance link. These results have several implications, and needs to be discussed thoroughly.

The first evidence is on the positive moderating effects outsiders have on the CEO power-firm performance relation. In line with our hypothesis, a large proportion of outside directors strengthens the positive impact of powerful CEOs on corporate results. There are several considerations in support of this evidence. First, the post Sarbanes-Oxley regulatory context is favouring pressures on outside directors to actively monitor CEOs. In fulfilling this task, outsiders need to acquire proper knowledge in understanding thoroughly the business they are involved in to be truly effective (Baysinger and Hoskisson, 1990). Thus, when they realize CEOs are acting for the best interest of the corporation, outsiders will be prone to shift from formal oversight to actual support, due also to their increased understanding of the company

business. In other terms, the novel context in corporate America is reversing the usual assumptions about outside directors about the lack of in-depth knowledge of firm operations, and the low amount and quality of information they possess with respect to insiders (e.g. Combs et al., 2007). Second, the requirements of increasingly independent corporate boards led often to the extreme situations in which the CEO is the sole executive on the board. A largely independent board of directors is widely considered to be a proper indicator of good governance, and boards with the CEO as the only executive are becoming dominant in the US (in our sample of large US firms it actually happens in more than 58 percent of the cases). A larger proportion of outsiders implies though a smaller or null representation of executives. Basing on arguments from power circulation theory, which portrays upper echelons as inherently political and characterized by continuous power struggles (Ocasio, 1994), the lack of inside executives within boards enhances the CEO's freedom and reduces the potential fights among top executives. In other terms, although the CEO authority is accepted and recognized, power circulation theory argues how the other executives are highly motivated to question CEOs' choices and underline each of CEOs' shortcomings since each of them might have a potential to succeed the CEO and replace the current one (Henderson and Fredrickson, 2001; Shen and Cannella, 2002). In this picture, a higher proportion of outsiders reduces the presence of inside managers, and consequently the potential for power struggles within the board. Further, the proportion of outsider does not have any direct influence on firm performance. This result is consistent with past research, which showed an inability to establish any clear contribution outsiders may provide to firm financial results (Finkelstein and Mooney, 2003). Hence, the presence of outsiders hardly has direct influence on firms' outcomes, and appears to exclusively being a moderator in the CEO power-firm performance relationship, for the reasons presented above.

A second evidence relates also to the negative effect of excessive board activity both as a direct effect on firm performance, and as an intervening variable in the CEO power-firm performance relation. Consistently with the arguments we developed in the theoretical frame, the enhanced emphasis on the oversight function of corporate boards as a result of increased liabilities of boards and directors risks to slacken the CEOs contribution to firm results. Although past literature argued that active boards have to provide CEOs with frequent evaluations and assessment of firms' financial results as a base for timely feedback and corrective actions (Zahra and Pearce, 1989), excessive monitoring may be counterproductive. Active monitoring by corporate boards biases the focus of board activity and functions towards securing short-term results (Baysinger and Hoskisson, 1990) and increasing outside firm accountability. Moreover, excessive monitoring may lower the contribution of competent and powerful CEOs as a result of enhanced formal controls which lead to a more bureaucratic approval of strategic decisions, investment proposals, and corporate plans. This result has its root in prior studies, according to which an increase in board monitoring may ultimately diminish the CEOs' cognitive attention and motivation for maximizing firm performance (Zajac and Westphal, 1994).

Finally, the hypothesis on the positive moderating effect of directors' shareholding incentives on the CEO power-firm performance was not supported. This result is somehow surprising, since directors' shareholding should ensure a supportive attitude of boards of directors in favour of powerful CEOs.

CONCLUSION

The article has three main contributions to both literatures on top management teams and boards of directors. The first is to provide further empirical evidence of the complexity that characterizes the relationships between top executives and firm's outcomes (Daily and Johnson, 1997). Along this line, the reliance on a composite measure of CEO power allowed

shedding new light on the influence it might have on corporate financial results. Moreover, our study provides fresh evidence on the opportunity to question the validity of the dominant interpretation of the agency paradigm at the light of the new corporate rules following the Sarbanes Oxley Act. In this context, we argue, assumptions from positivistic agency theory should be reconsidered, suggesting a reliance on a principal-agent theory which suitably grounds on “theory-relevant contexts” (Eisenhardt, 1989). It follows recommendations to avoid general framing of problems and remedies, and rather to apply context-specific theories of social contracting (as the principal-agent theory is) to predict and portray executives’ behaviours.

Second, it allowed to further investigate the CEO-board relationship (Combs et al., 2007), and to provide novel insights on how boards of directors may determine the relationships between top executives’ characteristics and organizational outcomes (Westphal and Fredrickson, 2001). The emphasis on such board roles as control and monitoring over CEOs determines opportunity to reconsider the CEO-board relationship at the light of the new regulations and constraints.

Third, practical implications arise from our findings, especially for policy makers. The strong emphasis on requirements from laws and codes of good governance (Aguilera and Cuervo-Cazurra, 2003) hides the risk to favour a ‘triumph of structure’ in corporate boardrooms (Leblanc and Gillies, 2005). As a consequence, it may challenge the boards’ ability to act as check and balance for managers (Mace, 1971). In other terms, prescriptions about board independence and structure should be reconsidered as regulatory frames change, and also as corporate cultures develop.

Our study presents also several limitations, which suggest interpreting results with specific cautions. A first limitation is the bias towards large US firms. This occurrence limits the generalizability of our results to other firms, and particularly to other samples in other

Countries. In this respect, future research should consider the possibility to extend these results through cross-national studies. A second limitation relates to the use of well established proxy variables to depict complex constructs, especially with respect to board characteristics. As several scholars noticed, these proxies hardly capture the full complexity of social relationships among directors and CEOs (Westphal, 1998), and thus a more extensive use of process-oriented data is encouraged (Huse, 2007; Pettigrew, 1992). Third, although we consider an average measure of financial performance over two years, our study is cross-sectional in its nature. However, longitudinal research designs may provide stronger evidences in studying the performance effects of the proposed CEO-board relationship (Shen, 2003).

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List of Tables and Figures

Table 2. Regression Analyses for ROI₀₄₋₀₅

Standardized Beta coefficients N=288	Model I	Model II	Model III	Model IV
Control variables				
<i>Industry and organizational controls</i>				
IND (electricity)	-.09	-.05	-.02	-.03
IND (oil&gas)	-.02	-.02	-.01	.01
IND (food)	-.01	-.02	-.02	-.02
IND (chemical)	-.07	-.06	-.05	-.05
IND (automotive)	-.05	-.05	-.03	-.04
IND (hi-tech)	-.10	-.08	-.08	-.10†
IND (media)	-.13*	-.09	-.12†	-.14*
Firm size (Ln Sales)	-.08	-.07	.08	-.08
<i>CEO controls</i>				
CEO age (Ln CEO age)	-.05	-.05	-.09	-.13*
Newly appointed CEO	-.08	-.07	-.07	-.07
CEO duality	-.08	-.08	-.08	-.06
CEO interlocks	-.06	-.08	-.12†	-.13*
CEO founder or relative	-.07	-.03	.02	.03
CEO titles	.07	.07	.08	.07
Board characteristics				
Outside ratio		-.03	-.03	-.04
Directors shareholding		.05	.03	.04
Board meetings		-.18**	-.15*	-.14*
CEO Power				
CEO power			.26***	.26***
Interactions				
CEO power*Outside ratio				.12*
CEO power*BM shareholding				.07
CEO power*Board meetings				-.13*
R ²	.06	.10	.15	.18
Adj R ²	.02	.04	.09	.12
F sign (change)	1.35	1.68*	2.66***	2.85***

† = .10-level, * = .05-level, ** = .01-level, *** = .001-level, N=288

Figure 1. CEO-Board Relationships and Interaction Effects

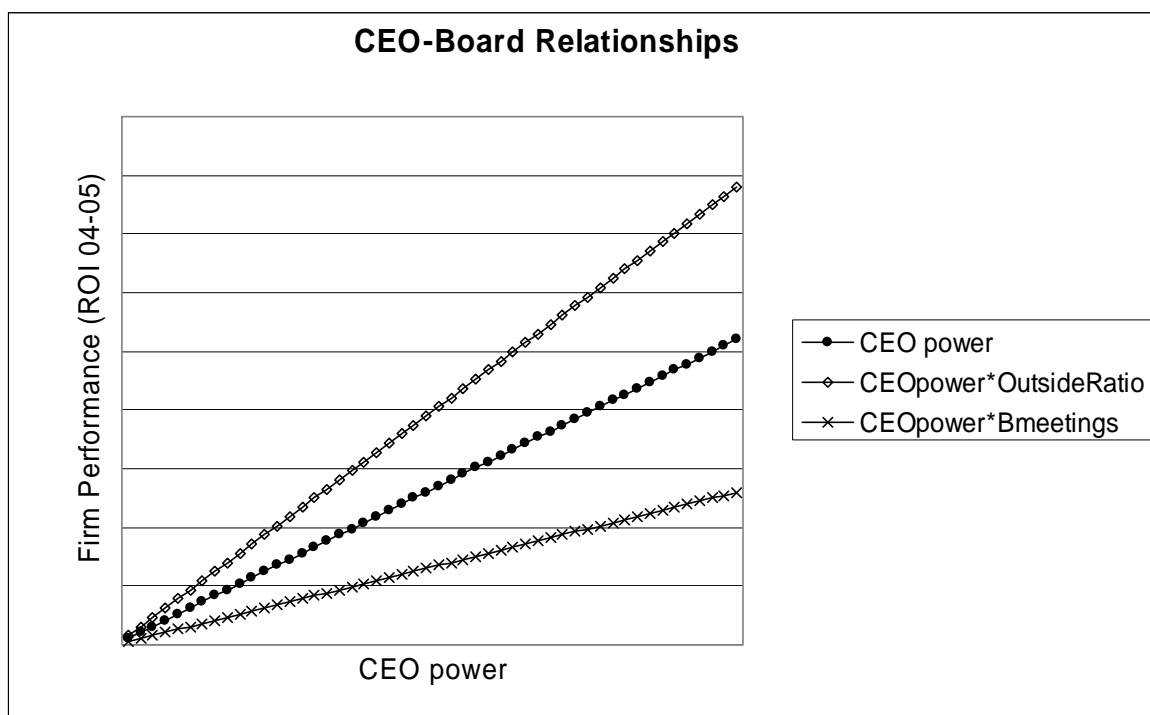


Table 1. Correlation analysis

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
1.IND (electric)	1																		
2.IND (oil&gas)	-.10	1																	
3.IND (food)	-.12	-.08	1																
4.IND (chemical)	-.12*	-.08	-.10	1															
5.IND (automotive)	-.13*	-.09	-.10	-.10	1														
6.IND (hi-tech)	-.11	-.08	-.09	-.09	-.10	1													
7.IND (media)	-.10	-.07	-.08	-.09	-.09	-.08	1												
8.Firm size	-.08	.12*	-.02	-.07	.15*	-.04	-.09	1											
9.CEO age	.04	.10	-.05	-.00	.09	-.12*	.06	.01	1										
10. Newly app. CEO	.07	-.06	-.00	-.07	-.07	-.00	.01	.04	-.19**	1									
11. CEO duality	.00	.04	.01	.08	.03	-.09	.01	.09	.33**	-.21**	1								
12. CEO interlocks	.29**	-.00	-.08	-.02	-.04	-.05	-.09	-.01	.24**	.03	.15*	1							
13. CEO founder or rel.	.10	.03	.04	.05	-.02	-.07	-.05	-.00	-.04	.06	.01	.10	1						
14. CEO titles	.12*	.15**	-.01	.07	.00	-.08	-.14*	.19**	-.04	-.08	.01	.09	.03	1					
15. Outside ratio	.00	-.01	-.04	.00	-.01	-.02	-.02	-.03	.06	-.02	.04	.00	.06	.15*	1				
16. Directors' shareh.	.08	.09	-.05	-.05	.05	-.14*	-.15*	.17**	.10	.03	.12*	.18**	.06	.11	.04	1			
17. Board meetings	.21**	-.02	-.09	-.01	-.08	.01	.17**	-.04	.01	.07	.00	.02	.15*	.01	-.01	.01	1		
18. CEO power	-.08	-.02	-.03	-.05	-.04	-.00	.12*	-.02	.23**	-.06	-.11	-.17**	-.23**	-.08	-.01	.06	-.15**	1	
20. ROI ₀₄₋₀₅	-.07	.02	.04	-.04	-.01	-.05	-.10	-.07	-.09	-.06	-.10	-.09	-.07	-.06	-.03	.03	-.21**	.22**	1
Mean	.13	.07	.08	.09	.10	.08	.07	9.1	4.0	.04	.78	2.3	2.9	1.5	.87	.90	8.0	2.0	.14
Standard Deviation	.33	.25	.28	.29	.30	.27	.25	.93	.13	.21	.42	1.5	.35	.64	.48	.16	3.6	1.1	.14

Pearson's product-moment correlation coefficients. 1-tailed: * < 0.05 ; ** < 0.01 , N=288