Firm Capability, Corporate Governance, and Firm Competitive Behavior: A Multi-Theoretic Framework

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**Abstract**

This paper identifies firm–level competitive activity, one of the key units of analysis in competitive dynamics research, as the fundamental mediation between corporate governance and firm–level financial performance. By employing the “Motivation–Capability” logic embodied in the competitive dynamics research literature, we reclassify various practices of corporate governance into motivational mechanisms (“motivation”) and resource acquisition and securing mechanisms (“capability”). Based on this reclassification, the current paper develops a multi–theoretic framework for studying the relationships among firm–level capability, corporate governance, and firm–level competitive behavior (which are characterized both by the level and variety of firm–level competitive activity). We maintain argue that the firm’s capability determines influences the potential scale and scope of its competitive activity. And, the “motivation” components of corporate governance system moderate such a relationship. In addition, the “capability” components of corporate governance supplement firm capability, thus having direct effects on firm–level competitive behavior as well.

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ABSTRACT

This paper identifies firm-level competitive activity, one of the key units of analysis in competitive dynamics research, as the fundamental mediation between corporate governance and firm-level financial performance. By employing the “Motivation-Capability” logic embodied in the competitive dynamics research literature, we reclassify various practices of corporate governance into motivational mechanisms (“motivation”) and resource acquisition and securing mechanisms (“capability”). Based on this reclassification, the current paper develops a multi-theoretic framework for studying the relationships among firm-level capability, corporate governance, and firm-level competitive behavior (which are characterized both by the level and variety of firm-level competitive activity). We maintain that the firm’s capability influences the potential scale and scope of its competitive activity. And, the “motivation” components of corporate governance system moderate such a relationship. In addition, the “capability” components of corporate governance supplement firm capability, thus having direct effects on firm-level competitive behavior as well.
INTRODUCTION

Despite agency theory’s prominent influence on contemporary corporate governance research, empirical support for the relationships that agency theory predicts between corporate governance and firm-level financial performance is quite mixed. In the current paper, we suggest that agency theory has been unable to reconcile the conflicting empirical results because the theory does not maintain a sufficient analytical focus concerning the behavioral linkages mediating the relationship between governance and economic performance. This paper takes an initial step toward filling this theoretical gap by exploring those linkages and developing an integrative theoretical framework. Particularly, we recognize that the firm has to launch competitive actions to enable it to achieve any economic gain. Thus, it is logical and necessary to first understand the effects of corporate governance on the overall patterns of firm-level competitive actions, i.e., the firm’s competitive behavior. Moreover, we acknowledge that directors of the board possess valuable human and social capital, serving as a uniquely different governance mechanism than other agency-based and goal-aligning mechanisms. Therefore, the current paper addresses a two-fold research question: Do corporate governance mechanisms in general and boards of directors in particular affect firm-level competitive behavior? If yes, in what manner do the relationships hold?

There are legitimate reasons to believe that corporate governance influences firm-level competitive behavior. First, management research literature suggests that the board of directors often plays a substantive role in firm-level strategic decision-making (Judge & Zeithaml, 1992). Second, according to the “Motivation-Capability” logic employed by competitive dynamics researchers (e.g., Chen, 1996; e.g., Chen, Smith, & Grimm, 1992; Chen, Su, & Tsai, 2005; Gimeno, 1999; Smith, Ferrier, & Ndofor, 2001), two ultimate drivers influence a firm’s
competitive behavior: a firm’s *motivation* to engage in competitive actions and its *capability* to do so. Following such logic, corporate governance mechanisms can be viewed as having various elements that are able to affect a firm’s motivation and capability to undertake competitive actions. Particularly, according to agency theory, managers — as decision-making specialists of the firm — have their own economic self-interests that may be in conflict with those of the owners (Fama & Jensen, 1983b). Therefore, the firm may undertake sub-optimal strategic actions, because of the misalignment of managers’ personal motivations with the economic interests of the shareholders (e.g., Amihud & Lev, 1981; Eisenhardt, 1989). It is reasonable to expect that effective corporate governance — in a large part serving as an agency remedy — should help the firm move towards undertaking optimal strategic actions for achieving sustainable competitive advantage. Meanwhile, among various corporate governance mechanisms, the board of directors plays a unique role. Service and advisory functions of the board (Chatterjee & Harrison, 2001; Mace, 1986) suggest that board of directors — in and of itself — can be a valuable resource to the firm. Such functions may directly affect the firm’s capacity in undertaking competitive actions.

If corporate governance mechanisms — especially the board of directors — influence how firms compete, it will be noteworthy to see how various aspects of corporate governance influence firm-level competitive behavior. Conceptually, if agency remedies such as monitoring by the board, market for corporate control, managerial ownership and compensation (Mahoney, 1992; Rediker & Seth, 1995; Zajac & Westphal, 1994) function effectively, we should anticipate optimal competitive action decisions made by capable managers given favorable strategic opportunities and firm-level resource endowments. Therefore, we may expect a moderating role played by corporate governance when connecting firm-level resources and strategic opportunities
with firm-level competitive behavior and eventually financial performance (Hutchinson & Gul, 2004). Corporate governance can usefully be viewed as a “faucet” installed to facilitate the flow of firm-level capability toward economic value-maximizing deployments by virtue of reducing inefficient managerial diversions of firm-level capability. Moreover, the board of directors may serve as an additional conduit that enhances the firm’s capability because directors themselves possess valuable social and human capital that can be deployed by the firm to engage in competitive actions.

The research question addressed in the current paper is intended to interest researchers from three sub-fields in strategic management: corporate governance, competitive dynamics, and the dynamic resource-based approach. First, according to corporate governance research literature, the relationship between corporate governance and firm-level financial performance is still inconclusive (e.g., Bhagat & Black, 2002; Daily, Dalton, & Cannella, 2003a; Dalton, Daily, Certo, & Roengpitya, 2003; Dalton, Daily, Ellstrand, & Johnson, 1998; Dalton, Johnson, & Ellstrand, 1999; Hermalin & Weisbach, 2003; Lane, Cannella, & Lubatkin, 1998). From a theoretical perspective, the expected positive relationship between effective corporate governance and firm-level financial performance was based mainly on agency theory, which focuses exclusively on the motivation element of firm-level decision-making processes and assumes away potential capability problems. However, the effects of corporate governance are multidimensional. The inconclusive empirical findings regarding the relationship between corporate governance and firm-level financial performance may partially be attributed to the lack of an integrative view that examines the effects of corporate governance mechanisms on both motivation and capability drivers of firm-level strategic behavior. Our multi-theoretic framework serves as a direct response to those who advocate a more integrative approach for the study of
corporate governance (Hillman & Dalziel, 2003; Zahra & Pearce, 1989). In particular, the current paper maintains that the “Motivation-Capability” logic, which is well grounded in the competitive dynamics research literature, can provide a systemic framework for such integration.

Moreover, no work has been done to examine the impacts of corporate governance upon competitive behavior of the firm on a full scale. In response, the current paper attempts to contribute to the research literature by proposing and analyzing firm-level competitive activity as a more effective unit of analysis for corporate governance research for the purpose of explaining and predicting behavior. Indeed, corporate governance research examining how corporate governance mechanisms influence firm-level strategies in specific areas such as R&D (e.g., Hill & Snell, 1988; Lee & O’Neill, 2003), diversification (e.g., Amihud & Lev, 1981; Lane et al., 1998) and internationalization (e.g., Carpenter, Pollock, & Leary, 2003; Sanders & Carpenter, 1998) provide largely inconclusive empirical findings as well. The current paper, therefore, proposes that a firm’s strategic actions need to be treated as systematically interrelated. Such interrelatedness can be captured by aggregate measures of competitive behavior such as total activity (e.g., Smith, Grimm, & Gannon, 1992; Smith, Grimm, Wally, & Young, 1997; Young, Smith, & Grimm, 1996) and competitive complexity (e.g., Ferrier, 2001; Ferrier & Lee, 2002) initiated by competitive dynamics researchers.

Second, the application of the “Motivation-Capability” logic to competitive dynamics research assumes no agency problems. However, potential agency problems may blur the firm’s strategic vision and thus induce suboptimal competitive actions. This paper extends competitive dynamics research by explicitly examining how divergent motives between the firm’s decision-makers and owners influence its competitive behavior and how corporate governance may
‘correct’ the firm’s undertaking of sub-optimal competitive actions, especially in areas that are likely to reflect severe conflicts of interest between management and firm owners.

Third, the dynamic resource-based view of the firm highlights the strategic importance of heterogeneous resource and capabilities in generating and sustaining competitive advantage (Barney, 1991; Dierickx & Cool, 1989; Mahoney & Pandian, 1992; Makadok & Barney, 2001; Peteraf, 1993; Wernerfelt, 1984). Recently, scholars are beginning to emphasize that a firm’s resource and capabilities define only the potential economic value that can be generated by the firm, but the extent to which the actual economic value generated by the firm matches potential economic value is affected by motivations of organization members — managers in particular — to effectively and efficiently deploy firm-level resource and capabilities including their own skills (Gottschalg & Zollo, 2004; Kim & Mahoney, 2002; Makadok, 2003).

Specifically, Makadok states that: “future research on the genesis of competitive advantage should examine agency and governance issues along with, not apart from, resource-based issues” (2003: 1043). Consistent with such a call, the current paper acknowledges the foundational role of firm-level resource and capabilities in affecting firm-level competitive behavior and views motivational mechanisms of corporate governance as moderating such a relationship. Accordingly, this paper provides a framework to “test the interaction between governance and competence” (Makadok, 2003: 1054).

Finally, the current paper should be of interest to both executives and corporate reform advocates. This paper provides preliminary insights for competitive intelligence by positing governance structures as an inseparable part of competitor analysis and for governance restructuring by suggesting governance effects on direct firm-level behavioral outcomes.
This paper is organized as follows. First, we review corporate governance research literature and competitive dynamic research literature. Particularly, this paper explores possibilities of how these two research fields can inform each other — and, indeed, are complementary and reinforcing. Second, the overall theoretical framework is provided, along with specific propositions. Finally, we conclude with discussion on some implications, limitations, and directions for future research derived from the theoretical framework developed in this paper.

LITERATURE REVIEW

Corporate Governance

Agency theory is the (overwhelmingly) dominant logic for corporate governance research thanks to its effective characterization of the nature of some key governance issues. Numerous empirical studies of corporate governance emerged employing the principal-agent logic. The foundational premise of those research studies is that effective governance needs to better align managers’ own interests with those of owners thus leading to (1) firm behaviors that are consistent with owners’ expectations and (2) superior firm-level financial performance due to reduction of agency costs (Eisenhardt, 1985; Fama, 1980; Fama & Jensen, 1983a).

At the outcome level, researchers have employed various operationalizations of firm-level performance and tested hypotheses derived from the agency-theoretic model in numerous empirical settings (for extensive reviews see Daily, Johnson, & Dalton, 1999; Hermalin & Weisbach, 2003; Johnson, Daily, & Ellstrand, 1996; Shleifer & Vishny, 1997). At a behavior level, firms’ pursuits of strategy in specific areas such as R&D (e.g., Baysinger, Kosnik, & Turk, 1991; David, Hitt, & Insead, 2001; Graves, 1988), internationalization (Carpenter et al., 2003;
Sanders & Carpenter, 1998; Tihanyi, Johnson, Hoskisson, & Hitt, 2003), and diversification (Amihud & Lev, 1999; Lane et al., 1998; Lane, Cannella, & Lubatkin, 1999) have been examined using the agency-theoretic lens.

**Corporate governance and firm-level financial performance.** An expectation held by many researchers is the positive relationship between corporate governance effectiveness and firm-level financial performance. However, decades of empirical research provide conflicting findings. Multiple review papers and meta-analyses emerged (e.g., Chatterjee & Harrison, 2001; Daily et al., 2003a; Dalton et al., 2003; Hermalin & Weisbach, 2003). These research papers all point to the inconclusive findings regarding the effects of various dimensions of corporate governance on firm-level financial performance.

Such empirical inconclusiveness has led some researchers and board reform activists to identify possible explanations or to search for alternative ways of corroborating the applicability of agency theory in explaining and predicting governance phenomena. Among complex reasons for such inconclusiveness, two emerge to be the most critical.

*First,* many researchers argue that the expected positive relationship between governance effectiveness and firm-level financial performance ignores key linkages between these two constructs. For example, Pettigrew observes that: “great inferential leaps are made from input variables, such as board composition to output variables such as board performance with no direct evidence on the processes and mechanisms which presumably link the inputs to the outputs” and researchers still need to “get much closer to the actual operation of the strategic apex of the enterprise” (1992: 171). The importance of studying the actual processes through which governance mechanisms — especially the board of directors — are involved in firm-level strategic decision making has gained increased attention (Forbes & Milliken, 1999). The
inconclusiveness concerning the firm-level financial performance effects of corporate governance may be partially resolved if we explicitly treat firm-level competitive behavior as the unit of investigation as opposed to bypassing this key linkage between corporate governance and firm-level financial performance.

Second, the single theoretic approach employed in extant research, with agency theory being dominant, offers an incomplete understanding of governance effectiveness, especially what the board does and how the board affects firm-level financial performance. Specifically, a uni-theoretical approach typically results in an overemphasis on directors’ oversight role and the exclusion of alternative roles, which fail to recognize — for example — the contradictory effects of board independence on monitoring and provision of resources (Hillman & Dalziel, 2003: 392). However, only recently have some empirical studies begun to use multi-theoretic lenses (see Carpenter et al., 2003; Jensen & Zajac, 2004). It is important to note that it is not board independence itself that leads to governance effectiveness. The main reason why board independence has become one of the more employed constructs in corporate governance research literature is because outside directors, compared with insiders whose personal interests are tied with the firm, are more likely to be motivated to serve their fiduciary functions. On the other hand, outside directors may lack the necessary information and ability in effectively monitoring managers even though these directors are supposedly strongly motivated to do so (Hoskisson, Hitt, Johnson, & Grossman, 2002). Accordingly, the proposed multi-theoretic approach needs to recognize how different components (such as motivation and capability) of the governance system influence firm-level competitive behavior. We begin with a brief review of the theoretical constructs of competitive behavior.
**Firm-Level Competitive Behavior**

We define firm-level competitive behavior as the overall patterns of purposeful, observable, and specific moves that firms deploy for competitive advantages or benefits. Such a construct is rooted in competitive dynamics research literature, which employs firm-level actions/moves as its unit of analysis. According to competitive dynamics research literature, “a series of actions (moves) and reactions (countermoves) among firms in an industry create competitive dynamics. These action/reaction dynamics reflect the normal and innovative movement of firms in pursuit of profits” (Smith et al., 2001: 315). Decisions on competitive moves are an essential part of a firm’s routines and can lead to substantial organizational changes.

Competitive dynamics research chooses firm-level competitive moves as its unit of analysis in order to identify generalizable antecedences and patterns of firm-level competitive behavior. This stream of research represents an important intellectual development toward combining the content approach of strategic management research with the process approach (Huff & Reger, 1987; Montgomery, Wernerfelt, & Balakrishnan, 1989; Rajaopalan, Rasheed, & Datta, 1993). Its analytical focus on competitive actions encourages researchers to explore both “content” factors that help firms rationalize their behaviors and “process” factors involved in firms’ decision making and action implementation.

**Competitive behavior (action) variables.** Variables employed by competitive dynamics researchers to characterize firm-level competitive actions\(^\text{1}\) or behavior exist at least at three levels:

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\(^1\) For simplicity, the term “action” used throughout the remainder of this study (unless otherwise indicated) refers to a *competitive move*, which can be either initial or reactive. The distinction between action and reaction is not relevant any further unless specifically discussed.
(1) Variables that characterize individual actions such as magnitude (Chen et al., 1992; MacMillan, McCaffery, & Van Wijk, 1985; Smith et al., 1992; Smith, Grimm, Gannon, & Chen, 1991), speed or timing (Ferrier, Smith, & Grimm, 1999; Smith et al., 1992; Smith et al., 1991), visibility (Chen & Miller, 1994), and response likelihood (Chen, 1996; Chen & Miller, 1994; Gnyawali & Madhavan, 2001).

(2) Variables that correspond to sequential moves, e.g., volume (Ferrier, 2001), duration (Ferrier, 2001; Ferrier & Lee, 2002), sequencing (Lee, Smith, Grimm, & Schomburg, 2000), complexity (Ferrier, 2001; Ferrier & Lee, 2002), and unpredictability (Ferrier, 2001; Ferrier & Lee, 2002).

(3) Variables that summarize the firm’s overall competitive behavior at an aggregate level such as total competitive activity (Ferrier et al., 1999), competitive simplicity (Miller & Chen, 1994, 1996), and competitive aggressiveness (Ferrier, Fhionnlaoich, Smith, & Grimm, 2002).

Clearly, individual actions (and their characteristics) serve as the building blocks of firm-level competitive behavior measured at sequential and aggregate levels. However, researchers recognize that an approach that focuses exclusively at the individual action level of analysis has limited managerial implications, because “the pattern of competitive moves unfolds dynamically throughout a given time period” (Ferrier & Lee, 2002: 163). In other words, in a given time period, individual competitive actions are likely to be interconnected to serve a unified strategic intent. It would be more meaningful to study firm-level competitive behavior at the aggregate level, which corresponds to the well-accepted conceptualization of strategy as patterns or consistencies in streams of behaviors (Mintzberg & Waters, 1985) and the entire repertoire of firm-level competitive moves (Miller & Chen, 1994).

The current paper focuses on the impacts of corporate governance on firm-level competitive behavior. Thus, constructs at the aggregate level that are reviewed next, are the most appropriate for current research purposes. The various competitive behavior variables at the aggregate level are placed into basically two categories — (1) the level of competitive activity
and (2) the *variety* of competitive activity. These two categories capture the scale and scope of firm-level competitive behavior respectively (Gnyawali, He, & Madhavan, 2002).

*Level of competitive activity* refers to the extent to which a firm carries out a collection of vigorous competitive actions in a given time period. Traditionally, competitive dynamics research literature has employed the construct “total competitive activity” (Ferrier *et al.*, 1999; Young *et al.*, 1996) to capture the scale of firm-level competitive behavior. This construct is typically interpreted as reflecting firm-level competitive aggressiveness and has been found as the most robust construct in the competitive dynamics research literature (Ferrier *et al.*, 2002: 303). Particularly, in hypercompetitive industry contexts aggressive competitive behavior characterized by a large number of initiated moves and competitive responses can preempt vital strategic positions and weaken rivals’ ability to respond (D’Aveni, 1994; Smith *et al.*, 1992). Ferrier and Lee (2002) find that the rival firm experiences a significant decrease in stock price when a focal firm carries out more total actions per unit time. Similarly, Ferrier’s (2001) empirical test on rival firms in 16 different industries over a seven-year time period suggests that firms that carry out a high number of actions per attack experience a gain in market share. It ought to be mentioned that the pure count of number of actions does not include information on the magnitude of each individual action. However, actions vary in their levels of resource requirement and consequentially strategic impacts (Chen *et al.*, 1992; Hambrick, Cho, & Chen, 1996). In order to truly capture the scale of firm competitive behavior, we use the term of *level of competitive activity* instead of total competitive activity.

*Variety of competitive activity* denotes the range or diversity of competitive actions (Ferrier *et al.*, 1999; Nayyar & Bantel, 1994). Sometimes, this construct is conceptualized — but

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2 At the operational level, level of competitive behavior can be measured by aggregating the magnitude of each individual action.
in the opposite direction — as competitive simplicity (Ferrier et al., 1999; Miller & Chen, 1996), which refers to the degree to which a firm carried out a concentrated repertoire of action types. This construct is related to the notion of strategic complexity, which can lead to sustainable competitive advantage (Rivkin, 2000). Empirically, Miller and Chen (1996) find that a firm’s increased concentration on the most numerous actions (i.e., lowering variety of competitive activity) is negatively related to firm-level performance measured by per unit revenue.

The “Motivation-Capability” Logic and Its Connection with Corporate Governance Research Literature

The key logic that frames competitive dynamics research is that “competitors can offer responses to a competitive move (i.e., a stimulus) only if they are aware of the move, if they are motivated to respond to the move and if they are capable of responding to the move.” (Chen et al., 1992: 442-443, emphasis in original). Accordingly, there are three elements — awareness, motivation, and capability — that provide the theoretical foundation for analyzing factors that can influence characteristics of competitive reaction at various levels. Lacking any one of these three elements will predictably result in non-response or an inefficient response to a competitive action. Because “awareness” is usually related to a firm’s informational capability, it can be regarded as a special kind of firm-level capability. Therefore, competitive dynamics researchers usually consider “motivation” and “capability” as the two drivers of firm-level competitive behavior (Gimeno, 1999). The undertaking of any competitive action would require the presence of both drivers. Similarly, Nelson and Winter (1982) also discussed explicitly these two drivers of firm behavior in their evolutionary theory of economic change.

3 In a broader sense, firm-level strategic activities are responses to various environmental stimuli. The “Awareness-Motivation-Capability” framework can thus be applied to strategic issues of various kinds.
Motivation “accounts for the incentives that drive a firm to undertake action” (Smith et al., 2001: 320). Competitive dynamics research assumes that optimal competitive actions need to be motivated by their net benefits to the firm. Such a view is consistent with the basic premise of contemporary microeconomics. As Smith et al. summarize: “motivation relates to perceived gains and losses, which stem from its belief of whether it stands to gain advantages from actions or stands to lose if no action is carried out” (2001: 320). In general, microeconomics and strategy content research focus on rationalizing motivations behind firm- and individual-level behaviors.

Capability can be interpreted as focusing on strategy perception and implementation, which is consistent with the conventional view of the role of firm-level resources and capabilities in strategic management (Barney, 1986; Barney & Arikan, 2001). If the resources or capabilities required for perceiving and implementing a strategic action are not readily accessible by the firm, then the firm may delay or even abandon its implementation of the planned action. Such logic corresponds to the resource-based review of the firm (Barney, 1991; Peteraf, 1993) and dynamic capability theory (Makadok, 2001; Teece, Pisano, & Shuen, 1997).

The linkages between strategic management theories and the “Motivation-Capability” logic suggest that the latter can be employed to analyze systematically various strategic phenomena — such as corporate governance in the current paper — and to reconcile some conflicting views. Indeed, motivation, capability and the interconnections between these two drivers of firm behavior provide corporate governance research with a systematic framework that can facilitate the integration of multiple theories (e.g., Chatterjee & Harrison, 2001; Daily et al., 2003a; Hillman & Dalziel, 2003).

Current corporate governance research such as agency theory and social capital theory target two different but simultaneously co-existing mechanisms that influence behavioral and
(consequently) financial firm-level outcomes: (1) the motivation of the executives to serve shareholders’ interests through effectively undertaking competitive actions, and (2) the organizational capability to undertake competitive actions that is possibly enhanced by corporate governance arrangements. Particularly, the current paper emphasizes that the board of directors can influence de facto both *motivation* and *capability* of the firm, while non-board components of the corporate governance system such as executive compensation and institutional ownership are mainly motivation-aligning instruments. We discuss this fundamental difference between board and non-board governance mechanisms below.

**The multiple functions of the board of directors.** Mace (1986) documents that boards play at least three major roles: (1) serving as sort of discipline, (2) providing advice and counsel; and (3) taking action in crisis situations. The disciplinary role is largely consistent with the monitoring function suggested by agency theory. With regard to the advice and counsel provision role, the following examples provide some useful insights:

Several years ago the president of a large insurance company came on our board and began looking over our financial operations. After one of his early board meetings he stopped by my office and observed that our stock was rather low in price, that we had some convertibles that were going to mature, that maybe a good thing to do would be to buy out some of our own stock. We followed his suggestion and saved, I think, over $7 million. If he never does one more thing for this company, he deserves directors’ fees for the rest of his life. Clearly he was of enormous help to me, and to our financial people, and the company … [Also], one of my outside directors is a real pro on acquisitions, and he has been most helpful to me. He does not know much about our operations or our problems, but he does know a lot about the process of identifying and acquiring other companies. Also he knows the people involved, and this is useful. There is a lot of stuff on acquisitions that is common in all acquisitions. He has been through a bundle of them and has helped me through some rough spots — in negotiating, for example (Mace, 1986: 18 and 22).

The above examples illustrate the processes through which directors (1) improve the firm’s *awareness* of new strategic opportunities and (2) enhance the firm’s *capabilities* in
implementing strategies. Such non-motivational and cooperative roles of the board are conceptualized more formally in the social capital research literature (Granovetter, 1985).

_Social capital theory_ considers the significance of firm-level relationships (including interlocking directorates) with other entities as a resource for social action (Nahapiet & Ghoshal, 1998). Many scholars hold that social capital is largely informational (Koka & Prescott, 2002) or opportunity oriented (Burt, 1992). This social capital facilitates firm-level actions by increasing its awareness of competitive opportunities in various forms. In addition, dynamic relations between social capital and firm-level resource accumulation may signal — at least partially — the overall feature of a firm’s resource status as well as its pattern of resource flow (Gnyawali & Madhavan, 2001). Specifically, directors (as well as interlocking directorates) serve as uniquely important conduits of information flow due to their high social status and closeness to the core of firm-level decision-making bodies.

To summarize, the roles of the board cannot be fully understood without a logical combination of these three research perspectives: (1) social capital theory (for the firm’s awareness and capabilities enhanced by its board members); (2) agency theory (for the firm and its managers’ motivations); and (3) resource-based theory (for the firm’s capabilities available for deployment by its managers). Extant classification schemes of board role/function strongly correspond to such a view (See Table 1). However, a research challenge with this multi-theoretic approach emerges. That is, _how can the theories be logically integrated so as to systemically inform meaningful academic research, managerial practice, and policymaking?_ Discussion on this issue follows next.

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**Insert Table 1 about here**

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Corporate governance mechanisms reclassified based on a “Motivation-Capability” view. As indicated in the call for multi-theoretic approaches (Hillman & Dalziel, 2003), corporate governance should not be viewed merely as an agency remedy for at least two important reasons: (1) the interactive effects between economic incentive systems and firm-level capability and (2) the direct information and resource flows from governance structure. Particularly, among various governance mechanisms, the board of directors — in and of itself — constitutes an information-exchanging mechanism and a unique resource pool for the firm.

What is unique about the board of directors is that it simultaneously functions as (1) a motivational mechanism by virtue of outsiders’ monitoring of managerial behavior, (2) a resource (including information) acquisition or securing mechanism through social capital generated by directors themselves and their social contacts, directorship by key suppliers (of raw material, capital, technology as well as legitimacy), and directors’ immediate involvement in a firm’s strategy perception and implementation. Accordingly, it is necessary to reclassify the various governance mechanisms to reflect each mechanism’s actual role in affecting a firm’s motivation and capability to undertake competitive actions. The “Motivation-Capability” logic provides the systematic connection between these mechanisms.

Scanning the various governance mechanisms, we observe that, except for the board of directors, all other mechanisms such as institutional ownership, market for corporate control, and executive compensation are aimed to help better align managers’ personal interests with those of firm owners. Rediker and Seth (1995) provides a synthetic research approach to studying the ‘bundle’ of governance mechanisms. Each mechanism can be further classified into one of the
three categories, i.e., *inducement, direct external enforcement*, and *external pressure for self-enforcement* (See Table 2).

The principal-agent approach focuses solely on the functioning of corporate governance on the motivational effects of those mechanisms aligning managers’ interests with those of the owners. While theoretically and practically appealing, such an approach has its inadequacy in addressing information and capability related effects of corporate governance. For example, outside directors may have strong motives to monitor managers’ decision making but these directors may provide little constructive advice to managers as to what actions fit the competitive environment best due to their unfamiliarity with the industry. Indeed, the influence of corporate governance goes beyond the motivational issues of interest alignment. Implications of corporate governance also enhance a firm’s capabilities in various aspects (Chatterjee & Harrison, 2001). The current paper reconstructs the theory behind each governance mechanism using the “Motivation-Capability” logic embodied in competitive dynamics research (Chen, 1996; Chen et al., 1992; Gimeno, 1999), and examines how each mechanism influences firms’ motivation and capability to undertake competitive actions differently.

**THEORETICAL MODEL**

**The Interrelationship between “Motivation” and “Capability”**

Prior to developing specific propositions, it is necessary to discuss first how motivation and capability are connected with each other. The mechanisms through which corporate governance influences firm-level competitive behavior depends not only on how each governance variable *individually* contributes to a firm’s motivation and capability but also on the internal *linkages* that connect motivation and capability factors. Such interrelationships further
explain the necessity of viewing corporate governance mechanisms as belonging to an integral system (Aguilera & Jackson, 2003; Rediker & Seth, 1995). Furthermore, a coherent understanding of the interrelationships between motivation and capability is important for the systematic integration of social capital, agency, and dynamic resource-based theories.

The firm, as a domain of incentives (Barnard, 1938; Teece et al., 1997), can purposefully develop motivational programs to enhance its capability. On the other hand, the firm’s strategic motives can also be constrained by its existing resources and capabilities. Put differently, firm-level motivations cannot be formulated independent of its capabilities. Hence, when studying firm-level strategy (a sequence of competitive actions) or firm-level competitive behavior (an aggregation of competitive actions), we perceive complex interactions between motivation and capability drivers as well as blurred temporal orders. Furthermore, aggregating individual actions to study patterns of firm-level strategy or competitive behavior requires aggregation of motivation and capability at the overall firm level. Therefore, firm-level motivation is defined as the firm’s overall strategic intent to increase economic profitability, and firm-level capability is defined as the pool of resources and competencies facilitating the firm’s strategy formulations and implementations. In general, we can regard the two drivers as functioning simultaneously.

Motivation or capability alone cannot result in competitive actions. In other words, the firm can be exposed to numerous strategic opportunities but undertakes no action if it is not motivated or is constrained by its capability. The direct relation between firm-level capability and firm-level competitive actions is thus moderated by firm-level motivation. Accordingly, we treat “capability” as the independent construct that affects firm-level competitive behavior, and we consider “motivation” as moderating such a relationship (cf. Gottschalg & Zollo, 2004; cf. Hillman & Dalziel, 2003).
Still, there exists another complication that needs to be carefully clarified. That is, most board related variables — such as size of the board, board independence, and CEO duality — have both “capability” and “motivation” effects. Oftentimes, effects of the two types do not (theoretically) function in a mutually enforcing manner. For example, an “oversized” board would be regarded by agency theory as an inefficient governance mechanism because of potential free-riding problems and may result in inadequate or even failed monitoring of managerial behavior (Jensen, 1993a). Yet, on the other hand, according to social capital theory, social contacts and resource securing benefits offered by a large board can enhance the firm’s resources and capabilities.

Thus, a distinction between firm capability and board capability is necessary. Correspondingly, there should be another distinction between firm-level motivation and board-level motivation. Firm capability refers to the resources and competencies that a firm can access — (theoretically) independent of contributions from the board of directors. Examples are firm-level tangible and intangible resources and managers’ skills. And, the link between firm-level capability and competitive behavior is moderated by the motivational mechanisms of corporate governance (i.e., mechanisms that can affect the fulfillment of firm motivation) including board monitoring, managerial compensation, and institutional ownership. Board capability includes access to useful information and resources that are based on directors’ own social and human capital. In combination, the board of directors provides its own “board capability” to the firm and simultaneously affects how well managers base their decisions on “firm motivation” (e.g., economic profitability) rather than their own self-interests. The board’s performance of the dual role will be affected by board motivation, which includes economic incentive programs provided
to the directors and their interpersonal relations with the managers (Hillman & Dalziel, 2003; Westphal, 1999).

The theoretical model of the current paper is depicted below (Figure 1). The key logics embodied in the overall research model are:

1. **The resource-based view logic**: Absent agency problems, firm capability provides the foundational forces that define the potential scale and scope of firm-level competitive behavior;

2. **The agency logic**: The motivational components of corporate governance (e.g., board monitoring, executive compensation, and institutional ownership) will affect actual competitive behavior of the firm by virtue of moderating the relation between firm capability and its competitive behavior; and

3. **The social capital logic**: The board of directors, being a unique mechanism of corporate governance, can supplement the firm with “board capability” based on directors’ own social and human capital, thus having direct impacts on firm-level competitive behavior.

Explanations for and articulations of the specific propositions are as follows.

**Propositions**

**Firm capability.** The term “firm capability” broadly used in the current paper is in line with the resource-based approach, which include factors that can contribute to the firm’s awareness of strategic opportunities/threats and its ability in implementing strategies (cf. Barney & Arikan, 2001). In a simple form, firm capability can be viewed as a production set that contains the possibilities of transforming commodities (Nelson & Winter, 1982: 60). A firm’s

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4 To maintain the focus of this current paper, we do not extend our discussion to the specific factors that can affect “board motivation.” However, we firmly believe that future work towards a thorough understanding of how effectively the board of directors supplements the firm’s capability with its social and human capital needs to explicitly consider the directors’ motivations.
capability determines the potential scale and scope of firm-level competitive behavior as availability of firm capability can either facilitate or constrain firm-level activity (Kim & Mahoney, 2002; Mahoney & Pandian, 1992; Penrose, 1959).

As mentioned early on, the “faucet” metaphor explains our basic understanding of the primary role of corporate governance in controlling the deployment of firm capability. In a world where the managers have no agency problems or cognitive limitations, we expect the “faucet” be wide open to facilitate flow of firm capability towards efficient deployments that are observed from firm-level competitive actions, i.e., actions that help the firm achieve a more advantageous position in the competitive landscape. We maintain that in competitive contexts a firm that can apply its overall capability to launch a greater level and variety of competitive actions — on the average — achieves a better position. Our speculation is in line with two research literatures.

First, Penrose proposes that “the growing experience of management, its knowledge of the other resources of the firm and of the potential for using them in different ways, create incentives for further expansion as the firm searches for ways of using the services of its own resources more profitably” (1995: xiii). In other words, resources and capabilities accumulated and developed by the firm serve as a natural driving force for the firm to engage in various exploitation and exploration activities (March, 1991). Lack of activities may simply indicate inefficient use of firm resources and capabilities. Thus, we expect managers — in the absence of agency problems such as managerial self-dealing or shirking — to utilize fully the firm’s resources and capabilities to engage in economically profitable competitive activities.

Second, competitive dynamics research literature has long recognized the influence of firm-level capability on firm-level competitive behavior (see Smith et al., 2001). For instance, researchers find that unabsorbed slack resources, representing liquid resources that may be
deployed wherever needed, facilitate total competitive activity (Young et al., 1996), enable fast responses to rivals’ competitive attacks (Hambrick et al., 1996), and help sustain a competitive attack with longer duration that also consists of a more complex sequence of competitive moves (Ferrier, 2001).

Furthermore, establishing the relation between firm-level capability and its competitive behavior serves at least two foundational purposes. First, examination of the motivational (moderating) roles of corporate governance mechanisms will not be enabled without the establishment of a baseline relation between firm-level capability and firm-level competitive behavior. Second, when testing the direct association between board-level capability and firm-level competitive behavior, firm-level capability serves as an important control variable in the model. Paralleling the dynamic resource-based view and the research tradition of competitive dynamics literature, the following propositions are generated:

Proposition 1a: A firm’s overall capability will be positively related to its level of competitive activity.

Proposition 1b: A firm’s overall capability will be positively related to its variety of competitive activity.

Given the above resource-based, foundational propositions\(^5\), we develop propositions reflecting the impacts of corporate governance on firm-level competitive behavior. To illustrate how corporate governance research can be conducted employing the integrative “Motivation-Capability” logic, we choose those “conventional” constructs that have been theoretically

\(^5\) At a finer level, firm-level capability can be dimensionalized into the scale and scope aspects, which are expected to determine the potential scale and scope of firm-level competitive behavior respectively. For simplicity, we do not make such a distinction in this current paper.
controversial and empirically inconclusive. Such corporate governance constructs include board size, outsiders’ representation, CEO duality, managerial ownership, and institutional ownership.

**Board size.** Among various controversial areas of corporate governance research, the size of the board of directors, i.e., number of directors, has been under critical scrutiny. Quite frequently, board reform advocates have called for reduced board size to improve board effectiveness (see Kesner & Johnson, 1990). Hermalin and Weisbach (2003) maintain an agency logic to explain the empirical finding that board size and firm-level economic value are negatively correlated. This logic, however, raises some puzzling questions: why, if large boards are destructive to firm-level economic value, do we see large boards?” and “why does the market permit large boards to exist? (Hermalin & Weisbach, 2003: 7).

Interestingly, scholars in the field of strategic management offer an opposing conclusion. Based on a meta-analysis of 131 samples, Dalton, Johnson, and Ellstrand (1999) record systematic evidence of nonzero, positive, true population estimates of board size-performance relationships. Such contradictory conclusions suggest a need to disentangle competing forces embodied in board size. The current paper posits that agency-based effects of board size are related to *firm-level motivation*, while social capital theory provides justification for the existence of *board-level capability*, which can enhance a firm’s existing capability (Bazerman & Schoorman, 1983; Goodstein, Guatam and Boeker, 1994). Accordingly, board size can simultaneously have both direct and indirect (moderating) effects on firm-level competitive behavior. In terms of direct effects, we expect that the board provide direct assets that can enrich those already possessed by the firm. Increased number of directors is likely to improve both the volume and diversity of board capability. Unlike performing a common task that requires consensus and coordination, advice and resource provision by each director is essentially
conducted at individual level. Adding one member to the board means direct annexation of an additional channel for potentially useful information and resources (cf. Halebian & Finkelstein, 1993). Consequentially, increasing board size directly enhances the firm’s capability to undertake competitive actions. Specifically:

**Proposition 2a:** There will be a direct and positive relation between the size of a firm’s board of directors and its level of competitive activity.

**Proposition 2b:** There will be a direct and positive relation between the size of a firm’s board of directors and its variety of competitive activity.

As to effective monitoring of managerial decision-making by the board, it usually requires timely and cohesive efforts by the directors. Communication and coordination problems commonly associated with large groups (Halebian & Finkelstein, 1993) may complicate and delay the process for the board to collectively approve or disapprove certain decisions made by managers in regard to what firm-level actions to take. Also, when the board becomes too big, problems such as director free-riding increase (Jensen, 1993b; Lipton & Lorsch, 1992). In all, the board may not perform the monitoring role effectively but “become more symbolic and less a part of the management process” (Hermalin & Weisbach, 2003: 7). In such cases, the CEO has strong *de facto* control over the board and may behave opportunistically by shirking. As active engagement in competitive activity requires substantial investment and may post a negative sign on CEO capability measured by short-term performance, the CEO may thus have an economic incentive to reduce investment in competitive activities. Such reduction in competitive activities signifies inadequate utilization of firm capability. Hence,

**Proposition 2c:** Large board size will weaken the positive relationship between a firm’s capability and level of competitive activity.
Similarly, long-term benefits to the firm resulting from investment in competitive variety or strategic complexity (Rivkin, 2000) may automatically impair managers’ short-term benefits. Especially, proposals for engaging in exploration activities, which can help fully utilize “unused” capability of the firm (Penrose, 1959), may be turned down. Thus, by compromising effective monitoring of managerial decision making, large board size is hypothesized to have the following moderating effect:

Proposition 2d: Large board size will weaken the positive relationship between a firm’s capability and variety of competitive activity.

Outsiders (vis-à-vis insiders). A board that has a majority of outsiders provides viable links with different sectors of the external environment (Pfeffer & Salancik, 1978; Zahra & Pearce, 1989). Outsiders can be crucial in securing essential resources for the firm. Moreover, an increased number of outsiders are likely to bring in more heterogeneous perspectives and skills.

Empirically, however, researchers have not been able to observe any systematic and significant effect of outsiders’ representation on firm-level financial performance (Dalton et al., 1998). Therefore, we need to investigate this issue first from the capability related perspectives at an even finer level, anticipating that there likely exist limits regarding the types of resources that outside directors can provide (Aguilera, 2005). In other words, it is necessary to identify the boundary conditions for each theory — social capital theory in this case. Along these lines, Harris and Shimizu argue that outsiders are not superior to insiders and that they “serve different but complementary roles on the board” (2004: 778). Outsiders can bring in different information to the management and offer new insights (Mace, 1986). However, outside directors may not
have specific knowledge of the focal industry and the focal firm and their ability in providing service and advice to the firm is thus limited (Hillman & Dalziel, 2003) even though these outside directors might be strongly motivated to do so. But, on the other hand, outsiders are more likely to help the firm realize new, explorative opportunities and directly supply some resources that are needed for commercializing such opportunities.

In contrast, insiders provide the firm with a different set of assets. Their knowledge of daily operations of the firm (Baysinger & Hoskisson, 1990) and their ability in integrating intra-firm functions (Hill & Snell, 1988) help them make more concrete contributions to technical or operational aspects of firm activity. The knowledge and skills possessed by insiders may be more likely to help the firm better exploit its existing capability than engage in explorative activities. In sum, dominance by either outsiders or insiders has some negative implications for the firm’s pursuit of competitive activity. An optimal board composition — purely from the capability point of view — may require a viable combination of both insiders and outsiders:

**Proposition 3a:** There will be an inverse U-shaped relationship between proportion of outsiders and the level of a firm’s competitive activity.

**Proposition 3b:** There will be an inverse U-shaped relationship between proportion of outsiders and the variety of a firm’s competitive activity.

However, for the motivational point of view, the most vocal suggestion derived from agency theory is a board dominated by outsiders (Lorsch & MacIver, 1989; Zahra & Pearce, 1989). With no conflict of interest in evaluating managers’ performance, outside directors can maintain their independence, ensure adequate supervision of managerial decisions, and increase board objectivity (Dalton et al., 1998; Johnson et al., 1996). Among various classification schemes of board roles (see Table 1), all these research studies focus on the control or
monitoring role of the board (Chatterjee & Harrison, 2001; Dalton et al., 1998; Hillman & Dalziel, 2003; Johnson et al., 1996), which is likely to be effectively performed only by outside directors. Given the motivational function of monitoring vis-à-vis capability related functions, we anticipate that outside directors can ensure the firm to be sufficiently assertive when it comes to inter-firm competition and that outside directors can use their power of ratification and monitoring (Fama & Jensen, 1983b) to reduce managers’ under-investment in key strategic areas that have long-term influences on firm-level competitive advantage, e.g., R&D (Makadok, 2003). Therefore:

**Proposition 3c:** Increased proportion of outsiders will strengthen the positive relation between a firm’s capability and **level** of competitive activity.

**Proposition 3d:** Increased proportion of outsiders will strengthen the positive relation between a firm’s capability and **variety** of competitive activity.

**CEO duality.** Again, this is another area of controversy, as researchers have suggested CEO duality (i.e., CEO also holding the position of chairperson of the board) as “a double-edged sword” (Finkelstein & D'Aveni, 1994). Expectations about the positive effects of CEO duality emerge from the capability side (Finkelstein & D'Aveni, 1994; Harris & Helfat, 1998), as the most frequently cited reason for CEO duality is the so-called “unit of command” (Finkelstein & D'Aveni, 1994). Strong leadership represented by duality can issue commands or orders to lower levels so that critical strategic decisions can be implemented as directed (Andrews, 1987; Finkelstein & D'Aveni, 1994). Also, having one person holding the two positions can avoid internal political struggles between CEO and the board, further enhancing the firm’s capability in implementing strategies (Baliga, Moyer, & Rao, 1996). Such a view is also consistent with the
general belief of stewardship theory (Davis, Schoorman, & Donaldson, 1997). As Boyd states: “duality would increase chief executive discretion by providing a broader power base and locus of control, and by weakening the relative power of other interest groups” (1995: 304). Absent agency problems, such increased executive discretion can be interpreted as an addition to the firm’s capability by making it easier to carry out necessary competitive actions. Accordingly:

**Proposition 4a:** There will be a direct and positive relationship between CEO duality and the level of a firm’s competitive activity.

**Proposition 4b:** There will be a direct and negative relationship between CEO duality and the variety of a firm’s competitive activity.

As commonly suggested by scholars and board reform advocates, when the CEO and chairperson positions are held by the same individual, the monitoring function of the board is in potential jeopardy (Beatty & Zajac, 1994; Sundaramurthy, Mahoney, & Mahoney, 1997; Zajac & Westphal, 1996). Allocating both roles to the same person not only presents a conflict of interest but also opens up opportunities for management entrenchment because of the removal of some checks-and-balances mechanisms (Finkelstein & D'Aveni, 1994). Therefore, many scholars agree that the separation of CEO and chair of the board can help align the interests of managers and shareholders better and possibly prevent firm-level resources from being diverted away from necessary strategic investments or toward inefficient applications, and consequentially improving firm-level performance (Baysinger & Hoskisson, 1990; Kosnik, 1987; Seth, 2004). In other words, CEO duality eliminates an important mechanism of external enforcement and can weaken the monitoring function of the board in regard to strategic investments in competitive actions. Empirical results, in general, support such agency-based view (Daily & Dalton, 1994;
Sundaramurthy et al., 1997). Thus, consistent with previous propositions predicting moderating effects of agency-based, motivational mechanisms, the following propositions about the moderating effects of CEO duality are put forth:

**Proposition 4c:** CEO duality will weaken the positive relationship between a firm’s capability and its level of competitive activity.

**Proposition 4d:** CEO duality will weaken the positive relationship between a firm’s capability and its variety of competitive activity.

**Managerial ownership.** The overall research logic employed throughout the current paper suggests *no direct* effects of motivational mechanisms of corporate governance on firm-level competitive behavior. Instead, they moderate the baseline relationships between firm-level capability and various aspects of firm-level competitive behavior. Predictions about the directions of moderating effects are grounded in agency theory.

Table 2 summarizes the various motivational mechanisms that can be deployed by a firm to align its managers’ interests with those of the owners (also see Mahoney, 1992; Rediker & Seth, 1995). Being an “inducement” mechanism, managerial ownership has been argued as probably the most effective goal-aligning technique (Morck, Shleifer, & Vishny, 1990), numerous empirical studies have included managerial ownership as a key construct (for recent reviews see Daily et al., 2003a; Daily, Dalton, & Rajagopalan, 2003b; Dalton et al., 2003). The key logic is the conventional agency wisdom, which suggests that high managerial equity holdings should economically bond managerial actions to shareholder interests (Jensen & Murphy, 1990) as problems created by separation of ownership and control are mitigated by such an arrangement (Fama & Jensen, 1983b). Ownership empowerment can motivate managers to
compete with rivals and invest in strategic areas that have long-term benefits to the firm. In other words, under such an arrangement, the motivational obstacles hindering full utilization of firm capability are more likely to be removed. Managers are expected to have less economic incentive to divert the firm’s resources for non-productive activities such as over-diversification and managerial perquisites. Particularly, many researchers suggest the increased managerial incentives to engage the firm in more R&D activities (Hansen & Hill, 1991; Johnson & Greening, 1999). Thus, the following are proposed:

**Proposition 5a:** Managerial ownership will strengthen the positive relationship between a firm’s capability and level of competitive activity.

**Proposition 5b:** Managerial ownership will strengthen the positive relationship between a firm’s capability and variety of competitive activity.

**Institutional ownership.** One of the more dramatic changes in corporate governance practices is the active involvement of institutional investors (Charan, 1998; Daily et al., 2003b). Shleifer and Vishny (1997) suggest institutional ownership to be an essential component of governance effectiveness. The general implication of institutional ownership is that institutional investors holding large amounts of firm equity are not able to easily divest because in so doing it could substantially affect share price (Johnson & Greening, 1999; Pound, 1992). Thus, institutional investors have strong incentives to monitor a firm’s activity to make sure that decisions are made in ways that enhance the economic value of their investment. Empirical research on the relation between institutional ownership and firm R&D strategy corresponds to such a rationale (David et al., 2001; Lee & O'Neill, 2003). As an external force of enforcement, institutional investors’ monitoring is supposed to function in a similar manner as board
monitoring and may be more effective. Put differently, we expect institutional owners to ensure full and efficient utilization of firm capability in engaging in competitive activities. Thus,

\textit{Proposition 6a: Institutional ownership will strengthen the positive relationship between a firm’s capability and level of competitive activity.}

\textit{Proposition 6b: Institutional ownership will strengthen the positive relationship between a firm’s capability and variety of competitive activity.}

Table 3 summarizes the predicted relationships specified in all the propositions.

\begin{center}
Insert Table 3 about here
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CONCLUSIONS AND DISCUSSION

The current paper identifies two of the more important reasons for the mixed empirical results regarding the relationship between corporate governance and firm-level financial performance. \textit{First}, linking corporate governance directly with firm-level financial performance tends to miss some important processes that mediate between the two sides. Such processes may include the firm’s decision-making process and firm-level competitive activities. \textit{Second}, extant research literature recognizes the limitations of agency theory in addressing different corporate governance issues but has yet to develop an integrative approach that can effectively synthesize the various theoretical perspectives (Daily \textit{et al.}, 2003a; Hillman & Dalziel, 2003).

To address the first concern, we maintain that the effects of corporate governance need to be studied primarily at the level of firm competitive behavior (i.e., ‘what the firm does’) as
opposed to the firm’s financial performance (i.e., ‘how well the firm does’). Firm-level financial performance is then determined by firm competitive actions, market conditions, and the interactions between the two. Corporate governance can only demonstrate its effects on firm-level financial performance by virtue of influencing firm-level competitive behavior, which has traditionally been one of the key units of analysis in competitive dynamics research literature.

Competitive dynamics literature highlights the simultaneous presence of two drivers of competitive behavior — “motivation” and “capability.” And, no single driver is sufficient to predict the undertaking of competitive actions (Chen, 1996; Chen et al., 1992; Gimeno, 1999). It has thus been the tradition of competitive dynamics research to integrate multiple theories to explore the antecedences of firm-level competitive behavior as each economic or behavioral theory of strategic management usually addresses either the motivation (e.g., agency theory) or the capability (e.g., resource-based theory) of firm behavior. Capability, as maintained in resource-based theory, influences the potential scale and scope of firm-level competitive activity (Kim & Mahoney, 2002; Penrose, 1959). Motivation will then moderate such a relationship as economic and/or social considerations provide the rationales with respect to how available resources/capabilities are utilized. This logic has been the key driver that helps frame our theoretical model.

Indeed, “motivation” and “capability” are two different but closely related mechanisms through which corporate governance can affect firm-level competitive behavior (and eventually financial performance). A multi-theoretic approach to corporate governance research needs to recognize how different governance mechanisms relate to the firm’s motivation or capability (or both) to engage in competitive activities. Specifically, the board of directors can affect both the motivation and the capability behind firm-level competitive behavior. By monitoring managerial
decision making, the board exists as an “enforcement” mechanism making sure firm actions are undertaken to utilize firm capability in effective and efficient ways, thus serving shareholders’ interests when managers’ own interests are not perfectly aligned with those of shareholders. Meanwhile, directors can supplement the firm with their own human and social capitals, which enhance the firm’s ability to undertake competitive actions.

The reclassification of the various corporate governance practices based on the “Motivation-Capability” view (see Table 2) makes possible a systematic approach to studying the effects of corporate governance on firm-level competitive behavior. This reclassification also helps integrate some previously disconnected theoretical perspectives, i.e., resource-based, agency, and social capital theories.

The current paper also contributes to dynamic resource-based and competitive dynamics research literatures. By integrating corporate governance and competitive dynamics, the two research streams that have so far been largely disconnected, the current paper advances our knowledge of the antecedences of firm-level competitiveness, since competitive dynamics research has not discussed agency problems explicitly. In addition, this paper analyzes interactions between firm-level resources and firm-level motivational factors.

Practically, this research paper should be of interest to both executives and corporate reform advocates. Findings based on the theoretical framework proposed herein can provide preliminary insights for competitive intelligence by suggesting governance structures as an inseparable part of competitor analysis and for governance restructuring by evidencing governance effects on direct firm-level behavioral outcomes.

This paper is one of the first attempts towards disentangling the effects of corporate governance mechanisms on firm motivation and capability respectively (cf. Gottschalg & Zollo,
2004; cf. Hillman & Dalziel, 2003; Makadok, 2003). Nonetheless, it needs to be acknowledged
that leveraging the “Motivation-Capability” logic requires finer constructs and measures that can
directly capture the governance effects on firm-level motivation and firm-level capability (e.g.,
Hillman, Cannella, & Paetzold, 2000; Kosnik, 1990). Empirical testing of the theoretical model
developed in the current paper requires careful research design that can reflect concerns of the
multiple theories involved and the research traditions of competitive dynamics, corporate
governance, and the dynamic resource-based approach. Particularly, it would be quite useful if
the context for empirical tests were industries that are characterized as competitive, dynamic, and
knowledge-intensive.

Studying firm-level competitive activity requires a way of developing a large set of
longitudinal data of actual competitive actions undertaken by each firm in the sample, since
individual competitive action events are the building blocks for analyze the patterns of firm-level
competitive behavior. To identify individual action events, researchers will usually need to
employ structured content analysis, which is based on a formal coding analysis that is applied to
secondary data, such as corporate archives, newspapers, magazines and other published materials
(Chen et al., 1992; Smith et al., 2001; Smith et al., 1991). The contents of events are then
extracted according to predefined codes. Such a method has been widely practiced and well
documented by competitive dynamics researchers (see Smith et al., 2001 for a comprehensive
review). After the longitudinal data of actual firm actions are generated, a researcher can re-
classify and characterize the action events based on the conceptual framework that serves his/her
research purpose (Van De Ven, 1992). As presented in our overall framework, we consider only
competitive actions as reflecting efficient deployment of firm resources and capabilities. In order
to empirically identify those competitive (vis-à-vis non-competitive) actions, we believe that
event study method can be applied by measuring the direction and magnitude of stock market reaction to the announcement of each action event (McWilliams & Siegel, 1997).

To measure our baseline construct, i.e. firm capability, we believe that a researcher can follow the recent development in the resource based research literature, which has effectively employed patent, human resource, and market-based data. To control for effects that may be caused by other factors, control variables that have been identified in competitive dynamics research literature as having significant effects on firm-level competitive behavior need to be incorporated in the empirical model6.

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6 Smith et al. (2001) provides a recent review that should prove quite useful for doctoral students and other researchers as a guide contributing to testing empirically the model developed in the current paper.
REFERENCES


Researching the relationships among firm-level competitive behavior, market conditions, and firm-level financial performance is beyond the scope of this study. The reason why “Market Conditions” and “Firm Financial Performance” are included in the overall model is to illustrate the connections among resource-based view, competitive dynamics, and corporate governance literatures.
Table 1
Summary of Classification Schemes for Board Function/Role

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Board Function/Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Mace, 1986)</td>
<td>Provides advice and counsel</td>
<td>Depending upon the abilities, skills, and experiences represented on the board, directors can advise managers in general areas (e.g., pension plans, management compensation, acquisition, capital appropriation, etc.) and specific areas (e.g., technology, finance, government relationship, real estate, etc.).</td>
</tr>
<tr>
<td></td>
<td>Serves as some sort of discipline</td>
<td>Boards are “corporate conscience.” The very requirement of appearing before directors forces managers to think and conduct self-review.</td>
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<tr>
<td></td>
<td>Acts in crisis situations</td>
<td>Boards take active decision-making roles when there are accidents with general managers or management performance becomes unsatisfactory.</td>
</tr>
<tr>
<td>(Zahra &amp; Pearce, 1989)</td>
<td>Service</td>
<td>Involves enhancing company reputation, establishing contacts with the external environment, and giving counsel and advice to executives.</td>
</tr>
<tr>
<td></td>
<td>Strategy</td>
<td>Directors can aid managers by mapping or reviewing strategic actions.</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>Requires evaluating company and CEO performance to ensure corporate growth and protection of shareholders’ interest.</td>
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<tr>
<td>Control role</td>
<td>Service role</td>
<td>Resource dependence role</td>
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<td>-----------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
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<tr>
<td>Entails directors monitoring managers as fiduciaries of stockholders. Directors’ responsibilities in this role include hiring and firing the CEO and other top managers, determining management compensation, and otherwise monitoring managers to protect shareholder interest from managerial expropriation.</td>
<td>Involves directors advising the CEO and top managers on administrative and other managerial issues, as well as more actively initiating and formulating strategy.</td>
<td>Boards are a means for facilitating the acquisition of resources critical to the firm’s success. Directors fulfilling this role are often representatives of specific institutions, but may also serve a legitimizing function.</td>
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</table>

(Johnson *et al.*, 1996)
(Dalton *et al.*, 1998)

<table>
<thead>
<tr>
<th>Control of managerial behavior</th>
<th>Services provided to top management</th>
<th>Acquisition of essential resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring managers, specifically top managers for the benefit of the corporation is the primary legal responsibility of the board.</td>
<td>Directors are involved in providing advice and counsel to top executives.</td>
<td>Boards are one mechanism that firms may use to enhance their abilities to acquire critical resources such as scare raw materials or components, knowledge, capital, and legitimacy.</td>
</tr>
</tbody>
</table>

(Chatterjee & Harrison, 2001)

<table>
<thead>
<tr>
<th>Monitoring function</th>
<th>Provision of resource function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities include monitoring CEO, monitoring strategic implementation, planning CEO succession, and evaluating and rewarding the CEO/top managers of the firm.</td>
<td>Directors possess both human capital and relational capital. Activities include providing legitimacy/bolstering the public image of the firm, providing expertise, administrating advice and counsel, linking the firm to important stakeholders or other important entities, facilitating access to resources such as capital, building external relations, diffusing innovation, and aiding the formulation of strategy or other important firm decisions.</td>
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</tbody>
</table>

(Hillman & Dalziel, 2003)
Table 2
A Logically Restructured Typology of Corporate Governance Mechanisms Based on the “Motivation-Capability” Logic

<table>
<thead>
<tr>
<th>Motivational Mechanisms (“Motivation”)</th>
<th>Specific Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inducements</td>
<td>Managerial ownership</td>
</tr>
<tr>
<td></td>
<td>Management compensation package</td>
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<tr>
<td>Direct External Enforcements</td>
<td>Monitoring by blockholders</td>
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<tr>
<td></td>
<td>Monitoring by boards of directors</td>
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<tr>
<td></td>
<td>Mutual monitoring by managers</td>
</tr>
<tr>
<td>External Pressures for Self Enforcement</td>
<td>Competition for corporate control (e.g., threat of takeover)</td>
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<tr>
<td></td>
<td>Managerial labor markets</td>
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<tr>
<td></td>
<td>Product market competition</td>
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<tr>
<td></td>
<td>Multidivisional organizational form</td>
</tr>
<tr>
<td></td>
<td>Corporate culture</td>
</tr>
<tr>
<td>Resource Acquisition/Securing Mechanisms (“Capability”)</td>
<td>Boards of directors (composition, characteristics, structure, process)</td>
</tr>
<tr>
<td></td>
<td>Interlocking directorates (direct, indirect, reciprocal)</td>
</tr>
</tbody>
</table>
## Table 3

### Summary of Propositions

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Dependent Variables: Competitive Behavior</th>
<th>Moderating Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level of Activity</td>
<td>Variety of Activity</td>
</tr>
<tr>
<td>1 Firm Capability</td>
<td>+ (P1a)</td>
<td>+ (P1b)</td>
</tr>
<tr>
<td>2 Board Size</td>
<td>+ (P2a)</td>
<td>+ (P2b)</td>
</tr>
<tr>
<td></td>
<td>n (P3a)</td>
<td>n (P3b)</td>
</tr>
<tr>
<td>4 CEO Duality</td>
<td>+ (P4a)</td>
<td>+ (P4b)</td>
</tr>
<tr>
<td>5 Managerial Ownership</td>
<td></td>
<td>+ (P5a)</td>
</tr>
<tr>
<td>6 Institutional Ownership</td>
<td></td>
<td>+ (P6a)</td>
</tr>
</tbody>
</table>