

DIRECTOR TIES, BOARD EXPERIENCE,
AND FIRM STRATEGIC OUTCOMES:
BOARD EXPERIENCE EFFECTS ON POST-
ACQUISITION PERFORMANCE

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BOARD EXPERIENCE EFFECTS ON POST-ACQUISITION PERFORMANCE

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DIRECTOR TIES, BOARD EXPERIENCE, AND FIRM STRATEGIC OUTCOMES:
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ABSTRACT

This study examines the effects of board experience on firm outcomes. Using the resource-based view of the firm in complement with agency theory and the resource dependence perspective, theory development links the past experience of outside directors' strategic experiences at their home firms with similar strategies pursued by the focal firm. Hypotheses test the effects on both short-term and long-term performance of outside directors' experience with acquisitions by their home firms of the entire assets of target firms. Results generally do not support the notion that acquiring firms benefit through positive post-acquisition performance from the past experience of their outside directors. However, significant results with respect to board international experience and the acquisition experience of the audit committee provide empirical support for the strategic importance of board experience and of board committees and for their potential impact on firm performance. Discussion of the results address limitations of the study and provide some direction for future investigation into the effects of board experience on firm strategic outcomes.

CHAPTER 1

INTRODUCTION

In January 2000, one of the largest acquisitions in business history began when Time Warner Inc. agreed to acquisition by America Online Inc. in a stock swap valued at \$284 billion. Although for tax and accounting reasons the deal was structured as an acquisition, it was an intended merger of equals. The new sixteen-member board was split evenly between former directors of each company, and an executive from each company filled each of the two positions of co-COO. The merger of an Old Media company with a fast growing dot.com was heralded as a symbol of the new economy.

Two and half years later, the stock was valued at \$61 billion representing a loss in shareholder wealth of \$223 billion. A boardroom fight erupted in 2001 apparently initiated by then Chairman Stephen Case, former AOL CEO, when Case contacted directors one by one to argue for removal of AOL Time Warner CEO, Gerald M. Levin. Although the board supported Levin, forcing Case to retreat, Levin stepped down anyway in late 2001 in favor of Dick Parsons, his chosen successor. Case subsequently stepped down as well, followed roughly a year later by Vice Chairman Ted Turner. (Bianco & Lowry, 2003)

What role did the boards of the two companies play in the acquisition decision? Although boards have legal and contractual mandates to approve or disapprove acquisitions, the level of involvement can vary from being presented with a proposal and asked for a yes or no decision to involvement in the decision to pursue an acquisition, selection of the target, and determination of the offer (Bacon, 1985). This study

examines the research question: What attributes¹ do directors bring to the boardroom that enhance governance capabilities? Specifically, this research examines the effects of board of directors' experience on post-acquisition outcomes of acquiring firms. Directors are themselves often executives or directors at other firms in similar technological, competitive, and regulatory environments (Baysinger & Hoskisson, 1990). The knowledge, experience, and expertise they accumulate may be a resource that is integrated with focal firm strategies in ways that produce positive focal firm performance outcomes.

Research on boards of directors has primarily examined the relationship between outside representation on the board and firm financial performance. Empirical work of this type has been driven both by theoretical and practical considerations. Agency theory (Fama & Jensen, 1983) suggests that outside directors are essential to the governance of the modern corporation, which is characterized by separation of ownership and control (Berle & Means, 1968). Professional managers who are not owners of the firm may pursue their own self-interest at the expense of shareholders, and outside directors function as monitors and to ensure alignment of the interest of shareholders with those of managers. Hence, agency-based empirical studies have tended to focus on the balance of non-employee directors to the total number of directors on the board. In addition to the theoretical grounding, the empirical work has been driven by the practical implication of

¹ The term attributes, as used here, broadly applies to various differences (e.g., experience or occupation (Baysinger & Butler, 1985)) among directors on a specific board and to the collective differences of a specific board with respect to the population. Zahra and Pearce (1989) define attributes as identifying the total mix of a board's composition, characteristics, structure, and process, and this mix is a function of both internal and external contingencies such as firm size, industry type, and environmental characteristics. The collective attributes of a given board are posited here to be potential resources for the focal firm.

corporate governance reform, whose efforts have sought to increase outside representation on boards. However, there has been little empirical evidence to support the proposition that the proportion of outside directors on the board is related to the financial performance of the firm (Dalton, Daily, Ellstrand, & Johnson, 1998; Johnson, Daily, & Ellstrand, 1996; Zahra & Pearce, 1989).

Part of the reason for the lack of empirical evidence may lie in the fact that the theoretical construct of outside representation encompasses other attributes not normally accounted for in research designs. Directors themselves are often managers or directors at other firms and come to the firm with a host of experiences and expertise that may supplement and/or alter the effects of their impartial monitoring of management. In addition, research on corporate governance recognizes that directors do more than simply monitor (Baysinger & Butler, 1985). They also provide advice and counsel to the firm's CEO. In addition, directors tend to have some involvement with firm strategy (Zahra & Pearce, 1989). Although they are not normally actively involved in strategy formulation, they may provide input, in their advice and counsel role, during the formulation phase, and they are actively involved in monitoring the outcomes of management choices of firm strategy (Fama & Jensen, 1983). Thus, focusing primarily on the employment relationship or affiliation the director has with the firm as an antecedent of firm financial performance may overlook some other attributes that affect governance roles other than the monitoring role.

The lack of empirical evidence may also be partly attributable to the choice of firm financial performance as the outcome of empirical interest. Boards of directors are considered to be one among a variety of corporate governance mechanisms that control

the strategic direction of the firm, although it may be the most important of them (Baysinger & Butler, 1985), and these mechanisms may also have effects on firm outcomes. In addition, firm financial performance may be too far removed from the domain of board activity to be heavily influenced by board actions (Hermalin & Weisbach, 2001). Boards have been characterized as firemen, who normally sit around doing little until a fire erupts and then they act (Lorsch & MacIver, 1989). Directors may have more detectable effects on firm activities that are specifically within their purview than on the more general outcomes of firm financial performance. Among other activities, boards are specifically responsible for hiring, compensating, and evaluating top management (Lorsch & MacIver, 1989) and ratifying major changes in the firm's business or financial portfolio (Bacon, 1985). It is possible that the effects of board actions with respect to specific board responsibilities such as these are more likely to be detected empirically than firm financial performance.

The preceding discussion suggests that the lack of unequivocal empirical evidence supporting a board-performance relationship is a function of both the focus on directors' relationship to the firm and on firm financial performance. Thus, although agency theory provides a powerful paradigm for characterizing the separation of corporate ownership and control, the broad brush with which it paints that relationship may need the help of complementary theoretical frameworks to characterize the relationship between other attributes that directors bring to the firm (Johnson, Hoskisson, & Hitt, 1993; Judge & Zeithaml, 1992). The other major theoretical framework used to examine the board-firm relationship is the resource dependence perspective (Pfeffer & Salancik, 1978), which explains how the firm establishes external environmental linkages to secure access to

critical firm resources. According to this perspective, directors represent external constituents important to the survival of the firm. A rich research tradition supports the view that firms adapt to their needs for external inputs by recruiting directors that can provide such linkages (Hillman, Cannella, & Paetzold, 2000; Pfeffer, 1972, 1973; Pfeffer & Salancik, 1978; Provan, 1980; Zald, 1967). While the RDP provides a robust explanation for the way in which the firm links to its environment through directors, it does not account for the way in which firms integrate such resources with other internal resources (Zahra & Pearce, 1989). Hence, two strong theoretical frameworks, agency theory and the resource dependence perspective, provide organizational study with rich explanations for the monitoring of management by the board and for establishment of resource linkages with the environment.

The resource-based view (RBV) of the firm (Barney, 1991; Penrose, 1959; Peteraf, 1993; Wernerfelt, 1984) suggests that sustained competitive advantage stems from the integration of resources in unique and inimitable ways that competitors find difficult to replicate. Rumelt referred to this integration as “linkedness,” which he defined as bundling “linked and idiosyncratic resources and resource conversion activities” (Rumelt, 1974: 561). This innovative recombination of material and human resources (Kor & Mahoney, 2000) is primarily the task of organizational leaders (Penrose, 1959) and comes about through the dynamic interaction of organizational leadership capability, organizational resources, and the services of those resources (Kor & Mahoney, 2000: 113). The resources that boards bring to the firm may be considered part of the tangible and intangible resource base of the firm and, thus, may become inputs

to the integration that affords firms the capabilities that are at the root of sustainable competitive advantage.

Recognition of board functions beyond monitoring and the need for understanding how board resources are internally integrated within the firm may require the use of theoretical perspectives in addition to agency theory and the resource dependence perspective. Moreover, although the resource dependence perspective tends to emphasize the economic nature of the resources that directors link to the firm, directors also bring their own experiences, knowledge, and expertise to the firm, and these may be critical in the board's strategy and counsel functions. Hence, because boards do more than simply monitor management (Baysinger & Butler, 1985) and because resources must be integrated within the firm in order to produce any kind of output, research may need to extend beyond the boundary conditions of these two frameworks. The resource-based view of the firm may provide the theoretical explanation as to how boards perform their strategy and counsel roles. Research on boards (Useem, 1984) suggests that firm management values the intangible resources directors bring such as experience and expertise more highly than the economic resources directors link to the firm such as access to markets and financing.

The RBV posits that resources that are valuable, rare, inimitable, and nonsubstitutable (Barney, 1991) provide the basis for developing capabilities that distinguish firms from one another and allow some firms to outperform their competitors (Rumelt, 1982). The intangible experience resources that directors bring to the firm may be integrated in unique ways with the strategic direction of the firm that results in superior firm performance. The conditions of value, rarity, inimitability, and

nonsubstitutability may apply to the unique combinations of experience that exist on a firm's board. Director experience may be a human capital resource that adds to the firm's existing knowledge base and is integrated with other firm resources at the strategic level and in strategic decision processes that may produce superior outcomes. Hence, this research study asks what characteristics directors bring to the board that may be a source of firm capabilities.

This study also examines board structure in the form of committees. The audit committee is considered important to acquisition outcomes because of the role it plays in ensuring the integrity of firm financial reporting. Reliable accounting information is considered a key aspect of positive post-acquisition performance (Hitt, Harrison, & Ireland, 2001). The compensation committee is also considered because of the role it plays in setting management incentives based on firm performance (Ellstrand, Daily, Johnson, & Dalton, 1999).

The specific strategic context of this examination is acquisitions, and hypotheses developed in the theory section will test whether types of director experience are related to post-acquisition performance. The intended contribution of this work is to provide a finer-grained analysis of board characteristics than when examining the insider/outsider dichotomy and to examine effects of those characteristics on a specific aspect of firm performance, that of post-acquisition performance.

Acquisitions are the focus of study because they represent critical junctures in the life of the firm at which boards are singularly involved due to contractual, legal, and regulatory mandates (Bacon, 1985; Byrd & Hickman, 1992; Johnson, Hoskisson, & Hitt, 1993; Judge & Zeithaml, 1992). Hence, a focus on acquisitions provides a means to

investigate the relationship of the board to the firm that may detect effects on firm outcomes not manifest when considering the broader outcome of firm financial performance. Examination of effects on acquisitions affords the opportunity to focus on an event on which boards are thought to have distinct influence. In addition, the sources of value in acquisitions are not fully understood, and although some acquisitions produce value for bidders, many lose value, and the average return for bidders appears to be near zero (Jarrell, Brickley, & Netter, 1988; Jensen & Ruback, 1983). Research on the effects of board experience on post-acquisition performance may provide additional insight into the sources of acquisition value.

Discussion of the topic is organized in the following way. Chapter 2 develops the theory, including the rationale for the study, the theoretical perspectives for the study of boards, development of a theory of governance and of acquisitions, and development of specific, testable hypotheses regarding board experience constructs and post-acquisition performance. Chapter 3 describes the methods that will be used to test the hypotheses, the sampling procedure, the operationalization of the variables used in the study, and the analyses to be used. Chapter 4 reports results of the analysis. Finally, Chapter 5 presents discussion of the findings, limitations of the study, and implications for future research.

CHAPTER 2

THEORETICAL BACKGROUND AND DEVELOPMENT

Corporate governance is the relationship between external and internal management systems that determine and control firm strategic direction (Hitt, Ireland, & Hoskisson, 2003). One of these systems, the board of directors, may be the most important (Baysinger & Butler, 1985; Baysinger & Hoskisson, 1990). The most critical aspect of boards among researchers, practitioners, and activists is directors' independence (Johnson et al., 1993), usually operationalized on the basis of the director's employment relationship with the firm and by the balance between employee and non-employee directors. However, the empirical research regarding the relationship between non-employee directors and firm financial performance has resulted in ambiguous, equivocal findings.

One source of this ambiguity may lie in the construct validity of the outside director distinction in representing independence. Outside directors bring many attributes to the boardroom in addition to their "outsideness," or employment relationship with the firm. Attributes such as management or functional expertise, experience in the corporate arena, industry experience, or experience at particular levels of the value chain may have salience that is not accounted for when measuring the proportion of outside directors to total number of directors, suggesting that board outside representation measures appear to tap into multiple latent constructs (not just independence). Hence, board composition comprises diverse factors, although most often it has been operationalized using the insider/outsider dichotomy (Ellstrand, Tihanyi, & Johnson, 2002).

This dichotomy has been operationalized primarily by using the proportion of directors classified in various ways to the total number of directors. These operationalizations generally classify directors along four primary classifications: insiders, outsiders, affiliated directors, and interdependent/independent directors. Insiders are employees of the firm, outsiders are non-employees, affiliated directors have some personal or business relationship with the firm, and interdependent/independent directors are those appointed by the current CEO (for a discussion of these types see Dalton et al., 1998). A number of narrative reviews (Zahra & Pearce, 1989; Johnson, Daily, & Ellstrand, 1996) reported mixed findings of studies operationalizing the independence construct this way, and a meta-analysis (Dalton et al., 1998) found the relationship between board composition thus operationalized and firm financial performance to be near zero. Hence, board attributes defined on the basis of the employment relationship of the director to the firm appear to demonstrate no important empirical effects on firm financial performance.

Not all board studies have relied on the nature of the director-firm employment relationship to define constructs. A number of studies have examined effects of directors' occupational backgrounds on firm outcomes. For example, classifying eleven director occupational classes into four director types, researchers examining the effect of the external environmental conditions reported that the distribution of director occupations changed in response to environmental changes (Hillman, Cannella, & Paetzold, 2000). Hence, examining firm-environment linkages may demonstrate important distinctions in director backgrounds leading some researchers to suggest that directors be recruited on the basis of their expertise, knowledge, and stakeholder links

(Bacon & Brown, 1975; Kosnik, 1990; Waldo, 1988). A number of studies have examined director backgrounds as antecedents to specific firm outcomes. For example, two studies on strategic change demonstrated how executive directors, those serving as top managers at other firms, use their home firm experiences as referents for addressing strategic issues at firms where they serve as directors (Golden & Zajac, 2001; Westphal & Fredrickson, 2001). The various ways that board attributes have been operationalized suggest a very complex relationship between the board and firm outcomes.

In sum, research on board composition based on the director's employment relationship with the firm has revealed little empirical evidence of firm performance effects, and a number of researchers have attempted to empirically examine other attributes that directors bring to the boardroom as antecedent to firm outcomes. However, the source of ambiguity in research findings may not lie purely in the choice and operationalizations of the independent variables. The choice of dependent variable may also contribute to the research ambiguity.

Interest in board-firm performance effects has been driven in part by governance reform efforts to improve firm performance by increasing board independence. Given the scant empirical support for such efforts, it may be that firm financial performance is subject to too many other influences to empirically capture effects of independence. However, effects of board characteristics may be more readily discernible with respect to more specific outcomes (Ellstrand et al., 1999). Board influences may be more observable at points at which the firm experiences a deviation from a relatively steady state. Research data on boards of directors suggest that directors are like firemen who are generally inactive until a crisis occurs (Lorsch & MacIver, 1989). A number of studies

have examined boards with respect to more specific corporate outcomes such as bankruptcy (Daily, 1996; Daily & Dalton, 1994a; 1994b; Donoher, 2000), greenmail (Kosnik, 1987; 1990), poison pill adoption (Mallette & Fowler, 1992), and adoption of golden parachutes (Cochran, Wood, & Jones, 1985; Singh & Harianto, 1989a; Wade, O'Reilly, & Chandratat, 1990). Results of these studies suggest that an empirical focus on more specific outcomes may yield greater knowledge concerning boards of directors and their relationship to firm outcomes.

Thus, the source of ambiguity in research on boards may be a result both of independent variables intended to capture board independence but instead capturing a variety of unspecified effects and of a dependent variable (firm financial performance) that may be too far removed from board actions and subject to too many other influences to be empirically attributable to the nature of directors' employment relationship with the firm. Empirical findings that generally provide little or only equivocal support for the composition-performance relationship suggest that more fruitful investigation might come from finer-grained examination of board links with more event specific firm outcomes (Dalton et al., 1998, 1999). Recent research in strategic management (Hoskisson, Hitt, Wan, & Yiu, 2000) emphasizing the importance of fine-grained research suggests that empirical examination of attributes other than the director's employment relationship with the firm may enhance knowledge of the complex link between governance and firm performance. Furthermore, several researchers (e.g., Hoskisson, Hitt, Wan, & Yiu, 2000; Johnson et al., 1993) suggest using other theoretical perspectives to supplement those already extensively used in examining corporate governance. The following two sections provide brief overviews of agency theory and

the resource dependence perspective, the primary theoretical frameworks used in governance research.

Agency Theoretic View of Boards of Directors

Research on boards of directors from the perspective of agency theory (Eisenhardt, 1989; Fama & Jensen, 1983) has a strong theoretical framework. The nexus of contracts, monitoring managerial opportunism, separation of ownership and control, and specialization of decision making and risk bearing form a parsimonious yet powerful paradigm for explaining the operation of corporate governance. However, board research from an agency theoretic perspective has yielded mixed results (Daily, Johnson, & Ellstrand, 1996; Zahra & Pearce, 1989). In fact, results of two recent meta-analyses (Dalton et al., 1998, 1999) suggest that research would be better directed from other theoretical perspectives. Much of the difficulty with the agency theoretic governance research stems from the coarseness of the insider/outsider dichotomy. This construct, a cornerstone of agency research, is the basis for measuring the independence considered so crucial to effective monitoring of agents by principals (Johnson et al., 1993). However, corporate governance research based on this perspective exhibits two major weaknesses.

First, although the idea of independent monitoring of agents is consistent with structures that align agent actions with the interests of the principals (Fama & Jensen, 1983; Williamson, 1985), monitoring is not the only activity required in governing the activity of agents. If directors were simply guardians of shareholder interests watching managers and taking action only when managers depart from pursuit of shareholder wealth, perhaps results of previous research would have been more fruitful. Hence,

boards do more than monitor managerial opportunism (Baysinger & Butler, 1985). They also provide inputs into strategy formulation and implementation and provide expertise and counsel to firm management (Fama & Jensen, 1983; Zahra & Pearce, 1989). Thus, the coarseness of the insider/outsider dichotomy may not be sensitive enough to detect other important governance effects.

The second major weakness of the agency theoretic governance research is the implicit assumption that the capabilities of boards to control the strategic direction of the firm are homogeneously distributed across the boards of directors of large, complex organizations. By placing such a strong emphasis on the balance between insiders and outsiders, research models imply that the most important difference among boards is the distribution of the employment or affiliation relationship of individual directors with the focal firm. This suggests that except for variation among boards in the proportion of non-employee directors, the capabilities of boards to control firm strategic direction are roughly equivalent across firms. However, directors bring a number of other important attributes to the boardroom that may enhance the ability of the board-at-large to perform the varied tasks and processes need for effective governance (Baysinger & Butler, 1985). Furthermore, these attributes of effective governance may not be equally distributed across boards. Some directors may have more experience than other directors in certain industries or with certain phenomena specific to the corporate arena such as R&D, acquisitions, or restructuring. Other directors may have specific functional backgrounds that distinguish their capabilities from those of other directors. Among a large group of outside directors there may be large variation in the levels of industry experience, corporate experience, functional background, age, and tenure that distinguish the

capabilities of some boards to function more effectively than others. Hence, the strong emphasis placed by agency theory on outside director representation suggests a tacit assumption that outside directors are equivalent to other outside directors implying that board, or governance, capabilities are distributed homogeneously across boards. This leads to a third major weakness of the agency theoretic-corporate governance perspective.

In addition to performing more than monitoring roles (Baysinger & Butler, 1985), directors also bring to the firm a variety of attributes that may make boards different across firms. Directors embody far more attributes than simply the nature of their relationship with the firm on whose board they serve. Many directors are also CEOs or members of top management teams in their own right, have served in top management posts for some years, have considerable experience in particular industries, may have developed their management skills in functional areas, and have considerable experience in various business situations common to the corporate arena (e.g., acquisitions and restructuring, strategic entrepreneurship, etc.). Furthermore, this distribution of directors' background, skills, expertise, and current positions outside the firm suggests that board capabilities are heterogeneously distributed across boards. This heterogeneity includes the ideas that 1) boards may vary significantly in the level of critical governance resources they bring to the firm, and 2) some governance resources may be more critical to one specific firm than others depending on the firm's internal and external contingencies such as firm size, industry type, and environmental factors (Baysinger & Butler, 1985; Zahra & Pearce, 1989). Hence, directors are not simply detached observers of management actions judiciously applying the rule of pursuit of shareholder wealth when deviations occur. Rather directors are pools of experience, background, and

expertise and bring these pools to the boardroom with them in the performance of their corporate governance activities. Hence, agency theory provides a powerful paradigm in which to frame the monitoring relationship of the board with the firm. Because outside directors perform other roles in addition to monitoring and also bring strategically relevant experience, knowledge, and expertise to the firm that may not be accounted for in agency-based models, research on board-firm outcomes relationship may require the help of complementary theoretical frameworks.

The Resource Dependence Perspective on Boards of Directors

The resource dependence perspective (RDP) suggests that directors provide access to critical firm resources through linkages with the external environment. Such board-firm linkages include access to strategic inputs including raw materials and capital, information about the general environment, and knowledge of the industry and of the general business environment (Pfeffer, 1988; Pfeffer & Salancik, 1978; Zahra & Pearce, 1989). In short, the RDP view of directors is that they connect the firm to inputs from the external environment, and these connections facilitate firm survival through access to resources, provide legitimacy through links with established, legitimate organizations, reduce uncertainty through information that directors bring about the general and industry environments, and enable growth through continuation of linkages.

Research examining the resource dependence perspective suggests that industry concentration tends to have an inverted U-shaped relationship with merger and acquisition activity within an industry (Pfeffer, 1972). When industry concentration is low, there are too many players in the industry for the actions of any one player to be noticed by or have performance effects on other players. The resulting lack of structure

tends to lead to low levels of interdependence among firms reducing the level of uncertainty stemming from interdependence (Pfeffer and Salancik, 1978). As industry concentration increases, firm actions become more noticeable by other industry players and competition for environmental resources becomes more intense, thereby increasing the interdependence of firms in an industry (Pfeffer, 1972). Increasing interdependence is associated with increasing uncertainty, which managers seek to reduce in order to improve their capabilities in forecasting future conditions (Pfeffer and Salancik, 1978). Acquisitions are seen as an attempt by firm managers to reduce the levels of interdependence through absorption, thereby reducing uncertainty and increasing organizational forecasting capabilities (Pfeffer, 1972).

Forecasting is a key component of management planning in achieving both effectiveness and efficiency for the organization, and quantitative measures of organizational performance are attempts to gauge these achievements. Measures of organizational outcomes may reflect management's attempts to reduce interdependence and, thereby, uncertainty. Hence, as industry concentration increases from low to moderate levels, increased acquisition activity may reflect managers' attempts to reduce interdependence and uncertainty thereby improving forecasting capabilities and improving organizational performance. As industry concentration increases from moderate to high levels, potential antitrust activity by regulatory authorities tends to constrain the level of acquisition activity (Pfeffer, 1972). Thus, at moderate levels of industry concentration, acquisition activity may be seen as an attempt to enhance organizational performance through improved forecasting capabilities by reducing levels of interdependence and uncertainty. Accordingly, at low and high levels of industry

concentration, managers would seek ways other than acquisitions to improve organizational outcomes.

The availability to the firm of environmental resources may also play a role in managers' attempts to manage levels of uncertainty. Munificent industry environments tend to reduce the amount of interdependence and conflict among firms thereby reducing uncertainty. Firms operating in munificent environments may experience less competition with other organizations for resources potentially increasing organizational slack and reducing the necessity for managers to manage environmental uncertainty.

The chief limitation of the RDP is that it fails to specify how resources provided by directors become integrated with firm internal processes in strategically relevant ways that impact firm performance (Zahra & Pearce, 1989). The resulting view of the board is a somewhat inert mechanism through which the firm "plugs in" to resource supplies. As a consequence, we are left with a rather static view of the board's involvement with strategy. This static view results from limitations of the RDP for two reasons. First, RDP does not explain how the firm utilizes director knowledge and experience. Second, and more important, it does not connect the director-linked resources with firm strategies. Thus, the RDP provides a rich explanation of how the firm creates a conduit for a continuous supply of necessary resources, but it does not explain the processes whereby firms transform what directors bring into the boardroom into effective strategic outcomes.

In spite of this boundary condition of RDP, the resources that are linked to the firm through board members may provide a basis for effective corporate governance. Although the RDP explains how the firm becomes linked to the external environment, it fails to explain the processes whereby these linkages become firm internal processes that

lead to performance outcomes. The purpose of this paper is to provide an explanation of such processes using the resource-based view of the firm. Whereas the RDP leaves resources at the point of delivery at the firm's door, the RBV explains a number of processes whereby resources are integrated within the firm to produce strategically relevant outcomes.

In summary, agency theory, while providing a strong theoretical mechanism for the external monitoring of firm managements by non-employee directors, does not account for the broad array of other attributes that directors bring to the boardroom besides their non-employment relationship with the firm. The RDP provides a mechanism whereby firms are linked with critical resources from the environment through the affiliations of directors. However, it does not specify the integration of resources with firm internal processes. Researchers cite the importance of supplementing agency with other theoretical perspectives (e.g., Dalton et al., 1998; Johnson et al., 1993; Judge & Zeithaml, 1992) in order to gain a clearer understanding of governance processes. The resource-based view may offer such a theoretical perspective by addressing the utilization of attributes that directors bring to the firm and by providing an explanation for how board resources are integrated with firm internal processes to produce outcomes that unique to the firm.

A RESOURCE-BASED VIEW OF THE BOARD OF DIRECTORS

The resource-based view (RBV) of the firm (Barney, 1986, 1991, 1995; Peteraf, 1993; Rumelt, 1982; Wernerfelt, 1984) suggests that a source of sustainable competitive advantage lies in the uniqueness of firm resources and capabilities. Rejecting assumptions of perfect information, resource mobility, and resource divisibility of neo-classical economics (Conner, 1991), the RBV posits instead that one source of competitive advantage is private information that may be impounded by firm management constraining competitors from accessing the same information (Barney, 1995). Impounding private information means to create isolating mechanisms or resource-position barriers that prevent rivals from obtaining the same information (Coff, Coff, & Eastfold, 2006) and protecting the firm's future streams of economic rents (Lavie, 2006). In addition, the RBV posits that firm resources are not equally accessible to all firms. Indeed, private information may itself be a resource that serves as an isolating mechanism (Barney & Arikan, 2001; Penrose, 1959) that neutralizes the threat of competition. Furthermore, according to the RBV, resources may be indivisible and inseparable from firm-specific processes with which they may be integrated to generate rents (Barney & Arikan, 2001). Hence, resources and capabilities may be asset-specific (Williamson, 1975) in that they are not equally deployable by every firm. Moreover, rather than being easily imported from outside the firm, they tend to be accumulated internally (Dierickx & Cool, 1989) through the dynamic interaction of managerial capability, resources, and the services that those resources provide (Kor & Mahoney, 2000) resulting in unique combination and deployment of human, physical, and reputational capital (Conner, 1991) that may explain inter-firm variations in performance

(Rumelt, 1982). The concepts of the resource-based view of the firm may also be applied to parts of the firm such as the board of directors.

Corporate governance is often framed in terms of monitoring and controlling firm strategic direction (Baysinger & Hoskisson, 1990; Fama & Jensen, 1983; Hitt et al., 2003). Corporate boards may also contribute to firm competitiveness by providing services in the form of advice and counsel to top management on firm strategy (Zahra & Pearce, 1989). Directors on corporate boards often are members of the corporate community and experience similar competitive, technological, and regulatory contexts (Baysinger & Hoskisson, 1990) as the top managers on whose boards they serve. If the experiences that directors bring to the firm are strategically relevant to the firm's top management, the experience, knowledge, and expertise of directors may become integrated (through the similarity of outside directors' experience to the firm's strategies) with firm internal resources and processes contributing to the firm's ability to impound information and the asset specificity and indivisibility of its knowledge base. Hence, directors' experience, knowledge, and expertise may be considered firm resources, and the RBV may be used to investigate whether boards enhance firm governance in a way that makes the board a source of firm competitive advantage.

Governance is the relationship between systems in the external environment and internal management systems that determine and control the strategic direction of the firm (Hitt, Ireland, & Hoskisson, 2003). Previous research (Hillman et al., 2000; Pfeffer, 1972, 1973; Pfeffer & Salancik, 1978; Provan, 1980; Zald, 1967) based on RDP suggests that directors provide linkages to external resources. The RDP tends to emphasize the economic nature of such resources, and because the linkages provided by director outside

affiliations tend to be observable and verifiable, they tend to be regarded as tangible resources. However, intangible resources that directors bring may also be beneficial to the firm's competitive position. Research on director interlocks demonstrates the importance of the information and support that directors provide to the firm's top management (Haunschild, 1993), and evidence suggests that these intangible resources in the form of knowledge, experience, and expertise provide greater value to the firm than the economic nature of the resource linkages (Useem, 1984). These intangibles brought by directors to the boardroom may be integrated with resources at the firm level and through this integration may become part of the firm's governance resources.

The integration of director knowledge into the strategic decision making of the focal firm can occur through the similarity of strategic contexts in which the focal firm and the directors' home firms operate. Because outside and inside directors share common strategic contexts, they also share common experiences in addressing similar contingencies that arise in these contexts. This common framework results in common schema or structures of knowledge (Carpenter & Westphal, 2001) consisting both of explicit and implicit routines and patterns of thinking and action. Thus, the similarity of strategic context shared by board outsiders and insiders coupled with the similarity of acting within and in response to these contexts may afford the board a common framework of tacit knowledge that becomes a potential governance resource. By creating common frames of thinking and acting, similar contexts and experience allow boards to operate more efficiently as information and decision systems (Carpenter & Westphal, 2001).

The resource-based view suggests that a firm's resource base is composed of tangible and intangible resources (Barney, 1986; Wernerfelt, 1984; Peteraf, 1993). Table 1 provides a summary of these resources. Tangible resources are comprised of financial, organizational, physical, and technological resources. These are not equivalent to tangible assets but rather are tangible in the sense that they are explicit or documentable. Intangible resources are comprised of human, innovation, and reputational resources, which tend to be tacit and less easily observable.

TABLE 1
Firm Resources

Tangible resources	Examples
Financial	Capacity to raise external and internal funding
Organizational	Firm's formal reporting structure Management systems for planning, coordinating, and controlling
Physical	Plant and equipment Location Access to raw materials
Technological	Intellectual property Specialized knowledge and trade secrets
Intangible resources	
Human	Training, experience, relationships, managerial capabilities, organizational processes and routines
Innovation	Ideas, scientific capabilities, and capacity to innovate
Reputational	Reputation with customers, brand name, reputation with suppliers

Adapted from J. B. Barney, 1997, Gaining and sustaining competitive advantage. Reading, MA: Addison-Wesley Publishing Company, pp. 143-144; Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. Strategic Management: Competitiveness and Globalization (5th edition). Cincinnati, OH: Southwestern College Publishing, p. 83.

Resources that directors bring to the boardroom may be integrated to create unique governance capabilities. Firm capabilities that are not easily imitated by competitors lead to “isolating mechanisms” (Penrose, 1959) that are a key source of sustained competitive advantage. The more tacit and unobservable, hence intangible, resources are the less imitable they are and the greater their potential for integration with other resources to create core competencies. The information and support that directors provide tend to be of greater value to CEOs than the more tangible links such as access to economic resources (Useem, 1984). Because of the intangible nature of information and support, such resources may be a source of competitive advantage for the firm. Although

directors often provide links to financial resources, these are fairly easily observed or documented and therefore tend to be more tangible in nature. However, the expertise, experience, and knowledge that directors bring may be less observable and therefore intangible. Moreover, the way that these intangibles are integrated with firm strategies may be a source of strategic core competencies. Table 2 provides an overview of the types of potential resources that directors bring to the boardroom.

TABLE 2
Governance resources: A resource-based view of corporate governance

Tangible resources	Governance resources
Financial	Directors may provide links to outside funding sources (e.g., see the literature on indirect interlocks with financial institutions)
Organizational	Board's formal structure: chair, executive and other committees Systems for performing governance: annual rpt., proxies, meetings, director compensation, management compensation
Physical ²	
Technological ²	
Intangible resources	
Human	Governance, managerial, industry expertise Processes and routines
Innovation	Innovative practices
Reputational	Director reputations Collective board reputation

Financial governance resources are primarily in the form of links to outside funding that some directors provide, and, as mentioned above, these tend to be tangible in nature. Organizational governance resources comprised of the board's formal structure consist of the board's leadership structure (unitary or dual leadership) and committee

² Physical and technological resources tend to stem directly from the firm's internal resource base rather than from those brought to the board by directors. Thus, these are not considered to be governance resources.

structure. Systems for performing firm governance activities are comprised of such things as annual reports, proxies, meetings, and director and management compensation. Human governance resources in the form of directors' expertise in governance, management, and industry may complement other human resources such as processes and routines. Innovative governance practices may include training for directors, unique socialization processes, or unique committees. Reputational governance resources may consist of the reputations of individual directors or the collective reputation of the board.

The integration of resources provided by directors in the form of experience and managerial and industry expertise with the firm's strategies is a key aspect of board capabilities. Organizational capabilities are rooted in firms' knowledge about the transformation of its resources into production possibilities (Nelson & Winter, 1982). Research on firm absorptive capacity suggests that the effectiveness of new knowledge within the firm depends on its relationship with the firm's existing knowledge base (Lane & Lubatkin, 1998). Generic strategies such as low cost and differentiation business level strategies (Porter, 1980) and corporate level strategies such as diversification, mergers, and acquisitions tend to exist as part of the knowledge base of large, diversified firms. They are reported in the business and popular press, observed in the competitive practices of firms, and integrated into the formal education of business leaders. When this generic knowledge becomes part of a firm's active strategy and is integrated with the practical knowledge from directors' experiences, the combination may create capabilities that are potential sources of competitive advantage.

In sum, outside directors are more than simply non-employee directors. They come to the board with a variety of experience, knowledge, and expertise. This variety

may uniquely integrate with the firm's environmental domain and strategic position in such a way as to create core competencies in setting and controlling the firm's strategic direction that may be sources of sustained competitive advantage.

The impact that boards have on firm outcomes may be unobservable with respect to firm financial performance but may become observable when considered with respect to other firm outcomes. Board influence may be more apparent at particularly critical junctures in the life of the firm such as CEO turnover and major strategic changes such as bankruptcy, or mergers and acquisitions. Researchers reported that directors are like firemen. Most of the time, they are relatively inactive, but when the fire bell rings, they "spring into action" (Lorsch & MacIver, 1989: 97) suggesting that boards may tend to support the status quo until a critical contingency develops. Their action at these critical junctures is often legally required, and the effects of such initiatives may be more easily assessed empirically than board effects on firm financial performance.

Board research focused on more specific corporate outcomes has indeed resulted in observable effects. Kosnik (1987, 1990) found that board characteristics influence decisions about adoption of greenmail strategies. Ellstrand and colleagues (2002) found the proportion of outsiders and CEO duality to be associated with the levels of political risk in firms' international portfolios. Sanders and Carpenter (1998) reported an association with the level of outsider representation and the degree of internationalization of a firm. Hence, effects of board characteristics may be more easily observable with respect to specific corporate outcomes and less easily observable with respect to financial performance, which most often is measured without respect to specific firm events. Thus, the strategic involvement of boards may have more direct influence on specific

firm outcomes. This study focuses on board involvement in a particular type of strategic decision – that of the acquisition of another firm.

ACQUISITIONS: THEORETICAL AND RESEARCH PERSPECTIVES

The past fifty years have witnessed several waves of acquisition activity, but even during relatively less active periods, the number of acquisitions has remained quite high compared to earlier historical periods. Research on acquisitions makes two broad theoretical distinctions. The discipline hypothesis posits that target firms come into play as a result of underperformance attributable to inefficient or deficient management. Rooted in agency theory, the discipline hypothesis focuses on the discipline of financial and managerial labor markets with an implicit methodological focus on a unique event, a takeover transaction signaling the operation of that discipline. Although theoretically sound, empirical studies have not produced overwhelmingly supportive evidence. For example, pre-acquisition targets performed below their peers, but nine years later were performing even less well (Ravenscraft & Sherer, 1987). Moreover, management turnover in acquired targets was not found to be significant, and some targets were actually performing better than their peers at the time of acquisition (Walsh & Kosnik, 1993). Finally, acquiring firms who retained managers of acquired firms with important skills and expertise showed higher post-acquisition performance than acquiring firms that released target management (Cannella & Hambrick, 1993). Such findings have led researchers to suggest there are imperfections in the discipline of financial and managerial labor markets (Johnson et al., 1993).

Another theoretical explanation for firm acquisitions, rooted in strategic management theory, suggests that acquisitions occur when the combination of acquirer

and target will lead to improved performance of the combined firm. Focused on performance-enhancing synergies created over time, this improved performance hypothesis has received mixed empirical support. Acquisitions do appear to add value, but the value accrues primarily to the owners of target firms at the time of acquisition, while the average gains to acquiring firms are near zero (Jarrell, Brickley, & Netter, 1988; Jensen, 1988; Jensen & Ruback, 1983; Hitt et al., 2003).

Despite the inconclusive findings, acquisitions represent unique events in the life of the firm and are an important subject for empirical investigation. Disruptive for both the target and the acquirer, the deviation from a steady state that accompanies acquisitions may afford researchers the opportunity to isolate otherwise undetectable antecedents and outcomes of firm performance. Acquisition outcomes normally measure post-acquisition returns either to the target or to the bidder. The next section considers the research on outcomes relative to targets and bidders.

Targets generally increase in value in successful mergers, while unsuccessful mergers result in decreased target value. Successful tender offers increase target value while unsuccessful tender offers result in an increase only if the target is subsequently taken over by another bidder. These results suggest that increases in target value come from the combination of the two firms rather than simply as a result of being placed into play by the bidder (Bradley, DeSai, & Kim, 1983; Jarrell, Brickley, & Netter, 1988; Jensen & Ruback, 1983).

Bidders in successful mergers tend to underperform, but the underperformance may be attributable to the existence in study samples of “glamour” firms, low book to market firms, which usually perform less well than acquisitions in general (Rau &

Vermaelen, 1998). In contrast, another study demonstrated that successful bidders earned their required rate of return and did not underperform a control portfolio (Loderer & Martin, 1992). These findings suggest that successful mergers result in no net gain in value for the bidder, while unsuccessful mergers and tender offers lead to loss in value. Bidders in successful tender offers experience a gain in value (Jensen & Ruback, 1983; Mallete & Fowler, 1992). Successful bidders saw positive returns when buying private firms but negative returns when buying public firms (Fuller, Netter, & Stegemoller, 2002). This difference was attributed to a liquidity discount, or the difference between the availability of public information to value public firms through the workings of the financial markets and the lack of corresponding information required to value private firms resulting generally in a lower purchase price for private firms. Both gains and losses for acquirers were larger in absolute value when the target was larger relative to the bidder and when stock was used to finance the transaction (Fuller et al., 2002).

A review of the evidence of the market for corporate control from the 1960s to the 1980s (Jensen & Ruback, 1983) shows that targets tend to benefit considerably more than acquirers. Targets in successful mergers and tender offers experienced a weighted average abnormal return of 7.7% and 29.1%, respectively (Jensen & Ruback, 1983). A later review (Jarrell, Brickley, & Netter, 1988) did not separate returns of mergers from those of tender offers, but reported returns to targets of successful takeovers of roughly 30.9% that generally confirm Jensen and Ruback's (1983) earlier conclusions. Targets in unsuccessful mergers experienced a weighted average 17.2% abnormal return one month surrounding the initial announcement. However, analysis of the abnormal returns over a two-year period revealed that all gains dissipate if the target receives no subsequent

offers. Targets in unsuccessful tender offers experience average abnormal returns of 35.2% but lose all gains once the failure of the transaction is known (Jensen & Ruback, 1983). These findings support the notion that target owners benefit from takeovers but only in the event the transaction is completed.

A review of the evidence with regard to bidders shows bidders do not on average lose in takeover transactions but experience gains smaller than those of targets (Jensen & Ruback, 1983). Returns to bidders in mergers are difficult to interpret, but indications are that returns are close to zero, while returns to bidders in tender offers average 3.8% (Jensen & Ruback, 1983). Although a later review (Jarrell, Brickley, & Netter, 1988) does not separate returns of bidders in mergers from those of tender offers, reported average returns of bidders in successful takeovers of 1.14-2.04% generally support the earlier conclusion. Study of returns to bidders in unsuccessful mergers suggests that they are positive and attributable to cancellation of the transaction upon the realization that it may be overvalued (Jensen & Ruback, 1983). Overall, targets gain in takeover transactions, and bidders do not lose suggesting that acquisitions do indeed create value (Jensen & Ruback, 1983).

The above findings concerning bidders and targets and various outcomes of transactions can be summarized as follows. Acquisitions do create value, but the gains are more likely to go initially to owners of the target firm. Accrued gains come from the combination of the assets of the two firms rather than simply from the information communicated to the market concerning the value of the targets (Jensen & Ruback, 1983). That is to say, value comes from the transfer of the control of target assets to the bidder and the reallocation by the bidder with its own unique assets (Bradley et al., 1983;

Capron, Dussauge, & Mitchell, 1998). Gains to acquirers stem from 1) the unique combination and reallocation of their resource profiles with those of the target firm that lead to synergies and improved performance and 2) the capabilities of acquirers to identify acquisition opportunities that potential bidders are less likely to identify (Bradley et al., 1983; Jensen & Ruback, 1983). Although the discipline of the market for corporate control may operate effectively under certain conditions, for example, when target managers have failed to adapt to changing conditions, creation of value in acquisitions stems both from reallocation by a different set of managers and from the productive integration of the two firms' assets that produce more when combined than when operated separately.

These conclusions regarding post-acquisition performance can be interpreted using the resource-based view of the firm. The uniqueness and idiosyncratic nature of the acquirer-target combination imply that it is rare. The combination does not necessarily imply that it is optimal among competing bidders. However, given the idiosyncratic nature of firm resources, any combination between two firms through acquisition is itself idiosyncratic implying that current and potential competitors do not possess identical resource endowments. The potential performance improvement means the combination of the two firms may have value. Although most acquisitions result in no net gain to the acquirer, the potential for performance improvement means acquisitions are motivated by potential exploitation of the combination of the two firms' assets. The capability to identify opportunities that potential competing bidders are less likely to identify suggests imperfect imitability. Barney (1986) suggests that it is not only synergy that produces value but also the existence of private information impounded

by the bidder that excludes other firms from creating an auction. Auctions tend to lead to increased acquisition premiums that are a primary source of the failure of acquisitions to add value to the acquirer. Finally, the combination of the resource profiles of the two firms with unique histories increases the likelihood that the combination will not have equivalent substitutes. Path dependent endowments create firm “uniquenesses” that may create competitive disadvantages for other firms (Barney, 1991). These characteristics – rarity, value, inimitability, and nonsubstitutability - tend to be the potential basis for sustained competitive advantage. Hence, the quality of an acquisitive firm’s resources may play a role in identifying and creating synergies involved in increased post-acquisition performance. The above discussion suggests that the resource-based view may provide some insight into performance outcomes of successful acquisitions.

A RESOURCE-BASED VIEW OF ACQUISITIONS

The notion of acquisition carries with it an inherent assumption of external diversification rather than through internal development (Song, 1982) although either can occur without the other. The core factor theory of diversification posits that enhanced performance in acquisitions comes from shared factors of production (Rumelt, 1982) suggesting that valuable synergies come from related rather than unrelated acquisitions. Sustainable competitive advantage results when these synergies are valuable, rare, inimitable, and nonsubstitutable. However, although relatedness in the RBV is thought of as stemming from shared resources, processes, or outputs, relatedness is usually operationalized as product-market relatedness (Barney, 1986). Empirical findings support the notion that product market relatedness may not necessarily result in enhanced performance (Cannella & Hambrick, 1993), and synergies can occur at various points

along the value chain, not just in outbound logistics (Porter, 1980). Relatedness conceptualized as product market relatedness does not account for relatedness in assets, processes, or factor markets (Krishnan, Miller, & Judge, 1997). Hence, relatedness of resources may be of equal importance as product market relatedness suggesting that synergies come from different types of relatedness.

The preceding discussion suggests the following conclusions regarding resources and acquisition-induced synergies. Synergistic economies and vertical economies come from sharing core competencies created through the merger of two previously separate business organizations. Synergies are more likely to come from complementarities in resource profiles rather than from financial economies. The purpose of this study is to propose that the resource-based view provides an explanation for how resources brought by directors to bidding firms become antecedents of post-acquisition firm performance in the form of governance capabilities.

GOVERNANCE AND ACQUISITION OUTCOMES

The study of board involvement in acquisition decisions is salient for a number of reasons. First, corporate charters generally require board action for a change in ownership or a major reconfiguration of the firm's portfolio. In one sense, an acquisition is like any other management decision. However, the shareholders' interest is singularly at stake in an acquisition decision calling for action by the board in their behalf (Bacon, 1985). In addition, legal precedence, legislation, and regulations require board action for such a strategic decision. Hence, for contractual, judicial, legislative, and regulatory reasons, the role of the board in acquisition decisions is clear (Bacon, 1985). Due to the clear issues of firm ownership and board accountability, board acquisition involvement

may be particularly more appealing as a subject of empirical study than involvement in decisions on more routine matters (Bacon, 1985).

Research on boards has largely focused on composition variables, such as the insider/affiliated/outsider classification (e.g., Boeker & Goodstein, 1993; Cochran, Wood, & Jones, 1985; Daily, 1996; Daily & Dalton, 1994a; Finkelstein & D'Aveni, 1994) and on demographic variables such as age, tenure, and functional background (e.g., Carpenter & Westphal, 2001; Johnson et al., 1993; Sanders & Carpenter, 1998; Westphal & Fredrickson, 2001). Although board composition is a multidimensional concept, research has largely operationalized it as the proportion of outsiders to the total number of directors, and these studies have largely been agency based (Ellstrand et al., 1999). However, previous research on boards (Dalton et al., 1998, 1999; Johnson et al., 1993) emphasizes the importance of supplementing agency theory with those of complementary theoretical perspectives. Although agency theory provides a powerful paradigm for understanding corporate governance, it may not alone provide the theoretical mechanism necessary for looking at finer-grained aspects of corporate governance (Hoskisson, Hitt, Johnson, & Grossman, 2002; Johnson et al., 1993). The resource-based view in complement with agency theory may provide the theoretical lens for such a finer-grained assessment.

Outside directors bring to the boardroom many attributes in addition to the nature of their employment relationship with the firm. Many directors are also CEOs and executives at other firms, and it is unlikely that they “turn off” their strategic mindsets while serving on another firm’s board. In addition, both executive and non-executive directors may serve on multiple boards supplementing their knowledge of the focal firm

with that of other organizations and enriching the collective experience of the board. (Westphal & Zajac, 1997; Zajac & Westphal, 1996). Hence, service as a director on other firms' boards may be a mechanism whereby the experiences gained at those other firms are transmitted to the focal firm.

Governance research emphasizes the importance of firm-specific information provided by insiders (Baysinger & Hoskisson, 1990; Fama & Jensen, 1983). This firm-specific information may complement the more general information relating to firm governance provided by the board as a result of directors' collective experience on the boards of other firms. Previous experience may be another salient background characteristic in addition to those more widely used such as age, tenure, and functional background (Bigley & Wiersema, 2002). Outside directors bring attributes to the board that may have potentially important implications for firm performance outcomes

HYPOTHESES

Board Experience

Outside directors bring to the firm a variety of personal and professional characteristics in addition to the fact that they are not firm employees. Although most outside directors come from similar technological, regulatory, and competitive environments (Baysinger & Hoskisson, 1990), they may bring a broad range of relatively unique experiences with respect to how individual firms address their external environments and internal administrative structures. In addition, outside directors may have experiences relative to various types of corporate specific phenomena such as diversification, globalization, acquisitions, mergers, and restructuring. Direct, personal experience in similar situations is a powerful learning mechanism, and extensive

experience in a particular context may enhance one's ability to transfer benefits of that experience to other similar contexts (Westphal & Milton, 2000: 370-371). Thus, outside directors bring to the board generalized business knowledge and corporate-specific knowledge that may complement the firm-specific expertise of the firm's top managers (Baysinger & Hoskisson, 1990; Fama & Jensen, 1983).

This general business knowledge and knowledge about the corporate arena is distinct from the type of information that directors might bring about specific opportunities such as specific acquisition targets (Haunschild, 1993). Outside directors indeed likely possess a good deal of information about specific business opportunities or threats, and firms may indeed benefit from such specific knowledge. However, research findings suggest that director ties are more important as sources of knowledge concerning business models and "know-how" rather than as sources of private information (Haunschild, 1993). Hence, director ties provide a general "business scan" (Useem, 1984) as part of an information processing system that is an important intangible resource for the firm.

Interpretations of common actions, contexts, and outcomes (Hambrick, Geletkanycz, & Fredrickson, 1993) resulting from business experience are an important aspect of the study of managerial and business leadership. Previous research on strategic leadership suggests that overall business knowledge, especially with respect to specific industries, is the real underlying construct in studies that have used tenure as a variable (Bluedorn, Johnson, Cartwright, & Barringer, 1994). The measurement of tenure may be an attempt to capture the level of business leadership experience. The focus of this study

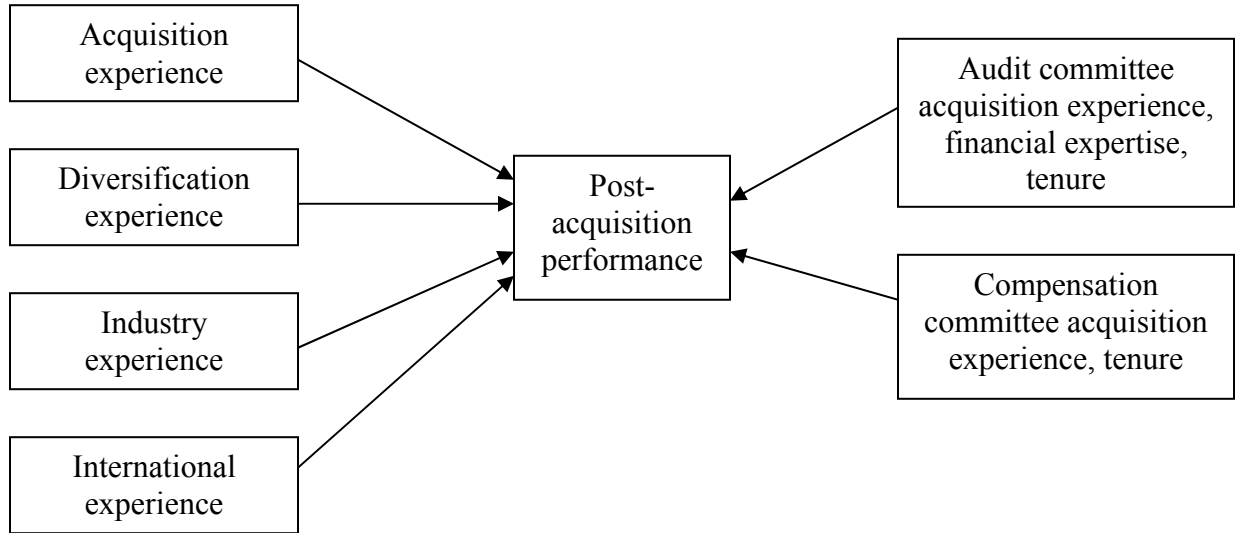
is on effects of different types of outside director experience on post-acquisition outcomes.

Outside directors' experience developed at other firms resulting in information, skills, and knowledge (Bazerman & Schoorman, 1983) may provide important benefits to the firms on whose boards they serve (Schoorman, Bazerman, & Atkin, 1981). For example, outside directors may enhance decision-making by identifying possible decision alternatives (Bacon, 1985; Bigley & Wiersema, 2002; Schoorman et al., 1981) that may not otherwise be considered by top managers. In addition, outside directors may also broaden the scope of the firm's scanning of environmental and internal information used to generate and evaluate decision alternatives (Geletkanycz & Hambrick, 1997). Furthermore, they may also improve the firm's decision processes of selecting from possible alternatives and information (Schoorman et al., 1981). Finally, although a study on the effects of experience and director ties on the influence of demographic minorities on corporate boards suggests that directors may not benefit from experience on other boards, the experience that was the focus of study was of an interpersonal nature rather than of the content and substance of firm strategies, and this distinction may be empirically important (Westphal & Milton, 2000). Overall, empirical findings suggest that outside directors provide a broad range of experiences that may benefit the focal firm in addition to the impartiality that outside representation is posited to provide.

The following sections develop hypotheses regarding specific types of experience brought by directors that may benefit the focal firm's acquisition strategies. Figure 1 provides a model of the hypothesized relationships. The left side of the figure represents hypotheses concerning the board at large, while the right side of the figure represents

hypotheses concerning the audit and compensation committees. Characteristics of the board and of the audit and compensation committee are hypothesized to have effects on the post-acquisition performance of bidding firms in acquisition transactions.

Figure 1: Theoretical Model of Hypothesized Relationships



Board Acquisition Experience

Research suggests that there is wide variety in the types of transactions, the possible combinations of bidder and target, and issues specific to particular transactions (Jemison & Sitkin, 1986; Lubatkin, 1983). In spite of considerable financial and operational analysis prior to a deal, intangible, often inarticulate, factors may prove to be more crucial to positive post-acquisition outcomes (Bacon, 1985). Addressing such issues of complexity and intangibility may require the existence of tacit knowledge due to the relatively unstructured nature of complex, infrequent decisions. Intangible resources that directors bring to the acquisition decision context in the form of governance, managerial, and industry knowledge may contribute to boards' ability to positively influence acquisition outcomes. Tacit, implicit knowledge occurs through repeated experience in encountering complex phenomena, and directors bring this to the boardroom. Repetition of complex phenomena tends to lead to routinization making decisions more programmable (March & Simon, 1958). Certain patterns in complex decisions become apparent over time. Portions of complex decisions begin to show structure, and decision makers may begin to evince a procedure for formulating and implementing complex choices. Repetition of complex phenomena leads to organizing processes and routines (Bluedorn et al., 1994; Nelson & Winter, 1982) suggesting that firms may benefit from the collective learning of their boards as a result of directors' encounters with similar phenomena in the external environment. Managers tend to rely heavily on current information obtained through information channels and to use informal networks to update current information (Dutton & Freedman, 1985). One such informal channel is the personal interactions between directors and top management.

Information concerning how the focal firm's management should address the external environment may be transmitted through director ties (Haunschild, 1993). Regular exposure on the part of outside directors to similar decision contexts may influence the effectiveness of the board in dealing with a specific decision (Bacon, 1985). Directors with acquisition experience on other boards and firms may bring this expertise into the boardroom adding to the firm's store of knowledge (Cohen & Levinthal, 1990; Nelson & Winter, 1982; Zahra & George, 2002), residing in the firm's organizational patterns and routines (Nelson & Winter, 1982), social networks and information systems (Olivera, 2000), and economic and social structures (Ocasio, 1997) suggesting that the collective acquisition experience of the board may have an impact on acquisition decisions of acquiring firms.

The benefits of repeated experience with acquisitions over time may be a function of both the number and type of acquisitions experienced. Although each acquisition transaction presents unique decision contexts, repeated exposure to acquisition decisions should result in the emergence of general patterns that may lead to development of tacit, implicit processes and routines (Haspeslagh & Jemison, 1991; Hitt, Hoskisson, Johnson, & Moesel, 1996; Nelson & Winter, 1982). Hence, the more experience a business leader has in addressing acquisition issues, the more proficient and adept she or he should become in assessing the relative merits of the potential combination of acquirer and target.

The level of acquisitions experience of the board may have differential effects on short-term and long-term performance of the combined firm. Positive short-term performance may be reflected in the reactions of the financial markets to the suitability of

the combination and the perceived potential synergies in announcement effects (Bradley, Desai, & Kim, 1983; Jarrell, Brickley, & Netter, 1988; Jensen & Ruback, 1983). However, consistent with strategic management theory (Cannella & Hambrick, 1993; Hoskisson, Hitt, Wan, & Yiu, 2000) positive long-term performance is more likely the result of successful implementation of the acquisition and the integration of the two firms' human capital such as management and employee skills and organizational capital such as decision systems and administrative structures (Cannella & Hambrick, 1993; Krishnan et al., 1997). The ability to identify and evaluate potential acquisition targets and to accurately project the long-term performance of the combination is more likely to be the result of internal firm resources such skill and expertise (Barney, 1991) learned through previous experience with the dynamics of the acquisition process (Jemison & Sitkin, 1986) rather than from external market reactions in evaluation of managerial actions (Bradley, Desai, & Kim, 1983; Jarrell, Brickley, & Netter, 1988; Jensen & Ruback, 1983).

Board acquisition experience may benefit the focal firm through learning. Learning from experience at other firms how not to perform an acquisition may improve a firm's chances of learning from that bad experience through the collective acquisition experience of the board. Hence, experiences with both poor performing and high performing acquisitions should benefit the focal firm. Therefore, the number of acquisitions as well as the type of acquisition (i.e., related/unrelated) experienced collectively by the board should be positively related to the performance of the combined firm.

A corporate level strategy that pursues related acquisitions differs in a number of respects from one that pursues unrelated acquisitions. Sources of value may differ with a related acquisition relying more heavily on the integration of resources between the two formerly separate firms and an unrelated acquisition relying more heavily on the efficient allocation of resources or the restructuring of acquired assets (Hill & Hoskisson, 1987; Hoskisson, Hitt, & Hill, 1993; Hitt et al., 2003). This integration may occur through sharing of physical resources at particular stages of the value chain. Alternatively, value may occur through sharing of knowledge among separate value chains within the firm's portfolio in which generic skills about how to manage a particular type of activity can be a source of value (Brush, 1996; Porter, 1985: 324-326). Furthermore, the value of combining two related firms may derive from the strength of the combined firm's human capital, in the form of firm management, to create value between separate units that is greater than the sum of their individual returns (Lubatkin & Chatterjee, 1994). These findings suggest the importance of creating value through intangible assets such as brand names, innovative capacity, and management skills that can be flexibly applied to a number of different business contexts (Chatterjee & Wernerfelt, 1991).

Firms pursuing related acquisitions may also differ from those pursuing unrelated acquisitions by the types of structure and controls used (Hoskisson & Hitt, 1988; Hoskisson, Hitt, & Hill, 1993). Related acquisitions tend to rely on linkages between business units to establish a degree of central coordination (Hill & Hoskisson, 1987). Unrelated acquisitions rely on maximizing efficiency at the business unit level while decentralizing decision making and accountability to the business unit level (Chandler, 1991; Hill & Hoskisson, 1987). These findings combined with the findings concerning

the sources of value in acquisitions suggest that considerable divergence in the management skills and expertise may be required to successfully integrate related acquisitions compared to unrelated acquisitions. Moreover, the background and prior experience of business leaders is significantly related to the strategy of the firm. The ability of a director to adequately advise and provide expertise to a firm's top management may be a function of the experiences of that director with strategies that are relevant to those of the focal firm (Carpenter & Westphal, 2001). Because successful related acquisition strategies may differ appreciably from successful unrelated acquisitions, board experience in related acquisitions may be a more valuable resource to a firm engaging in a related acquisition, while board experience in unrelated acquisitions may be a more valuable resource to a firm engaging in an unrelated acquisition. The preceding discussion regarding acquisition experience and differences in corporate level strategy suggests the following:

H_{1a}: The number of related acquisitions experienced collectively by the board of directors of the bidding firm will be positively related to post-acquisition performance of related firms.

H_{1b}: The number of unrelated acquisitions experienced collectively by the board of directors of the bidding firm will be positively related to post-acquisition performance of unrelated firms.

Board diversification experience

The level of diversification experience of the board and the level of focal firm diversification may impact governance processes. High firm diversification may lead to less board involvement because institutional pressures for board involvement are more widely diffused (DiMaggio & Powell, 1978; Judge & Zeithaml, 1992; Meyer & Rowan, 1977). A negative association of level of diversification with overall level of board

involvement suggests that “diversification may diffuse isomorphic pressures” for board involvement from institutional stakeholders, who represent constituent multiplicity (Oliver, 1991) and may be more diverse and their interests more diffuse for unrelated diversifiers than those of firms using related diversification (Judge & Zeithaml, 1992: 784). A highly diversified firm operating in multiple domains may rely on qualitatively more diverse resources than one that is less diversified. Focused action by the board necessitated by acquisition activity may moderate the potential for diffusion brought about by diversification.

In addition, the systems of management control vary by type and level of diversification (Hill & Hoskisson, 1987). Strategic controls based on operational understanding of proposed divisional strategies tend to be associated with related diversification, whereas financial controls based on financial performance measures such as ROI tend to be associated with unrelated diversification (Baysinger & Hoskisson, 1990; Hill & Hoskisson, 1987; Hoskisson, Hitt, & Hill, 1993). Beyond a certain level of diversification, corporate managers tend to implement financial controls that reduce their information processing requirements (Hill & Hoskisson, 1987). In single business or dominant business firms, corporate managers may be able to emphasize strategic control due to the small number and similarity of the firm’s divisions. However, in related linked and unrelated firms, corporate managers may lack first hand knowledge of the operational issues of a division’s industry, technology, and product or geographic markets. In such firms, corporate and division managers may have multiple and potentially conflicting goals. Increased complexity and information processing requirements may result in a high level of causal ambiguity leading corporate managers

to rely increasingly on the use of authority and rule-based controls rather than on operational understanding of divisional strategies (Gupta, 1987; Ouchi, 1980). Hence, related and unrelated diversification strategies require different sets of management skills and types of control (Hoskisson & Hitt, 1988; Hitt, Hoskisson, Johnson, & Moesel, 1996; Johnson et al., 1993), and may also require different types of governance related skills based on the collective experience of board members.

Events experienced serving on other firms' boards may influence how directors address governance issues at a given firm (Carpenter & Westphal, 2001; Westphal & Fredrickson, 2001; Westphal & Zajac, 1997). For example, the experience attained through their multiple directorships influenced both directors' perceptions of their ability to contribute to deliberations on strategic issues and to the quality of board member interactions (Carpenter & Westphal, 2001). In another study, CEO-directors tended to support reductions in the focal CEO's power when they had experienced similar reductions at their home firms (Westphal & Zajac, 1997). Finally, executive directors were found to influence strategy in their selection of new CEOs. (Westphal & Fredrickson, 2001). These findings suggest that experiences serving on other boards are translated into strategic decisions at a given firm that may impact that firm's performance.

The level of diversification of executive and CEO directors' home firms and those of non-executive directors serving on other boards is likely to affect how they recommend the focal firm approach strategic decisions (Carpenter & Westphal, 2001; Gupta, 1984; Hambrick & Mason, 1984; Hitt & Tyler, 1991; Song, 1982; Szilagyi & Schweiger, 1984; Westphal & Fredrickson, 2001; Westphal & Zajac, 1998). Gupta

(1984) argued that industry experience is an important characteristic, Szilagy and Schweiger (1984) argued that previous managerial experience affects one's suitability for implementing particular types of firm strategies, and Hambrick and Mason (1984) argued that how executives perceive their experiences influences future strategic choices. These arguments suggest that executives' previous experiences affect how they address future strategic contexts. Song (1982) found that background and prior experience of the firm's current CEO are significantly related to the firm's diversification strategy. In addition, Hitt and Tyler (1991) found that executives' characteristics, including amount and type of experience influenced how they evaluated acquisition targets. These findings support the notion that past managerial experience affects future managerial choices. Further, it may also be that these experiences will affect how executive directors recommend the focal firm address its strategic issues, and the collective experience of the board may influence the focal firm's strategy.

Boards with a collective level of related diversification experience will tend to emphasize the use of strategic controls and to lean more favorably toward related acquisitions than to unrelated acquisitions. The collective experience with related diversification may tend to create a deeper understanding of related acquisitions such that the type of information and support provided by the board with respect to an impending acquisition by the focal firm may favor acquisitions of related targets over unrelated targets. Hence, not only will related diversifiers be more likely to acquire related targets, but also the governance provided by the board, especially the advice and counsel relevant to acquisition decisions, may tend to weight decisions more favorably toward related acquisitions and this weighting may extend to the policies that the acquirer pursues in the

process of post-acquisition integration. This suggests that the collective diversification experience of the board will impact the type of acquisition an acquirer pursues and this will, in turn, impact the post-acquisition performance of the combined firm.

H_{2a}: Related diversification experience of the board of directors will be positively related to post-acquisition performance of related acquisitions by the focal firm.

H_{2b}: Unrelated diversification experience of the board of directors will be positively related to post-acquisition performance of unrelated acquisitions by the focal firm.

It may occur that although the collective experience of the board is with related diversification that the focal firm seeks an unrelated acquisition. Alternatively, a firm whose board has collective unrelated diversification experience may seek a related acquisition. The collective diversification experience of the board should have a positive effect on the post-acquisition performance. However, because of the board's predominant collective experience with the other type of diversification, the effect is likely to be less.

Industry experience

The collective industry experience of the board also may impact the acquisition activity of the focal firm. Certain types of diversity may impede the ability of board members to relate to one another (Kosnik, 1990). A board with industry experience similar to that of the focal firm may experience more effective interaction among the board at large and between outside directors and the top management team. Directors' business experiences are shaped in part by the industry context and the nature of industry-specific strategic decisions that directors have faced (Bluedorn et al., 1994). These experiences tend to shape the values of business leaders making it difficult to separate strategic decisions from the values of decision makers (Andrews, 1971). In turn, the firm

is, in part a reflection of its leaders (Hambrick & Mason, 1984). Directors from similar strategic contexts are more likely to perceive their ability to contribute strategically and to become more active monitors and advisors (Carpenter & Westphal, 2001). Upstream firms tend to face similar strategic choices by virtue of their position in the supply chain (Harrison et al., 1991). Likewise, downstream firms face similar strategic choices. Hence, similar industry experiences may impact the quality of decision-making with respect to specific strategic decisions.

Directors serving on boards of other firms may have industry-specific knowledge (Bacon & Brown, 1985) that may become part of the firm's store of knowledge (Nelson & Winter, 1982) enhancing the likelihood of improved post-acquisition performance. Industry experience often carries with it a cognitive base of assumptions about the future, knowledge about alternative courses of action, and consequences associated with each alternative (Hambrick & Mason, 1984). For example, common industry experience may lead managers to evaluate target firms using similar criteria (Hitt & Tyler, 1991). In addition, differences in managerial style may be negatively related to post-acquisition performance (Datta, 1991). The potential for such negative outcomes as conflict between the two formerly separate management teams and difficulty in achieving the level of coordination necessary for synergies (Hill & Hoskisson, 1987) tend to reduce the likelihood of high post-acquisition performance (Datta, 1991). Hence, the importance of common cognitive frames may be true also for industry experience (Bluedorn et al., 1994). A person's cognitive base is a function of experiences including training and background (Cyert & March, 1963). Furthermore, common cognitive frames among inside and outside directors based on industry experience may influence the capacity of

outside directors to address strategic issues at the focal firm. Directors whose experience is similar to the dominant industry in which the focal firm operates may be able to address acquisition issues more effectively improving the likelihood of positive post-acquisition performance. This suggests the following hypothesis.

H_{3a}: The number of industries of other firms on whose boards directors serve in which the focal firm also operates will be positively related to post-acquisition performance of the focal firm.

H_{3b}: The time that directors have spent in industries in which the focal firm operates will be positively related to post-acquisition performance.

International experience

International diversification tends to add to the complexity and dynamism (Dess & Beard, 1984) facing large, diversified firms. Increased complexity for internationally diversified firms stems from the increasing opportunities and threats confronting managers in international markets (Tihanyi, Ellstrand, Daily, and Dalton, 2000) as well as the greater dependence on foreign markets and the geographical dispersion of that dependence (Sullivan, 1994). Dynamism of internationalization stems, in part, from the expansion of the global economy and markets (Sambharya, 1996). One function of boards is to reduce the uncertainty associated with complexity and dynamism (Boyd, 1990; Hillman, Canella, & Paetzold, 2000; Pfeffer & Salancik, 1978). For internationally diversified firms, one way that boards may accomplish this is through the international experience of directors.

Managers of internationally diversified firms tend to accumulate a certain amount of international experience as part their management development (Perlmutter, 1969). This international experience is a response to the expansion of the global economy, the need for accumulating cultural knowledge in individual managers and within the firm's

knowledge base, and the need for reducing uncertainty associated with increased cultural complexity (Sambharya, 1996). The diffusion of international experience among a firm's managers encourages development within the firm of a geocentric perspective (Perlmutter, 1969) that reduces intercultural bias and promotes greater tolerance for cultural diversity within the firm and with respect to the firm's expanding markets. Directors who serve on the boards of internationally diversified firms may also serve as managers of other similarly internationally diversified firms and may have experience serving as managers in foreign markets. If so, they would bring this international experience to the board of the focal firm. Outside directors on boards of internationally diversified firms may be beneficiaries of the geocentric mindset within those firms without actually serving as a manager in a foreign market. Hence, whether they are executive directors or non-executive directors, their experience on boards of internationally diversified firms may influence how they recommend managers of the focal firm address the firm's international environment.

The increasing rate of globalization increases the likelihood that a U. S. firm may acquire a domestic target with considerable international sales as well as the likelihood of acquiring a foreign target, and such acquisitions are more challenging to successfully complete and integrate than domestic acquisitions (Hitt et al., 2001). Firms face considerable opportunities to develop revenue sources in foreign markets as well as face considerable threats from foreign firms competing in domestic markets. In addition, firms face increased opportunities to enhance their market power by purchasing from foreign suppliers providing greater variety in price and quality. Finally, firms face the possibilities of developing greenfield investments in foreign markets. The aggregate

effect of these opportunities and threats increases the importance of international experience within the firm.

A high level of international managerial experience tends to be associated with a high level of international diversification (Sambharya, 1996; Tihanyi et al., 2000).

Sambharya (1996) found that a higher proportion of managers with international experience was associated with higher foreign components of total sales and total assets. Tihanyi and colleagues (2000) reported a positive relationship between international experience and international diversification. These findings suggest that business leaders with international experience may be more inclined toward international diversification than those with less international experience (Sambharya, 1996).

International diversification tends to lead to higher performance than does domestic market diversification (Hitt, Hoskisson, & Ireland, 1994). This effect may be attributable to such influences as balancing variation in returns (Caves, 1982), increased market power and market opportunity (Buhner, 1987), and returns to intangible resources (Grant, 1987; Sambharya, 1996). Hence, international managerial experience may be indirectly associated with higher performance through the mediation of international diversification.

One way in which international diversification may take place is through acquisitions. Because of the growth of the global economy and markets (Sambharya, 1996), international experience has become a major component in management development and this has promoted growth of a strong geocentric perspective in many large, highly diversified firms (Perlmutter, 1969). A strong geocentric perspective may enhance the capacity of firm management to integrate the foreign components of assets,

sales, and profits of an acquisition of either a domestic internationally diversified firm or a foreign firm. Directors with a high level of international experience acquired through multiple directorships may enhance that capacity as well as the quality of a firm's acquisition decision processes when dealing with issues of international diversification inherent in a particular acquisition. International diversification tends to lead to higher performance, and this may also be true with acquisition of targets with international components or international business units. International experience among business leaders should lead to general improvement in firms' performance due to the enhanced capacity for dealing with the complexity and uncertainty of the international environment. This performance improvement should also be apparent with respect to more specific corporate outcomes. The capacity of firm leadership to assess and respond to the vagaries of the international environment should enhance the quality of the firm's strategic decision processes. Accordingly, international experience of directors should lead to higher post-acquisition performance, and this effect should be greater for acquisitions of foreign firms than domestic firms.

H_{4a}: International experience of the board of directors will be positively related to post-acquisition performance of the focal firm.

H_{4b}: The relationship of international experience of the board of directors with post-acquisition performance of the focal firm will be more positive for acquisitions of foreign firms than for acquisitions of domestic firms.

Board committees and acquisition outcomes

Although the focus of empirical investigation of effects of the board on firm outcomes has been primarily on the board at large, analysis at the board subgroup level may reveal important board-firm performance relationships. The work of the board increasingly relies on committees (Lorsch & MacIver, 1989) as a means to facilitate

board decision-making processes (Conyon & Peck, 1998; Singh & Harianto, 1989b). The past three decades have seen an increasing incidence of committees (Vance, 1983). Although researchers have increasingly acknowledged the importance of board committees, in comparison to the volume of research on the board at large, board structure in the form of board committees has received relatively little empirical scrutiny.

The rationale for the study of board committees is three-fold. First, committees may perform important monitoring functions. The specialization of committees means they deal with particular domains and develop some specialized expertise (Ellstrand et al., 1999; Vafeas, 1999) that may enhance the capability of the board at large to assess management actions in pursuit of firm strategy and to advise changes when necessary. A second reason for studying board committees is that the existence of and work performed by committees may help the board address the constraints of time and complexity brought about by infrequent and relatively short meetings (Lorsch & MacIver, 1989). A third reason for the study of committees is methodological. Committees tend to have distributions of attributes that differ significantly from those of the board at large (Kesner, 1988; Klein, 1998) possibly masking important effects. Hence, the study of board subgroups in the form of committees may enhance understanding of the board's capabilities for monitoring and for providing strategic support and advice and counsel.

Research on committees may be classified into two major categories: studies of composition and studies of committees as antecedents of corporate outcomes.

Composition studies tend to be somewhat descriptive in nature. An early study, for example, found that key committees tend to include more long-term directors with business backgrounds than the board at large (Kesner, 1988). Studies of gender effects

found that women tended to be underrepresented on key committees such as the nominating and executive committees (Bilimoria & Piderit, 1994; Kesner, 1988) and were preferred for membership on the public affairs committee (Bilimoria & Piderit, 1994). Recent research comparing committee composition with that of the board at large reported that the proportions of insiders and outsiders on the audit, compensation, and nominating committees differ significantly from those of the board (Klein, 1998). These findings suggest that key committee characteristics may be qualitatively and quantitatively different from those of the board-at-large. Moreover, these studies suggest that committees may indeed differ in strategically important ways from the board at large and that committee characteristics may be important antecedents of firm outcomes.

Another group of empirical studies focuses on committees as antecedents of corporate outcomes, and while the first group tends to be descriptive in nature, this group tends to be more explanatory in nature. Examination of audit committee effects on bankruptcy outcomes found no systematic, significant relationship between the proportion of affiliated directors on the audit committee and the occurrence, type, or time in bankruptcy reorganization (Daily, 1996), although statistical results suggested weak, marginally significant relationship between proportion of affiliated directors and the amount of time spent in bankruptcy. A study of the compensation committee found that CEO compensation was positively related to the compensation levels of compensation committee members (O'Reilly, Main, & Crystal, 1988). In another study of the compensation committee, the proportion of insiders on the compensation committee was negatively associated with the number of executives receiving golden parachutes (Singh & Harianto, 1989a). Finally, compensation committees were active monitors of CEO

compensation in both owner and manager-controlled firms, although the level of monitoring was greater in owner-controlled firms (Tosi & Gomez-Meija, 1989). These studies suggest that the way the board is structured may be associated with corporate outcomes. Furthermore, Klein (1998) reported that in spite of the apparent lack of a systematic relationship between board composition and firm financial performance, some evidence does suggest a weak relationship between committee composition and some measures of firm financial performance. Thus, the characteristics of committees, as a form of board structure, may be a salient focus of research.

Audit committee

The audit committee oversees the firm's financial reporting ensuring that it properly and accurately reflects the firm's financial status (Daily, 1996). In addition, the audit committee selects, compensates, and oversees the firm's external and internal auditors and may have independent access to them as well (Osterland, 2002; Financial Aspects of Corporate Governance, 1992). The monitoring functions of the audit committee underscored by recent scandals and increased regulatory and legislative scrutiny, implies the importance of a subgroup of the board with specialized responsibilities (Ellstrand et al., 1999) and knowledge.

The audit committee is subject to a number of regulatory bodies. The NYSE requires all members to be independent outsiders (Kesner, 1988) but relaxed this requirement in December 1999 to allow inclusion of non-outside directors if it is deemed to be in the best interest of the firm to do so (Klein, 2002). The SEC, Amex, and NASDAQ strongly suggest predominance of, or exclusively, outsiders (Kesner et al., 1986). Recent regulations on audit committee conduct and composition prohibit additional compensation beyond that for board member service (Weil & Berman, 2002). Firms must disclose whether at least one of the audit committee members is a financial expert (Osterland, 2002; Schwartz & Freedman, 2002; Weil & Berman, 2002) with experience in either preparing or auditing financial statements. In addition, the recommendation that the committee meets privately with internal and external auditors at least once per quarter and pre-approves all non-audit services by auditors expands the authority of the audit committee. These rules and regulations have the apparent intent of

reducing the susceptibility of financial reporting to fraud, inappropriate manipulation, or earnings management (Institute of Management and Administration, 2003).

Empirical evidence (Abbott & Parker, 2000; Beasley & Petroni, 1999; DeAngelo, 1981; McMullen 1996) supports the notion that certain aspects of the audit committee may contribute to the integrity of the firm's financial reporting (Daily, 1996; Ellstrand et al., 1999). McMullen (1996) reported an association between the presence of an audit committee and more reliable financial reporting. Financial reporting reliability was measured using shareholder litigation alleging management fraud, quarterly earnings restatements, SEC actions, illegal acts, and auditor turnover involving a disagreement over application of accounting rules, and firms with audit committees were found to be less likely to experience any of these five events. Raghunandan and colleagues (2001) reported that audit committees composed of outside directors with at least one member with a finance and accounting background were more likely to meet with the firm's chief internal auditor and those meetings were likely to last longer. In addition, audit committees so composed were more likely to review the audit program and results of the internal audit and to oversee management's interaction with internal auditing. Hence, not only the mere presence of an audit committee but outside representation combined with a certain level of financial expertise may enhance financial reporting integrity.

Moreover, audit committee characteristics may enhance financial reporting integrity through the firm's external audit. External audit quality is considered to be a function of the probability that an external auditor will detect weaknesses in the firm's accounting system and will report such weaknesses to management (DeAngelo, 1981). Auditors that specialize in the focal firm's industry may be more likely to increase the

quality of the external audit (Cammack, 2002) through better audit technologies (Dopuch & Simunic, 1980), lower costs through economies of scale (Caves, 1992) and superior knowledge resulting from economies of knowledge (Beasley & Petroni, 1999). Abbott and Parker (2000) reported an association between audit committee members seeking to protect their reputational capital as finance and accounting experts and selection of external auditors that specialize in the focal firm's industry.

The above findings suggest that the audit committee may contribute to the firm's financial reporting integrity through their selection and oversight of external auditors and interactions with both internal and external audit staff and through their mediation of interactions between management and audit staff. The application of accounting rules is often the subject of dispute between management and auditors (Antle & Nalebuff, 1991), and final financial reports often are the result of negotiation (Nelson, Elliot, Tarpley, 2000) suggesting that the audit committee serves as a broker between management and auditor in the production of balanced, accurate financial reporting (Klein, 2002). This conclusion supports agency theory because the audit committee is enacting a monitoring role, but it also supports the resource-based view. The existence of outsiders and the oversight of auditing and management interaction with auditing suggest a monitoring role. Previous research suggests that governance is more than oversight, however, and that governance may be comprised also of certain levels of expertise and skill (Baysinger & Butler, 1985). Although audit committees can be seen to perform a monitoring role, a certain level of financial expertise supplements this role. The existence of financial expertise on the audit committee enhances the capacity of the audit committee to perform its governance functions to ensure the integrity of the firm's financial reporting.

Financial expertise may enhance monitoring capability and enhance the quality of interactions with the firm's external and internal auditing activities. Thus, whereas outsiders on the audit committee may enhance the monitoring capability of the board, the level of financial expertise on the audit committee may be a resource that affords the board the capability to enhance its governance of the firm.

Empirical evidence supports the notion that board structure in form of committees has detectable effects on firm outcomes. No simple relationship appears to exist between audit committee outsider representation and bankruptcy outcomes (Daily, 1996) or with firm financial performance (Ellstrand et al., 1999). However, Klein (1998) reported weak associations between committee composition and some measures of firm financial performance. Furthermore, research regarding audit committee composition and the firm's financial reporting found that committee independence is negatively related to earnings management (Klein, 1998). These findings suggest the possibility of detecting performance effects at the board committee level. Because the audit committee performs a fairly narrow function, that of ensuring the integrity of financial reporting, the relationship of that committee to the board and to the firm presents somewhat important theoretical and empirical issues.

Fraudulent financial reporting may be defined as managerial intent to misstate financial information or to misappropriate assets (Beasley, 1996). Empirical evidence regarding the role of the audit committee in detecting or preventing fraud is mixed. One study reported a negative association between the proportion of outsiders at the board level and the incidence of fraud, while the existence of an audit committee had no significant effect (Beasley, 1996). The study did not examine fraud at the industry level.

Examination of the incidence of fraud across the technology, health care, and financial services industries resulted in a negative association between the existence of an audit committee and the incidence of fraud (Beasley, Caracello, Hermanson, & Lapedes, 2000). Fraud companies were less likely to have an audit committee. In addition, fraud companies had fewer audit meetings and were less likely to have an internal audit function. Results of these two studies suggest the importance of industry context with respect to corporate governance and the incidence of fraud.

Although these findings suggest that the effectiveness of the audit committee to prevent fraudulent financial reporting is questionable, they nevertheless lend support to the idea that audit committees enhance board monitoring of the firm's financial reporting. Furthermore, it may be important to point out some differences between these findings and those that support the role of the audit committee in financial reporting integrity. First, fraudulent financial reporting is qualitatively different from routine financial reporting because it assumes managerial intent to misstate information or misappropriate assets (Beasley, 1996). Second, audit committee activities that prevent fraud may be distinct from the types of activities that ensure financial reporting integrity. Detecting fraud may be qualitatively different from ensuring financial reporting integrity. Control systems do not necessarily prevent malfeasance; they make it more difficult for one to commit malfeasance. For this reason, detection and prevention may be considered qualitatively different types of activities. It may be that monitoring by the audit committee is more likely sufficient to ensure integrity under normal circumstances that do not involve the presence of managerial fraudulent intent. Hence, these findings suggest support both for agency theory and for the resource-based view. They support

agency theory because they suggest that stronger governance mechanisms are necessary in cases where the likelihood of managerial fraud is high. They support the RBV because they suggest that expertise on the board in the form of audit committee financial expertise may be board resources that enhance the governance capabilities of the board.

The RBV suggests that the intangible resources that directors bring to the audit committee may be effectively integrated with the firm's existing knowledge of its industry, its internal operations, and its activities specific to the finance and accounting functions of the firm. Hence, audit committees whose members have backgrounds in finance and accounting may be able to provide a higher level of the fiduciary care necessary for a firm to understand its financial position. Such sound financial knowledge seems to be a primary reason for positive post-acquisition performance. Much of the focus of acquisition due diligence is on the target firm. However, a capacity for due diligence in analyzing an acquisition target may be a reflection of the capability of the acquirer to properly and accurately assess its own financial status (Daily et al., 1996), and the capacity of the audit committee to ensure that occurs may lie at the heart of this capability at the firm level.

A considerable problem in post-acquisition performance is the high incidence among bidding firms of inappropriate accounting practices that inflate revenues or net income accompanied by attempts to cover up such practices (Hitt et al., 2001). Characteristics of the board and of key committees may be important determinants of financial reporting integrity. An analysis of causes and consequences of earnings manipulation reported a key incentive for that type of accounting practice was a desire for attracting low cost external funding and that earnings manipulation was more likely with

a board that is dominated by management and chaired by the CEO (Dechow, Sloan, & Sweeney, 1996). Examination of the relationship between board composition and financial statement fraud reported the proportion of outside directors to be negatively related to financial statement fraud and that board composition appeared to be more important for reducing the likelihood of financial statement fraud than the existence of the audit committee (Beasley, 1996). These findings suggest a complex relationship between board and committee attributes and the integrity of the firm's financial reporting and that further examination, particularly of the audit committee, is necessary. Xie and colleagues (2003) and Klein (2002) both reported that the proportion of outsiders on the audit committee was associated with lower levels of earnings management.

Publicly traded firms are required in nearly all cases to have an audit committee, and the increasing public attention on the audit committee suggests that it may be an important source of a firm's financial integrity. In addition, the responsibility of the audit committee to select and oversee the auditing function of the firm means that finance and accounting responsibility ultimately rests with the members of this committee. Although most business leaders develop a relatively keen ability to absorb and comprehend complex financial data and to abstract meaning from them, such expertise is different from that required to evaluate the systems of accounting and control necessary for ensuring the integrity of financial reporting. Hence, the requirement of at least one audit committee member with experience in preparing and auditing financial statements may be more critical to the integrity of the firm's financial reporting than the ability to read and understand the information contained in the reports. The former is the domain of financial expertise, while the latter is the domain of general business management. Thus,

financial expertise residing on the audit committee may be an important source of governance capability for a firm. This expertise may be critical in evaluating the potential value of the combination of an acquirer and a target. Hence, not only is due diligence in evaluating a target firm important for positive post-acquisition performance, but also ongoing due diligence in ensuring the integrity of the acquirer's financial systems will be critical in ascertaining a potential combination of the two firms. The importance of the audit committee in maintaining the financial integrity of the acquirer and in ascertaining the value of a post-acquisition combination suggests the importance to acquisition success of financial expertise on the audit committee. This implies the following hypothesis:

H₅: The number of directors on the audit committee with financial expertise will be positively related to post-acquisition performance of the combined firm.

Prior acquisition experience should help ensure higher post-acquisition performance (Hitt et al., 2001). Acquisition experience of the audit committee may also help ensure higher post-acquisition performance. The audit committee is responsible for the integrity of the firm's financial reporting and ensuring that it accurately reflects the firm's financial position. Knowledge among audit committee members that has been gained through experience with particular corporate phenomena may enhance the capability of the audit committee to ensure financial reporting integrity. Because management relies heavily on accounting-based information in evaluating potential acquisition transactions (Harrison et al., 1991), accurate, reliable financial reporting may be especially crucial in the decision process.

Empirical research supports the notion that audit committee characteristics may contribute to positive firm outcomes (Abbot & Parker, 2000; Raghunandan et al., 2001),

and a capacity for financial integrity may be a reflection of the capability of an acquirer to properly and accurately assess its own financial status. Abbott and Parker (2000) found that audit committee members seeking to protect their reputation capital tend to be more active and to select auditors that specialize in the focal firm's industry.

Furthermore, audit committees composed solely of outside directors and with at least one member with a background in accounting and finance were more likely to have private meetings with the firm's chief internal auditor, tended to meet longer with the internal auditor, and were more likely to review the audit program and results and to oversee management's interaction with the internal auditing (Raghunandan et al., 2001). In addition, a study on bankruptcy outcomes (Daily, 1996) reported a weak inverse relationship between the proportion of affiliated directors and time spent in bankruptcy reorganization. Although this association was weak, it suggests that firm-specific knowledge on the audit committee may be an important antecedent of positive outcomes. In the same way that firm-specific knowledge may have beneficial effects, event-specific knowledge may also have beneficial effects with respect to event-specific outcomes. One type of event-specific outcome is the acquisition of a target firm. A specific acquisition deal may have certain unique aspects that distinguish it from other acquisitions. Such unique aspects may include the method of payment, the ownership structure of the target, and the relatedness of the target firm's industry to that of the acquirer. Due to potential unique aspects of each individual acquisition, experience learned from involvement in one acquisition may not be fully transferable to another acquisition requiring additional learning for subsequent deals. Indeed, an organizational leader may experience multiple acquisitions over a period of time resulting in a collective set of experiences that begins

to comprise acquisitions knowledge. In addition, when these collective experiences are coupled with the specialized domain of the audit committee, audit committee members may develop acquisitions knowledge that is uniquely geared toward the types of decisions and actions within the audit committees domain. Hence, knowledge gained from previous experience with acquisition outcomes may provide the audit committee with knowledge about the firm's financial reporting that may assist the board and management in more accurately ascertaining the potential benefits of a proposed acquisition. Thus, the level of acquisition experience on the audit committee may have a positive effect on post-acquisition outcomes. In addition, because of the differences in value creation, integration, organizational structure, and control systems that distinguish related acquisitions from unrelated acquisitions, experience with particular types of acquisitions may have differential effects on post-acquisition outcomes.

Successful related acquisitions tend to rely in part on operational synergies between the related units, and the relatively tight linkages necessitated by these synergies may also require relatively tight integration of the units' accounting and control systems. Audit committee members with experience in related acquisitions may be a resource that provides the committee with capabilities to detect opportunities for integrating the accounting and control systems of the focal firm with an acquisition target. Furthermore, these capabilities may extend to the audit committee's oversight of the acquiring firm's external and internal audit processes enhancing the combined firm's synergies at the operational level. Hence, audit committee related acquisition experience may enhance the post-acquisition performance of the acquiring firm.

Successful unrelated acquisitions tend to rely in part on financial synergies among the firm's units. The efficient allocation of resources and the operation of internal financial markets underlying these financial synergies (Hitt et al., 2003) may be enhanced by the audit committee's familiarity with their vagaries through their experience with unrelated acquisitions. Prior experience with unrelated acquisitions at their home firms coupled with their accounting and financial expertise may enhance the capabilities of members of the audit committee to detect opportunities for financial synergies between the bidder and the target. Knowledge and understanding among members of the audit committee of leverage, cash flow, and return on investment garnered through previous audit committee experience and experience with unrelated acquisitions may enhance the capabilities of the focal firm to realize the financial synergies underlying the potential creation of value from unrelated acquisitions. These enhanced capabilities should lead to increased performance outcomes, and these capabilities may extend to the audit committee's oversight of the firm's external and internal audit processes enhancing the firm's potential financial synergies. Hence, audit committee unrelated acquisition experience may enhance the post-acquisition performance of the acquiring firm.

The preceding discussion suggests the following hypotheses.

H_{6a}: The number of related acquisitions experienced by members of the audit committee in serving on other firms' boards will be positively related to post-acquisition performance of related acquisition firms.

H_{6b}: The number of unrelated acquisitions experienced by members of the audit committee in serving on other firms' boards will be positively related to post-acquisition performance of unrelated acquisition firms.

Tenure of organizational leaders is generally viewed in the management literature as leading to complacency and reinforcement of the status quo (Johnson et al., 1993; Staw &

Ross, 1980; Stevens, Beyer, & Trice, 1978; Wiersema & Bantel, 1992). However, with respect to the board of directors, effects of tenure may not necessarily behave in the same ways as organizational tenure. For example, Johnson and colleagues found that mean board tenure was not significantly related to firm restructuring (Johnson et al., 1993) suggesting that the effects of board tenure are not equivalent to that of top management team members. Boards operate quite differently than top management teams meeting on a less continuous basis, and the factors that influence the effects of tenure of top management teams may not operate with respect the board of directors (Johnson et al., 1993).

These differences in tenure effects may be present in the audit committee as well, and there are several factors that may influence the effects that audit committee tenure has on audit committee outcomes. The primary domain of the audit committee is in ensuring financial reporting integrity, and much of this domain is governed by institutional pressures for compliance to standards that may supersede organizational pressures for reinforcement of the status quo. For example, accounting standards undergo continuous review by the Financial Accounting Standards Board (FASB). Accounting work is characterized by professional standards of compliance that are set outside the organization. Furthermore, these standard are not static and when changed establish a new status quo. The institutional pressures of the accounting profession may provide an external monitoring mechanism that enforce professional standards of compliance and public accountability that may grow stronger the longer one is associated with the profession.

In addition to the institutional pressures associated with the work of the audit committee, the position of the audit committee with respect to the focal organization may reduce the effects of tenure on reinforcement of the status quo. Members of the audit committee have access to the firm's internal and external audit staff and may meet with either team of auditors independent of the board (Osterland, 2002; Financial Aspects of Corporate Governance, 1992) . This structural independence may reduce pressures for complacency on the part of the audit committee.

Extended service on the audit committee may increase understanding of organizational accounting issues that may be unique to the firm or to the industry. In addition, extended service may enhance proficiency in the firm's financial accounting and reporting requirements. Taken together, the institutional pressures that the accounting profession places on the work of the audit committee, the committee's structural independence with respect to the focal organization, and the increased knowledge and proficiency in accounting standards and practices gained from extended service on the audit committee may all work to enhance audit committee effectiveness with longer average service time of the committee influencing a positive relationship between the tenure of the audit committee and firm performance and this positive relationship is likely to hold true for post-acquisition performance. Therefore, the tenure of the audit committee should be associated with the ability of the firm to ascertain its own value, evaluate that of a potential target, and to accurately predict the value of the combined firm.

H₇: The tenure of the audit committee will be positively related to post-acquisition performance.

Compensation committee

The level of acquisition experience on the compensation committee may be an important determinant of the capability of the committee to determine and control firm strategic direction through the CEO's employment contract. One of the key aspects of general management of large, complex, diversified firms is acquisitions knowledge. Such knowledge includes the capacity for identifying and evaluating potential targets (Hitt et al., 2003), understanding the dynamics of acquisition decision-making (Jemison & Sitkin, 1986) and successfully integrating previously separate firms (Cannella & Hambrick, 1997; Krishnan, Miller, & Judge, 1993). This generally is tacit, implied knowledge attainable primarily through experience and repetition. Hence, the most effective method of acquiring acquisition knowledge is through experiencing them over time.

The average director serves on 2-3 other boards (Byrd & Hickman, 1992; Kesner, 1988; Vafeas, 1999) and may acquire such experience-based knowledge through service on these other boards. Moreover, empirical research suggests that members of the key board committees (audit, compensation, nominating, and executive committees) are more likely to have business experience (Kesner, 1988). The greater the level of acquisition experience by way of this business experience and service on other boards, the more likely committee members may be to apply the knowledge gained through this experience to the tasks of determining and controlling firm strategic direction in general and to specific strategic decisions such as acquisition decisions, in particular. In addition, because of their unique responsibilities in developing and administering executive

employment contracts, members of the compensation committee are more likely to utilize their acquisitions knowledge in dispensing their compensation committee duties.

Schmidt and Fowler (1990) found significant increases in executive compensation for firms engaging in acquisitions. Lynch and Perry (2002) found that top managers of acquirers tended to have higher total compensation than those of targets, and these higher levels of compensation were attributable to higher salaries, higher bonuses, higher restricted stock and other long-term incentives and stock options with higher values than those of executives of target firms. These findings suggest that acquisitive activity is associated with increases in executive compensation. Acquisitions may be driven by managers' pursuit of their self-interest by increasing firm size to increase their compensation (Fama & Jensen, 1983; Finkelstein & D'Aveni, 1994; Tosi & Gomez-Meija, 1989).

The board, as the primary source of managerial incentives, may affect how acquisitions affect executive compensation. Wright and colleagues (2002) found that the intensity of external monitoring in terms of observation by securities analysts, independent outside directors, and activist institutional investors moderated the relationship between acquisitions and executive compensation. Weak external monitoring was associated with increased executive compensation due to increases in firm size. However, strong external monitoring was associated with increased executive compensation due to post-acquisition increases in firm returns. This finding provides support for agency theory, although it does not explain why external monitoring strengthened the link between compensation and post-acquisition returns. Banerjee and Owers (1993) reported that a low proportion of stock-based compensation to total

executive compensation was associated with payment of higher acquisition premiums. Overpayment in acquisitions tends to dilute any potential gains and is a key factor in neutral and negative post-acquisition outcomes (Hitt et al., 2001). Hence, it may be a combination of board independence and board experience that affects the capacity of the board to structure the compensation contract that effectively aligns managerial and shareholder interests.

Empirical evidence provides further support for the implications of the acquisitions-compensation-firm performance link. Tehranian and colleagues (1987) reported that bidders with long-term incentive plans experienced significantly favorable market reactions to proposed acquisition announcements. Moreover, Datta and colleagues (1992) reported that firms with high equity-based compensation experienced significantly higher post-acquisition stock price effects than firms with lower equity-based compensation suggesting that high equity-based compensation is an incentive to maximize shareholder wealth. Boards that structure the compensation contract with higher components of contingent pay may be more effective at aligning managerial and shareholder interests. These findings in combination with mixed findings of agency-based studies suggest that it is not simply the existence of outsiders on the board that leads to effective governance. Rather it is more likely the combination of outside directors and their capabilities that lead to effective governance. The experiences that directors bring to the boardroom may enhance that effectiveness.

The above findings suggest the importance of compensation in effecting positive firm outcomes. However, the bulk of executive level compensation decisions occur not at the board level but rather in the compensation committee (Daily, Johnson, Ellstrand, &

Dalton, 1998; Ellstrand et al., 1999; Kesner, 1988; Lorsch & MacIver, 1989). The capacity of the compensation committee for crafting the executive employment contract may be a function of compensation committee members' experiences with various types of corporate phenomena such as acquisitions. The strong empirical and theoretical associations between contingent pay and post-acquisition performance suggested by the findings reported above suggest that experience with acquisitions may enhance the capability of the compensation committee to more effectively align managerial and shareholder interests. Because of the importance of the compensation committee to that capability, the acquisition experience of the committee may improve that capability and lead to higher acquisition performance through effective alignment incentives. This suggests that the compensation committee acquisition experience of the bidding firm may lead to higher post acquisition performance.

H₈: The acquisition experience of the compensation committee of the bidding firm will be positively related to the bidding firm's post-acquisition performance.

Compensation committee tenure may lead to performance-enhancing acquisitions. Empirical evidence supports the notion that team tenure of top management teams increases the likelihood of corporate strategic change. In addition, the combination of team tenure with short organizational tenure may be more conducive to change (Wiersema & Bantel, 1992) suggesting that the inclusion of outsiders may facilitate change. The compensation committee of the board tends to be composed of members with short organizational tenure, because as outsiders, they tend to be relatively new to the organization. In addition, previous committee research suggests that committee members tend to have longer tenure as directors than non-committee members. Due to

the specialization of committees, committee membership is not likely to rotate among existing board members. Instead it is more likely that once a director serves on a particular committee, she or he will continue to serve on that committee throughout the duration of service on the board. This may be more likely on key board committees such as the compensation committee (A. E. Ellstrand, personal communication, June 11, 2003). Wiersema & Bantel (1992) reported that top managers recruited from outside the organization spent a higher percentage of their organizational tenures as top managers. Outside directors' organizational tenure will roughly equal their board tenure. Wiersema & Bantel (1992) also reported that top managers with short organizational tenure and long top management team tenure were more inclined toward strategic change. Hence, as a group composed of outside directors with short organizational tenure roughly equal to their team tenure, the compensation committee may be more inclined toward corporate strategic change. Acquisitions tend to be relatively disruptive sources of change for both acquirer and target. Previous research supports the idea that short organizational tenure combined with long team tenure is conducive to corporate strategic change (Wiersema & Bantel, 1992). Compensation committees may be more likely to review the compensation contract within the context of corporate strategic change such as an acquisition. Therefore, the tenure of the compensation committee may be positively associated with post-acquisition performance.

H₉: The tenure of the compensation committee will be positively related to post-acquisition performance of the focal firm.

CHAPTER 3

METHODS

Sample

The population for this study consists of acquisitions listed in the acquisitions roster of the monthly issues of Mergers and Acquisitions (Cannella & Hambrick, 1993; Datta, 1991; Krishnan et al., 1997) for the years 1996-1999. This sampling period covers a period during the fifth wave of merger and acquisition activity during the twentieth century (Hitt et al., 2001) and is intended to provide a large enough sampling frame to yield a sample of sufficient size³. Partial acquisitions, acquirers that were subsequently acquired themselves by 2002, privately held firms, and foreign firms (Datta, 1991; Krishnan et al., 1997) will be excluded from sample. The cutoff off date of 1999 will allow a two-year period for collecting post-acquisition performance data.

The sample was randomly selected in the following manner. I made a list of all the roster pages containing records for my sampling frame by volume, issue number, and page number and assigned numbers in numerical order to each entry in that list. The result was a numbered list of all pages containing records of acquisitions that could potentially be included in my sample. Using a random number generator, I randomly selected a page from this list, and, after generating another random number, I randomly selected a record from the randomly selected page. I recorded the information from that

³ The initial proposed study period was 1994-1998. At the suggestion of my dissertation supervisor the time frame was changed to 1996-2000. However, after the sample had been collected, I discovered that beginning with the January, 2000 issue Mergers & Acquisitions increased the minimum reporting threshold from deals valued at \$5 million to deals valued at \$25 million. Including firms in my sample that straddled this change would introduce potential bias, so I excluded firms that were reported in issues published in 2000 and beyond. This included some firms that had completed deals prior to 2000 but, due to the lag in reporting, were not included in the rosters until 2000.

randomly selected record subject to the following constraints. The acquisition was a 100% acquisition of an entire firm (the target) by the acquiring firm. If the record was labeled as a DIVESTITURE, MAJORITY INTEREST, or REMAINING INTEREST then it was excluded and the nearest record (either moving forward or backward) that fit the above criterion was used. If no records on that page fit the criterion, I used the nearest record on either of the pages immediately preceding or following the original page. If no record could be found after exhausting the above criteria, I omitted that page from the selection process and began the process for randomly selecting the next record.

The power of a statistical test refers to the probability of detecting a statistically significant test statistic, or effect size, at a specific level of significance with a specific sample size (Cohen & Cohen, 1983). In multiple regression, power is the probability of detecting as statistically significant a specific level of R^2 (Hair, Anderson, Tatham, & Black, 1998; Mattingly, 2002). Previous empirical research on the board-firm relationship should provide an estimate of a reasonable value of the test statistic to expect from a statistical test. Table 3 shows the results of a convenience sample of empirical studies from a meta-analysis of the relationship between board composition and firm financial performance (Dalton et al., 1998). The table reports the author(s) and the R^2 values reported in the study. The simple arithmetic mean of these values is 0.29 with a maximum of .65 and a minimum of .11. Although this is a crude measure, it provides a reasonable estimate that the statistical test should be sensitive to values of R^2 as low as .10. A sample of 250 should be sensitive enough to detect values of R^2 as low as .06 with ten variables and .08 with 20 variables (Hair et al., 1998). The largest number of

variables in any hypothesized model is 18, so statistical tests based on a sample of 250 should be capable of detecting R^2 values between .06 and .08 without being overly sensitive (Hair et al., 1998). Therefore, a sample of size $n = 250$ would be sufficient, but the requirements of the statistical tests for CARs indicate a larger sample will be necessary.

TABLE 3
Convenience Sample of Studies Reporting R^2

Author	Reported R^2
Boeker & Goodstein, 1991	.21, .31, .28, .24, .27, .28, .23
Daily & Dalton, 1994	Pseudo- R^2 .32
Goodstein, Gautam, & Boeker, 1994	.257, .218, .324
Hill & Snell, 1988	.11, .30, .33
Johnson, Hoskisson, & Hitt, 1993	.65

Source: Dalton et al., 1998

A review of empirical evidence of post-acquisition performance reported that acquirers in tender offers realized increases ranging from 2.4% to 6.7% with a weighted average of 3.8% (Jensen & Ruback, 1983) while a later review reported increases ranging from 1.14% to 2.04% for the period of the 1960s through roughly the first half of the 1980s (Jarrell, Brickley, & Netter, 1988). These findings suggest that a reasonable parameter estimate of post-acquisition performance gains would be 1%. Assuming the value of the parameter of mean post-acquisition performance gains to be 1% (the null value), the necessary sample mean to reject the null hypothesis at $\alpha = .05$ is

$$z = \frac{\bar{x} - 0}{\frac{.134}{\sqrt{250}}} \geq 1.645 \text{ (Moore \& McCabe, 1998), where .134 is the market standard}$$

deviation for the period 1991-2000 (Brealey & Myers, 2003), 250 is the sample size, 0 is the null assumption, and 1.645 is the z value of a two-tailed test at $\alpha = .05$, or .014. An increase in post-acquisition performance of 0.014 above the mean of 1% would be

sufficient to reject the null hypothesis of no effect. A sample size of 360 would have a power of roughly .80 to detect such an effect.

$$P(\bar{x} \geq .014 \text{ when the null value is } 2\%) = P\left(\frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}} \geq \frac{.014 - .02}{\frac{.134}{\sqrt{360}}}\right) = P(Z \geq -.85), \text{ or a}$$

power of $1 - .1977 = 0.8023$. Therefore, a sample size of $n = 360$ will be collected.

Dependent variables

Post-acquisition performance of the combined firm will be measured using an accounting-based measure, firm ROA⁴, and a market-based measure, long-term cumulative abnormal returns (CARs). In addition, a two-day event study of acquisition announcement effects will use short-term CARs. ROA will be averaged over two years immediately following the acquisition and will be collected from Compustat.

Accounting-based measures are important in strategy research, because managers tend to rely most heavily on accounting-based information for strategic decision-making (Bromiley, 1986; Harrison et al., 1991). In addition, accounting measures reflect internally oriented information that may be more pertinent to the information asymmetries associated with positive post-acquisition performance (Barney, 1988).

Financial markets are unlikely to detect such information asymmetries and private synergy (Harrison et al., 1991). The performance results of synergies tend to occur over

⁴ Although I originally proposed measuring firm performance using industry-adjusted ROA (firm ROA – industry ROA), potential difficulties in the use of such a difference score as a dependent variable led to use of another measure. Organizational researchers have previously documented problems associated with the use of difference scores (Cronbach, 1958, 1992; Cronbach and Furby, 1970; Edwards, 1994, 1995; Johns, 1981; Wall & Payne, 1973; Werts & Linn, 1970). First, they tend to be less reliable than their component measures. In addition, difference scores tend to conceal the relative contribution of each component measure to the variance in the difference score. Moreover, their use as a dependent variable confounds the effects of the independent variables on the components of the difference score. Finally, the use of a difference score as a dependent variable in regression is inherently a multivariate model but essentially treats the model as a univariate one (Edwards, 1995). For these reasons, instead of using industry-adjusted ROA as the dependent variable, I used simple firm ROA.

a longer period of time than most market-based measures, so ROA will be averaged over two years.

Long-term CARs

Long-term cumulative abnormal returns (CARs) is a long-horizon event study test that compares the return performance of the stock of a single firm to a portfolio of stocks adjusted for size and book-to-market ratio (Rau & Vermaelen, 1998). The measure differs from short-term CARs as it is used in an event study in a number of ways. When short-term CARs is used in an event study, the basis of abnormal returns is the error of the security's actual return from its predicted return. The prediction is based on an OLS regression of the security's return against a market portfolio prior to the event being studied. The return of the market portfolio after the event has occurred is multiplied by the β that resulted from the OLS regression, and the result is the predicted return of the security. The difference, or error, between the security's actual return and the prediction is the abnormal return (AR). CARs for each day of the event study can then be computed by adding all previous days' ARs to that of the day in question. For an event study in which the event window began five days before the event, CARs are

$$CAR = AR_{-5} + AR_{-4} + AR_{-3} + AR_{-2} + AR_{-1} + AR_0$$

Using long-term CARs, AR is the difference between the return of the security and that of a market portfolio, and both are measured after the occurrence of the event being studied. Abnormal returns are computed monthly rather than daily as in the short-term event study. The market portfolio is adjusted for firm size and book-to-market (BtM) ratio because firm size and BtM may explain a larger proportion of variation in average stock returns that does beta (Rau & Vermaelen, 1998). Firms with low book-to-

market ratios tend to have below average returns, so it is important to control for the effect such firms may have on the sample statistics, and construction of the market portfolio in this way serves as such a control.

The market portfolio consists of a number of size and book-to-market adjusted portfolios based on all NYSE, Amex, and NASDAQ firms during the period of study and is adjusted monthly to account for changes in the size and book-to-market ratios of the NYSE firms and for firms that are delisted during the study period. Delisted firms will be included the month of the last listing and subsequently excluded from the portfolio. Newly listed firms will be included in the portfolio the first month they are listed. NYSE-listed firms are used to allow for sufficient dispersion in firm characteristics across portfolios. Using stocks from all three exchanges to create the size breakpoints would result in extreme variation in the size of the portfolios. Using NYSE for the size deciles ensures that the portfolios are not dominated by the many small stocks of the NASDAQ (Fama & French, 1992). First, quintile breakpoints are determined for all NYSE firms based on firm size, measured as market capitalization, or the number of the firm's common shares outstanding times the price of the firm's stock at the end of preceding month (Brav, Geczy, & Gompers, 2000). Second, quintile breakpoints are determined for the NYSE firms based on book-to-market ratio. The intersections of these two categories create 25 portfolios (5 x 5) into which all NYSE, Amex, and NASDAQ firms are allocated based on their size and book-to-market ratios (Brav, Geczy, & Gompers, 2000).

Sample firms are then allocated into 25 portfolios using the same breakpoints as for the market portfolio. Monthly abnormal returns are the difference between a

particular sample firm's monthly return and the market return of its market portfolio based on size and book-to-market ratio. Cumulative abnormal returns are computed by adding each month's return to the cumulative sum of returns that begins with the first month of acquisition, the month in which the transaction took place. Bidding firms already listed on the NYSE, Amex, and NASDAQ will have returns reported for the full month. Although the transaction may take place during a month, the partial returns for that month should not make a statistically practical impact given that returns will be accumulated over 24 months. This assumes that transaction completion dates are randomly distributed throughout the month and do not systematically occur on a particular day of the month.

Event study of announcement effects

Announcement effects will be assessed for each hypothesis by computing the abnormal return on the bidding firm's stock at the time of the acquisition announcement as demonstrated by Byrd and Hickman (1992). Market model parameters for each observation will be computed using daily returns data prior to the acquisition announcement. The estimated market model parameters, $\hat{\alpha}_i$ and $\hat{\beta}_i$ for each firm i are the result of an OLS regression of the firm's stock return against the market portfolio for a 200-day period preceding the announcement. Two-day returns will be continuously compounded for the 100 nonoverlapping two-day periods beginning with day -209 (i.e., 209 days before the announcement date, which is day 0). As was measured by Byrd and Hickman (1992), the abnormal return for a firm's stock, AR_{it} , for firm i over the two-day event study period t is the difference between the actual continuously-compounded return for firm i during the two-day interval t , R_{it} , and the expected return for that time period

based on the estimated market model parameters and the continuously compounded market return, R_{mt} , for the same two-day period, or

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}$$

Significance tests for the abnormal returns will be based on a Z-statistic for the two-day event period (days -1 and 0) using the following:

$$Z = \frac{1}{\sqrt{N}} \sum_{i=1}^N \left[\frac{AR_{it}}{\sqrt{\text{var}(AR_{it})}} \right]$$

where N is the number of observations in the sample. $\text{var}(AR_{it})$ is defined as

$$\text{var}(AR_{it}) = V_i^2 \left[1 + \frac{1}{100} + \frac{[R_{mt} - \bar{R}_m]^2}{\sum_{t=a}^b (R_{mt} - \bar{R}_m)^2} \right]$$

where V_i^2 is the residual variance from firm i 's market model regression, \bar{R}_m is the mean of the continuously-compounded two-day market returns over the 200-day estimation period, and a and b represent the beginning and ending two-day periods for the estimation period. The Z-statistic is asymptotically unit normal distributed.

The sample will be split into three groups at the 33rd and 67th percentiles representing low, moderate, and high levels of the experience and tenure variables. Two-day abnormal returns will be assessed for the entire sample as well as for the partitioned sample for low and high levels for each hypothesis.

Independent variables

Data on directors will be collected from Dun & Bradstreet Reference Book of Corporate Managements and Standard and Poor's Register of Corporations. Acquisition experience will be measured using the total number of acquisitions of firms that are tied

to the focal firm through multiple directorships divided by the total number of ties. This measure is similar to other measures of experience used by previous researchers (Carpenter & Westphal, 2001; Westphal & Fredrickson, 2001). Using the number of firms tied to the focal firm through director ties takes into account multiple directorships that would not be accounted for by counting the number of directors with acquisition experience. A director serving on the boards of two other firms, each of which have made three acquisitions, would weight this measure more heavily than if the director were counted once for having acquisition experience outside the focal firm. This is consistent with the notion that repeated experience with a phenomenon contributes more to knowledge than does one experience.

Diversification experience of directors will be operationalized by determining the diversification type of the firms tied to the focal firm (the bidding firm in the sample) through multiple directorships using the specialization ratio (Hoskisson, Hitt, Johnson, & Moesel, 1993; Reed & Sharp, 1987) and the entropy measure (Palepu, 1985). First, firms in the sample and firms tied to the focal firm through director ties will be classified as single, dominant, or diversified using the specialization ratio, where firms generating 95% or more of revenue from a single segment are single business firms; those generating from 70-95% are dominant business firms; and those generating less than 70% from a single business are diversified firms (Hoskisson et al., 1993; Palepu, 1985). Diversified firms will be further delineated using a procedure used by Hoskisson and colleagues (1993). Firms operating in four-digit segments within a two-digit industry group are considered related, while those operating in multiple industry groups are unrelated.

The entropy measure (Palepu, 1985) will be used to measure levels of related and unrelated diversification. The entropy measure of diversification is $\sum P_j \ln\left(\frac{1}{P_j}\right)$, where P_j is the proportion of sales in segment j weighted by $\ln\left(\frac{1}{P_j}\right)$, the natural logarithm of the inverse of the proportion of sales. Related diversification DR_j is the diversification resulting from operating in several segments within an industry group. It is computed using $DR_j = \sum_{i \in j} P_i^j \ln\left(\frac{1}{P_i^j}\right)$, where P_i^j is the share of the segment i of group j in the total sales of group j . For firms operating in several industry groups M , total related diversification is $DR = \sum_{j=1}^M DR_j P^j$, where DR_j is related diversification as computed above and P^j is the share of group j in the firm's total sales. Unrelated diversification results from operating in several industry groups and is defined as $DU = \sum_{j=1}^M P^j \ln\left(\frac{1}{P^j}\right)$ and results in a weighted average of sales of all the industry groups (Palepu, 1985).

Related board diversification will be operationalized as the number of firms using a related diversification corporate-level strategy that are tied to the focal firm (the bidding firm in the sample) through director ties. This number will then be deflated by dividing by the total number of ties. Similarly, unrelated board diversification experience will be operationalized as the number of firms using an unrelated diversification corporate-level strategy tied to the focal firm (the bidding firm in the sample) through director ties divided by the total number of ties. Diversification experience of directors will be determined by the type of diversification of the tied-to firms at the time of the focal

firm's acquisition. Using the number of firms tied to the focal firm through director ties takes into account multiple directorships that would not be accounted for by counting the number of directors tied to related firms. A director with three ties to related-diversified firms increases the measure of related diversification experience more than it would than if the director were counted once as having experience with related diversification.

Industry experience is similar to the product market relatedness measure used by Carpenter & Westphal (2001). The hypothesized association between industry experience of the board and the industry of the focal firm calls for counting the number of industries that each director has experience in through service on other boards that match industries in which the focal firm operates. The greater the number of shared industries, the stronger the hypothesized association with post-acquisition performance of the focal firm.

Industry segments are identified by their four-digit SIC codes; industry groups are identified by two-digit SIC codes (Hoskisson et al., 1993). In some cases industry segments may be considered closely related. For example, meat packing plants, 2011; sausages and other prepared meat products, 2013; and poultry slaughtering and processing, 2015 all have the same three-digit SIC codes and may possess common characteristics that would make them somewhat related. However, malt beverages, 2082; and bottled and canned soft drinks and carbonated waters, 2086 have very divergent products and markets and may be less related than the three meat processing segments. Although the use of SIC codes presents some measurement problems, particularly due to the assumed equal dissimilarity between four-digit codes, the prevalent use of this scheme among researchers for classifying industry activity indicates some level of

reliability. Therefore, industry experience will be determined on the basis of four-digit SIC codes. Using a procedure similar to that used for diversification experience, board industry experience will be measured using the number of director ties to firms in four-digit industry segments in which the focal firm operates at the time of the focal firm's acquisition divided by total number of director ties. The time that directors have spent in industries in which the focal firm operates will be operationalized as the sum of tenure of directors at tied to firms which operate in the same industry as the focal firm divided by the total number of ties.

International experience will be measured using a technique validated by Sullivan (1994), used by Carpenter & Westphal (2001), and adapted by Westphal & Fredrickson (2001). It is the degree of internationalization (DOI) consisting of three components: the ratio of foreign sales to total sales, the ratio of foreign assets to total assets, and the percentage of foreign subsidiaries to the highest number of foreign subsidiaries in the sample (Westphal & Fredrickson, 2001)⁵. The three components will be summed to form a composite measure with a theoretical range of 0-3.

Audit committee financial expertise will be measured by determining the audit committee members' background in preparing or auditing financial statements through proxy statement analysis (Xie et al., 2002). Audit committee acquisition experience will be measured using the total number of acquisitions of firms that are tied to the focal firm through multiple directorships on the audit committee divided by the total number of ties. Audit committee tenure is the average number of years of service of individual committee members.

⁵ The percentage of foreign subsidiaries was measured as the number of foreign subsidiaries of the tied-to firm divided by that firm's total number of subsidiaries.

Compensation committee acquisition experience will be measured using the total number of acquisitions of firms that are tied to the focal firm through multiple directorships on the compensation committee divided by the total number of ties.

Compensation committee tenure is the average number of years of service of individual committee members.

Control variables

A number of variables have demonstrated relationships with post-acquisition performance in previous studies, and the analysis will control for their effects. Prior firm performance has demonstrated effects on later strategic decisions and on firm performance (Wiersema & Bantel, 1992), so prior performance will be measured using ROA averaged over the two-year period prior to the acquisition. In addition, to account for potential effects of variation in industry profitability during the study period, industry post-acquisition ROA will be included as a control variable.

The relative size of the acquirer and target may have some effect on the financial performance of the acquisition. Fuller and colleagues (2002) noted that gains and losses for acquirers were larger in absolute value when the target was larger relative to the bidder suggesting that research designs should control for this effect. Targets that are large relative to the acquirer may present significant integration challenges implying negative impact on post-acquisition performance. Krishnan and colleagues (1997) measured relative firm size as the ratio of the revenue of the acquiring firm to that of the target (Krishnan et al., 1997). Relative size in this study will be measured as the ratio of the revenue of the target firm to that of the acquirer. The ratio of revenue is used rather than market capitalization, because revenue may be a clearer indicator of the firm's

processing and output activities than would be a measure of financial inputs.

Consideration of operating and outbound logistics activities may be more directly related to the performance stemming from the successful integration of two firms than the combined firm's financial inputs.

Board size has demonstrated some effects on firm financial performance (Dalton et al., 1998; Hermalin & Weisbach, 2001). A meta-analysis of the board size-firm performance relationship indicated a systematic, non-zero, positive relationship between the size of the board and firm performance (Dalton et al., 1999). A narrative review of the economic literature (Hermalin & Weisbach, 2001) suggests a negative relationship between board size and performance. A larger board may be too unwieldy to adequately control and serve the focal firm's management leading to the possibility of lower performance outcomes. Alternatively, a larger board may have a broader, richer pool of experience from which to draw. Hence, there is no clear theoretical or empirical consensus on the board size-firm performance relationship (Dalton et al., 1999). Therefore, the absolute size of the board is included as a control variable.

Acquisitive activity among firms at the macroeconomic level often clusters with respect to time (Ritter, 1991). In addition, acquisitive firms may acquire multiple firms during the study period, and the effect these acquisitions may have on the firm's performance need to be controlled. Therefore, the total number of acquisitions during the study period will be used as a control variable.

To control for agency explanations, a number of variables used to test agency theory-based hypotheses will be included in the models. Measures of inside director equity, outside director equity, the number and equity of five-percent blockholders, and

the number and equity of institutional investors have demonstrated relationships with firm performance (Hoskisson, Johnson, & Moesel, 1994; Johnson et al., 1993). Equity is intended to align director interests with those of shareholders, and large blockholders and institutional investors are thought to exert more concentrated influence on firm managers (Fama & Jensen, 1983; Hoskisson, Hitt, Johnson, & Grossman, 2002). Inside director equity, outside director equity, the number of blockholders and institutional equity will be used to control for effects based on agency arguments.

The resource dependence perspective is another theoretical framework that provides explanations for board-firm relationships, and the empirical tests will include variables accounting for these effects as well. An industry level variable that may affect firm outcomes is the structure of the firm's industry (Wiersema & Bantel, 1992). Industrial/organization economics suggests that industry structure, in terms of numbers and relative strength of competitors, is an important factor in determining firm outcomes. Industry structure will be measured using the four-firm concentration ratio, and growth of profitability and sales of the largest four-digit SIC industry segment in which the bidding firm operates at the time of completing the acquisition. Industry profitability and sales growth will be measured as a composite variable representing environmental munificence (Dess & Beard, 1984)⁶. Following a procedure used by Keats and Hitt (1988), I regress industry sales and industry operating income data against time for the five years prior to the focal acquisition using the following equation:

$$y_{t_n} = b_0 + b_1 t_n + \alpha_{t_n},$$

⁶ Earlier theorists have encouraged development of integrative approaches such as the use of composite measures. Originally operationalized as separate measures of both industry profitability growth and industry sales growth, I instead combined these into a composite measure representing environmental munificence (Dess & Beard, 1984).

where y = industry sales or operating income, t_n = n th year prior to the year of the acquisition, and α = the residual. The resulting coefficients are then standardized, and their arithmetic mean comprises the composite measure of environmental munificence. Data on industry sales and operating income will be collected from Compustat.

Because sample firms in this study are all acquirers, the level of industry concentration may moderate the industry concentration-firm performance relationship. To test this proposed curvilinear relationship, I include a squared term for industry concentration. A curvilinear relationship between industry concentration and acquiring firm performance would be manifest in a statistically significant positive non-squared term and a statistically significant negative squared term.

Analytic procedures

Analytic procedures will test for performance effects of the announcement of the acquisition. This is being done to determine if there are any immediately detectable effects of the market reaction to the acquisition. This will be done with a two-day event study using an event window consisting of the day before the announcement of the acquisition and the day of the announcement. Interpretation of this test may be ambiguous as it may be difficult to distinguish effects of the financial markets' reaction to the announcement of the acquisition from effects of financial markets' reaction to the experience level of the board. The reaction of financial markets may not be sensitive to board attributes such as experience and expertise.

Analysis will also include a series of four hierarchical OLS regression models using the dependent variables modified as described in the section on dependent variables. The relationship of each of the dependent variables, performance of related

acquisitions ($ROA_{related}$), performance of unrelated acquisitions ($ROA_{unrelated}$), performance of related acquisitions ($CARS_{related}$), and performance of unrelated acquisitions ($CARS_{unrelated}$) will be assessed with respect to the control and hypothesis variables. First, the control variables, prior firm performance ($PRIOR\pi$), industry post-acquisition ROA ($INDROA_A$), relative firm size ($RELATIVESIZE$), board size ($BOARDSIZE$), and number of acquisitions during the study period ($\#ACQPERIOD$) will be regressed against the performance variables, $ROA_{related}$, $ROA_{unrelated}$, $CARS_{related}$ and $CARS_{unrelated}$. Following is an example of the hierarchical regression model using $ROA_{related}$.

$$ROA_{related} = \beta_0 + \beta_1(PRIOR\pi) + \beta_2(INDROA_A) + \beta_3 (RELATIVESIZE) + \beta_4(BOARDSIZE) + \beta_5(\#ACQPERIOD)$$

Next, the agency theory-based variables, inside director equity ($INSIDEREQUITY$), outside director equity ($OUTSIDEREQUITY$), number of five-percent blockholders ($5\%BLOCKHOLDERS$), and institutional equity ($INSTQTY$) will be entered into the model. Again, the following example using one of the dependent variables illustrates the hierarchical OLS model.

$$ROA_{related} = \beta_0 + \beta_1(PRIOR\pi) + \beta_2(INDROA_A) + \beta_3 (RELATIVESIZE) + \beta_4(BOARDSIZE) + \beta_5(\#ACQPERIOD) + \beta_6(INSIDEREQUITY) + \beta_7(OUTSIDEREQUITY) + \beta_8(5\%BLOCKHOLDERS) + \beta_9(INSQTY)$$

Next, the resource dependence perspective-based variables, four-firm concentration ratio ($INDCONC$), industry concentration squared, and environmental munificence ($INDGROWTH$) will be entered into the model as illustrated using the modified ROA dependent variable.

$$\begin{aligned} \text{ROA}_{\text{related}} = & \beta_0 + \beta_1(\text{PRIOR}\pi) + \beta_2(\text{INDROA_A}) + \beta_3 (\text{RELATIVESIZE}) + \\ & \beta_4(\text{BOARDSIZE}) + \beta_5(\#\text{ACQPERIOD}) + \beta_6(\text{INSIDEREQUITY}) + \\ & \beta_7(\text{OUTSIDEREQUITY}) + \beta_8(5\%\text{BLOCKHOLDERS}) + \beta_9(\text{INSTQTY}) + \\ & \beta_{10}(\text{INDCONC}) + \beta_{11}(\text{INDCONC})^2 + \beta_{12} (\text{INDGROWTH}) \end{aligned}$$

Finally, the hypothesized variables will be entered into the model comprising the full model. The variables are related acquisition experience (RELATEDACQ), related diversification experience (RELATEDDIV), and related acquisition experience of the audit committee (RELATEDACQAUDIT).

$$\begin{aligned} \text{ROA}_{\text{related}} = & \beta_0 + \beta_1(\text{PRIOR}\pi) + \beta_2(\text{INDROA_A}) + \beta_3 (\text{RELATIVESIZE}) + \\ & \beta_4(\text{BOARDSIZE}) + \beta_5(\#\text{ACQPERIOD}) + \beta_6(\text{INSIDEREQUITY}) + \\ & \beta_7(\text{OUTSIDEREQUITY}) + \beta_8(5\%\text{BLOCKHOLDERS}) + \beta_9(\text{INSTQTY}) + \\ & \beta_{10}(\text{INDCONC}) + \beta_{11}(\text{INDCONC})^2 + \beta_{12} (\text{INDGROWTH}) + \\ & \beta_{13}(\text{RELATEDACQ}) + \beta_{14}(\text{RELATEDDIV}) + \beta_{15}(\text{RELATEDACQAUDIT}) \end{aligned}$$

The above models and similar ones for $\text{ROA}_{\text{unrelated}}$, $\text{CARs}_{\text{related}}$ and $\text{CARs}_{\text{unrelated}}$ will test hypotheses H_{1a}, H_{1b}, H_{2a}, H_{2b}, H_{6a}, and H_{6b}. The rest of the variables will be regressed against the two unstratified measures of performance, ROA and CARs in a hierarchical fashion similar to the previous models to test hypotheses H_{3a}, H_{3b}, H₄, H₅, H₇, H₈ and H₉.

First, the control variables, prior firm performance, relative firm size, board size, and number of acquisitions during the study period will be regressed against the unmodified performance variables, ROA and CARs.

$$\begin{aligned} \text{Performance variable} = & \beta_0 + \beta_1(\text{PRIOR}\pi) + \beta_2(\text{INDROA_A}) + \beta_3 \\ & (\text{RELATIVESIZE}) + \beta_4(\text{BOARDSIZE}) + \beta_5(\#\text{ACQPERIOD}) \end{aligned}$$

Next, the agency theory-based variables, insider equity, outsider equity, number of five-percent blockholders, and institutional equity will be entered into the model.

$$\begin{aligned} \text{Performance variable} = & \beta_0 + \beta_1(\text{PRIOR}\pi) + \beta_2(\text{INDROA_A}) + \beta_3 \\ & (\text{RELATIVESIZE}) + \beta_4(\text{BOARDSIZE}) + \beta_5(\#\text{ACQPERIOD}) + \\ & \beta_6(\text{INSIDEREQUITY}) + \beta_7(\text{OUTSIDEREQUITY}) + \beta_8(5\%\text{BLOCKHOLDERS}) \\ & + \beta_9(\text{INSTQTY}) \end{aligned}$$

Next, the resource dependence perspective-based variables will be entered into the model.

$$\begin{aligned} \text{Performance variable} = & \beta_0 + \beta_1(\text{PRIOR}\pi) + \beta_2(\text{INDROA_A}) + \beta_3 \\ & (\text{RELATIVESIZE}) + \beta_4(\text{BOARDSIZE}) + \beta_5(\#\text{ACQPERIOD}) + \\ & \beta_6(\text{INSIDEREQUITY}) + \beta_7(\text{OUTSIDEREQUITY}) + \beta_8(5\%\text{BLOCKHOLDERS}) \\ & + \beta_9(\text{INSTQTY}) + \beta_{10}(\text{INDCONC}) + \beta_{11}(\text{INDCONC})^2 + \beta_{12}(\text{INDGROWTH}) \end{aligned}$$

Finally, the hypothesized variables will be entered into the model comprising the full model. The variables are the number of same industries (#SAMEIND), time spent in those industries (TIMEIND), international experience (INTLEXP), audit committee financial expertise (FINEXP_{AUDIT}), audit committee tenure (TENUREAUDIT), compensation committee acquisition experience (ACQCOMP), and compensation committee tenure (TENURECOMP).

$$\begin{aligned} \text{Performance variable} = & \beta_1(\text{PRIOR}\pi) + \beta_2(\text{INDROA_A}) + \beta_3 (\text{RELATIVESIZE}) + \\ & \beta_4(\text{BOARDSIZE}) + \beta_5(\#\text{ACQPERIOD}) + \beta_6(\text{INSIDEREQUITY}) + \\ & \beta_7(\text{OUTSIDEREQUITY}) + \beta_8(5\%\text{BLOCKHOLDERS}) + \beta_9(\text{INSTQTY}) + \\ & \beta_{10}(\text{INDCONC}) + \beta_{12}(\text{INDCONC}) + \beta_{13}(\text{INDGROWTH}) + \beta_{14}(\#\text{SAMEIND}) + \end{aligned}$$

$$\beta_{15}(\text{TIMEIND}) + \beta_{16}(\text{INTLEXP}) + \beta_{17}(\text{FINEXP}_{\text{AUDIT}}) + \beta_{18}(\text{TENUREAUDIT}) + \beta_{19}(\text{ACQCOMP}) + \beta_{20}(\text{TENURECOMP})$$

Statistical tests for long-term CARs

Cumulative abnormal returns will be tested using t-tests of the returns of each of sampled firms against the cumulative returns of its corresponding portfolio. Each of the 25 portfolios will have a different number of benchmark returns, but it is expected that these numbers will be large. The abnormal returns of each portfolio i will be the equally weighted arithmetic average of the returns i in that portfolio for each month t (Ritter, 1991):

$$AR_t = \frac{1}{n} \sum_{i=1}^n ar_{it} .$$

Cumulative abnormal returns from the first month q to any event month s is the sum of the abnormal returns:

$$CAR_{q,s} = \sum_{t=q}^s AR_t .$$

CHAPTER 4

RESULTS

This chapter presents the results of the analyses. I begin by addressing potential implications arising from the sample selection process and alternative measurements of some of the variables. Second, I present the bivariate correlations among the variables and address their relationships. Third, I present analysis and results of six hierarchical regressions (four regressions of the two long term performance measures classified according to the relatedness of the focal acquisition and two regressions of the unclassified performance measures). Fourth, I present analysis and results of the analysis of cumulative abnormal returns. Finally, I present results of post hoc analyses.

Sample

The first section deals with implications stemming from my sample selection procedures. I identified my sample firms from the acquisitions rosters of Mergers & Acquisitions. Entries in the rosters are organized by target firm such that action involving an acquisition target is the starting point of the reporting sequence. Although information on both the acquirer and the target are included in the entries, it is the action with respect to the target firm that initiates the reporting activity. In addition, reporting on subsequent acquisition activity involving the same deal (e.g., initial offer, increased amount of offer, second offer after withdrawal of previous offer) means that the same deal could be reported multiple times. Furthermore, because the rosters report activity based on the target, a heavily acquisitive firm may be included in the rosters each time it pursues a target. The inclusion of all acquiring firms reported in the rosters may result in a more inclusive sampling frame than is frequently used in strategy research where

samples frequently come from the Fortune 500 or from the population of manufacturing firms. Consequently, the probability of inclusion in my sample for acquisitions by small and less widely known firms was equal to that of large, more well known firms and was primarily a function of their acquisition activity. Therefore, acquisitive firms are more likely to appear in the sampling frame than less acquisitive firms. The use of a fairly non-restrictive sample may lead to broader generalizability of my results. Lu and Beamish (2004) demonstrated the value in strategy research of using a non-restricted sample in investigations using archival data, and findings by Geringer, Beamish, and daCosta (1989) suggest that future research may benefit from samples incorporating small or medium-sized firms.

Descriptive statistics of the variables

Table 4 presents the means and standard deviations for the variables used in the study. The mean relative size ratio of target to acquirer for the entire sample (N = 189) is .33. The descriptive statistics of the variables also provide some information about the boards of the firms in the sample. Mean board size is 8 directors, while mean inside director equity is 16 percent and mean outside director equity is 4 percent. The mean number of block holders is 4, and mean institutional equity is .43. Mean industry performance for the two year period prior to the acquisition is -.18.

The variables representing experience levels of the board may be restricted in their range of values potentially limiting the richness of the experience data. Data regarding director experience were collected from secondary sources. Because many of the firms in the sample are relatively small and closely held, data for the home firms of some directors are unavailable. As a result some of the experience measures for the

boards of the sample firms are based on data only when reported in these secondary sources. Consequently, in some cases the experience measures may represent an approximate profile, or representative picture, of the experience levels of the board rather than the more comprehensive measurement of experience that might result from finer grained assessment of directors' backgrounds. Therefore, while the less restrictive sample used in this study may be more broadly representative of the population of publicly traded firms, it may also introduce a certain amount of restriction in the range of experience measures.

Correlations among the variables

The next section addresses the bivariate correlations among all the variables in the study as well as correlations of the subsamples of unrelated acquisitions and related acquisitions. Environmental munificence was measured as the mean of the standardized coefficients of regressions of industry sales and operating income against time over a five year period preceding the focal acquisition. The two standardized coefficients were closely correlated ($r = .90$) confirming the validity of the measures as indicators of a single underlying construct (Keats & Hitt, 1988). Correlations for the full sample are presented in Table 4, those for the unrelated acquisitions subgroup are presented in Table 5, and those for the related acquisitions subgroup are presented in Table 6. To more easily distinguish the correlations associated with each subgroup of variables, correlations for the full sample are labeled r_{all} , those for the unrelated subgroup are labeled $r_{unrelated}$, and those for the related acquisitions subgroup are labeled $r_{related}$.

I address the correlations in the following order: correlations with relative size of the acquisition, correlations among the performance variables, correlations with the board

level variables (inside director equity, outside director equity, number of block holders, and institutional equity), and correlations with the variables representing board experience. In each case, correlations for the full sample and for the two subgroups are reported for each of the above categories of variables.

Relative size of target to acquirer, measured as the ratio of target sales to acquirer sales, is negatively and significantly related to industry concentration for the full sample and for the unrelated acquisitions subgroup ($r_{\text{all}} = -.22, p < .01$; $r_{\text{unrelated}} = -.24, p < .01$, respectively). For the full sample, firm post-acquisition return on assets (ROA) is positively and significantly related to firm prior ROA ($r_{\text{all}} = .65, p < .01$), industry post-acquisition ROA ($r_{\text{all}} = .34, p < .01$), board size ($r_{\text{all}} = .24, p < .01$), institutional equity ($r_{\text{all}} = .32, p < .01$), audit committee tenure ($r_{\text{all}} = .26, p < .01$), and compensation committee tenure ($r_{\text{all}} = .26, p < .01$) and negatively and significantly related to outsider director equity ($r_{\text{all}} = -.33, p < .01$). For unrelated acquisitions, firm return on assets is positively and significantly related to firm prior ROA ($r_{\text{unrelated}} = .64, p < .01$), industry post-acquisition ROA ($r_{\text{unrelated}} = .33, p < .01$), board size ($r_{\text{unrelated}} = .29, p < .01$), institutional equity ($r_{\text{unrelated}} = .39, p < .01$), board international experience ($r_{\text{unrelated}} = .23, p < .01$), audit committee tenure ($r_{\text{unrelated}} = .26, p < .01$), and compensation committee tenure ($r_{\text{unrelated}} = .24, p < .01$) and negatively and significantly related to outside director equity ($r_{\text{unrelated}} = -.32, p < .01$). Long term CARS is positively and significantly related to industry concentration ($r_{\text{unrelated}} = .25, p < .01$), and firm prior return on assets is positively and significantly related to industry return on assets ($r_{\text{unrelated}} = .38, p < .01$). For related acquisitions, firm return on assets is positively and significantly related to long term CARS ($r_{\text{related}} = .34, p < .01$), firm prior ROA ($r_{\text{related}} = .67, p < .01$), industry

post-acquisition ROA ($r_{\text{related}} = .35, p < .01$), and board international experience ($r_{\text{related}} = .29, p < .01$) and negatively and significantly related to outside director equity ($r_{\text{related}} = -.62, p < .01$), the number of directors in the same industry as the sample firm ($r_{\text{related}} = -.62, p < .01$), and industry tenure of directors in the same industry as the sample firm ($r_{\text{related}} = -.53, p < .01$).

Table 4
Descriptive Statistics and Correlations
Full model

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Return on assets	-1.09	13.81											
2. Long term CARS	.86	.90	.06										
3. Firm prior ROA	2.70	11.20	.65**	-.04									
4. Industry ROA	-.18	.41	.34**	.14†	.37**								
5. Relative size of target	.33	.36	-.03	-2.4E-3	-.08	-.02							
6. Board size	8.23	2.85	.24**	-.03	.13†	.09	-.14*						
7. Firm acquisition history	4.31	8.99	.14	.04	.08	.08	-.06	.35**					
8. Inside director equity	.16	.20	-.11	-.08	.01	-.06	.01	-.41**	-.17*				
9. Outside director equity	.04	.09	-.33**	-.06	-.19	-.07	.19**	-.15*	-.13†	-.13†			
10. Block holders	3.67	2.17	.02	.06	.04	.07	.11	-.15*	-.03	.011	.06		
11. Institutional equity	.43	.28	.32**	.04	.29**	.14†	-.07	.44**	.13†	-.47**	-.13†	.19**	
12. Industry concentration	29.99	16.98	-.03	.16*	-.04	.01	-.22**	.25**	-.03	-.15*	.05	.05	.07
13. Munificence	.01	1.00	-.10	.06	-.05	-.07	-.07	.10	.08	.04	-.06	-.10	-.09
14. Board rel. acq. exp.	.83	1.25	.03	-.09	-.05	.06	-.10	.08	.11	.12	-.2E-5	.01	.03
15. Audit rel. acq. exp.	.53	1.13	4E-5	-.09	-.06	.06	.04	-.10	.01	.23**	-.01	.03	-.06
16. Board rel. div. exp.	.02	.05	-.15*	.02	-.28**	.02	-.10	.20**	.14*	-.10	-.02	.06	-.06
17. Board unrel. acq. exp.	1.27	1.97	.03	-.05	-.12	.07	-.17	.31**	.14†	-.26**	.04	.02	.17*
18. Audit unrel. acq. exp.	.56	1.00	1.1E-3	-.18*	-.01	.03	-.09	.08	3.2E-3	-.10	-.01	.06	.09
19. Board unrel. div. experience	.06	.11	.08	-.02	-.09	.10	-.16*	.32**	.09	-.21**	.09	.02	.17*
20. Directors in same industry	.01	.05	-1.6E-3	.03	.02	-.03	1.3E-3	-.06	-.06	-.05	.23**	.09	.06
21. Tenure in same industry	.11	.57	-.02	.06	-.01	-.03	.04	-.06	-.05	-.03	.25**	.08	.03
22. Board int'l exp.	.20	.26	.23**	.12†	.05	.12	-.04	.29**	.22**	-.16*	-.20**	.07	.22**
23. Audit financial expertise	.24	.44	-.10	-.07	-.09	-.01	.05	-6.4E-4	-.06	.10	-.05	-.07	-.04
24. Audit tenure	6.26	4.37	.26**	.04	.17*	.05	-.06	.34**	.19**	-.11	-.13†	-.03	.17*
25. Compensation acq. exp.	1.17	2.02	-2.5E-3	-.06	-.15*	.04	-.11	.04	.07	-.02	.05	-1.7E3	.02
26. Compensation tenure	6.76	4.81	.26**	.07	.19**	.10	-.06	.43**	.20**	-.27**	-.13†	-8.2E-4	.29**

N=189; † significant at .10, * significant at .05, ** significant at .01

Table 4
Descriptive statistics and correlations
Full model

Variables	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Return on assets														
2. Long term CARS														
3. Firm prior ROA														
4. Industry ROA														
5. Relative size of target														
6. Board size														
7. Firm acquisition history														
8. Inside director equity														
9. Outside director equity														
10. Block holders														
11. Institutional equity														
12. Industry concentration														
13. Munificence	.19**													
14. Board rel. acq. exp.	-.01	6.5E-3												
15. Audit rel. acq. exp.	-.09	-.10	.87**											
16. Board rel. div. exp.	.04	4.5E-3	.11	.04										
17. Board unrel. acq exp.	.10	.02	.39**	.21	.30**									
18. Audit unrel. acq. exp.	-.02	-.03	.43**	.36**	.09	.57**								
19. Board unrel. div. experience	.17*	-.07	.17*	.11	.25**	.50**	.31**							
20. Directors in same industry	.05	.05	-.01	-.03	-.09	-.01	.03	-.09						
21. Tenure in same industry	.06	.06	.01	-.02	-.08	-.01	-.01	-.08	.87**					
22. Board int'l exp.	.10	-.01	.33**	.21**	.22**	.33**	.23**	.34**	-.01	-.02				
23. Audit financial expertise	-.04	-.08	.08	.09	.03	.24**	.16*	.10	-.02	.03	-.02			
24. Audit tenure	.03	.02	-.06	-.16*	.05	-.02	-.14†	-.01	-.06	-.09	.08	-.09		
25. Compensation acq. exp.	.02	-.01	.60**	.54**	.20**	.69**	.44**	.32**	-.1.2E-3	-.02	.23**	.14†	-.13	
26. Compensation tenure	.13†	.03	-.04	-.09	-.1.1E-3	.03	-.04	.04	-.07	-.09	.13†	-.06	.66**	-.11

N=189; † significant at .10, * significant at .05, ** significant at .01

A number of board level variables are intercorrelated. Among all the variables in the study, board size is positively and significantly related to the focal firm's acquisition history ($r_{\text{all}} = .35, p < .01$), institutional equity ($r_{\text{all}} = .44, p < .01$), industry concentration ($r_{\text{all}} = .25, p < .01$), board related diversification experience ($r_{\text{all}} = .20, p < .01$), board unrelated acquisition experience ($r_{\text{all}} = .31, p < .01$), board unrelated diversification experience ($r_{\text{all}} = .32, p < .01$), board international experience ($r_{\text{all}} = .29, p < .01$), audit committee tenure ($r_{\text{all}} = .34, p < .01$), and compensation committee tenure ($r_{\text{all}} = .43, p < .01$) and negatively and significantly related to inside director equity ($r_{\text{all}} = -.41, p < .01$).

Among the firms making unrelated acquisitions, board size is positively and significantly related to the focal firm's acquisition history ($r_{\text{unrelated}} = .38, p < .01$), institutional equity ($r_{\text{unrelated}} = .52, p < .01$), industry concentration ($r_{\text{unrelated}} = .23, p < .01$), board unrelated acquisition experience ($r_{\text{unrelated}} = .32, p < .01$), board unrelated diversification experience ($r_{\text{unrelated}} = .34, p < .01$), board international experience ($r_{\text{unrelated}} = .31, p < .01$), audit committee tenure ($r_{\text{unrelated}} = .34, p < .01$), and compensation committee tenure ($r_{\text{unrelated}} = .44, p < .01$) and negatively and significantly related to inside director equity ($r_{\text{unrelated}} = -.47, p < .01$).

Among the variables for related acquisitions, board size is positively and significantly related to industry concentration ($r_{\text{related}} = .33, p < .01$), board related diversification experience ($r_{\text{related}} = .42, p < .01$), board unrelated acquisition experience ($r_{\text{related}} = .29, p < .05$), board international experience ($r_{\text{related}} = .24, p < .05$), audit committee tenure ($r_{\text{related}} = .38, p < .01$), and compensation committee tenure ($r_{\text{related}} = .46, p < .01$) and negatively and significantly related to the number of blockholders ($r_{\text{related}} = -.31, p < .05$).

Among all the study variables, inside director equity, the percentage of shares held by inside directors, is positively and significantly related to audit committee related acquisition experience ($r_{\text{all}} = .23, p < .01$) and negatively and significantly related to institutional equity ($r_{\text{all}} = -.47, p < .01$), board unrelated acquisition experience ($r_{\text{all}} = -.26, p < .01$), board unrelated diversification experience ($r_{\text{all}} = -.21, p < .01$), and compensation committee tenure ($r_{\text{all}} = -.27, p < .01$). Among the firms making unrelated acquisitions, inside director equity is positively and significantly related to audit committee related acquisition experience ($r_{\text{unrelated}} = .29, p < .01$) and negatively and significantly related to institutional equity ($r_{\text{unrelated}} = -.49, p < .01$), industry concentration ($r_{\text{unrelated}} = -.24, p < .01$), board unrelated acquisition experience ($r_{\text{unrelated}} = -.27, p < .01$), board unrelated diversification experience ($r_{\text{unrelated}} = -.29, p < .01$), audit committee tenure ($r_{\text{unrelated}} = -.21, p < .05$), and compensation committee tenure ($r_{\text{unrelated}} = -.30, p < .01$). Among the firms making related acquisitions, inside director equity is positively and significantly related to environmental munificence ($r_{\text{related}} = .34, p < .05$) and negatively and significantly related to institutional equity ($r_{\text{related}} = -.44, p < .01$).

Correlations with outside director equity for each of the three models are as follows. For the full sample, outside director equity is positively and significantly related to the number of directors in the same industry as the focal firm ($r_{\text{all}} = .23, p < .01$) and average tenure of directors in the same industry as the focal firm ($r_{\text{all}} = .25, p < .05$) and negatively and significantly related to board international experience ($r_{\text{all}} = -.20, p < .01$). For related acquisitions, outside director equity is positively and significantly related to the number and tenure of directors in the sample firm's industry ($r_{\text{related}} = .66, p < .01$;

$r_{\text{related}} = .60, p < .01$, respectively) and negatively and significantly related to prior industry performance ($r_{\text{related}} = -.40, p < .01$).

Institutional equity for the full sample is positively and significantly related to board international experience ($r_{\text{all}} = .22, p < .01$), and compensation committee tenure ($r_{\text{all}} = .29, p > .01$). For unrelated acquisitions, institutional equity is positively and significantly related to board unrelated diversification experience ($r_{\text{unrelated}} = .23, p < .01$), board international experience ($r_{\text{unrelated}} = .22, p < .01$), audit committee tenure ($r_{\text{unrelated}} = .25, p < .01$), and compensation committee tenure ($r_{\text{unrelated}} = .30, p < .01$). For related acquisitions, institutional equity is positively and significantly related to board related diversification experience ($r_{\text{related}} = .30, p < .01$). The number of blockholders is positively and significantly to institutional equity for the full sample ($r_{\text{full}} r = .19, p < .01$) and for the unrelated subgroup ($r_{\text{unrelated}} = .21, p < .01$).

There are several significant correlations among the board experience variables. For the full sample, board related acquisition experience is positively and significantly related to audit committee related acquisition experience ($r_{\text{all}} = .87, p < .01$), board unrelated acquisition experience ($r_{\text{all}} = .39, p < .01$), audit committee unrelated acquisition experience ($r_{\text{all}} = .43, p < .01$), board international experience ($r_{\text{all}} = .33, p < .01$), and compensation committee acquisition experience ($r_{\text{all}} = .60, p < .01$). For the subsample of unrelated acquisitions, board related acquisition experience is positively and significantly related to audit committee related acquisition experience ($r_{\text{unrelated}} = .88, p < .01$), board unrelated acquisition experience ($r_{\text{unrelated}} = .38, p < .01$), audit committee unrelated acquisition experience ($r_{\text{unrelated}} = .41, p < .01$), board unrelated diversification experience ($r_{\text{unrelated}} = .21, p < .05$), board international experience ($r_{\text{unrelated}} = .36, p < .01$),

and compensation committee acquisition experience ($r_{\text{unrelated}} = .60, p < .01$). For the subsample of related acquisitions, board related acquisition experience is positively and significantly related to firm acquisition history ($r_{\text{related}} = .31, p < .05$), audit committee related acquisition experience ($r_{\text{related}} = .84, p < .01$), board unrelated acquisition experience ($r_{\text{related}} = .45, p < .01$), audit committee unrelated acquisition experience ($r_{\text{related}} = .51, p < .01$), and compensation committee acquisition experience ($r_{\text{related}} = .57, p < .01$).

Audit committee related acquisition experience for the full sample is positively and significantly related to audit committee unrelated acquisition experience ($r_{\text{all}} = .36, p < .01$), board international experience ($r_{\text{all}} = .21, p < .01$), and compensation committee acquisition experience ($r_{\text{all}} = .54, p < .01$). For the subsample of unrelated acquisitions, audit committee related acquisition experience is positively and significantly related to audit committee unrelated acquisition experience ($r_{\text{unrelated}} = .34, p < .01$), board international experience ($r_{\text{unrelated}} = .24, p < .01$), and compensation committee acquisition experience ($r_{\text{unrelated}} = .58, p < .01$). For the related acquisitions subsample, audit committee related acquisition experience is positively and significantly related to firm acquisition history ($r_{\text{related}} = .39, p < .01$), audit committee unrelated acquisition experience ($r_{\text{related}} = .47, p < .10$), and compensation committee acquisition experience ($r_{\text{related}} = .41, p < .01$).

Board related diversification experience for the full sample is positively and significantly related to board unrelated acquisition experience ($r_{\text{all}} = .30, p < .01$), board unrelated diversification experience ($r_{\text{all}} = .25, p < .01$), board international experience ($r_{\text{all}} = .22, p < .01$), and compensation committee acquisition experience ($r = .20, p < .01$).

For the unrelated acquisitions subsample, board related diversification experience is positively and significantly related to board unrelated acquisition experience ($r_{\text{unrelated}} = .31, p < .01$), board unrelated diversification experience ($r_{\text{unrelated}} = .26, p < .01$), board international experience ($r_{\text{unrelated}} = .28, p < .01$), and compensation committee acquisition experience ($r_{\text{unrelated}} = .24, p < .01$). For the related acquisition subsample, board related diversification experience is positively and significantly related to board unrelated acquisition experience ($r_{\text{related}} = .29, p < .05$) and compensation committee tenure ($r_{\text{related}} = .28, p < .05$).

Board unrelated acquisition experience for the full sample is positively and significantly related to audit committee unrelated acquisition experience ($r_{\text{all}} = .57, p < .01$), board unrelated diversification experience ($r_{\text{all}} = .50, p < .01$), board international experience ($r = .33, p < .01$), audit committee financial expertise ($r_{\text{all}} = .24, p < .01$), and compensation committee acquisition experience ($r_{\text{all}} = .69, p < .01$). For the unrelated acquisitions subsample, board unrelated acquisition experience is positively and significantly related to audit committee unrelated acquisition experience ($r_{\text{unrelated}} = .55, p < .01$), board unrelated diversification experience ($r_{\text{unrelated}} = .59, p < .01$), board international experience ($r_{\text{unrelated}} = .39, p < .01$), audit committee financial expertise ($r_{\text{unrelated}} = .30, p < .01$), and compensation committee acquisition experience ($r_{\text{unrelated}} = .66, p < .01$). For the related acquisitions subsample, board unrelated acquisition experience is positively and significantly related to audit committee unrelated acquisition experience ($r_{\text{related}} = .67, p < .01$), and compensation committee acquisition experience ($r_{\text{related}} = .84, p < .01$).

Audit committee unrelated acquisition experience for the full sample is positively and significantly related to board unrelated diversification experience ($r = .31, p < .01$), board international experience ($r_{\text{all}} = .23, p < .01$), and compensation committee acquisition experience ($r_{\text{all}} = .44, p < .01$). For the unrelated acquisitions subgroup, audit committee unrelated acquisition experience is positively and significantly related to board unrelated diversification experience ($r_{\text{unrelated}} = .41, p < .01$), board international experience ($r_{\text{unrelated}} = .31, p < .01$), and compensation committee acquisition experience ($r_{\text{unrelated}} = .38, p < .01$). For the subgroup of related acquisitions, audit committee unrelated acquisition experience is positively and significantly related to compensation committee acquisition experience ($r_{\text{related}} = .67, p < .01$). Board unrelated diversification experience for the full sample is positively and significantly related to board international experience ($r_{\text{all}} = .34, p < .01$) and compensation committee acquisition experience ($r_{\text{all}} = .32, p < .01$). For the unrelated acquisitions subgroup, board unrelated diversification experience is positively and significantly related to board international experience ($r_{\text{unrelated}} = .44, p < .01$), and compensation committee acquisition experience ($r_{\text{unrelated}} = .44, p < .01$).

For the full sample, the number of directors from firms in the same industry as the sample firm is positively and significantly related to tenure of directors in the same industry as the sample firm ($r_{\text{all}} = .87, p < .01$). For the unrelated acquisitions subgroup, it is positively and significantly related to the tenure of directors in the sample firm's primary industry ($r_{\text{unrelated}} = .81, p < .01$). For the related acquisitions subgroup, the number of directors from firms in the same industry as the sample firm is positively and

significantly related to tenure of directors in the sample firm's industry ($r_{\text{related}} = .97, p < .01$).

Board international experience for the full sample is positively and significantly related to compensation committee acquisition experience ($r_{\text{all}} = .23, p < .01$). For the unrelated acquisitions subgroup it is positively and significantly related to compensation committee acquisition experience ($r_{\text{all}} = .31, p < .01$).

Audit committee tenure for all three groups (full, unrelated, and related) is positively and significantly related to compensation committee tenure ($r_{\text{all}} = .66, p < .01$; $r_{\text{unrelated}} = .69, p < .01$; $r_{\text{related}} = .60, p < .01$).

Hierarchical regression models

I then used hierarchical regression to test the hypotheses. Before running the regression models, I evaluated the residuals and DFFITS for influential observations and removed any such observations from the analysis. Table 7 presents a summary of the regression of return on assets for related acquisitions⁷. With respect to the control model (Model 1), the R^2 ($R^2 = .37, p < .01$) indicates the model has strong explanatory power. Firm average prior return on assets is positively and significantly related to firm post-acquisition ROA ($b = .55, p < .01$).

With respect to the control and agency model (Model 2), R^2 ($R^2 = .39, p < .01$) indicates strong explanatory power, although the change in R^2 indicates that the addition of the agency variables does not improve the explanatory power of the model. Firm average prior return on assets is positively and significantly related to firm ROA ($b = .52, p < .01$).

⁷ Evaluation of the residuals and DFFITS identified two influential observations which were excluded from the analysis.

The control, agency, and resource dependence model (Model 3) suggests continued strong explanatory power ($R^2 = 0.46$, $p < .01$), although the change in R^2 indicates that the additional variables do not add to the explanatory power of the model. Firm average prior return on assets is positively and significantly related to firm ROA ($b = .53$, $p < .01$). With respect to the test of the curvilinear effect of industry concentration, although the signs of both terms are in the direction necessary for confirming the relationship, neither is statistically

Table 5
Descriptive Statistics and Correlations
Unrelated Acquisitions

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Return on assets	-2.28	15.30										
2. Long term CARS	.81	.90	-1.5E-3									
3. Firm prior ROA	2.20	12.42	.64**	-.04								
4. Industry ROA	-.20	.46	.33**	.14†	.38**							
5. Relative size of target	.29	.33	-.02	-.10	-.08	-.03						
6. Board size	8.33	3.04	.29**	-.01	.16†	.11	-.15†					
7. Firm acquisition history	4.49	9.85	.14	.02	.07	.08	-.11	.38**				
8. Inside director equity	.15	.19	-.18*	-.07	-.04	-.07	.03	-.47**	-.16†			
9. Outside director equity	.04	.08	-.32**	.03	-.13	1.2E-3	.11	-.15†	-.14	-.14†		
10. Block holders	3.58	2.08	.03	.03	.04	.05	.14	-.09	-.06	-.13	.13	
11. Institutional equity	.42	.29	.39**	.03	.34**	.14	-.11	.52**	.14	-.49**	-.18*	.21*
12. Industry concentration	29.08	16.**	-.04	.25**	-.03	.04	-.24**	.23**	.01	-.24**	.04	.07
13. Munificence	-.03	1.035	-.14†	.05	-.08	-.05	-.11	.14†	.13	-.07	-.08	-.08
14. Board rel. acq. exp.	.84	1.33	.05	-.07	-.05	.09	-.11	.04	.08	.17*	-.07	.01
15. Audit rel. acq. exp.	.54	1.22	.01	-.11	-.07	.07	-.07	-.15†	-.05	.29**	-.04	.04
16. Board rel. div. exp.	.03	.06	-.13	.04	-.29**	.04	-.10	.18*	.14†	-.10	-7.3E-4	.10
17. Board unrel. acq. exp.	1.31	2.12	.04	-.02	-.15	.11	-.20*	.32**	.15†	-.27**	.03	.08
18. Audit unrel. acq. exp.	.55	1.03	.03	-.16†	-.02	.04	-.12	.08	.16	-.13	-.04	.08
19. Board unrel. div. experience	.07	.11	.09	.01	-.10	.11	-.18*	.34**	.12	-.29**	-.05	.09
20. Directors in same industry	.01	.05	.13	.09	.12	.04	-.11	-.06	-.06	-.02	-.08	.12
21. Tenure in same industry	.08	.48	.10	.11	.07	.04	-.07	-.06	-.06	2.2E-3	-.07	.07
22. Board int'l exp.	.20	.25	.23**	.14†	.02	.13	-.03	.31**	.24**	-.17†	-.18*	.04
23. Audit financial expertise	.23	.43	-.14	-.07	-.14	9.5E-3	-.02	.02	-.04	.09	-.10	-.11
24. Audit tenure	6.13	4.32	.26**	.03	.19	.07	-.03	.34**	.22**	-.21*	-.09	-.04
25. Compensation acq. exp.	1.13	2.08	-.02	-.04	-.21	.08	-.12	-3.3E-3	.05	-3.3E-4	.05	.05
26. Compensation tenure	6.44	4.54	.24**	.10	.19*	.09	-.06	.44**	.18*	-.30**	-.05	.01

N=138; † significant at .10, * significant at .05, ** significant at .01

Table 5
Descriptive Statistics and Correlations
Unrelated Acquisitions

Variables	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Return on assets															
2. Long term CARS															
3. Firm prior ROA															
4. Industry ROA															
5. Relative size of target															
6. Board size															
7. Firm acquisition history															
8. Inside director equity															
9. Outside director equity															
10. Block holders															
11. Institutional equity															
12. Industry concentration	.12														
13. Munificence	-.06	.25**													
14. Board rel. acq. exp.	2.0E-3	-.01	.03												
15. Audit rel. acq. exp.	-.09	-.06	-.09	.88**											
16. Board rel. div. exp.	-.09	.05	.01	.11	.03										
17. Board unrel. acq exp.	.17*	.09	.02	.38**	.20*	.31**									
18. Audit unrel. acq. exp.	.10	-.04	-4.7E-3	.41**	.34**	.10	.55**								
19. Board unrel. div. experience	.23**	.21*	-.04	.21*	.13	.26**	.59**	.41**							
20. Directors in same industry	.06	.03	.04	-.10	-.08	-.09	-.05	4.1E-3	-.08						
21. Tenure in same industry	.03	.05	.04	-.09	-.07	-.08	-.06	-.05	-.05	.81**					
22. Board int'l exp.	.22**	.10	-.02	.36**	.24**	.28**	.39**	.31**	.44**	-.03	.08				
23. Audit financial expertise	-.04	-.07	-.14	.11	.10	.07	.30**	.14	.15†	.07	-.04	-.05			
24. Audit tenure	.25**	-.05	-.01	-.05	-.16†	.06	.02	-.10	-.05	.02	-.01	.14	-.08		
25. Compensation acq. exp.	-.03	.05	-.01	.60**	.58**	.24**	.66**	.38**	.44**	-.05	-.07	.31**	.19*	-.16†	
26. Compensation tenure	.30**	.08	.03	-.06	-.13	-.01	.05	-.01	.03	2.7E-4	-.02	.09	-.05	.69**	-.16†

N=138, † significant at .10, * significant at .05, ** significant at .01

Table 6
Descriptive Statistics and Correlations
Related Acquisitions

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Return on assets	2.13	7.78											
2. Long term CARS	1.00	.9	.34*										
3. Firm prior ROA	4.06	6.81	.67**	-.11									
4. Industry ROA	-.14	.21	.35*	.11	.26†								
5. Relative size of target	.43	.42	-.24†	.15	.13	-.04							
6. Board size	8.00	2.25	.03	-.09	-.05	-.05	-.11						
7. Firm acquisition history	3.82	6.14	.21	.13	.20	.10	.10	.18					
8. Inside director equity	.18	.22	.16	-.13	.22	-.10	-.05	-.23	-.22				
9. Outside director equity	.05	.12	-.62**	-.25†	-.49**	-.40**	.27	-.19	-.16	-.12			
10. Block holders	3.9	2.41	-.09	.11	-.02	.15	.02	-.31*	.08	-.10	-.04		
11. Institutional equity	.44	.28	3.1E-3	.05	.06	.16	-.41E-3	.17	.07	-.44**	-.07	.13	
12. Industry concentration	32.47	16.85	-.07	-.11	-.10	-.18	-.23	.33*	-.17	.06	.06	-.02	-.05
13. Munificence	.09	.90	.13	.07	.08	-.20	-.02	-.09	-.11	.34*	-.05	-.17	-.18
14. Board rel. acq. exp.	.80	1.01	-.12	-.16	-.02	-.14	-.05	.25†	.31*	-.03	.17	-8.0E-3	.12
15. Audit rel. acq. exp.	.49	.85	-.05	-3.3E-3	.03	-.02	.09	.14	.39**	.02	.07	.01	.03
16. Board rel. div. exp.	4.7E-3	.02	.01	.04	-.04	-.04	.09	.42**	.16	-.09	-.07	-.09	.30*
17. Board unrel. acq. exp.	1.19	1.54	.01	-.16	.14	-.21	-.09	.29*	.09	-.23	.07	-.17	.17
18. Audit unrel. acq. exp.	.57	.92	-.18	-.24†	.08	-.06	-.02	.12	-.06	-.04	.05	.01	.03
19. Board unrel. div. experience	.05	.11	.12	-.07	.01	.12	-.09	.23	-.01	-3.6E-3	-.16	-.13	3.5E-4
20. Directors in same industry	.02	.07	-.62**	-.10	-.38**	-.38**	.15	-.05	-.06	-.11	.66**	.04	.05
21. Tenure in same industry	.20	.76	-.53**	-.04	-.33*	-.32*	.17	-.05	-.04	-.08	.60**	.10	.04
22. Board int'l exp.	.21	.29	.29*	.08	.16	.08	-.08	.24†	.21	-.14	-.23†	.12	.23
23. Audit financial expertise	.27	.44	.05	-.08	.16	-.04	.18	-.05	-.12	.13	.02	.02	-.06
24. Audit tenure	6.61	4.55	.27†	.07	.10	-.09	-.15	.38**	.10	.10	-.20	-.02	-.05
25. Compensation acq. exp.	1.29	1.87	.05	-.12	.17	-.24†	-.14	.21	.20	-.09	.06	-.15	.02
26. Compensation tenure	7.51	5.43	.35†	.17	.21	.15	-.10	.46**	.29*	-.25†	-.27†	-.05	.27†

N=51; † significant at .10, * significant at .05, ** significant at .01

Table 6
Descriptive Statistics and Correlations
Related Acquisitions

Variables	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Return on assets														
2. Long term CARS														
3. Firm prior ROA														
4. Industry ROA														
5. Relative size of target														
6. Board size														
7. Firm acquisition history														
8. Inside director equity														
9. Outside director equity														
10. Block holders														
11. Institutional equity														
12. Industry concentration														
13. Munificence	-.01													
14. Board rel. acq. exp.	-.04	-.10												
15. Audit rel. acq. exp.	-.18	-.11	.84**											
16. Board rel. div. exp.	.13	.03	.12	.17										
17. Board unrel. acq. exp.	.14	-.01	.45**	.23†	.29*									
18. Audit unrel. acq. exp.	.01	-.13	.51**	.47**	.13	.67**								
19. Board unrel. div. experience	.08	-.14	.02	.04	.21	.14	-.02							
20. Directors in same industry	.08	.08	.25†	.12	-.07	.13	.09	-.11						
21. Tenure in same industry	.06	.09	.23	.12	-.07	.11	.08	-.12	.97**					
22. Board int'l exp.	.10	.18	.25†	.11	.05	.17	.04	.01	.03	.07				
23. Audit financial expertise	.04	.08	-.03	.05	-.17	2.8E-3	.21	-.05	.07	.14	.05			
24. Audit tenure	.22	.10	-.08	-.15	.14	-.15	-.25†	.09	-.24†	-.25†	-.06	-.12		
25. Compensation acq. exp.	-.08	-.01	.57**	.41**	.06	.84**	.67**	-.06	.08	.06	.02	-.02	-.05	
26. Compensation tenure	.24†	.03	.03	.05	.28*	.01	-.12	.09	-.20	-.21	.23	-.10	.60**	-.01

N=51; † significant at .10, * significant at .05, ** significant at .01

Table 7
Model For Related Acquisitions by Sample Firms (related roa)

Variable	Model 1	Model 2	Model 3	Model 4
<i>Step One (Controls):</i>				
Intercept	-.16	1.95	3.35	6.18
Prior average roa	.55**	.52**	.53**	.54**
Industry roa (post-acq)	-1.61	-1.09	-.68	-.53
Size target/acquirer	.03	-5.2E-3	.10	-4.17†
Board size	-1.5E-3	-.06	-.25	-.38
Prior acquisitions	.11	.10	.14	.16
<i>Step Two (Agency model):</i>				
Inside director equity		-.79	-1.60	-2.56
Outside director equity		-15.16	-5.47	-14.62
Blockholders (#)		-.05	-.27	-.11
Institutional equity		-1.49	-.23	-2.50
<i>Step Three (RDP model):</i>				
Industry concentration			-.06	-.04
Industry concentration ²			1.3E-3	1.0E-3
Industry growth (munificence)			1.14	1.12
<i>Step Four (Ind. Variables)</i>				
Board related acquisitions experience				1.02
Board related diversification experience				29.12
Audit committee related acquisitions experience				-.78
<i>Model fit statistics</i>				
N	59	58	51	50
R ²	.37**	.39**	.46**	.52*
(adjusted R ²)	(.31)	(.27)	(.29)	(.31)
Change in R ²		.02	.07	.06
F-statistic		.39	1.64	1.42

Coefficients are unstandardized. Change in R² is between each model and the successive model.

† p < .10, * p < .05, ** p < .01.

Results are essentially unchanged when examining concentration alone without its squared term present.

significant. The proposed curvilinear relationship between industry concentration and performance of acquiring firms is not supported.

Regression of the full model, which includes the independent variables, produces a statistically significant R² (R² = .52, p < .05), although the value of the change in R² indicates no additional explanatory value from the addition of these variables. Prior firm return on assets continues to be positively and statistically significantly related to post-acquisition performance (b = .54, p < .01), and relative size is negatively and

significantly related to post-acquisition performance ($r = -4.17, p < .10$). Hypotheses 1a, 2a, and 6a are not supported.

Table 8 presents the results of the regression of ROA for firms making unrelated acquisitions⁸. With respect to the control model, reported as Model 1 in Table 8, firm average prior return on assets, industry post-acquisition ROA, and board size are positively and significantly related to firm return on assets ($b = .19, p < .01$; $b = 8.48, p < .01$; $b = .87, p < .05$, respectively).

With respect to the control and agency model (Model 2), the R^2 and change in R^2 indicate that the additional variables improve the explanatory power ($R^2 = .45, p < .01$, $\Delta R^2 = .18, F = 11.13, p < .01$). Firm average prior return on assets and industry post-acquisition ROA are positively and significantly related to firm return on assets ($b = .60, p < .01$, $b = 4.17, p < .05$, respectively).

The control, agency, and resource dependence model is statistically significant ($R^2 = .54, p < .01$), and the change in R^2 is also statistically significant ($\Delta R^2 = .09, F = 12.23, p < .01$) suggesting strong explanatory power of the model and that the addition of the variables representing the resource dependence perspective adds significantly to the model's explanatory power. Firm prior average return on assets is positively and significantly related to post-acquisition performance ($b = .63, p < .01$). In addition, insider director equity is negatively and significantly related to post-acquisition performance ($b = -10.11, p < .10$).

The full model, which includes the hypothetical variables, shows a statistically significant R^2 ($R^2 = .55, p < .01$), although the change in R^2 is not. Firm prior average

⁸ Evaluation of the residuals and DFFITS identified two influential observations which were excluded from the analysis

ROA is positively and significantly related to post-acquisition performance ($b = .65$, $p < .01$), while inside director is negatively and significantly related ($b = -9.37$, $p < .10$).

None of the coefficients for the hypothetical variables is statistically significant.

Hypotheses 1b, 2b and 6b are not supported.

Table 8
Model For Unrelated Acquisitions by Sample Firms (unrelated roa)

Variable	Model 1	Model 2	Model 3	Model 4
<i>Step One (Controls):</i>				
Intercept	-8.20	-3.51	-1.84	-.98
Prior average roa	.19**	.60**	.63**	.65**
Industry roa (post-acq)	8.48**	4.17*	2.84	2.46
Size target/acquirer	1.79	-1.09	.14	.58
Board size	.87*	.18	.43	.31
Prior acquisitions	.05	.06	.02	.01
<i>Step Two (Agency model):</i>				
Inside director equity		-7.88	-10.11†	-9.37†
Outside director equity		-8.98	-14.93	-14.69
Blockholders (#)		-.08	-.03	-.09
Institutional equity		3.82	1.85	1.90
<i>Step Three (RDP model):</i>				
Industry concentration			-.19	-.22
Industry concentration ²			2.4E-3	2.7E-3
Industry growth (munificence)			-.73	-.44
<i>Step Four (Ind. Variables)</i>				
Board unrelated acquisitions experience				.20
Board unrelated diversification experience				9.51
Audit committee unrelated acquisitions experience				.61
<i>Model fit statistics</i>				
N	149	146	137	137
R ²	.27**	.45**	.54**	.55**
(adjusted R ²)	(.24)	(.41)	(.50)	(.49)
Change in R ²		.18**	.09**	.01
F-statistic		11.13	8.07	.90

Coefficients are unstandardized. Change in R² is between each model and the successive model.

† p < .10, * p < .05, ** p < .01.

Results are essentially unchanged when examining concentration alone without its squared term present.

Hierarchical regression of long-term CARS

The next section addresses the hierarchical regression of long-term cumulative abnormal returns. I ran hierarchical regressions of long-term cumulative abnormal returns to test the hypotheses concerned with related acquisitions. The results of the hierarchical regression are shown in Table 9. With respect to the control model in Table 9, no statistically significant relationship between the variables and the dependent variable exists. However, with respect to the control and agency model (Model 2), the

change in R^2 is significant ($\Delta R^2 = .16$, $F = 3.33$, $p < .05$), and outside director equity is negatively and significantly related ($b = -3.66$, $p < .01$). With respect to the control, agency, and RDP model, outside director equity is negatively and significantly related ($b = -4.16$, $p < .01$). In the full model for related long-terms CARS, for which R^2 is non-significant, outside director equity is negatively and significantly related to long-term CARS ($b = -4.32$, $p < .05$). None of the experience variables is significant. H1a, H2a, and H6a are not supported.

I then ran a similar hierarchical regression for firms making unrelated acquisitions. Results are shown in Table 10⁹. With respect to the control model (Model 1), the marginally significant R^2 value ($R^2 = .07$, $p < .10$) indicates some explanatory power, and only industry post-acquisition ROA is statistically significant ($b = .33$, $p < .05$). The control and agency model (Model 2) has a significant R^2 ($R^2 = .14$, $p < .05$) and a significant change in R^2 ($\Delta R^2 = .07$, $F = 2.77$, $p < .05$). Industry post-acquisition ROA is positively and statistically significant ($b = .35$, $p < .05$), and outside director equity is negatively and significantly related to post-acquisition performance ($b = -2.53$, $p < .01$). The control, agency, and RDP model (Model 3) shows significant R^2 ($R^2 = .15$, $p < .05$). Industry post-acquisition ROA is positively and significantly related ($b = .35$, $p < .05$), and outside director equity is negatively and significantly related to long-term CARS ($b = -2.34$, $p < .05$). The squared term for industry concentration is non-significant. The full model (Model 4), which contains the hypothetical variables has significant R^2 ($R^2 = .20$, $p < .05$). Industry post-acquisition ROA is positively and significantly related ($b = .35$, $p < .05$), industry concentration is positively and significantly related ($b = .02$, $p < .10$),

⁹ Two influential observations were removed prior to the analysis.

Table 9
Model For Related Acquisitions by Sample Firms (related LTCARS)

Variable	Model 1	Model 2	Model 3	Model 4
<i>Step One (Controls):</i>				
Intercept	1.3**	2.7**	2.33*	1.92†
Prior average roa	-.01	-.03	-.04	-.03
Industry roa (post-acq)	.67	-.03	-.21	-.33
Size target/acquirer	-.03	-.02	-.02	.38
Board size	-.02	-.10	-.12	-.11
Prior acquisitions	.02	.01	.02	.01
<i>Step Two (Agency model):</i>				
Inside director equity		-.78	-.94	-1.01
Outside director equity		-3.66**	-4.16**	-4.32*
Blockholders (#)		-.05	-.03	.03
Institutional equity		.31	.23	.25
<i>Step Three (RDP model):</i>				
Industry concentration			1.6E-4	.01
Industry concentration ²			-5.5E-6	-1.1E-4
Industry growth (munificence)			.13	.12
<i>Step Four (Ind. Variables)</i>				
Board related acquisitions experience				-.33
Board related diversification experience				2.46
Audit committee related acquisitions experience				.38
<i>Model fit statistics</i>				
N	60	59	52	51
R ²	.04	.20	.25	.32
(adjusted R ²)	(-.04)	(.05)	(.02)	(.03)
Change in R ²		.16*	.05	.07
F-statistic		3.33	.65	1.20

Coefficients are unstandardized. Change in R² is between each model and the successive model.

† p < .10, * p < .05, ** p < .01.

Results are essentially unchanged when examining concentration alone without its squared term present.

and outside director equity is negatively and significantly related to long-term CARS (b = -2.6, p < .05). Audit committee unrelated acquisitions experience is negatively and significantly related to post-acquisition performance (b = -.19, p < .05) but in the opposite direction of that predicted. Hypotheses 1b, 2b, and 6b are not supported.

Next, I ran a hierarchical regression of the non-stratified performance variables beginning with firm return on assets. Results of this regression are reported in Table 11¹⁰. With respect to the statistically significant control model (R² = .29, p < .01), prior firm return

¹⁰ Four influential observations were removed prior to the analysis.

on assets, industry post-acquisition ROA, firm relative size, and board size are positively and significantly related ($b = .20, p < .01$; $b = 8.63, p < .01$; $b = .05, p < .01$; $b = .58, p < .01$, respectively). With respect to the control and agency model (Model 2), R^2 is significant ($R^2 = .51, p < .01$), and the change in R^2 is also significant ($\Delta R^2 = .22, F = 22.90, p < .01$). Prior firm ROA and industry post-acquisition ROA are positively and significantly related to post-acquisition return on assets ($b = .66, p < .01$; $b = 4.01, p < .05$, respectively). With respect to the control, agency, and RDP model (Model 3), R^2 and the change in R^2 are statistically significant ($R^2 = .62, p < .01$; $\Delta R^2 = 0.11, F = 16.89, p < .01$). Prior firm return on assets and industry return on assets are positively and significantly related to post-acquisition return on assets ($b = .68, p < .01$; $b = 2.98, p < .05$, respectively). With respect to the full model (Model 4), R^2 is statistically significant ($R^2 = .66, p < .01$), and the change in R^2 is also significant ($\Delta R^2 = 0.04, F = 4.91, p < .05$). Prior firm return on assets is positively and significantly related to post-acquisition return on assets ($b = .69, p < .01$). Board international experience is positively and significantly related to the dependent variable ($b = 5.27, p < .05$). Hypothesis 4a is supported. To test the interaction of international experience with acquisition of foreign targets, I ran an additional regression in which I included the interaction term. Neither the change in R^2 nor the coefficient of the interaction term is significant. Both audit committee and compensation committee tenure measures are positively and statistically significant, although at marginal levels ($b = .29, p < .10$; $b = .45, p < .10$, respectively). Hypotheses 7 and 9 receive marginal support. Hypotheses 3a, 3b, 4b, 5, and 8 are not supported.

Table 10
Model For Unrelated Acquisitions by Sample Firms (unrelated LTCARS)

Variable	Model 1	Model 2	Model 3	Model 4
<i>Step One (Controls):</i>				
Intercept	.80**	1.23**	.70†	.78*
Prior average roa	-1.7E-3	-1.4E-3	8.2E-3	7.0E-4
Industry roa (post-acq)	.33*	.35*	.35*	.35*
Size target/acquirer	-.32	-.29	-.11	-.15
Board size	.01	-.03	-.02	-.02
Prior acquisitions	.01	4.3E-3	4.4E-3	3.8E-3
<i>Step Two (Agency model):</i>				
Inside director equity		-.65	-.34	-.41
Outside director equity		-2.53**	-2.42*	-2.62*
Blockholders (#)		-.01	.01	.01
Institutional equity		.18	.09	.10
<i>Step Three (RDP model):</i>				
Industry concentration			.02	.02†
Industry concentration ²			-1.9E-4	-2.5E-4
Industry growth (munificence)			.07	.07
<i>Step Four (Ind. Variables)</i>				
Board unrelated acquisitions experience				.04
Board unrelated diversification experience				-.12
Audit committee unrelated acquisitions experience				-.19*
<i>Model fit statistics</i>				
N	149	146	137	137
R ²	.07†	.14*	.16*	.20*
(adjusted R ²)	(.03)	(.08)	(.07)	(.10)
Change in R ²		.07*	.02	.04
F-statistic		2.77	.98	2.02

Coefficients are unstandardized. Change in R² is between each model and the successive model.

† p < .10, * p < .05, ** p < .01.

Results are essentially unchanged when examining concentration alone without its squared term present.

In addition, I tested whether there were any curvilinear effects from the tenure variables that might mask the non-significant linear effects. I ran two additional regressions in which I included each of the squared tenure terms. Neither coefficient is significant.

I ran a similar hierarchical regression of long-term CARS against the non-stratified hypothetical model. Results are presented in Table 12¹¹. In the control model

¹¹ One influential observation was removed prior to the analysis.

(Model 1), only industry post-acquisition ROA is positively and significantly related to the market performance measure ($b = .31, p < .10$). In the control and agency model (Model 2), industry post-acquisition ROA is positively and significantly related ($b = .38, p < .05$) and board size is negatively and significantly related ($b = -.05, p < .10$). With respect to the control, agency, and RDP model (Model 3), industry ROA is positively and significantly related ($b = .37, p < .05$), and board size is negatively and significantly related to firm market performance ($b = -.05, p < .10$). In the full model (Model 4), the change in R^2 is significant ($\Delta R^2 = .05, F = 9.66, p < .01$), industry ROA is positively and significantly related ($b = .34, p < .10$), and board size is negatively and significantly related ($b = -.06, p < .05$). With respect to the hypothetical variables, none of the coefficients is statistically significant. To test the interaction of international experience with foreign acquisitions, I ran an additional regression in which I included the interaction term. The coefficient is not significant. Hypotheses 3a, 3b, 4a, 4b, 5, 7, 8, and 9 are not supported.

In addition, to test whether there were any curvilinear effects from the tenure variables that might mask the non-significant linear effects, I ran two additional regressions in which I included each of the squared tenure terms. Neither coefficient is significant.

Table 11

Non-stratified model (ROA)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
<i>Step One (Controls):</i>							
Intercept	-4.05**	-3.33	-3.15	-3.86	-3.99	-3.76	-3.76
Prior average roa	.20**	.66**	.68**	.69**	.69**	.69**	.68**
Industry roa (post-acq)	8.63**	4.01*	2.98*	2.42†	2.41†	2.42†	2.42†
Size target/acquirer	.05**	.20	.20	-.33	-.28	-.34	-.36
Board size	.58*	.20	.36	.12	.13	.12	.12
Prior acquisitions	.06	.05	3.3E-4	-.04	-.04	-.03	-.03
<i>Step Two (Agency model):</i>							
Inside director equity	-5.53	-6.07	-6.07	-5.95†	-5.81†	-6.00†	-6.03†
Outside director equity	-6.86	-6.57	-6.57	-2.50	-2.40	-2.51	-2.52
Blockholders (#)	.13	.18	.18	.07	.08	.07	.08
Institutional equity (#)	1.85	.91	.91	.59	.60	.60	.60
<i>Step Three (RDP model):</i>							
Industry concentration			-.07	-.08	-.08	-.08	-.08
Industry concentration ²			7.1E-4	8.9E-4	9.0E-4	8.9E-4	2.8E-4
Industry growth (munificence)			.84	.72	.72	.73	.73
<i>Step Four (Ind. Variables)</i>							
Number of directors in same industry				-4.68	-4.33	-4.59	-4.59
Average tenure in same industry				1.57	1.56	1.56	1.56
International experience				5.27*	5.02*	5.24*	5.28*
International experience*foreign				.83			
Financial expertise				-.77	-.77	-.78	-.77
Audit committee tenure				.29†	.29†	.26	.29†
Audit tenure ²						1.5E-3	
Compensation committee acquisition experience				.45†	.45†	.48†	.45†
Compensation committee tenure				.02	.02	.02	-.02
Compensation committee tenure ²							1.7E-3

Model fit statistics

N	208	204	188	186	186	186	186
R ²	.29**	0.51**	0.62**	0.66**	0.66**	0.66**	.66**
(Adjusted R ²)	.27	(0.49)	(.59)	(0.62)	(.61)	(0.61)	(.61)
Change in R ²		0.22**	.11**	0.04*	0	0	0
F-statistic		22.90	16.89	4.91	0	0	0

Coefficients are unstandardized. Change in R² is between each model and the next successive model.

† p < .10, * p < .05, ** p < .01.

Results are essentially unchanged when examining concentration alone without its squared term present.

Table 12
Non-stratified model (LTCARS)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
<i>Step One (Controls):</i>							
Intercept	1.10**	1.41**	1.00**	.91*	.99*	.91*	.88*
Prior average roa	-1.2E-3	-.01	-.01	-.01	-.01	-.01	-.01
Industry roa (post-acq)	.31†	.38*	.37*	.34†	.35*	.34†	.34†
Size target/acquirer	-.03	-.02	-.01	.11	.07	.11	.11
Board size	-.02	-.05†	-.05†	-.06*	-.07*	-.06*	-.06*
Prior acquisitions	4.8E-3	4.5E-3	.01	.01	.01	.01	.01
<i>Step Two (Agency model):</i>							
Inside director equity		-.53	-.36	-.33	-.42	-.34	-.31
Outside director equity		-.84	-.35	-.08	-.14	-.08	-.07
Blockholders (#)		-.01	.01	-.01	-.01	-.01	-.01
Institutional equity (#)		.20	.13	.12	.11	.12	.12
<i>Step Three (RDP model):</i>							
Industry concentration			.02	.02	.02	.02	.02
Industry concentration ²			-9.6E-5	-1.3E-4	-1.3E-4	-1.2E-4	-1.2E-4
Industry growth (munificence)			.05	.04	.04	.04	.03
<i>Step Four (Ind. Variables)</i>							
Number of directors in same industry				-.73	-.94	-.72	-.75
Average tenure in same industry				.30	.31	.30	.30
International experience				.39	.55†	.39	.39
International experience*foreign				-.12	-.51	-.12	-.12
Financial expertise				.01	-.13	.01	.01
Audit committee tenure				-.03	.01	.01	.01
Audit tenure ²				.01		1.1E-4	
Compensation committee acquisition experience					-.03	-.03	-.03
Compensation committee tenure					.01	.01	.02
Compensation committee tenure ²							-4.9E-4

Model fit statistics

N	210	206	190	188	188	188	188
R ²	.02	.05	.08	.13	.13	.13	.13
(Adjusted R ²)	(-3.0E-4)	(.01)	(.02)	(.03)	(.03)	(.02)	(.02)
Change in R ²		.03	.03	.05**	0	0	0
F-statistic		1.55	.62	9.66	0	0	0

Coefficients are unstandardized. Change in R² is between each model and the next successive model.

† p < .10, * p < .05, ** p < .01.

Results are essentially unchanged when examining concentration alone without its squared term present.

Event study of announcement effects

The next section addresses analysis of cumulative abnormal returns estimated using event study methods. First, I address the issue of potentially confounding events. Then, I present the analysis of the cumulative abnormal returns.

Potentially confounding events

A critique of event studies in strategy research challenging the validity of their interpretation (McWilliams and Siegel, 1996) identified certain cases in which confounding events may present alternative explanations for performance effects. I investigated the existence of potentially confounding events surrounding the announcement date. Using a scheme suggested by McWilliams and Siegel (1996), I identified a number of potentially confounding events among my sample firms during four different event windows.

I searched for news articles using Factiva, an on-line news database of Dow Jones Reuters Business Interactive LLC, within a two-day window using each firm name as the keyword. During this period, thirteen different potentially confounding events were reported for eleven firms; three of these were acquisition-related events involving acquisitions of other targets by the sample firm. Occurrence of these events could potentially provide alternative explanations in the event of any performance differences attributable to my hypothetical variables.

I also classified firms using a three day event window consisting of the day before the acquisition announcement, the day of the announcement, and the day following the announcement (-1, 0, +1). Inclusion of the day after the announcement was intended to capture any information leakage about events occurring on that day that may have been

reflected in returns on the announcement date. For this three-day window, 23 events were reported for 20 firms; six of these were acquisition-related activities events involving acquisitions of other targets by the sample firm.

In addition to these event windows, I investigated a four-day event window consisting of the day before the announcement, the day of the announcement, and two days following the announcement (-1, 0, +1, +2). During this period, 35 potentially confounding events were reported for 25 firms, 11 of which were acquisition related events involving acquisitions of other targets by the sample firm.

Finally, I investigated the existence of potentially confounding events during a five-day event window consisting of two days prior to the announcement, the day of the announcement, and two days following the announcement (-2, 0, +2). During this period, 39 different potentially confounding events were reported for 28 firms, 11 of which were acquisition related events involving acquisitions of other targets by the sample firm. A

Table 13
Potentially confounding events around announcement date

Type of event	# of occurrences among sample firms during event window			
	2-day	3-day	4-day	5-day
Restructuring/divestiture	1	2	2	2
Price changes				
New products				
Dividend/Earnings announcements	1	4	6	7
Joint venture/Strategic alliance			1	2
Acquisition activity	3	6	11	11
Litigation/Labor unrest	2	2	4	4
Major executive changes				1
Forecasted changes in earnings or sales		1	2	2
Layoffs				
Debt or equity related event	2	2	2	3
Contract awards		2	2	2
Competitors' dividend/Earnings announcements	2	2	2	2
Product failure				
Competitors' activity	2	2	3	3
Product recall				
Total	13	23	35	39

tabular summary of these events is shown in Table 13.

Classifying my sample firms by occurrence or non-occurrence of potentially confounding events, I ran t-tests of the differences between mean performance values (i.e., two-day continuously compounded abnormal return) for each pair of groupings. Results of these tests are reported in Table 14. For the two and three day event windows, t-statistics of the mean difference in performance for each pair of groupings are not statistically significant ($t = .44$, n.s. and $t = 1.46$, n.s., respectively). However, for the four and five day event windows, there is a statistically significant difference between the two groups ($t = 2.13$, $p < .05$, $t = 2.13$, $p < .05$, respectively). Comparison of the shortest and longest event windows (2-day and 5-day) indicates a number of noteworthy differences. First, for the firms in the group with no potentially confounding events performance is higher than for the group that did experience potentially confounding events. Second, the difference in mean performance values between the two groups increases as the size of the event window increases. In addition, in each case mean performance for the non-confound group increases while the mean performance for the confound group decreases. Consequently, I conclude that there may be systematic differences among my sample firms driving variation in their two day continuously compounded abnormal returns. At the same time, this should be regarded with caution due to the fact that the five-day window is 2.5 times as large as the two-day window increasing the likelihood of capturing more information within the event window time frame. For this reason, event studies normally use a short event window such as the two-day window used in this study.

Table 14
Test of mean performance differences for firms experiencing potentially confounding events

		N	Mean	Standard deviation	
Two day event window (-1, 0)	No potentially confounding events reported	189	.0047	.0674	t = .44, n.s.
	Potentially confounding events reported	11	-.004	.0451	
Three day event window (-1, 0, +1)	No potentially confounding events reported	180	.0065	.0654	t = 1.46, n.s.
	Potentially confounding events reported	20	-.015	.0422	
Four day event window (-1, 0, +2)	No potentially confounding events reported	175	.008	.0618	t = 2.14, p < .05
	Potentially confounding events reported	25	-.021	.0727	
Five day event window (-2, 0, +2)	No potentially confounding events reported	172	.0082	.062	t = 2.13, p < .05
	Potentially confounding events reported	28	-.019	.0707	

Tests of board experience hypotheses

To test for the existence of any short term effects of board experience on firm performance, I conducted further hypothesis tests using cumulative abnormal returns as the dependent variable. Using event study methods, I estimated cumulative abnormal returns during a two-day window that included the day before the acquisition announcement and the day of the acquisition announcement (-1, 0). The estimation period, the period used for estimating the stock's "normal" return, is a 200 day period ending 10 days before the acquisition announcement (-209 to -10). Returns during the estimation period and event window are two day continuously compounded returns. Prior to hypothesis testing, I ran univariate distributions of the two day continuously

compounded abnormal returns stratified according to the relatedness of the acquisition as well as the unstratified measure. Results are shown in Table 15.

Table 15
Univariate distributions of CARS (related acquisitions, unrelated acquisitions, full sample)

Performance variable: 2 day return (-1, 0)	N	Mean	Standard deviation
CARS (related acquisitions)	57	0.0100	0.0578
CARS (unrelated acquisitions)	143	0.0019	0.0660
CARS (total sample)	200	0.0042	0.0637

To test the significance of the effects of board experience on these returns, I partitioned each of the independent variables into thirds and ran t-tests of the differences in mean returns between the top and bottom thirds. Results are shown in Table 16. For some variables there were insufficient non-zero values to rank into three groups. In such cases, I tested the mean difference in performance between the group with non-zero values and the group with zero values. These results are shown in Table 17. In every case in both Tables 16 and 17, the resulting t-values are not statistically significant. Hypotheses 1a, 2a, 6a, 1b, 2b, 6b, 3a, 3b, 4a, 5, 7, 8, and 9 are not supported. Hypothesis 4b was tested separately due to the hypothesized moderating effect of foreign acquisitions.

Table 16
 Difference in mean CARS for top and bottom thirds of experience variables

Experience variable	N _{1,2}	t-value
	Mean _{1,2}	
	Standard deviation _{1,2}	
Board related acquisition experience	20, 19	0.58 n.s.
	0.0072, .0195	
	.0528, .0767	
Audit committee related acquisition experience	23, 29	0.93, n.s.
	0.0015, 0.0172	
	.0505, .0672	
Board unrelated acquisition experience	43, 50	0.36, n.s.
	-0.003, 0.0024	
	.048, .0886	
Board unrelated diversification experience	51, 89	0.44 n.s.
	-0.001, 0.003	
	.0315, .08	
Audit committee unrelated acquisition experience	45, 78	0.74 n.s.
	-0.004, 0.0047	
	.0556, .0727	
Test of full, non-stratified model		
Audit committee tenure	68, 61	.04 n.s.
	0.0055, 0.0059	
	.0524, .0777	
Compensation committee acquisition experience	80, 66	-0.02 n.s.
	0.006, 0.0062	
	0.0857, .0443	
Compensation committee tenure	69, 66	0.55 n.s.
	0.0064, 0.0127	
	.0456, .0823	

Table 17
Mean differences of CARS between non-zero levels of experience and zero levels of experience

Experience variable	N ₁ , N ₂	Test statistic
	Mean ₁ , Mean ₂	
	Standard deviation _{1,2}	
Board related diversification experience	8, 49	0.51, n.s.
	0.0048, 0.0109	
	.0217, .0619	
Test of full, non-stratified model		
Number of directors in same industry	186, 13	-.33 n.s.
	0.0036, 0.0096	
	.0646, .0516	
Average tenure of directors in same industry	186, 13	-0.33 n.s.
	0.0036, 0.0096	
	.0646, .0516	
Audit committee financial expertise	149, 50	-0.29 n.s.
	0.0032, 0.0062	
	.0646, .0616	

N_n = number of firms reporting experience variable

To test hypothesis 4b, I ran analysis of variance of the effects of international experience on two-day return when the acquisition is either foreign or domestic. Examination of univariate distributions of two-day return for foreign and domestic acquisitions suggests that mean performance is roughly equal for the two types of acquisitions and the data are approximately normally distributed. I then ranked international experience into three groups and tested the interaction between high and low levels of international experience with the type of acquisition, i.e., foreign or domestic. Results of the analysis of variance are presented in Table 18. The interaction term, foreign x international experience, is not statistically significant (F = .09, n.s.). Therefore, there is no significant interaction between the two variables. The main effects, international experience and type of acquisition (foreign/domestic), are also not statistically significant (F = .79, n.s., F = 0.46, n.s., respectively). The two-way ANOVA results in a non-significant difference in the mean performance of foreign acquisitions

between high and low levels of international experience. In addition, the mean performance for foreign acquisitions is negative for both high and low levels of international experience. Furthermore, mean performance is actually lower for higher levels of international experience for each type of acquisition, and this is opposite what was predicted in hypothesis 4b. Hypothesis 4b is not supported.

Post hoc analyses

As mentioned earlier in this chapter, the sample was a rather non-restrictive one potentially comprised of a number of small to medium sized firms. For this reason, I suspected that there may be some size effects potentially masking the effects in my study. I ran bivariate correlations of all the variables in the study and included a size variable operationalized as firm revenues the year of the acquisition. Fifteen of the variables in the study were significantly correlated with size. With the exception of the number of blockholders, all of the control variables were correlated with size. In addition, size showed statistically significant correlations with a number of experience variables representing diversification and with the two tenure variables. To examine these relationships further, I used moderated regression to test the interaction effects of size with my hypothesized variables. Beginning with the full model, I entered size into the model followed by the interaction terms for each size-experience variable individually to test the effects of each interaction on each of the two long term dependent variables. In only one case (for the ROA model) was the change in R^2 statistically significant, and that was for the interaction of size with the number of outside directors in the same industry as the sample firm ($\Delta R^2 = .01$, $F = 5.37$, $p < .05$). However, the change in R^2 of 0.01 is of little practical significance. All the coefficients appeared to be in the same direction as in

the previous tests, and the same coefficients were significant. Therefore, the moderated regression of the dependent variable against the interaction of firm size with experience does not indicate any significant relationships that were not apparent prior to the inclusion of size in the model.

Table 18
ANOVA summary table of the relationship between type of acquisition (foreign or domestic), level of board international experience, and cumulative abnormal returns (N = 157)

Source	df	SS	MS	F*	R ²
Type of acquisition (foreign/domestic)	1	.0021	.0021	.46	0.003
Level of international experience (upper 33%, lower 33%)	1	.0036	.0036	.79	.005
Foreign x international experience	1	.0004	.0004	.09	.0005
Within groups	153	.6997			
Total	156	.7058			

Analysis Variable : cumulative abnormal two-day return

*None of the F values are significant at regular or marginal levels.

FOREIGN	Rank for Variable INTL_EXP	N Obs	N	Mean	Std Dev	Minimum	Maximum
0	lowest third	85	77	0.0078327	0.0884753	-0.3071000	0.4414500
	highest third	46	45	-0.0038893	0.0428981	-0.0948900	0.1424600
1	lowest third	13	12	-0.0028533	0.0311301	-0.0355000	0.0802700
	highest third	24	23	-0.0066252	0.0244431	-0.0601500	0.0398100

CHAPTER 5

DISCUSSION OF FINDINGS AND SCHOLARLY IMPLICATIONS

This chapter presents discussion of the results of the study within the context of current governance research. Discussion proceeds first with implications arising from the findings of the study including suggestions for future research. Next, the chapter addresses theoretical considerations which may improve future investigation into board-firm performance relationships. These considerations include discussion of managerial power, the governance life cycle, and the concept of strategic relevance of board characteristics. Next, discussion of limitations addresses methodological issues that may have negatively impacted the results. Finally, theoretical implications address issues related to the theoretical framework of the study.

FINDINGS OF THE STUDY

International experience

International experience shows a statistically significant positive effect on firm ROA confirming the hypothesis that board international experience leads to performance enhancements of the focal firm. International diversification may present another form of managerial complexity, and a board with international experience may be an effective means of buffering the firm from the effects of that complexity (Pfeffer and Salancik, 1978) by incorporating directors' international experience into the firm's knowledge base and strategic decision structures. The capacity of directors to assist focal firm managers in addressing the added complexity of globalization may be a direct result of their past experiences as managers themselves in addressing similar external contingencies at their home firms. This finding may be regarded with caution, however, as the effect of board

international experience was not significant with respect to LTCARs. It may be that equity markets do not value board international experience or, perhaps more likely, that they not sensitive enough to detect such fine-grained board characteristics. Hence, accounting-based measures of performance may be more likely to capture board international experience than are financial market-based measures.

Committee tenure

Tenure measures for both the audit and compensation committees show statistically significant positive effects on firm ROA although the statistical significance is only marginal. Nevertheless, the existence of positive effects for international experience and for committee tenure suggests board experience and tenure have some statistical effects on accounting measures of firm performance. Moreover, the lack of significance of experience and tenure measures in the market measure model suggests the lack of sensitivity of market measures to human experience factors supporting the argument that accounting measures and market measures are conceptually and empirically distinct.

Accounting-based measures may be more prone than market-based measures to capture effects of human experience due to the susceptibility of accounting measures to human manipulation. Although accounting procedures are governed by standardized rules (e.g., GAAP) and overseen by a cadre of professionals, the application of the rules whereby transaction data are translated into accounting information for decision making are highly subject to human interpretation. Hence, even within the domain of legal and ethical management and accounting practices, accounting information incorporates a great deal of human thinking, experience, and decision making. It stands to reason that

such information systems may be more likely to incorporate both the experience of business leaders as well as their shortcomings and also more likely than market measures to demonstrate statistically significant effects from variables reflecting human experience and decision making.

ACCOUNTING FOR THE LACK OF SIGNIFICANT EFFECTS

Potential interactions in governance research

The lack of inclusion of potential interactions in my empirical model may account for the lack of significant effects. Although in my theory development I advocated the use of multitheoretic approaches in the study of corporate governance, I implicitly advocated generally linear relationships among the variables representing the theoretical constructs. However, the corporate governance literature suggests the mutual influence of multiple theoretic approaches (e.g., Hillman and Dalziel, 2003; Lynall, Golden, & Hillman, 2003), and this implies the potential for interactions among various governance constructs. Boards are endogenously constituted (Hermalin and Weisbach, 2001) implying the existence of mutual and simultaneously operating antecedents, functions, and effects in corporate governance. Therefore, it seems likely that there are rather complex statistical relationships that, in some cases, involve the existence of interactions.

Governance researchers make extensive use of interactions in investigating governance relationships (e.g., Golden and Zajac, 2001; Hillman and Dalziel, 2003). With respect to potential interactions in this study, correlations between variables representing monitoring (director equity, number of blockholders, institutional equity) and variables representing environmental capacity (industry concentration and munificence), although weak and marginally significant, suggest that monitoring and

environmental munificence may be mutually influential. Such relationships may impact the nature of the relationship between board characteristics and firm performance, and variables such as those mentioned above may have potential mediating or moderating effects on that relationship. Thus, the inclusion of interactions in my theory development and empirical model may have improved the likelihood of significant hypothesized effects particularly with respect to the simultaneous, mutual influences of multitheoretic constructs.

Further improving the empirical model

Managerial power. Inclusion of other constructs in the theoretical model may have further improved the empirical model. Power is the capacity of an individual to “overcome resistance in achieving a desired outcome or aim” (Lynall et al., 2003; Pfeffer, 1981) and more broadly is the capacity to control the premises and choices of decisions as well as their consequences (Roy, 1997). Within an organizational context, power is the capacity to influence others and tends to be concentrated among strategic managers. For example, managerial power, the capacity of management to influence strategic direction may play a role in acquisitions. The CEO may have a capacity to direct strategic actions such as acquisitions regardless of the experience of the board. The strategic management literature recognizes the role that such managerial power may play both as an antecedent to acquisitions and in impacting post-acquisition outcomes.

Acquisitions may result from motivations reflecting the interests of a variety of stakeholders. For example, acquisitions may be motivated by adaptive processes whereby managers pursue particular strategies in response to environmental changes for the purpose of increasing shareholder value. However, acquisitions also may be

motivated by the pursuit of managers' own self interests in securing and expanding their bases of power.

Acquisitions resulting from managerial motives can be seen as the result of managers' maximization of their own interests (subject to capital market constraints) rather than those of shareholders (Trautwein, 1990). Maximization of managers' goals may be motivated by profit but also by power. This concept is related to the "hubris hypothesis," the idea that corporate takeovers are often motivated by managers' conviction that their efforts and expertise are a major source of a firm's value and can be expanded and enhanced through extension of their control over other organizations through takeovers (Roll, 1986). Empirical investigation of the role of managerial power with respect to acquisitions suggests that power is a motive (though not the only motive) and is negatively associated with acquisition outcomes (Trautwein, 1990).

Maximization of managerial power may be a particularly salient motive with respect to unrelated acquisitions (Bergh, 1997). Unrelated acquisitions provide managers a singular opportunity to expand the scale and scope of the firm not inherent with related acquisitions. Unrelated acquisitions may be more likely than related acquisitions to expand executives' compensation base and to enhance their power through increased market power, managerial economies, and economies of scale and scope (Bergh, 1997). On balance, managerial power may be considered to be one of several motives for acquisitions, especially for unrelated acquisitions, and have negative post-acquisition performance consequences.

Operationalizations of managerial power may include (but are not limited to) measures of CEO duality, CEO equity, interdependent directors (directors appointed by

the current CEO (Daily et al. 1998)) and CEO and top management tenure. The inclusion in this study of inside director equity might be considered to address the issue of managerial power in that it may represent the power of a firm's dominant coalition (Cyert & March, 1963; Finkelstein, 1992). However, it may not represent the concept of managerial power sufficiently to show any potential effects. If CEO power is a critical factor in the pursuit and completion of acquisitions (or a particular acquisition), as the strategic management literature suggests, it may be a critical construct to include in future theoretical models.

Potential impact of firm size. Firm size is often considered in strategic management researcher to underlie many of the statistical relationships demonstrated empirically.

Although relative size of target to acquirer was included as a control variable in the regression analyses size was otherwise not explicitly included as a variable.

Consequently, I included size as a variable in post hoc analyses. In addition, I examined the potential interactions of size with each of the hypothesized experience variables. In each case, I detected no significant statistical effects. This was surprising as my sample included a number of small and medium sized firms, whose boards often are qualitatively and quantitatively distinct from those of large firms. Despite high correlations of size with many of the independent variables, the lack of a post hoc explanation based on firm size suggests that other unobserved variables may be driving variation in the dependent variables. Following this logic, I suspected that the stage of development of the firm in terms of its organizational life cycle may also account for qualitative and quantitative differences in the boards of the sample firms and, in turn, the lack of statistical effects.

Governance and the organizational life cycle. The concept of the governance life cycle (Lynall et al., 2003) suggests that the governance needs of firms differ at different stages of the firm's life cycle and that these changes are reflected in composition and other characteristics of the board of directors. Given that boards may differ depending on the stage of development of the focal firm, research on the effects of board characteristics on firm financial performance may benefit from inclusion of this concept in theoretical and empirical models.

A model of a corporate governance life cycle that spans the general organizational life cycle (OLC) rests on two major assumptions concerning changes to the firm and to its governance systems. The first of these assumptions is based on the OLC model and posits that firms change as they age. Their relationship changes with the external environment, which becomes more complex encompassing more stakeholders with greater differences (heterogeneity) among the stakeholders. The needs of stakeholders change placing different demands on the firm. In addition, firms also experience a number of internal changes based on the organizational life cycle creating new dynamics in firm-environment relations. Firms tend to become larger, more complex, more diversified, and more elaborate in structure. As a result, firm-environment relations shift over time in response to changes in the firm's OLC.

The second assumption about the impact of the OLC on governance concerns the link that systems of governance provide between internal management systems and firm stakeholders. Governance has been described as the systems that link the interests of participants in organizations to the internal management systems that control the ongoing activities of the organization (Baysinger & Hoskisson, 1990; Dalton, Daily, & Cannella,

2003; Hitt, Ireland, & Hoskisson, 2003). A primary objective of systems of corporate governance is to align the interests of managers with those of the owners (shareholders) (Hitt, Ireland, & Hoskisson, 2001), while a secondary objective is to align the interests of managers with those of stakeholders. Evidence suggests that a well-governed corporation has a competitive advantage (Hitt, Ireland, & Hoskisson, 2001). Given that the stakeholder population of firms changes as firms grow and that governance links management to the owner and stakeholder population, progression of firms through stages of the OLC has implications for the types of governance systems that are most appropriate. These types of governance systems may change in response to firm contingencies at various stages of growth.

As firms progress in the OLC, they are characterized by greater separation of ownership and control and progressively more stringent, formal, and contractual agreements governing their relationship. The new venture firm represents an interesting case of governance that is unique in a number of respects. The management team is normally made up of professionals often with technical backgrounds and little management knowledge. That team is supplemented by a group of investors represented by venture capitalist managers. Such a firm is conceived in instability (founders and investors expect rapid growth and change), and the venture capitalists normally have very specific and narrowly defined goals.

The strategic management literature indicates that the governance relationship at this stage may be quite different from that of the large, public diversified firm and thus the theoretical lens through which to view governance at this stage may be different as well (Cable & Shane, 1997). Whereas agency theory tends to characterize the principal-

agent relationship as one of opposition, high performing new venture team-venture capitalist relationships are often characterized by mutual cooperation (Busenitz, Fiet, & Moesel, 2000), nonfinancial exchanges (Sapienza, 1992), and greater focus on processual arrangement than on structural arrangements (Sapienza & Korsgaard, 1996). In addition, new venture management and venture capitalists differ in their time orientations in ways that differ from traditional principal-agent relationships (Gersick, 1994). Thus, new venture firms demonstrate governance relationships that are markedly different from those of large public diversified firms, and the theory used to explain these relationships may further illuminate both this type of firm governance as well as the firm governance process in general.

Governance relationships change once again at the IPO stage. The firm enters a new period of instability, firm-environment links change drastically, ownership becomes more diverse and further separated from management of the firm, and the shared governance characteristics of new venture teams give way to the more oppositional processes characteristic of agency theory. In addition, stakeholder expectations of high growth, continued survival, and elaborating structure place different demands on management.

The large diversified public firm undergoing restructuring activities presents a change in the form of the governance life cycle. To this point, it has been characterized by continuing separation of ownership and control and increasingly formal governance systems. Firms in this stage experience changes in ownership and strategic direction in addition to changes in size and structure that may change the dynamics of governance systems. This particular stage is important to include in a stage model of governance

because it no longer represents a general monotonic pattern but instead may exhibit a more cyclical pattern i.e., governance may oscillate among a variety of arrangements dictated by changes in firm strategic direction (e.g., growth, retrenchment).

The concept of a governance life cycle could contribute to governance research in a number of ways. First, by providing an explanatory model across life-cycle stages, it may more fully elaborate the boundary conditions of governance theories. Second, by challenging the explanations provided by governance theories, such a view could enlarge the theoretical perspective by including explanations of when mutual cooperation is more appropriate. Governance theories appear to be very brittle with respect to boundary conditions, and the governance literature may benefit from a more robust multitheoretic perspective that encompasses more corporate forms than the large public diversified firm that has largely been the focus of governance research.

Board experience could differ across the various stages of the governance life cycle. Boards of relatively young firms may be more likely to have outsiders that have close personal and professional associations with the CEO, and their personal and professional backgrounds are more likely to share common attributes such as service on the boards of privately held firms, management of multiple firms, a relatively localized reputation, and relatively short organizational tenure. Ownership of such firms may be more likely concentrated among blockholders such as venture capitalists, board insiders, and other owner-managers. Likewise in firms in fairly well advanced stages of the governance life cycle, directors are again likely to share personal and professional associations with the CEO, and these are likely to share common attributes such as service on the boards of large, established firms, and a national (or global) reputation as a

business leader. Generally, the experiences of these directors and the focal CEO are likely to be more similar to one another than to those of the former example of the relatively young firm.

The existence in my sample of firms potentially representing a variety of firm populations may encompass a variety of stages in the governance life cycle, and board characteristics associated with this variety may have introduced potential confounding effects. Such potentially confounding effects may account in part for the lack of statistical relationships between board characteristics and firm financial performance. Future research that includes broader representation of firm populations may benefit from including the concept of the governance life cycle in theoretical and empirical models.

Strategic relevance. Further clues to the lack of statistically significant relationships between my experience variables and firm financial performance may lie in the concept of strategic relevance. Past experience may have little intrinsic value in that the value of previous experience may lie in its relationship to current events similar to those from which the experience was derived. Experience in and of itself may bring value only in relation to a future similar event. Within an organizational context, this concept of strategic relevance means that the experience is linked to the behavior of the firm by virtue of the firm's strategy bearing a certain similarity to previous events from which the experience is derived.

Strategic relevance bears some similarity to strategic relatedness that occurs when directors serve multiple directorships at firms that follow similar corporate strategies and that may operate in similar environments (Baysinger & Hoskisson, 1990). Experience on other boards may impact directors' contributions to the focal firm's strategy depending

on the strategic relevance of their experience to the focal firm. The variability of the strategic relevance of director ties impacts both whether and when such ties provide relevant strategic knowledge for the performance of board roles (Carpenter & Westphal, 2001).

One way that these tests may have failed due to lack of strategic relevance is that although the experience of the boards may be effectual as my theory predicted, the event (dependent variable) chosen to demonstrate the effects of that experience may not reflect enough variation from that experience to demonstrate observable effects. First, the two-year performance period is sufficiently long to absorb many effects in addition to that exerted by the experience of the board through the acquisition event. Years of research concerning the link between board composition and financial performance have led researchers to conclude that a search for a board composition-financial performance link is not fruitful (Dalton et al., 1998) because the criterion appears to be too distal with respect to the predictor. Similarly, the two-year event window may be too distal with respect to the experience to capture the effects of board experience on events associated with a single acquisition.

Second, a single acquisition may not provide a significant impact on a firm's performance to show the effects I intended to capture. A single acquisition may or may not represent a strategically significant event in the existence of a firm to register statistically significant effects. Strategically significant events may have a variety of determinants. For example, a relatively young firm making its first acquisition may be undertaking a significant departure from previous strategies such that the acquisition may be strategically significant. Another determinant of strategic significance with respect to

acquisitions may be the size of the target relative to the acquirer. Although I included relative size as a control variable, its values were rather widely dispersed and negatively skewed. Hence, although the mean relative size of the target to the acquirer was rather large (.33), the relatively high proportion of small values may mean that for many firms in the sample, relative size of the target did not represent a strategically significant event.

With respect to acquisition activity by acquiring firms, a strategically significant event might consist of a series of acquisitions. Firms that intentionally engage in programs of acquisition may do so over a relatively long period of time. Such programs of acquisition would likely represent considerable departure from the firm's current strategy, and this departure might be considered strategically significant. In such cases, one might expect the need for board acquisition experience to be particularly valuable and perhaps more so than with respect to any single acquisition. From an empirical standpoint, such programs of acquisition might be difficult to identify and would almost necessarily be done *ex post*.

Firms in my sample were randomly selected from the acquisitions rosters of Mergers & Acquisitions with little regard for strategically significant criteria for the acquiring firm. Such criteria might include, but not be limited to, the relative size of the target to the acquirer, the length of time between announcement and completion, conditions of the offer (e.g., hostile, friendly, invited), conditions of the acceptance of the offer (board acceptance, management takeover, tender offer, proxy vote), strategic fit between target and acquirer, and others. For some firms such as General Electric, Tyco International, and Cisco Systems, an acquisition is a fairly routine event, and those firms have procedures in place for evaluation and valuation of the target and for post-

acquisition integration. Hence, for some firms, acquisition of another firm is merely a special type of asset purchase, while for others, it is a sea change in the firm's strategy. The random selection of acquiring firms from the M&A rosters did not account for the special types of circumstances that may cause some acquisitions to have more strategic impact on the acquirer. Although I attempted to control for the past acquisition behavior of the focal firm, a simple count of acquisitions over the previous five year period may not be sufficiently fine grained to account for the many variations that may occur in offering and consummating a deal. In sum, to evaluate the effects of board experience on a firm's acquisition may require modification of the sampling frame designed to capture those effects.

The above discussion addresses the issue of strategic relevance for the criterion. Model specification issues that address the issue of strategic relevance may also need to do so for the predictor. Considering the importance of home firm experience relative to other forms of experience resulting from directors' various management and governance activities throughout a director's career may enhance model specification. Governance literature provides strong theoretical and empirical support for the roles that director experience plays in the strategies of focal firms (Golden and Zajac, 2001; Walters, Kroll, and Wright, 2006; Westphal and Fredrickson, 2001).

Although my theory development addressed the importance of the entirety of director experience, I focused only on home firm experience of outside executive directors. Considering only the home firm experience of outside directors may overlook the importance of experience garnered by serving on other boards and, hence, may capture too little information about the directors' experience. While home firm

experience may be more available and concrete, the lessons learned from service on other boards may also have some important impact on the learning of corporate directors. Although this potentially leads beyond the “black box” of the board process into individual directors’ cognitive processes, measures may serve as proxies for these processes. Some of these may be the number of non-executive board appointments, tenure considerations such as board tenure at the focal firm, home-firm tenure, and tenure in other non-executive board appointments. In sum, the empirical investigation of the impact of director experience on focal firm strategic outcomes may need to more squarely address the issue of the strategic relevance of director experience with respect to the selection of both the criterion and the predictors.

LIMITATIONS

In addition to the potential improvements to the theoretical and empirical models discussed above (inclusion of interactions, impact of size and governance life cycle, and strategic relevance), there are several limitations of the methods used that may have impacted the lack of significant findings. These limitations, addressed below, deal with sample design, measurement, and data collection.

The sample was intended to be representative of the population of publicly held firms making at least one acquisition during the period under study, and this representativeness may have introduced potential bias into the study by including a wide range of industries with potentially varying corporate behaviors. Inclusion of the full range of industries may mask effects that could otherwise be more industry specific. My sample included 141 different four digit industries spanning 9 one digit groups, 34 two digit groups, and 108 three digit groups. It may be difficult to detect statistical effects

within a sample broadly representing all industries. More specifically, with respect to governance studies, the effectiveness of governance mechanisms may be highly variable across industry sectors due to the possibility that different sectors have their own particular subtleties and unique characteristics (Le Walters and Kroll, 2006). Much of the governance research has focused on Fortune 500 firms or on firms from a smaller number of industries. Focusing on one or a few industries may result in identifying associations with industry-specific behaviors that would not be empirically detectable within a broader representation of firm behavior.

Another consideration with respect to sample design is that of the power of the statistical tests. Initial sample size estimates based on power calculations called for a sample of 250 for the regression analyses and 360 for the event study analyses. Due to cost constraints, the sample consisted of 215 firms, and missing data for some firms reduced that to 189 for the regression analyses and 200 for the event study analyses. The smaller sample sizes could increase the possibility of a Type II error or of rejecting an effect as insignificant that actually exists and would have been detected by a test with an appropriate level of power.

Another limitation of the study may lie in the measurement of experience, which was measured as average experience (total outsider experience divided by number of outsiders). Experience may be more effectively captured by considering such measures as the range of experience or the maximum level of experience. Effects of experience may be more likely to be evident if considering the variation of experience on the board. Research on organizational demography (Jehn, Northcraft, & Neale, 1999; Pfeffer, 1983) suggests that variation in group characteristics impacts group outcomes. Considering the

average level of experience among boards of directors may less effectively capture the value of that experience than considering the variation in that experience.

Furthermore, board experience may be a function not only of the absolute level of outside director experience but also of the level of experience of insiders. Board experience is likely an aggregation of the experience brought by outside directors and that possessed by inside directors rather than only a reflection of outsider experience. This aggregation might be captured by gauging the numerical differences between outsiders' experience and that of insiders (Carpenter & Westphal, 2001). Hence, future research on the effects of board experience on firm outcomes may benefit from considering methods of measuring experience that incorporate more information about the experience (e.g., variation) as well as relate that experience to that of board insiders.

Future research on the impact of board experience on firm outcomes may also benefit from alternate methods of data collection. Experience may be more effectively captured through a survey instrument than through simple counts of past events in a director's career resulting in greater construct validity. In addition, surveys have the potential of capturing not only a director's experience but a whole range of other information including the perception by the director that the experience is considered useful by the CEO and other board insiders.

Given the lack of significant findings in this study, accounting for the limitations identified here may lead to better results in future studies. In particular, restricting the range of potential corporate behaviors by restricting the range of industries, using multiple methods of measuring experience, and supplementing the data collection methods with the use of survey data may improve the empirical model.

THEORETICAL IMPLICATIONS

Theory development leading to the hypotheses tested here depended on the resource-based view (RBV) of the firm for an explanation of the potential effects of board experience on firm financial performance. Because few of the experience variables showed systematic relationships to firm performance, the RBV fails to provide much power in explaining the effects of board experience on firm outcomes. It may be that the knowledge resources of outside directors are extensions of the firm's resource base and do not add any unique characteristics.

Governance research provides ambiguous support for the explanations provided by agency theory regarding effects of board characteristics on firm outcomes. Because of the mixed findings regarding agency theoretic effects, variables representing agency constructs were included in the empirical model as control variables. These show statistical significance in the control models and, in some cases, persist throughout multiple stages of the hierarchical regressions. Hence, agency theory provides strong explanatory power regarding firm financial performance.

Among the theoretical explanations tested, only agency theory, represented by variables measuring firm ownership, continues to show some linear relationship to firm performance throughout the series of hierarchical regressions. Inside director equity shows a negative effect on firm ROA for the unrelated acquisitions subgroup and for the non-stratified model, while outside director equity shows a negative effect for both subgroups of LTCARS. These relationships suggest that acquiring firms dominated by board ownership tend to perform poorly. Indeed, insider dominated firms perform poorly with respect to accounting measures, and outside dominated firms perform poorly with

respect to market measures. As only acquiring firms were included in the sample, such an observation may be a statistical artifact of the sample design. However, the persistence of these relationships suggests the power of agency theory explanations regarding firm ownership concentration and firm performance.

CONCLUSION

The lack of statistical effects in the study nevertheless does provide some evidence as to possible effects of board experience on firm performance. In particular, board international experience exhibits some capacity to influence long term performance of acquiring firms, at least with respect to accounting performance measures.

The statistical results may have been confounded also by potential interactions not reflected in my empirical model. Governance research suggests the simultaneous operation of multiple theoretical constructs implying the potential mediators and moderators. In particular, the capacity for monitoring may interact with environmental characteristics, and such interaction likely impacts the effects of board characteristics on firm performance.

The above issues primarily affect the specification of empirical models in investigating governance related antecedents of firm performance. In addition to empirical issues, this research also raises some theoretical issues. One theoretical construct that might have improved model specification is managerial power, which affects both the motivations for acquisitions and the probability of positive performance consequences. These issues were not fully considered in this study either theoretically or empirically, although the inclusion of inside director equity encompasses part of the content domain of managerial power. In addition, relationships of inside director equity

with other ownership variables and with firm ROA suggest that managerial power is negatively related to investors' capacity for monitoring further suggesting an association with weak governance. In conjunction with previous research on managerial power and acquisitions (Bergh, 1997), findings suggest that managerial power leading to pursuit of unrelated acquisitions is associated with low reliance on the unrelated acquisition and diversification experience of the board.

The lack of any evidence of size masking statistical effects suggests that other more latent factors may be confounding the effects. Somewhat related to the concept of size is the stage of firm development within the organizational life cycle and, by implication, the potential effects of a governance life cycle. Variation in firm-environment relations as a function of the organizational life cycle implies that governance, which is a reflection of firm-environment relations, changes as well. Hence, varying board characteristics as a function of a governance life cycle may be a critical inclusion in subsequent governance research investigating board antecedents of firm performance.

Finally, relevance of board experience to the strategic direction of the firm may be a critical consideration in investigating the impact of board characteristics on firm performance. To be considered a source of competitive advantage, board characteristics may need to fit within the firm's strategic context (Golden & Zajac, 2001).

Despite ambiguous statistical relationships, governance research is driven by strong theoretical and practical considerations and future research should explicitly address the challenges of relatively weak statistical effects.

REFERENCES

- Abbott, L. J., & Parker, S. 2000. Auditor selection and audit committee characteristics. Auditing, 19(2): 47-66.
- Andersen, R. C., Mansi, S. A., & Reeb, D. M. 2004. Board characteristics, accounting reporting integrity, and the cost of debt. Journal of Accounting & Economics, 37: 315-342.
- Andrews, K. 1971. The concept of corporate strategy. Dow-Jones-Irwin: Homewood, IL.
- Antle, R., & Nalebuff, B. 1991. Conservatism and auditor-client negotiations. Journal of Accounting Research, 29: 31-54.
- Bacon, J. 1985. The role of outside directors in major acquisitions or sales. The Conference Board Research Bulletin, No. 180.
- Bacon, J. & Brown, J. K. 1975. Corporate directorship practices: Role, selection and legal status of the board. New York: The Conference Board.
- Banerjee, A., & Owers, J. E. 1993. Managerial incentives and corporate control auctions. Managerial and Decision Economics, 14: 295-309.
- Bantel, K. A., & Jackson, S. E. 1989. Top management and innovations in banking: Does the composition of the top management team make a difference? Strategic Management Journal, 10: 107-124.
- Barber, B. and J. Lyon 1997. Detecting long-run abnormal returns: The empirical power and specification of test statistics. Journal of Financial Economics, 43: 341-372.
- Barringer, B. R., & Harrison, J. S. 2000. Walking a tightrope: Creating value through interorganizational relationships. Journal of Management, 26: 367-403.
- Barney, J. B. 1986. Strategic factor markets: Expectations, luck, and business strategy. Management Science, 32: 1231-1241.
- Barney, J. 1991. Firm resources and sustained competitive advantage. Journal of Management, 17: 99-120.
- Barney, J. B. 1995. Looking inside for competitive advantage. Academy of Management Executive, 9(4): 49-61.

- Barney, J. B. 1988. Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis. Strategic Management Journal, 9(Special Issue): 71-78.
- Barney, J. B., & Arkan, A. M. 2001. The resource-based view: Origins and implications. In Hitt, M. A., Freeman, R. E., & Harrison, J. S. (eds.) Handbook of strategic management. Blackwell Publishers: Oxford, UK; 124-188.
- Baysinger, B., & Butler, H. N. 1985. Corporate governance and the board of directors: Performance effects of changes in board composition. Journal of Law, Economics, and Organization, 1: 101-124.
- Baysinger, B. & Hoskisson, R. E. 1989. Diversification and strategy and R&D intensity in multiproduct firms. Academy of Management Journal, 32: 310-332.
- Baysinger, B., & Hoskisson, R. E. 1990. The composition of board of directors and strategic control: Effects on corporate strategy. Academy of Management Review, 15: 72-87.
- Bazerman, M. H., & Schoorman, F. D. 1983. A limited rationality model of interlocking directorates. Academy of Management Review, 2: 206-217.
- Beasley, M. S. 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. The Accounting Review, 71: 443-465.
- Beasley, M. S., Carcello, J. V., Hermanson, D. R., & Lapides, P. D. 2000. Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. Accounting Horizons, 14: 441-454.
- Beasley, M. S., & Petroni, K. R. 1999. Board independence and audit-firm type. Auditing: A Journal of Theory & Practice, 20: 97-114.
- Bergh, D. D. 1997. Predicting divestiture of unrelated acquisitions: An integrative model of ex ante conditions. Strategic Management Journal, 18: 715-731.
- Berle, A. A., & Means, G. C. (1932) 1968. The modern corporation and private property. New York: Harcourt, Brace & World.
- Bigley, G. A., & Wiersema, M. F. 2002 New CEOs and corporate strategic refocusing: How experience as heir apparent influences the use of power. Administrative Science Quarterly, 47: 707-727.
- Bilimoria, D., & Piderit, K. 1994. Qualifications of corporate board members. Group and Organization Management, 19: 334-362.
- Bianco, A., & Lowry, T. 2003. Can Dick Parsons rescue AOL Time Warner? He's a lot tougher than you think. An in-depth profile. Business Week, 3833: 86.

- Bluedorn, A. C., Johnson, R. A., Cartwright, D. K., & Barringer, B. R. 1994. The interface and convergence of the strategic management and organizational environment domains. Journal of Management, 20: 201-262.
- Boeker, W. & Goodstein, J. 1993. Performance and successor choice: the moderating effects of governance and ownership. Academy of Management Journal, 36: 172-186.
- Booth, J. R., & Deli, D. N. 1996. Factors affecting the number of outside directorships held by CEOs. Journal of Financial Economics, 40: 81-104.
- Boyd, B. 1990. Corporate linkages and organizational environment: A test of the resource dependence model. Strategic Management Journal, 11: 419-430.
- Bradley, M., Desai, A. & Kim, E. H. 1983. The rationale behind interfirm tender offers: Information or synergy? Journal of Financial Economics, 11: 183-206.
- Brav, A., C. Geczy, et al. 2000. Is the abnormal return following equity issuances anomalous? Journal of Financial Economics, 56: 209-249.
- Brealey, R. A., & Myers, S. C. 2003. Principles of corporate finance, 7th edition. Burr Ridge, IL: McGraw-Hill Irwin.
- Bromiley, P. 1986. Corporate capital investment: A behavioral approach. New York: Cambridge University Press.
- Brush, T. H. 1996. Predicted change in operational synergy and post-acquisition performance. Strategic Management Journal, 17: 1-24.
- Buhner, R. 1987. "Assessing international diversification of West German corporations." Strategic Management Journal 8: 25-37.
- Busenitz, L. W., Fiet, J. O., & Moesel, D. D. 2000. An event history analysis of mutual cooperation between venture capitalists and new venture team members on venture exits. Unpublished manuscript.
- Byrd, J. W., & Hickman, K. A. 1992. Do outside directors monitor managers? Journal of Financial Economics, 32: 195-221.
- Cable, D. M. & Shane, S. 1997. A prisoner's dilemma approach to entrepreneur-venture capitalist relationships. Academy of Management Review, 22: 142-176.
- Cammack, S. 2002. An examination of firms charged with Medicare and Medicaid fraud: Does corporate governance matter? Unpublished doctoral dissertation, University of Missouri, Columbia.

- Cannella, Jr., A. A., & Hambrick, D. C. 1993. Effects of executive departures on the performance of acquired firms. Strategic Management Journal, 14: 137-152.
- Capron, L., Dussauge, P., & Mitchell, W. 1998. Resource deployment following horizontal acquisitions in Europe and the United States, 1988-1992. Strategic Management Journal, 19: 631-661.
- Carpenter, M. A., & Westphal, J. D. 2001. The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. Academy of Management Journal, 44: 639-660.
- Caves, R. E. 1982. Multinational enterprise and economic analysis. New York, Cambridge University Press.
- Chandler, A. D. 1991. The functions of the HQ unit in the multibusiness firm. Strategic Management Journal, 12 (Special Winter Issue): 31-50.
- Chatterjee, S., & Wernerfelt., B. 1991. The link between resources and type of diversification: Theory and evidence. Strategic Management Journal, 12: 33-48.
- Cochran, P. L., Wood, R. A., & Jones, T. B. 1985. The composition of boards of directors and incidence of golden parachutes. Academy of Management Journal 28: 664-671.
- Coff, R., Coff, D., & Eastfold, R. 2006. The knowledge-leveraging paradox: How to achieve scale without making knowledge imitable. Academy of Management Review, 31: 452-465.
- Cohen, J. & Cohen, P. 1983. Applied Multiple Regression 2nd ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Cohen, W. M., & Levinthal, D. A. 1990. Absorptive capacity: New perspective on learning and innovation. Administrative Science Quarterly, 35: 128-152.
- Conner, K. R. 1991. A historical comparison of resource-based theory and five schools of thought within industrial organizational economics: Do we have a new theory of the firm? Journal of Management, 17: 121-154.
- Conyon, M. J., & Peck, S. I. 1998. Board control, remuneration committees, and top management compensation. Academy of Management Journal, 41: 146-157.
- Cyert, R., & March, J. 1963. A behavioral theory of the firm. Englewood Cliffs, N. J: Prentice Hall.
- Daily, C. M. & Dalton, D. R. (1994). Bankruptcy and governance: The impact of board composition and structure. Academy of Management Journal, 37, 1603-1617.

- Daily, C., & Dalton, D. R. (1994). Corporate governance and the bankrupt firm: An empirical assessment. Strategic Management Journal, 15, 643-654.
- Daily, C. M. 1996. Governance patterns in bankruptcy reorganizations. Strategic Management Journal, 17: 355-375.
- Dalton, D. R, Daily, C. M., & Cannella, A. A. 2003. Corporate governance: Decades of dialogue and data. Academy of Management Review, 28: 371-382.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L., 1998. Meta-analytic reviews of board composition, leadership structure, and financial performance. Strategic Management Journal, 19: 269-290.
- Datta, D. K. 1991. Organizational fit and acquisition performance: Effects of post-acquisition integration. Strategic Management Journal, 12: 281-297.
- Datta, D. K., Pinches, G. E., & Narayanan, V. K. 1992. Factors influencing wealth creation from mergers and acquisitions: A meta-analysis. Strategic Management Journal, 13: 67-84.
- DeAngelo, L. 1981. Auditor Size and Auditor Quality. Journal of Accounting and Economics, 3: 183 – 200.
- Dechow, P. M, Sloan, R. G., & Sweeney, A. P. 1996. Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. Contemporary Accounting Research, 13: 1-36.
- Defond, M. L., Hann, R. N., & Xuesong, H. 2005. Does the Market Value Financial Expertise on Audit Committees of Boards of Directors? Journal of Accounting Research, 43: 153-193.
- DeFond, M. L., & Jiambalvo, J. 1994. Debt covenant violation and manipulation of accruals. Journal of Accounting and Economics, 25: 36-67.
- Dess, G. G. & Beard, D. W. 1984. Dimensions of organizational task environments. Administrative Science Quarterly, 29: 52-73.
- Dierickx, I. & Cool, K. 1989. Asset accumulation and sustainability of competitive advantage. Management Science, 35: 1504-1513.
- DiMaggio, P., & Powell, W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48: 147-160.
- Donoher, W. J. 2000. Organizational distress and bankruptcy: Resources, strategy, and corporate control as determinants of the filing decision. Unpublished doctoral dissertation, University of Missouri, Columbia.

- Dopuch, N. & Simunic, D. 1980. The nature of competition in the auditing profession: A descriptive and normative view. In Regulation and the accounting profession. J. W. Buckley and J. F. Weston (eds). Belmont, CA: Lifetime Learning Publications.
- Dutton, J. M., & Freedman, R. D. 1985. External environment and internal strategies: Calculating, experimenting, and imitating organizations. Advances in Strategic Management, 3: 39-67.
- Eisenhardt, K. 1989. Agency theory: An assessment and review. Academy of Management Journal, 14: 57-74.
- Ellstrand, A. E., Daily, C. M., Johnson, J. L., & Dalton, D. R. 1999. Governance by committee: The influence of board of directors' committee composition on corporate performance. Journal of Business Strategies, 16: 67-88.
- Ellstrand, A. E., Tihanyi, L., & Johnson, J. L. 2002. Board structure and international political risk. Academy of Management Journal, 45: 769-777.
- Fama, E. F., & French, K. R. 1992. The cross-section of expected stock returns. The Journal of Finance, 47: 427-465.
- Fama, E. F., & Jensen, M. C. 1983. Separation of ownership and control. The Journal of Law and Economics, 26:301-325.
- Feldmann, D. A., & Schwarzkopf, D. L. 2003. The Effect of Institutional Ownership on Board and Audit Committee Composition. Review of Accounting & Finance, 2: 87-109.
- Finkelstein, S. 1992. Power in top management teams: Dimensions, measurement, and validation. Academy of Management Journal, 35: 505-538.
- Finkelstein, S. & D'Aveni, R. A. 1994. CEO duality as a double-edged sword: How board of directors balance entrenchment avoidance and unity of command. Academy of Management Journal, 37: 1079-1108.
- Fuller, K., Netter, J., & Stegemoller, M. 2002. What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. Journal of Finance, 87: 1763-1793.
- Geletkanycz, M. A., & Hambrick, D. C. 1997. The external ties of top executives: Implications for strategic choice and performance. Administrative Science Quarterly, 42: 654-681.
- Geringer, J. M., Beamish, P. W., & daCosta, R. C. 1989. Diversification strategy and internationalization. Strategic Management Journal, 10: 109-119.

- Gersick, C. J. G. 1994. Pacing of strategic change: The case of a new venture. Academy of Management Journal, 37: 9-45.
- Goodstein, J., Gautam, K., & Boeker, W. 1994. The effects of board size and diversity on strategic change. Strategic Management Journal, 15: 241-250.
- Golden, B. R., & Zajac, . E. J. 2001. When will boards influence strategy? Inclination x power = strategic change. Strategic Management Journal, 22: 1087-1112.
- Grant, R. M. 1987. Multinationality and performance among British manufacturing companies. Journal of International Business Studies, 18: 79-87.
- Gupta, A. 1984. Contingency linkages between strategy and general manager characteristics. Academy of Management Review, 9: 399-413.
- Gupta, A. 1987. SBU relations, corporate-SBU relations, and SBU effectiveness in strategy implementation. Academy of Management Journal, 30: 477-500.
- Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. 1998. Multivariate analysis. Upper Saddle River, N. J.: Prentice Hall.
- Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. 1993. Top executive commitment to the *status quo*: Some tests of its determinants. Strategic Management Journal, 14: 401-418.
- Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. Academy of Management Review, 9: 193-206.
- Harrison, J. S., Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. 1991. Synergies and post-acquisition performance: Differences versus similarities in resource allocations. Journal of Management, 14: 173-190.
- Haspeslagh, P. C., & Jemison, D. B. 1991. Managing acquisition: Creating value through corporate renewal. New York: Free Press.
- Haunschild, P. 1993. Interorganizational imitation: The impact of interlocks on corporate acquisition activity. Administrative Science Quarterly, 38: 564-592.
- Healy, P. M., Palepu, K. G., & Ruback, R. S. 1992. Does corporate performance improve after mergers? Journal of Financial Economics, 31: 135-175.
- Helland, E., & Sykuta, M. 2003. Regulation and the evolution of corporate boards: Monitoring, advising, or window dressing? Journal of Law and Economics, 47: 167-194.

- Hermalin, B. E., & Weisbach, M. S. 1988. The determinants of board composition. RAND Journal of Economics, 19: 589-606.
- Hermalin, B. E. and Weisbach, M. S. 2001. Boards of directors as an endogenously determined institution: A survey of the economic literature. Working paper, National Bureau of Economic Research.
- Hill, C. W. L., & Hoskisson, R. A. 1987. Strategy and structure in the multiproduct firm. Academy of Management Review, 12: 331-341.
- Hill, C. W. L., & Snell, S. A., 1988. External control, corporate strategy, and firm performance in research-intensive industries. Strategic Management Journal, 9: 577-590.
- Hillman, A. J., Cannella, A. A., Jr., & Paetzold, R. L. 2000. The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. Journal of Management Studies, 37: 235-255.
- Hillman, A. J. & Dalziel, T. 2003. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. Academy of Management Review, 28: 383-396.
- Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. Mergers and acquisitions: A guide to creating value for stakeholders. New York: Oxford University Press.
- Hitt, M. A., Hoskisson, R. E. & Ireland, R. D. 1994. A mid-range theory of the interactive effects of international and product diversification on innovation and performance. Journal of Management 20: 297-326.
- Hitt, M. A., Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. 1996. The market for corporate control and firm innovation. Academy of Management Journal, 39: 1084-1119.
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. 2003. Strategic management (concepts): Competitiveness and globalization (5th edition). Cincinnati, OH: Southwestern College Publishing.
- Hitt, M. A., & Tyler, B. B. 1991. Strategic decision models: Integrating different perspectives. Strategic Management Journal, 12: 327-351.
- Holmqvist, M. 2003. A dynamic model of intra- and inter-organizational learning. Organization Studies, 24: 95-123.
- Hoskisson, R. E., & Hitt, M. E. 1988. Strategic control systems and relative R&D investment in large multiproduct firms. Strategic Management Journal, 9: 605-621.

- Hoskisson, R. E., Hitt, M. A., & Hill, C. W. L. 1993. Managerial incentives and investment in R&D in large multiproduct firms. Organization Science, 4: 325-341.
- Hoskisson, R. E., Hitt, M. A., Johnson, R. A., & Moesel, D. D., 1993. Construct validity of an objective (entropy) categorical measure of diversification strategy. Strategic Management Journal, 14: 215-235.
- Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. 2000. Theory and research in strategic management: Swings of a pendulum. Journal of Management, 25: 417-456.
- Jarrell, G. A., Brickley, . A., & Netter, . M. 1988. The market for corporate control: The empirical evidence since 1980. Journal of Economic Perspectives, 2: 49-68.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. 1999. Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. Administrative Science Quarterly, 44: 741-763.
- Jemison, D. B., & Sitkin, S. B. 1986. Corporate acquisitions: A process perspective. Academy of Management Review, 11: 145-163.
- Jensen, M. C. 1988. Takeovers: Their causes and consequences. Journal of Economic Perspectives, 1: 21-48.
- Jensen, M. C., & Ruback, R. S. 1983. The market for corporate control: The scientific evidence. Journal of Financial Economics, 11: 5-50.
- Johnson, R. A. 1996. Antecedents and outcomes of corporate refocusing. Journal of Management, 22: 439-483.
- Johnson, J. L., Daily, C. M., & Ellstrand, A. E. 1996. Boards of directors: A review and research agenda. Journal of Management, 22: 409-438.
- Johnson, R. A., Hoskisson, R. E., & Hitt, M. A. 1993. Board of director involvement in restructuring: The effects of board versus managerial controls and characteristics. Strategic Management Journal, 14: 33-50.
- Judge, W. Q., & Zeithaml, C. P. 1992. Institutional and strategic choice perspectives on board involvement in the strategic decision process. Academy of Management Journal, 35: 766-794.
- Karamanou, I., & Vafeas, N. 2005. The Association between Corporate Boards, Audit Committees, and Management Earnings Forecasts: An Empirical Analysis. Journal of Accounting Research, 43: 453-486.

- Kesner, I. F. 1988. Director characteristics and committee membership: An investigation of type, occupation, tenure, and gender. Academy of Management Journal, 31: 66-84.
- Klein, A. 1998. Firm performance and board committee structure. Journal of Law and Economics, 41: 275-303.
- Klein, A. 2002. Audit committee, board of director characteristics, and earnings management. Journal of Accounting and Economics, 33: 375-400.
- Klein, A. 2002. Economic determinants of audit committee independence. Accounting Review, 77: 435-452.
- Kor, Y. Y & Mahoney, J. T. 2000. Penrose's resource-based approach: The process and product of research creativity. Journal of Management Studies, 37: 109-139.
- Kosnik, R. D. 1987. Greenmail: A study of board performance in corporate governance. Administrative Science Quarterly, 32: 163-185.
- Kosnik, R. 1990. Effects of board demography and directors' incentives on corporate greenmail decisions. Academy of Management Journal, 33: 129-150.
- Kothari, S. P. & Warner, J. 1997. Measuring long horizon security price performance. Journal of Financial Economics, 43: 301-339.
- Krishnan, H. A., Miller, A., & Judge, W. Q. 1997. Diversification and top management team complementarity: Is performance improved by merging similar or dissimilar teams? Strategic Management Journal, 18: 361-374.
- Lane, P. J., & Lubatkin, M. 1998. Relative absorptive capacity and interorganizational learning. Strategic Management Journal, 19: 461-477.
- Lavie, D. 2006. The competitive advantage of interconnected firms: An extension of the resource-based view. Academy of Management Review, 31: 638-658.
- Le, S. A., Walters, B. & Kroll, M. 2006. The moderating effects of external monitors on the relationship between R&D spending and firm performance. Journal of Business Research, 59: 278-287.
- Leonard-Barton, D. 1992. Core capabilities and core rigidities: A paradox in managing new product development. Strategic Management Journal, 13 (Summer): 111-125.
- Loderer, C., & Martin, K. 1992. Post acquisition performance of acquiring firms. Financial Management, 21(3): 69-79.

- Lorsch, J. W., & MacIver, E. 1989. Pawns or potentates. Boston: Harvard Business School Press.
- Lu, J. W. & Beamish, P. W. 2004. International diversification and firm performance: The S-curve hypothesis. Academy of Management Journal, 47: 598-609.
- Lubatkin, M. 1983. Mergers and the performance of the acquiring firm. Academy of Management Review, 8: 218-225.
- Lubatkin, M. , & Chatterjee, S. 1994. Extending modern portfolio theory into the domain of corporate diversification: Does it apply? Academy of Management Journal, 37: 109-136.
- Lynall, M. D., Golden, B. R., and Hillman, A. J. 2003. Board composition from adolescence to maturity: A multitheoretic view. Academy of Management Review, 28: 416-431.
- Lynch, L. J., & Perry, S. E. 2002. An examination of pre-merger executive compensation structures in merging firms. Journal of Managerial Issues, 14: 279-295.
- Lyon, J., Barber, B.,& Tsai, C. 1999. Improved methods for test for long run abnormal returns. Journal of Finance, 54: 165-201.
- Mahon, J. F., & Murray, E. A., Jr. 1981. Strategic planning for regulated companies. Strategic Management Journal, 2: 251-262.
- Malette, P., & Fowler, K. L. 1992. Effects of board composition and stock ownership on the adoption of “poison pills.” Academy of Management Journal, 35: 1010-1035.
- Mangena, M. & Pike, R. 2005. The effect of audit committee shareholding, financial expertise and size on interim financial disclosures. Accounting and Business Research, 35(4), 327-349.
- March, J. C. & Simon, H. A. 1958. Organizations. New York: Wiley.
- Mattingly, J. 2002. Stakeholder salience, structural development, and firm performance: Structural and performance correlates of socio-political stakeholder management strategies. Unpublished doctoral dissertation (proposal), University of Missouri, Columbia.
- McMullen, D. A. 1996. Audit committee performance: An investigation of the consequences associated with audit committees. Auditing: A Journal of Practice & Theory, 15: 87-103.
- McWilliams, A., & Siegel, D. 1997. Event studies in management research: Theoretical and empirical issues. Academy of Management Journal, 40: 626-657.

- Meyer, J. & Rowan, B. 1977. Institutionalized organizations: Formal organizations as myth and ceremony. American Journal of Sociology, 83: 340-363.
- Mitchell, M. L., & Stafford, E. 2000. Managerial decisions and long-term stock price performance. Journal of Business, 73: 287-329.
- Moore, D. S., & McCabe, G. P. 1998. Introduction to the practice of statistics. New York: W. H. Freeman.
- Nelson, M. W., Elliot, J. A., & Tarpley, R. L. 2000. Where do companies attempt earnings management, and when do auditors prevent it? Working paper, Cornell University and George Washington University.
- Nelson, R. N., & Winter, S. G. 1982. An evolutionary theory of economic change. Cambridge, MA: Harvard University Press.
- Ocasio, W. 1997. Towards an attention-based view of the firm. Strategic Management Journal, 18(Summer special issue): 187-206.
- Oliver, C. 1991. Strategic responses to institutional processes. Academy of Management Review, 16: 145-179.
- Olivera, F. 2000. Memory systems in organizations. Journal of Management Studies, 37: 811-832.
- O'Reilly, C. A., Main, B. G., & Crystal, G. R. 1988. CEO compensation as tournament and social comparison: A tale of two theories. Administrative Science Quarterly, 33: 257-274.
- Osterland, A. 2002. Board games: Board reform is essential. Too bad it may backfire. (The state of finance: Corporate governance). CFO, The Magazine for Senior Financial Executives, 18 (12).
- Ouchi, W. 1980. Markets, hierarchies, and clans. Administrative Science Quarterly, 25: 129-141.
- Palepu, K. 1985. Diversification strategy, profit, performance and the entropy measure. Strategic Management Journal, 6: 239-255.
- Penrose, E. T. 1959. The theory of the growth of the firm. New York: Wiley.
- Perlmutter, H. V. 1969. Some management problems in spaceship earth: The megafirm and the global industrial state. Academy of Management Journal 12: 59-93.
- Peteraf, M. A. 1993. The cornerstones of competitive advantage: A resource-based view. Strategic Management Journal, 14: 179-191.

- Pfeffer, J. 1972. Merger as a response to organizational interdependence. Administrative Science Quarterly, 17: 382-394.
- Pfeffer, J. 1972. Size and composition of corporate boards of directors: The organization and its environment. Administrative Science Quarterly, 17: 218-228.
- Pfeffer, J. 1973. Size, composition, and function of hospital boards of directors: A study of organization-environment linkage. Administrative Science Quarterly, 18: 349-364.
- Pfeffer, J. 1981. Power in organizations. Marshfield, MA: Pitman.
- Pfeffer, Jeffrey. 1988. A resource dependence perspective on intercorporate relations. In Mark Mizruchi and Michael Schwartz, eds. Intercorporate relations: the structural analysis of business. Cambridge, New York: Cambridge University Press, 1987.
- Pfeffer, J. & Salancik, G. R. 1978. The external control of organizations: A resource dependence perspective. New York: Harper & Row.
- Porter, M. E. 1980. Competitive strategy: Techniques for analyzing industries and competitors. New York: The Free Press.
- Porter, M. E. 1985. Competitive advantage: Creating and sustaining superior performance. New York: The Free Press.
- Provan, K. G. 1980. Board power and organizational effectiveness among human service agencies. Academy of Management Journal, 23: 221-236.
- Raghunandan, K., Read, W. J., & Rama, D. V. 2001. Audit committee composition, "gray directors," and interaction with internal auditing. Accounting Horizons, 15: 105-118.
- Rau, P. R., & Vermaelen, T. 1998. Glamour, value and the post-acquisition performance of acquiring firms. Journal of Financial Economics, 49: 223-253.
- Ravenscraft, D. J., & Scherer, F. M. 1987. Life after takeover. The Journal of Financial Economics, 36: 147-156.
- Reed, R., & Sharp, J. A. 1987. Confirmation of the specialization ratio. Applied Economics, 19: 393-106.
- Report of the Committee on Financial Aspects of Corporate Governance, 1992. London: Gee.
- Ritter, J. R. 1991. The long-run performance of initial public offerings. Journal of Finance, 46: 3-27.

- Roll, R. 1986. The hubris hypothesis of corporate takeovers. The Journal of Business, 59: 197-216.
- Rosenstein, S., & Wyatt, J. G. 1990. Outside directors, board independence, and shareholder wealth. Journal of Financial Economics, 26: 175-191.
- Roy, W. G. 1997. Socializing capital: The rise of the large industrial corporation in America. Princeton, NJ: Princeton University Press.
- Rumelt, R. P. 1974. Strategy, structure and economic performance. Cambridge: Harvard University Press.
- Rumelt, R. P. 1982. Diversification strategy and profitability. Strategic Management Journal, 3: 359-369.
- Sambharya, R. B. 1996. Foreign experience of top management teams and international diversification strategies of U.S. multinational corporations. Strategic Management Journal, 17: 739-746.
- Sanders, W. G., & Carpenter, M. A. 1998. Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. Academy of Management Journal, 41: 158-178.
- Sapienza, H. J. 1992. When do venture capitalists add value? Journal of Business Venturing, 7: 9-27.
- Sapienza, H. J., & Korsgaard, A. 1996. Procedural justice in entrepreneur-investor relations. Academy of Management Review, 37: 1618-1632.
- Schmidt, D. R., & Fowler, K. L. 1990. Post-acquisition financial performance and executive compensation. Strategic Management Journal, 11: 559-569.
- Schoorman, F. D., Bazerman, M. H., & Atkin, R. S. 1981. Interlocking directorates: A strategy for reducing environmental uncertainty. Academy of Management Review, 6: 243-251.
- Schwartz, B., & Freedman, J. 2002. Corporate counsel. New York Law Journal, October.
- SEC's report on fraud reveals intense pressure on acctg. departments. Accounting Department Management Report. Institute of Management & Administration.
- Singh, H., & Harianto, F. 1989a. Management-board relationships, takeover risk, and the adoption of golden parachutes. Academy of Management Journal, 32: 7-24.
- Singh, H. & Harianto, F. 1989b. Top management tenure, corporate ownership structure and the magnitude of golden parachutes. Strategic Management Journal, 10: 143-156.

- Song, J. A. 1982. Diversification strategies and the experience of top executives of large firms. Strategic Management Journal, 3: 377-380.
- Staw, B. & Ross, J. 1980. Commitment in an experimenting society: A study of the attribution of leadership from administrative scenarios. Journal of Applied Psychology, 65: 249-260.
- Stevens, J., Beyer, J., & Trice, H. 1978. Assessing personal, rate, and organizational predictors of managerial commitment. Academy of Management Journal, 21: 380-396.
- Sullivan, D. 1994. Measuring the degree of internationalization of a firm. Journal of International Business Studies, 25: 325-342.
- Szilagyi, A. D., & Schweiger, D. M. 1984. Matching managers to strategies: A review and suggested framework. Academy of Management Review, 9: 626-637.
- Teoh, S. H. Welch, I., & Wong, T. J. 1998. Earnings management and the underperformance of seasoned equity offerings. Journal of Financial Economics, 50: 63-99.
- Tehrani, H., Travlos, N. G., Waegelin, J. F., & Johnson, J. W. 1987. Management compensation contracts and merger-induced abnormal returns: Discussion. Journal of Accounting Research, 25: 51-84.
- Tihanyi, L., Ellstrand, A. E., Dalton, D. R., & Daily, C. M. 2000. Composition of the top management team and firm diversification. Journal of Management, 26: 1157-1177.
- Tosi, Jr., H. T., & Gomez-Meija, L. R. 1989. The decoupling of CEO pay and performance: An agency theory perspective. Administrative Science Quarterly, 34: 169-189.
- Trautwein, F. 1990. Merger motives and merger prescriptions. Strategic Management Journal, 11: 283-295.
- Turley, S., & Zaman, M. 2004. The Corporate Governance Effects of Audit Committees. Journal of Management & Governance, 8: 305-332.
- Turvani, M. 2001. Microfoundations of knowledge dynamics within the firm. Industry and Innovation, 8: 309-323.
- Useem, M. 1984. The inner circle: Large corporations and the rise of business political activity in the U.S. and U.K.: New York: Oxford University Press.

- Vafeas, N. 1999. The nature of board nominating committees and their role in corporate governance. Journal of Business Finance & Accounting, 26: 199-225.
- Vance, S. C. 1983. Corporate leadership: Boards, directors, and strategy. New York: McGraw-Hill.
- Vermeulen, F., & Barkema, H. 2001. Learning through acquisitions. Academy of Management Journal, 44: 457-476.
- Wade, J., O'Reilly, C. A., & Chandratat, I. 1990. Golden parachutes: CEOs and the exercise of social influences. Administrative Science Quarterly, 35: 587-603.
- Waldo, C. N. 1988. Boards of directors: Their changing roles, structure, and information needs. Westport, CT: Quorum Books
- Walsh, J. P., & Kosnik, R. D. 1993. Corporate raiders and their disciplinary role in the market for corporate control. Academy of Management Journal, 36:671-700.
- Weil, J., & Berman, D. 2002. Auditing the audit committee: Lawmakers toughen rules, but toughness can't be legislated. The Wall Street Journal, December 9: C1.
- Wernerfelt, B. 1984. A resource-based view of the firm. Strategic Management Journal, 5: 171-180.
- Westphal, J. D., & Milton, L. P. 2000. How experience and network ties affect the influence of demographic minorities on corporate boards. Administrative Science Quarterly, 45: 366-398.
- Westphal, J. D., & Fredrickson, J. W. 2001. Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy. Strategic Management Journal, 22: 1113-1138.
- Westphal, J. D., & Zajac, E. J. 1997. Defections from the inner circle: Social exchange, reciprocity, and the diffusion of board independence in U. S. corporations. Administrative Science Quarterly, 42: 161-183.
- Wiersema, M. F. & Bantel, K. A. 1992. Top management team demography and corporate strategic change. Academy of Management Journal, 35: 91-121.
- Williamson, O. 1975. Markets and hierarchies, analysis and antitrust implications: A study in the economics of internal organization. New York: Free Press.
- Williamson, O. 1985. The economic institutions of capitalism: Firms, markets, relational contracting. New York: Free Press.

- Wright, P., Kroll, M., & Elenkov, D. 2002. Acquisition returns, increase in firm size, and chief executive officer compensation: The moderating role of monitoring. Academy of Management Journal, 45:599-608.
- Xie, D., Davidson, W. N., & DaDalt, P. J. 2003. Earnings management and corporate governance: The role of the board and the audit committee. Journal of Corporate Finance, 9: 295-316.
- Zahra, S. A., & George, G. 2002. Absorptive capacity: A review, reconceptualization, and extension. Academy of Management Review, 27: 185-203.
- Zahra, S. A. & Pearce, J. A. 1989. Boards of directors and corporate financial performance: A review and integrative model. Journal of Management, 15: 291-334.
- Zajac, E. J. 1988. Interlocking directorates as an interorganizational strategy: A test of critical assumptions. Academy of Management Journal, 31: 428-438.
- Zajac, E. J. & Westphal, J. D. 1996. Director reputation, CEO-board power, and the dynamics of board interlocks. Administrative Science Quarterly, 41: 5-7-529.
- Zald, M. N. 1967. Urban differentiation, characteristics of boards of directors, and organizational effectiveness. American Journal of Sociology, 73: 261-272.

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