

Entrepreneurial Orientation and Firm Performance: The Moderating Role of Managerial Power

Justin L. Davis, *Ohio University*

R. Greg Bell, *The University of Dallas*

G. Tyge Payne, *Texas Tech University*

Patrick M. Kreiser, *Ohio University*

Abstract

Organizational researchers have long recognized the important role that top managers play within entrepreneurial firms (Ireland, Hitt and Sirmon 2003). Utilizing Covin and Slevin's (1989) conceptual framework, the current study explores three key entrepreneurial characteristics of top managers and the impact these characteristics have on firm performance. Specifically, we argue that top managers with a high tolerance of risk, those who favor innovative activities and those who display a high degree of proactiveness will positively impact firm performance. In addition, this study examines the influence of top managers' prestige, structural and expert power on the relationship between entrepreneurial orientation and firm performance. We conclude the study with a discussion of theoretical and practical implications of our findings and suggestions for future research in this area of study.

Keywords: Entrepreneurial orientation, power, top management

Introduction

A significant amount of strategy research has centered on the importance of top management (e.g., Hambrick and Mason 1984) and entrepreneurial behavior (e.g., Covin and Slevin 1989; Lumpkin and Dess 1996) in determining firm performance. However, there has been a paucity of research examining how the entrepreneurial orientation of the top manager might enhance the performance of firms competing in today's more dynamic and competitive economic environment (Bettis and Hitt 1995). Hamel (2000) suggests that in order to successfully navigate an ever changing economy, strategic leaders need to position their organizations to: (1) Capture existing markets while also creating new ones; (2) Seize market share from more conservative and less innovative competitors; and (3)

Acquire the customers, assets, and perhaps even the employees of slow growing incumbent firms. Accomplishing these goals in a complex landscape requires that a manager display entrepreneurial leadership abilities (Ireland, Hitt and Sirmon 2003).

Utilizing Covin and Slevin's (1989) conceptual framework, the current study describes the makeup of an entrepreneurially-oriented top manager and discusses how and why this orientation is important to firms seeking high levels of performance in the modern business environment. Covin and Slevin (2002) argued that managers should endeavor to promote an entrepreneurial dominant logic within the firm. In this paper, we follow this suggestion, arguing that top managers who display a high tolerance for risk, favor innovative activities, and possess a high degree of proactiveness will di-

rectly influence firm performance. We also suggest a number of entrepreneurial imperatives upon which strategic leaders should focus their efforts in order to best position their firms (Bettis and Hitt 1995; Hitt, Keats and Demarie 1998).

Not all leaders, however, are equally positioned to foster such entrepreneurial behaviors (Finkelstein and Hambrick 1996). Covin and Slevin (1988) suggest that there may be factors specific to certain managers that enable them to more effectively impact organizational outcomes and enhance firm performance. For instance, a top manager's inclination to take business-related risks, favor innovation, and display proactive behaviors may vary greatly from individual to individual (Covin and Slevin 1988). These variations will directly influence the strategic actions that an organization takes and will invariably

impact firm performance (Ireland, Hitt and Sirmon 2003).

In order to explore some of the factors that impact the relationship between entrepreneurial orientation and firm performance, this study moves beyond existing literature to explore the role that various types of managerial power have on an entrepreneurially-oriented top manager's ability to influence performance. In order to shed light on the factors that have the greatest impact on an entrepreneurially-oriented manager's ability to impact organizational outcomes, we address three distinct variations of managerial power. Specifically, we explore how prestige, structural, and expert power influence the effectiveness of an entrepreneurial leader. Implications of this line of research highlight the importance of studying entrepreneurial orientation at the individual level of analysis and how firms with growth aspirations should consider hiring or promoting managers with certain entrepreneurial tendencies. Additionally, restricting the top manager's ability to influence the firm through power differentials may limit the performance of the firm.

The paper will proceed as follows. We begin with a brief discussion of literature related to entrepreneurial orientation (EO) and the three types of power mentioned previously. We develop testable hypotheses related to the impact of EO and power on firm performance, as well as the moderating influence of power on the EO-performance relationship. We then describe our data collection and analysis procedures, followed by the presentation of empirical results. The findings from our empirical study illustrate the importance of entrepreneurial orientation, prestige power, and structural power in impacting firm performance. We conclude the manuscript with a discussion of the research and practical implications of our study, as well as a brief discussion of limitations of the current study and directions for future research.

Literature Review

Top Management and Performance

There have been competing arguments in the organizational literature concerning the role that top managers play in directly impacting firm performance. While some scholars have taken an externally focused position arguing that the effect of leadership is overshadowed by environmental factors (Lieberson and O'Connor 1972), a vast amount of management literature has suggested that a firm's top manager is a primary variable in determining the firm's success or failure (Daily and Johnson 1997; Harrison, Torres and Kukalis 1988; Koene, Vogelaar and Soeters 2002). Sexton and Upton (1987) supported the strategic choice perspective by arguing that the performance of a firm is not a natural phenomenon, but that the choices and social interactions made by the firm's top manager catalyze firm growth. These choices and social interactions come in the form of varying philosophies and values of the top manager and ultimately have a significant impact on the strategic decision making of the organization (Andrews 1980; Guth and Taguiri 1965).

A common view regarding the role of top managers places emphasis on the informational accessibility of the leader and their discretion in assessing strategic options. With this access to information and the power to make these strategic decisions, top managers are empowered with the most influential decision making role in the organization (Child 1972). This belief is reinforced by the upper echelons perspective (Hambrick and Mason 1984), which argues that top managers—through their specific knowledge, experience and values—reveal themselves not only in their decisions regarding firm policies and direction but also in their assessments of decision making situations. This research has led to the conclusion that top managers have an

identifiable impact on the overall direction of the firm due to their position within the firm, the power that comes with their position and their specific strategic choices (Hambrick 1981).

Entrepreneurial Orientation

Due to the changing environment in which most firms are now competing, it is imperative to consider the importance of top managers from the standpoint of how their entrepreneurial preferences and values may impact strategic decision making. Hisrich and Peters (1992, 2) defined entrepreneurship as the process of "creating something different of value by devoting the necessary time and effort, assuming the accompanying financial, psychological and social risks, and receiving the resulting rewards of monetary and personal satisfaction." Others suggest entrepreneurship is associated with innovative behavior coupled with a strategic orientation in pursuit of profitability and growth (Carland et al. 1984). McGrath and MacMillan (2000) further clarify this mix of innovative behavior and strategic orientation by defining the common characteristics of habitual entrepreneurs. These common characteristics (i.e., collectively referred throughout this paper as entrepreneurial orientation) include a desire to seek and create new opportunities through the incidence of innovative, proactive and risk taking behaviors (Covin and Slevin 1989; Miller 1983).

The most commonly accepted conceptualization of entrepreneurial orientation was developed by Miller (1983), who argued that the firm develops an entrepreneurial orientation if it consistently exhibits product market innovations, takes risks and behaves proactively. Miller's (1983) arguments, and the vast majority of entrepreneurial orientation literature since that time, are focused at the organizational level. Given this fact, numerous researchers have used this entrepreneurial orientation conceptualization to focus on a firm-level com-

bination of risk taking, innovativeness and proactiveness (e.g., Covin and Slevin 1991; Zahra 1993).

While the entrepreneurial orientation construct has most commonly been utilized when studying organizations, many researchers have argued that application at the individual level could provide valuable insight into the functioning of managers and their respective organizations (Carland, Hoy and Carland 1988; Gartner 1985; Stewart 1996). Sadler-Smith et al. (2003) noted that a number of recent studies have been designed to describe the attributes of entrepreneurship in terms of personality traits, attitudes and managerial behaviors. Complementing this idea, Hyrsky (2000) identified a number of dimensions of individual-level entrepreneurship including innovativeness, risk taking and ambition and achievement. The growing call for research at the individual level has opened new avenues for examining the entrepreneurial orientation construct.

Individual Entrepreneurial Orientation

The willingness of entrepreneurs to exploit opportunities is a function of various individual differences (Shane and Venkataraman 2000). Psychological and demographic characteristics represent examples of these individual differences and have been found to impact the likelihood that an individual will engage in entrepreneurial activity (Kristiansen and Indarti 2004). In addition, research has also suggested that the personality characteristics of entrepreneurs are correlated with long-term venture survivability (Ciavarella et al. 2004). Covin and Slevin (1988) forwarded the notion that there is a relationship between a top manager's entrepreneurial orientation and firm performance. They suggested that entrepreneurial style measured the degree to which top managers favor innovative activities are inclined to take business-related risks and compete proactively with other firms. Using this same EO

framework, the current study assesses the individual EO of top managers.

The view of EO as an individual level variable has only recently begun to gain traction. For example, Aloulou and Fayolle (2005) found that the individual leaders of the entrepreneurial

“Collectively, the three dimensions of innovativeness, proactiveness and risk taking enable a leader to identify and exploit emerging opportunities in an environment and establish an entrepreneurial strategy leading to firm growth.”

firm are more willing to exhibit innovative, proactive and risk taking characteristics. Lumpkin and Dess (2001) described entrepreneurial innovation as a willingness to support creativity and experimentation with respect to the introduction of new products/services, technological leadership, and R&D. While these authors were focused on corporate entrepreneurial activities, a recent stream of research has identified individual innovative work behavior as a contributing factor to firm performance (e.g., Dorenbosch, van Engen and Verhagen 2005; Ramamoorthy et al. 2005). These recent studies support the earlier arguments of Schumpeter (1934), who argued that one of the main characteristics that separated entrepreneurs from non-entrepreneurs was their willingness to innovate. He described the entrepreneur as an innovator who introduces new goods or services, creates new methods of production, operates within new markets and finds new sources of raw materials (Robinson et al. 1991).

Related to entrepreneurial risk taking, Kreiser, Marino and Weaver (2002) argued that risk taking has long been associated with conceptions of the entrepreneur. McClelland (1961) posited that entrepreneurs tend to be more willing to engage in risk taking behaviors than non-entrepreneurs. Given these previous suggestions, it is not surprising that risk taking is often

viewed as a desirable behavior among employees in firms seeking to increase their level of entrepreneurial activity (Kuratko and Goldsby 2004). Further, research has suggested that risk taking is one of the most commonly used concepts associated with entrepreneur-

ial behavior (Karagozoglu and Brown 1988; Miller and Friesen 1982).

The third dimension of entrepreneurial orientation is proactiveness. At the firm level, proactiveness has been applied to the pursuit of business opportunity (Lumpkin and Dess 2001) and competitive rivalry (Knight 1997). At the individual level, Penrose (1959) was the first to point out the importance of an entrepreneur's vision and imagination to the performance of firms. Brendle (2002) found that the proactiveness of the business owner was a source of competitive advantage. Thus, the presence of proactive orientation by a leading individual of a firm constitutes a valuable organizational resource, often leading to an advantage over rival organizations. Combining these three dimensions at an individual level, we suggest that entrepreneurial orientation can be conceptualized for top managers.

We contend that managers with a stronger individual entrepreneurial orientation will have a positive impact on organizational performance. Collectively, the three dimensions of innovativeness, proactiveness and risk taking enable a leader to identify and exploit emerging opportunities in an environment and establish an entrepreneurial strategy leading to firm growth. It is the collective effect of the combination of these three variables that enables firms to create an

Table 1
Power-Focused Literature

CEO Power Sources		
Formal Power	Factors that directly provide the CEO with decision-making influences	Equity holdings (Barkema & Pennings 1998) CEO duality (Cannella & Shen 2001) Formal organizational titles (eg. board chair) (Daily & Johnson 1997)
Informal Power	Factors that do not directly depend on the CEO's formal positions	External directorate networks (Geletkanycz, Boyd & Finkelstein 2001) Tenure (Magan, St-Onge & Calloc'h 1999; Baker & Gompers 2003; Miller 1991; Shen 2003) Experience in various functions within the organization (Finkelstein 1992)
Relative Power	Factors that indirectly affect both the formal and informal power base of the CEO	Boards of directors (Farrell & Whidbee 2002; Baker & Gompers 2003) Active institutional investors (Wright, Kröll & Elenkov 2002)

entrepreneurial advantage. Hence, based on entrepreneurial orientation, we expect a top manager to choose strategies that are entrepreneurial in nature and will enhance firm performance. The first hypothesis is based on this general argument.

H1: *The entrepreneurial orientation of a firm's top manager will have a positive impact on firm performance.*

Managerial Power

Research on corporate governance has viewed top managers as the decisive force guiding organizational strategic decisions and direction, with the board of directors typically playing more of a support role (Eisenhardt and Bourgeois 1988; Finkelstein 1992). Strategy research divides a top manager's strategic decision responsibilities into two main functions: formulation and implementation. The first is management's ability to formulate an appropriate strategy given an organization's resource and path dependency limitation(s). The second function considers a manager's ability to implement strategies that work in a competitive environment and the needs and desires of other major firm stakeholders (Pfeffer and Salancik 1978; Porter 1980).

Managerial power is essential for the achievement of both of these functions. Power has been defined as "the ability to initiate, constrain, circumscribe, or terminate action either

directly or by influence exercised on those with decision making authority" (Herman 1981, 17). In top management research, the CEO has been examined as the most powerful and dominant individual member within a corporation (Daily and Johnson 1997; Hambrick and Mason 1984; Harrison, Torres and Kukalis 1988). Finkelstein and Hambrick (1996) suggest that managerial discretion impacts organizational outcomes. The more discretion a manager has at his or her disposal, the more impact the leader's choices will have on outcomes of the company (Finkelstein 1992). There can be many positive benefits of a powerful CEO, such as clear lines of authority, faster strategic response times, and a focal point for external accountability (Cannella and Monroe 1997; Finkelstein and D'Aveni 1994). Therefore, understanding the uses and assessment of power within organizations is essential for addressing many organizational/management topics, including CEO research (Pfeffer 1992).

Early studies of CEO power can be classified as formal, informal (Finkelstein and D'Aveni 1994) or relative, such as CEO-board relative power (Finkelstein and Boyd 1998; Pearce and Zahra 1991). Table 1 provides a brief summary of literature surrounding these classifications of CEO power. Formal power relates to factors that directly provide the CEO with decision making influences, such as equity holdings (Barkema and Pennings 1998), CEO duality (Cannella and Shen

2001), or other formal organizational titles (Daily and Johnson 1997). Informal power relates to factors that do not directly depend on the CEO's formal positions (Finkelstein and D'Aveni 1994). Factors such as external directorate networks (Geletkanycz, Boyd and Finkelstein 2001), tenure (Magan, St-Onge and Calloc'h 1999), and experience in various functions within the organization (Finkelstein 1992) have been operationalized as informal power. Relative power relates to factors that indirectly affect both the formal and informal power base of the CEO. Boards of directors (Farrell and Whidbee 2002) active institutional investors (Wright, Kröll and Elenkov 2002), and other forces decrease the discretionary power of the CEO (Finkelstein and Boyd 1998). Additional studies have found that CEO power comes through stock ownership (Cannella and Shen 2001), age (McKnight and Tomkins; 2004), tenure (Baker and Gompers; 2003; Miller 1991; Shen 2003), previous superior performance (Hermalin and Weisbach 1998) and manipulation behaviors (Westphal 1998). Explicit in relative power studies is the understanding that there are inherit agency costs associated with the power given to the CEO, and that relative power factors are necessary to minimize self-interest costs (e.g., Davis 1991; Gerety, Hoi and Robin 2001; Johnson, Hoskisson and Hitt 1993; Redicker and Seth 1995). It is through these forms of power that CEOs draw their managerial power.

Finkelstein (1992) developed a multi-dimensional power model as a means to better understand the complexities of CEO power. Finkelstein surveyed 1,763 top managers to assess the reliability and validity of four CEO power dimensions. Finkelstein's four dimensions of power are (1) expert power, which is defined as the ability to effectively manage the firm; (2) prestige power, which is derived from the executive's level of status or prestige; (3) structural power, which is derived from the formal authority given by the titles held by the executive, often referred as "hierarchical" power (Daily and Johnson 1997); and (4) ownership power, which is obtained by those executives who maintain ownership ties to the firm. Finkelstein conducted a second study that surveyed top managers to rate the dimensions of power in their own firms. Using this data (perceived power) in conjunction with demographic data helped to establish convergent validity. Finkelstein's third study on the power variables strengthened the validity and overall development of the power dimensions by examining predictive validity. This study found that three of the four dimensions had predictive validity relating to organizational outcomes.

We will utilize the power framework developed by Finkelstein (1992) in the current study. We focus on three of the four power variables, including prestige, structural and expert power. We selected these three types of power due to their expected direct influence on the ability of a top manager to implement his/her decisions in the organization. Ownership power is focused primarily on the vested interest of the top manager, which is beyond the scope of the current study. Thus, ownership power was not considered in this analysis.

Prestige Power

One method that a manager can utilize to derive enhanced standing within an organization is through prestige

(Finkelstein 1992). Prestige power is the ability of an individual to influence behavior based on others' (both inside and outside the firm) perceptions of his/her elite status or prestige (D'Aveni 1990). Prestige power is a network-based power construct derived upon the notion that relationships developed in educational, social and professional contexts can help a top manager in addressing environmental uncertainty within his/her organizations (Useem 1979). Relationships built upon outside sources can provide firm leaders with access to information, knowledge, capital and material resources not available from internal sources within the firm. Organizational members with the capabilities to develop and employ such connections to aid the firm may derive power according to the demand for such resources by the organization (Pfeffer and Ross 1981; Pfeffer and Salancik 1978; Useem 1979). Research shows that prestigious CEOs can enhance the standing of an organization and aid in its legitimacy through the manager's network with other prestigious individuals (Daily and Johnson 1997).

In addition, research has pointed to the top manager's university affiliation as influencing middle managers' perceptions of CEO power (Miller and Wiseman 2001). This is not surprising given that managers educated at, or associated with, a prestigious institution are of greater perceived ability (D'Aveni 1990; Hitt et al. 2001). Daily and Johnson (1997) utilized Finkelstein's power dimensions to examine the effects of CEO power on firm performance. In their work on human capital's effect on firm performance, Hitt et al., (2001) found that elite education had positive direct effects on firm performance and indirect effects on strategy and firm performance. This elite education provides individuals with valuable knowledge gained through their interaction with elite individuals (D'Aveni and Kesner 1993). Further, this association has been shown to contribute to organizational legitimacy and to possess a positive relationship with firm

performance (D'Aveni 1989). Following each of these ideas, our second hypothesis is:

H2: *The prestige power of a firm's top manager will have a positive impact on firm performance.*

Structural Power

Structural power refers to the ability of an individual to influence behavior and/or decision making based on his/her hierarchical, or legitimate, positioning within the firm (Astley and Sachdeva 1984; Dailey and Johnson 1997; French, Raven and Cartwright 1959; Hambrick 1981). Through his/her hierarchical status and legitimate positioning, a manager has the ability to directly influence firm performance through his/her decision making (Ocasio 1994). Structural power focuses primarily on the number of titles that a top manager holds in addition to that of CEO (Dunn 2004; Jensen and Zajac 2004). CEO duality is seen as an indicator of structural power that can significantly influence corporate decisions (Sridharan and St. John 1998). CEO duality enables the CEO to lead board meetings, thus dictating the direction of the meetings and the information available to the board. As a result of this ability of the CEO to dictate his/her will on the board meetings, oversight of the manager by the board is limited (Daily and Johnson 1997). In this way, managers have an increased ability to pursue personal interests which are not in the best interest of shareholders (Fama and Jensen 1983).

Beyond CEO duality, additional titles for the CEO such as "president" (Combs and Skill 2003) and "chief operating officer" (Finkelstein and Hambrick 1996) are also indicative of structural power. From an agency perspective, these additional titles would allow the CEO to have easier access to the pursuit of personal interest as he/she is able to bypass certain hierarchical barriers. Following this idea, our third hypothesis states:

H3: *The structural power of a firm's top manager will have a negative impact on firm performance.*

Expert Power

The third type of power examined in this study is expert power. Expert power refers to the ability of an individual to influence behavior and/or decision making based on his/her actual or perceived knowledge or past experiences in a particular area of importance. Past research has suggested that managers who have had exposure to a variety of functional areas have an increased ability to develop networks and contacts both within and outside of the organization (Daily and Johnson 1997). These contacts enable the manager to respond more quickly and efficiently to environmental uncertainties. In addition, managers who have broad and strategically critical functional experiences provide a form of expert power (Daily and Johnson 1997). For example, managers are more likely to be promoted (Campion, Cheraskin and Stevens 1994), receive higher compensation and/or effectively manage when their functional experiences relate to the strategic uncertainties faced by their firms (e.g., Carpenter and Wade 2002; Guthrie and Datta 1997).

Bunderson (2003) expanded functional expertise research to examine its effects in a team environment. A manager with metafunctional expertise possesses broad experience and understanding of the roles played by and the relationships among the different functions on a multifunctional team. The knowledge of and experience in these multiple roles and functions can be very beneficial to the firm when exploited correctly (Bunderson 2003). Through this attainment of knowledge and experience, managers can more effectively navigate their company. Thus,

H4: *The expert power of a firm's top manager will have a positive impact on firm performance.*

The Moderating Role of Power

Prestige Power. For managers with a high EO, prestige power may be especially beneficial in improving the firm's competitive position. While listing priorities for entrepreneurial leadership, Ireland, Hitt and Sirmon (2003) suggested that top managers must continually make use of available opportunities. Through their external relationships, top managers can be better positioned to spot market opportunities due to their network of outside contacts. Further, with their enhanced standing with employees derived from prestige power, entrepreneurially-oriented managers may be better equipped to arrange resources and implement strategies to exploit those opportunities. In contrast, a manager with a minimal level of prestige power would have less buy-in from employees on new ideas or strategies for the firm. We expect a combinative effect of the presence of prestige and a focus on entrepreneurial behavior within the organization. As such, we expect that prestige power will have a positive effect on an entrepreneurially oriented top manager's ability to enact strategies that will enhance a firm's performance. Formally,

H5: *Prestige power has a positive effect on the relationship between the entrepreneurial orientation of a firm's top manager and firm performance.*

Structural Power. Ireland, Hitt and Sirmon (2003) suggest that in order to be effective entrepreneurial leaders, top managers must be prepared for competitor innovations that threaten the current business model through strategic entrepreneurship. This is an action-oriented, proactive approach to entrepreneurial behavior that seeks to lead with the development of disruptive entrepreneurial innovation. This suggests that top managers with an entrepreneurial orientation will be

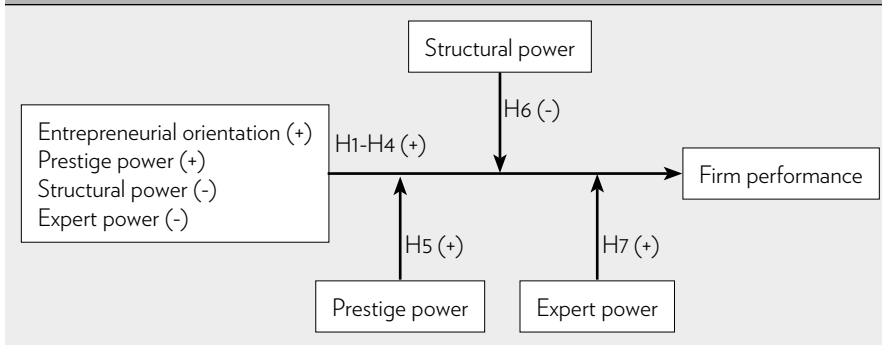
more inclined to embrace innovative activities. However, due to the added responsibilities of directing the firm, the top manager's focus could shift to an administrative manager (Michael, Storey and Thomas 2002) concentrating on loss prevention and coordination. With additional titles and administrative responsibility, the top manager will become even more embedded in these administrative roles, becoming concerned more with daily efficiency and processing (Baumol 1968) and less concerned with making strategic choices that champion innovations which threaten the current business model (Ireland, Hitt and Sirmon 2003).

Further, research has suggested that CEOs with additional titles may make strategic choices that are not in the best interest of the firm but could lead to personal gain for the CEO (Coles, McWilliams and Sen 2001; Tosi et al. 2000). A CEO with added structural power may choose strategies that will not risk his or her employment (or other incentives), such as research and design initiatives, because these decisions may not be seen as profitable to the CEO in the short run (Carpenter 2000; Hill and Snell 1989). The avoidance of risk inherently limits the entrepreneurial behavior of the firm. Thus, we expect additional titles and authority (i.e., structural power) within the organization to have a negative impact on the CEOs' entrepreneurial strategic choices and behavior, thus reducing the performance prospects of the firm. Following this logic, our sixth hypothesis states:

H6: *Structural power has a negative effect on the relationship between the entrepreneurial orientation of a firm's top manager and firm performance.*

Expert Power. The ability to adapt to a changing environment is often dependent on the ability to access resources in a timely manner. As discussed previously, expert power is gained from previous strategically critical function-

Figure 1
Relationship Between Entrepreneurial Orientation, Managerial Power and Firm Performance



al experience, and often results in an increased ability to develop and access networks within and outside the firm. It is both of these elements that can enhance the entrepreneurial behavior within a firm. For example, a manager with past expertise in a particular field will be able to more effectively navigate and respond in a highly dynamic environment as he/she can draw on prior knowledge to respond more effectively and efficiently in difficult situations. A manager with a strong internal and/or external network will also have increased access to resources (e.g., intellectual, social, tangible), enabling a quicker, and more effective, response to a changing environment.

In addition, expert power can provide an entrepreneurial manager with the ability to exert control over other organizational constituents and, through this, a greater ability to implement entrepreneurially oriented strategies. Further, a multifunctional background enables a manager with an entrepreneurial orientation to more effectively spot opportunities and nourish entrepreneurial capabilities within the firm. Both of these outcomes are important aspects of entrepreneurial leadership (Ireland, Hitt and Sirmon 2003). Thus, we propose:

H7: *Expert power has a positive effect on the relationship between the entrepreneurial orientation of a firm's top manager and firm performance.*

Figure 1 displays a theoretical model of the proposed relationship between entrepreneurial orientation, managerial power, and firm performance, including the moderating influence of the three types of managerial power.

Methods

A survey-based study was conducted to empirically test the hypotheses developed in this study. The sample population consisted of current or former executive and professional MBA students. This sample population was selected due to the subjects' past work experience and access to and perspective of current organizational operations and leaders. The survey was sent to 156 individuals and yielded a total of 92 responses for a response rate of 59 percent. From these 92 responses, 23 responses included incomplete data and were discarded. Thus, the final sample size for our analyses was 69. Subjects were asked to provide information related to the entrepreneurial behavior and sources of power of their top managers. Responses were based on individual work experiences and perceptions. To investigate the issue of non-response bias, the first 50 percent of the responses received were compared with the second 50 percent of responses received. No significant differences were found.

The measures utilized in this study were based on previous research efforts on the topic (e.g., Covin and Slevin 1989). The primary variables

and constructs considered in this study include: (1) entrepreneurial orientation, (2) prestige power, (3) structural power, (4) expert power, and (5) firm performance (measured using net profit). The prestige, structural and expert power constructs were developed utilizing previous works that examined these variables. Additionally, control variables assessing respondent age, respondent gender, firm age and firm size were included in the analyses.

Entrepreneurial Orientation

Entrepreneurial orientation has received an increasing amount of attention in the literature, coinciding with the growth and legitimization of entrepreneurship as a field of study. The most commonly used scale for measuring EO has been the scale originally developed by Miller (1983) and later modified by Covin and Slevin (1989). Following the vast majority of past research on EO, we used this same scale as a basis to measure the EO of the top manager of the firms in our study. The scale was slightly adapted from its original form to directly reflect the individual's perception of their top manager's entrepreneurial behavior. Specifically, the scale measured three dimensions: innovativeness, proactiveness and risk taking behavior. Survey questions were based on a 7-point Likert scale and can be seen in Appendix A. Following the theoretical arguments of Covin and Slevin (1989) and Covin, Green, and Slevin (2006), we utilized a collective measure of the EO construct. In order to do so, item responses for survey questions related to the innovativeness, proactiveness, and risk taking dimensions were summed and averaged.

Performance

Research examining the EO-performance relationship has drawn upon many different operationalizations of firm performance. The most commonly utilized measures of performance have been profitability, sales growth, ROI and ROE. However, the approach used

Table 2
Descriptive Statistics & Correlations

	N	Mean	EO	Net Profit	Prestige	Structure	Expert	Age	Gender	Firm Age
EO	69	4.28	-							
Net profit	69	4.19	0.32***	-						
Prestige	69	4.14	0.12	0.12	-					
Structure	69	3.63	-0.03	-0.15	0.08	-				
Expert	69	3.68	0.14	0.10	0.49***	0.34***	-			
Age	69	4.25	-0.09	-0.26**	-0.09	-0.11	0.26**	-		
Gender	69	3.72	-0.05	0.01	-0.06	-0.11	0.16	0.12	-	
Firm age	69	0.24	0.12	-0.09	0.01	0.11	0.08	-0.04	0.03	-
# of employees	69	2.84	-0.05	0.14	-0.18	-0.10	0.03	-0.11	-0.30***	-0.02

Significance: * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$

for measuring these variables has been mixed. Given the large number of studies related to EO that have targeted small or developing businesses, and the resulting difficulty of gaining access to archival financial information from many of these companies, a large majority of studies in this area have used a survey-based approach to measure performance. In most cases, the performance of the firm is measured by the perception of the CEO or other manager providing responses to the survey. Chandler and Hanks (1993) found that self-reports of firm performance from the owner/general manager of small firms were highly correlated with archival data. Specific to the current study, respondents were asked to evaluate the performance of their firm based on their individual perception. Given its prevalence in studies related to EO, we utilized net profit as our measure of firm performance. This variable was gathered using 5-point Likert scale items. Individuals were asked to evaluate both the importance of this performance variable, and their satisfaction with the performance outcome. These two performance measures were multiplied to create a single performance dimension capturing both perceived importance and satisfaction of performance.

Prestige Power

As discussed previously, prestige power is a function of a manager's repu-

tation within the institutional environment and the various stakeholders of a firm (Finkelstein 1992). Items used to measure this construct were taken from the work of Certo and Hodge (2007). The survey questions used included: (1) The CEO of my company has a positive reputation among his/her subordinates; (2) The CEO of my firm is intelligent; (3) The CEO of my firm is prestigious; (4) The CEO of my firm is a prominent member of society; and (5) The CEO of my firm received his/her education from a highly prestigious institution. Responses to the survey items were based on a 5-point Likert scale and ranged from 1-5 (Strongly Disagree – Strongly Agree) and had a Cronbach's alpha of 0.74.

Structural Power

Structural power is based on the power gained through the holding of certain positions of authority. Finkelstein (1992) established several variables that effectively measure the level of structural power held by a manager, which were used to operationalize the structural power construct in the current study. These items included: (1) determining whether the CEO is also the chairman of the board, and (2) the number of roles the CEO is serving in (e.g., president, member of board of directors, etc.). Item measurements resulted in a Cronbach's alpha of 0.81.

Expert Power

Expert power is based on an executive's general ability to deal with industry factors and aid in the success of an organization (Finkelstein 1992). We utilized several items to measure expert power in our survey. These items included questions related to (1) a CEO's tenure with a firm as its chief officer (Combs and Skill 2003); (2) the number of positions a CEO has held in any capacity during his or her entire career prior to becoming CEO (Finkelstein 1992); and (3) the number of previous firms the person has served at with the title of CEO. To ensure consistency with our other measures, these variables were collected based on Likert scale responses and resulted in a Cronbach's alpha of 0.77.

Results

Given that the data was collected from one respondent in each firm, we performed tests to assess the presence of common method variance (CMV). Harman's single-factor test has been a commonly used test of CMV in single-method research design studies (Podsakoff et al. 2003; Podsakoff and Organ 1986). Following this method, exploratory factor analysis was used to examine the independence or relatedness of independent variables. As expected, the test was negative, confirming the independence of the different types of power. If common variance is

Table 3
Results of Regression Analyses for Net Profit

	Model 1	Model 2	Model 3	Model 4
Dependent Variable	Net Profit	Net Profit	Net Profit	Net Profit
Age of respondent	-0.24*	-0.19	-0.14	-0.16
Gender	-0.12	-0.10	-0.30	-0.28
Age of firm	-0.20	-0.27	-0.35**	-0.35**
# of employees	0.06	0.07	0.01	0.01
EO		0.30***	0.30***	0.61
Prestige power			0.42***	0.94*
Structural power			-0.04	-0.62
Expert power			0.34**	0.82
EO x Prestige				0.05*
EO x Structural				-0.18
EO x Expert				0.06**
F	1.21	3.41***	3.81***	2.76**
R ²	0.07	0.213	0.337	0.364
ΔR ²		0.206	0.111	0.027

a concern, all items would be found on a single factor. However, we found four separate factors (explaining 68 percent of total variance). Thus, the concern for CMV is not warranted. Additional information related to descriptive statistics and correlations can be found in Table 2.

We used regression and moderated regression analyses to test the hypotheses. The initial testing of the model using only the control variables is reported in Table 3 (Model 1). Only one control variable (age of respondent) was found to be significant ($p < 0.10$) in this first regression model. H1 tested the direct relationship between EO and firm performance. Consistent with a significant amount of past research (e.g., Rauch et al. 2009), the results in Table 2 (Model 3) show support for this hypothesis ($p < 0.01$). This supports the assertion that EO is positively related to net profit.

H2, H3 and H4 tested the direct relationship between each of the three types of power (prestige, structural and expert). The results for these regressions can be seen in Model 3 (Table 3). H2 was supported, demonstrating a positive relationship between pres-

tige power and net profit ($p < 0.01$). H3, examining the relationship between structural power and net profit, predicted a negative relationship. While the results did suggest this negative direction of relationship, our findings were not significant. H4 confirmed a significant, positive relationship between expert power and net profit ($p < 0.05$). Thus, for the main effects models, our findings showed support for H1, H2 and H4.

Moderated regression analysis was used to test H5, H6 and H7. Following the arguments of Rosenberg (1968), we defined a moderator as a variable influencing the form or magnitude of the relationship between an independent variable and a dependent variable. Testing was carried out by assessing the multiplicative interaction of the independent variable and the moderator on the dependent variable (see Table 3). A moderated regression procedure creating multiplicative interaction terms as new variables was performed. This was done for each of the three hypothesized moderation relationships (i.e., EO/Prestige, EO/Structure, EO/Expert). In each case, the multiplicative term was regressed

against the dependent variable (net profit). The results are shown in Model 4 (Table 3).

For H5, our findings showed marginal support ($p < 0.10$) for the interaction effect of EO and prestige power on net profit. The moderating influence of structural power on the EO-net profit relationship was not supported, rejecting H6. Our last hypothesis examined the moderating influence of expert power on the EO-net profit relationship. Our findings indicated support for this relationship, confirming H7 ($p < 0.05$). Implications of these findings and further discussion are provided in the following section.

Discussion

Research in the area of entrepreneurial orientation continues to represent a fruitful area of study (Rauch et al. 2009). By examining the moderating role of managerial power on the relationship between EO and performance, we contribute to the existing knowledge base on this topic. In our approach, we deviate from the majority of studies in EO by shifting our focus to the influence of individual behaviors on entrepreneurial orientation. In doing so, we move away from an individual traits perspective of entrepreneurship and place emphasis on a behavioral focus (Gartner 1985). Thus, we examine entrepreneurial behavior and how it is influenced by the power of the top manager.

Our findings have implications for researchers and practitioners alike. For researchers examining issues related to EO, we have extended knowledge in this area with our findings related to the direct and moderating influence of the three power variables. As our results indicate, prestige and expert power both exhibit a positive relationship with firm performance (measured as net profit). In addition, both of these variables were found to have an interaction effect with EO on net profit. First, this reinforces previous research suggesting that EO has a positive

impact on the level of a firm's performance. Second, these results suggest that managerial power is an important component in determining the efficacy of an EO. While an EO is important to the success of today's organizations, these findings suggest that an EO represents a particularly worthwhile strategic orientation when combined with the appropriate implementation of managerial power.

“As our results suggest, organizations with managers who have a preference for innovative activities, who are not risk averse, and who are proactive (exhibiting an EO) are in a more favorable position to compete in a fast-paced business climate.”

For firms attempting to compete in today's highly competitive markets, this research underscores the role of managers in determining firm success. As our results suggest, organizations with managers who have a preference for innovative activities, who are not risk averse, and who are proactive (exhibiting an EO) are in a more favorable position to compete in a fast-paced business climate. From a managerial perspective, our study also illustrates the importance of prestige and expert power. The ability to develop and utilize these two types of power can equip a manager with the needed tools to most effectively direct his/her organization. More specifically, those managers who have broad functional backgrounds may be uniquely positioned to lead their top management team and make sense of opportunities that change their organization's current business model. This was seen in our finding of the influence of prestige power. In this way, managers with a high degree of prestige power are better equipped to learn about competitors and innovations through their external contacts.

An interesting point of discussion arising from this study stems from the lack of support for the direct or mod-

erating impact of the third dimension of power, structural power. This was the only power variable which did not show any statistical significance in its relationship to firm performance. There are several possible explanations for this unexpected finding. While past research has viewed the positions held within a firm by a top manager as very important, it appears employees place a premium on the expertise and prestige

demonstrated by the top manager and place less emphasis on the hierarchical positioning of the individual. Following this logic, it is essential for a manager to recognize that position alone is not a sufficient source of power to be leveraged. A top manager must be able to complement his/her position with other sources of power to achieve their desired influence.

There are also several limitations to the current study, which direct our suggestions for future research. An initial limitation is the wide number of industries represented in our sample. Our analysis did not target a specific industry, allowing only broad conclusions about the overall influence of EO and the power variables examined. However, it would be interesting to examine this issue from a comparison perspective looking at two industries that have vastly different operating environments, such as high tech firms and manufacturing firms. While this may lead to the same conclusions drawn in the current study, it would provide support for the generalizability of the relationships that we examine.

In addition, the current study followed the majority of studies in the area of EO by using the survey method for data collection. While this in

itself is not a significant limitation, it does highlight the lack of variability in methodological approach in this stream of literature. Future research on this topic would benefit from better triangulation of this phenomenon through the use of various sources of secondary data to test the EO construct. For example, very few research efforts have utilized secondary proxy measures to analyze firm-level entrepreneurship. While the use of secondary data is often viewed as sub-optimal in organizational research, this approach could shed further light on the impact of EO in firms.

In conclusion, our study has suggested that EO and managerial power play a fundamental role in heightening levels of firm performance. Further, the interaction of EO and power also wields an identifiable impact on organizational success. While structural power was not found to have a direct or moderating impact on these relationships, the other two types of power (prestige and expert) appear to be important characteristics that the top managers in organizations should attempt to emphasize. In a business world that is increasingly characterized by greater uncertainty and heightened levels of competition, this study has helped to provide a clear agenda for enhancing firm success. It is hoped that these arguments have helped to clarify the nature of the relationship between EO, managerial power and firm performance.

References

- Andrews, K. 1980. *The concept of corporate strategy*, Second Edition. Homewood, IL: Richard D. Irwin.
- Astley, W. G. and P. Sachdeva. 1984. Structural sources of intraorganizational power: A theoretical synthesis. *Academy of Management Review* 9(1): 104-113.
- Aloulou, W. and A. Fayolle. 2005. A conceptual approach of entrepreneurial orientation within small business. *Journal of Enterprising Culture* 13(1): 24-45.
- Baker, M. and P.A. Gompers. 2003. The

- determinants of board structure at the initial public offering. *Journal of Law and Economics* XLVI: 569-598.
- Barkema, H.G. and J.M. Pennings. 1998. Top management pay: Impact of overt and covert power. *Organization Studies* 19: 975-1003.
- Baumol, W.J. 1968. Entrepreneurship and economic theory. *American Economic Review* 58: 64-71.
- Bettis, R.A. and M.A. Hitt. 1995. The new competitive landscape. *Strategic Management Journal* 16: 7-19.
- Brendle, M.G. 2002. Personality and company culture: Important contributions to innovation and a source of competitive advantage for small businesses. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, Vol 62(10-B): 4824.
- Bunderson, J.S. 2003. Team member functional background and involvement in management teams: Direct effects and the moderating role of power centralization. *Academy of Management Journal* 46(4): 458-474.
- Campion, M.A., L. Cheraskin, and M.J. Stevens. 1994. Career-related antecedents and outcomes of job rotation. *Academy of Management Journal* 37(6): 1518-1542.
- Cannella, A.A. and M.J. Monroe. 1997. Contrasting perspectives on strategic leaders: Toward a more realistic view of top managers. *Journal of Management* 23: 213-37.
- Cannella Jr., A.A. and W. Shen. 2001. So close and yet so far: Promotion versus exit for CEO heirs apparent. *Academy of Management Journal* 44: 252-270.
- Carland, J.W., F. Hoy, W.R. Boulton, and J.C. Carland. 1984. Differentiating entrepreneurs from small business owners: A conceptualization. *Academy of Management Review* 9(2): 354-359.
- Carland, J.W., F. Hoy and J.A. Carland. 1988. Who is an entrepreneur? Is a question worth asking. *American Journal of Small Business* 12(4): 33-39.
- Carpenter, M.A. 2000. The price of change: The role of CEO compensation in strategic variation and deviation from industry strategy norms. *Journal of Management* 6(6): 1179-1199.
- Carpenter, M.A. and J.B. Wade. 2002. Microlevel opportunity structures as determinants of non-CEO executive pay. *Academy of Management Journal* 45(6): 1085-1103.
- Certo, S. T. and F. Hodge. 2007. Top management team prestige and organizational legitimacy: An examination of investor perceptions. *Journal of Managerial Issues* 34: 461-477.
- Chandler, G.N. and S.H. Hanks. 1993. Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing* 8: 391-408.
- Child, J. 1972. Organizational structure, environment and performance: the role of strategic choice. *Sociology* 6: 1-22.
- Ciavarella, M.A., A.K. Buchholtz, C.M. Riordan, R.D. Gatewood, and G.S. Stokes. 2004. The big five and venture survival: Is there a linkage? *Journal of Business Venturing* 19(4): 465-484.
- Combs, J.G. and M. S. Skill. 2003. Managerialist and human capital explanations for key executive pay premiums: A contingency perspective. *Academy of Management Journal* 46(1): 63-73.
- Coles, J.W., V.B. McWilliams and N. Sen. 2001. An examination of the relationship of governance mechanisms to performance. *Journal of Management* 27(1): 23-51.
- Covin, J., Green, K., and Slevin, D. 2006. Strategic process effects on the entrepreneurial orientation-sales growth rate relationship. *Entrepreneurship: Theory & Practice* 30(1): 57-81.
- Covin, J. and D. Slevin. 2002. The entrepreneurial imperatives of strategic leadership. In M.A. Hitt, R.D. Ireland, S.M. Camp, and D.L. Sexton (Eds.), *Strategic entrepreneurship: Creating a new mindset*. 309-327. Oxford: Blackwell Publishers.
- . 1991. A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice* 16(1): 7-25.
- . 1989. Strategic management of small firms in hostile and benign environments. *Strategic Management Journal* 10(1): 75-87.
- . 1988. The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies* 25(3): 217-234.
- Daily, C.M. and J.L. Johnson. 1997. Sources of CEO power and firm financial performance: A longitudinal assessment. *Journal of Management* 23(2): 97-118.
- D'Aveni, R.A. 1990. Top managerial prestige and organizational bankruptcy. *Organization Science* 1(2): 121-142.
- . 1989. Dependability and organization bankruptcy: Application of agency and prospect theory. *Management Science* 35(9): 1120-1138.
- D'Aveni, R., and I. Kesner. 1993. Top managerial prestige, power and tender offer response: A study of elite social networks and target firm cooperation during takeovers. *Organization Science* 4: 123-151.
- Davis, G.F. 1991. Agents without principles? The spread of the poison pill through the intercorporate network. *Administrative Science Quarterly* 36: 583-613.
- Dorenbosch, L., M.L. van Engen, and M. Verhagen. 2005. On-the-job innovation: The impact of job design and human resource management through production ownership. *Creativity & Innovation Management* 14(2): 129-141.
- Dunn, P. 2004. The impact of insider power on fraudulent financial reporting. *Journal of Management* 30(3): 397-412.
- Eisenhardt, K. M. and L. J. Bourgeois, III. 1988. Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of Management Journal* 31: 737-770.
- Fama, E. and Jensen, M. 1983. Separation of ownership and control. *Journal of Law and Economics*, 26: 301-325.
- Farrell, K.A. and D.A. Whidbee. 2002. The impact of forced CEO turnover on committee structure. *Journal of Managerial Issues* XIV: 49-67.
- Finkelstein, S. 1992. Power in top management teams: Dimensions, measurement and validation. *Academy of Management Journal* 35: 505-538.
- Finkelstein, S. and D.C. Hambrick. 1996. *Strategic leadership: top executives and their effects on organizations*. Minneapolis/St. Paul: West Publishing Company.

- Finkelstein, S. and R. D'Aveni. 1994. CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal* 37: 1079-1108.
- French, J., B. Raven, and D. Cartwright. 1959. *Studies in social power*. University of Michigan, Institute for Social Research.
- Gartner, W.B. 1985. A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review* 10: 696-706.
- Geletkanycz, M.A., B.K. Boyd and S. Finkelstein. 2001. The strategic value of CEO external directorate networks: Implications for CEO. *Strategic Management Journal* 22: 889-898.
- Gerety, M., C. Hoi, and A. Robin. 2001. Do shareholders benefit from the adoption of incentives pay for directors? *Financial Management* 30: 45-61.
- Guth, W. and R. Taguiri. 1965. Personal values and corporate strategy. *Harvard Business Review* 43(5): 123-132.
- Guthrie, J.P. and D.K. Datta. 1997. Contextual influences on executive selection: Firm characteristics and CEO experience. *Journal of Management Studies* 34(4): 537-560.
- Hambrick, D.C. 1981. Environment, strategy and power within top management teams. *Administrative Science Quarterly* 26: 253-76.
- Hambrick, D.C. and P. Mason. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Journal* 15(3): 193-206.
- Hamel, G. 2000. *Leading the revolution*. Boston, MA: Harvard Business School Press.
- Harrison, J.R., D.L. Torres and S. Kukalis. 1988. The changing of the guard: Turnover and structural change in the top-management positions. *Administrative Science Quarterly* 33: 211-232.
- Hermalin, B.E. and M.S. Weisbach. 1988. The determinants of board composition. *RAND Journal of Economics* 19: 589-606.
- Herman, E.S. 1981. *Corporate control, corporate power*. New York: Cambridge University Press.
- Hill, C.W.L. and S.A. Snell. 1989. Effects of ownership structure and control on corporate productivity. *Academy of Management Journal* 32(1): 25-46.
- Hisrich, R.D. and M.P. Peters. 1992. *Entrepreneurship—Starting, developing, and managing a new enterprise*. Boston, MA: Irwin.
- Hitt, M.A., B.W. Keats and S.M. DeMarie. 1998. Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Executive* 12(4): 22-42.
- Hitt, M.A., R.D. Ireland, S.M. Camp and D.L. Sexton. 2001. Guest editors' introduction to the special issue - Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. *Strategic Management Journal* 22(6/7): 479-491.
- Hyrsky, K. 2000. Entrepreneurial metaphors and concepts: An exploratory study. *International Small Business Journal* 18(1): 13-34.
- Ireland, R.D. M.A. Hitt and D.G. Sirmon. 2003. A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management* 29(6): 963-990.
- Jensen, M. and E.J. Zajac. 2004. Corporate elites and corporate strategy: How demographic preferences and structural position shape the scope of the firm. *Strategic Management Journal* 25(6): 507-524.
- Johnson, R.A., R.E. Hoskisson, and M.A. Hitt. 1993. Board of director involvement in restructuring: The effects of board versus managerial controls and characteristics. *Strategic Management Journal* 14: 33-50.
- Karagozoglu, N. and W.B. Brown. 1988. Adaptive responses by conservative and entrepreneurial firms. *Journal of Product Innovation Management* 5(4): 269-281.
- Knight, G.A. 1997. Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing* 12(3): 213-225.
- Koene, B.A.S., A.L.W. Vogelaar and J.L. Soeters. 2002. Leadership effects on organizational climate and financial performance: Local leadership effect in chain organizations. *Leadership Quarterly* 13(3): 193-215.
- Kreiser, P.M., L.D. Marino and K. M. Weaver. 2002. Assessing the psychometric properties of the entrepreneurial orientation scale: A multi-country analysis. *Entrepreneurship: Theory & Practice* 26(4): 71-94.
- Kristiansen, S. and N. Indarti. 2004. Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture* 12(1): 55-78.
- Kuratko, D.P. and M.C. Goldsby. 2004. Corporate entrepreneurs or rogue middle managers? A framework for ethical corporate entrepreneurship. *Journal of Business Ethics* 55(1): 13-30.
- Liebersohn, S. and J. O'Connor. 1972. Leadership and organizational performance: A study of large corporations. *American Sociological Review* 37(2): 117-130.
- Lumpkin, G.T. and G.G. Dess. 2001. Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing* 16(5): 429-451.
- . 1996. Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Journal* 21(1): 135-172.
- Magnan, M., S. St-Onge, and Y. Calloc'h. 1999. Power games. *Ivey Business Journal* 63: 38-43.
- McClelland, D.C. 1961. *The achieving society*. New York, NY: Van Nostrand.
- McGrath, R.G. and I. MacMillan. 2000. *The entrepreneurial mindset*. Boston, MA: Harvard Business School Press.
- McKnight, P. and C. Tomkins. 2004. The implications of firm and individual characteristics on CEO pay. *European Management Journal* 22: 27-40.
- Michael, S., D. Storey and H. Thomas. 2002. Discovery and coordination in strategic management and entrepreneurship. In M.A. Hitt, R.D. Ireland, S.M. Camp, and D. L. Sexton, Eds., *Strategic entrepreneurship: Creating a new mindset*. Oxford: Blackwell Publishers.
- Miller, D. 1991. Stale in the saddle: CEO tenure and the match between organization and environment. *Management Science* 37: 34-52.

- . 1983. The correlates of entrepreneurship in three types of firms. *Management Science* 29(7): 770-791.
- Miller, D. and P.H. Friesen. 1982. Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal* 3(1): 1-25.
- Miller, J.S. and R.M. Wiseman. 2001. Perception of executive pay: Does pay enhance a leader's aura. *Journal of Organizational Behavior* 22(6): 703-711.
- Ocasio, W. 1994. Political dynamics and the circulation of power : CEO succession in U.S. industrial corporations. *Administrative Sciences Quarterly* 39(2) : 285-312.
- Pearce, J.A. and S.A. Zahra. 1991. The relative power of CEO's and boards of directors: Associations with corporate performance. *Strategic Management Journal* 12: 135-153.
- Penrose, E.T. 1959. *The theory of the growth of the firm*. New York, NY: John Wiley & Sons.
- Pfeffer, J. 1992. *Managing with power*. Boston Massachusetts: Harvard Business School Press.
- Pfeffer, J. and J. Ross. 1981. Unionization and income inequality. *Industrial Relations* 20(3): 271-285.
- Pfeffer, J. and G.R. Salancik. 1978. *The external control of organizations: A resource dependence perspective*. New York: Harper and Row.
- Podsakoff, P., S. MacKensie, J. Lee and N. Podsakoff. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88(5): 879-903.
- Podsakoff, P. and D. Organ. 1986. Self-reports in organizational research: Problems and prospects. *Journal of Management* 11: 55-73.
- Porter, M.E. 1980. *Competitive strategy*. New York, NY: Free Press.
- Ramamoorthy, N., P.C. Flood, T. Slattery and R. Sardesai. 2005. Determinants of innovative work behaviour: Development and test of an integrated model. *Creativity & Innovation Management* 14(2): 142-150.
- Rauch, A., J. Wiklund, G.T. Lumpkin and M. Frese. 2009. Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice* 33(3): 761-787.
- Redicker, K. and A. Seth. 1995. Boards of directors and substitution effects of alternative governance mechanisms. *Strategic Management Journal* 16: 85-100.
- Robinson, P.B., D.V. Stimpson, J.C. Huefner and H.K. Hunt. 1991. An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory & Practice* 15(4): 13-31.
- Rosenberg, M. 1968. *The logic of survey analysis*. New York, NY: Basic Books.
- Sadler-Smith, E., Y. Hampson, I. Chaston and B. Badger. 2003. Managerial behavior, entrepreneurial style, and small firm performance. *Journal of Small Business Management* 41(1): 47-67.
- Schumpeter, J.A. 1934. *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge: Harvard University Press.
- Sexton, D.L. and N.B. Upton. 1987. Evaluation of an innovative approach to teaching entrepreneurship. *Journal of Small Business Management* 25(1): 35-43.
- Shane, S. and S. Venkataraman. 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review* 25(1): 217-226.
- Shen, W. 2003. The dynamic of the CEO-board relationship: an evolutionary perspective. *Academy of Management Review* 28: 466-476.
- Sridharan, U.V. and C.H. St. John. 1998. The effects of organizational stability and leadership structure on firm performance. *Journal of Managerial Issues* 10(4): 469-484.

About the Authors

Justin L. Davis (PhD - University of Texas at Arlington) is an assistant professor of strategic management at Ohio University. His primary research interests include firm-level entrepreneurship, venture capital funding, social capital in entrepreneurship, and other areas of small business development. He has published research in outlets such as the *Journal of Small Business Management*, the *Journal of Business Ethics* and the *Journal of Developmental Entrepreneurship*.

R. Greg Bell (PhD - University of Texas at Arlington) is serving as an assistant professor at the University of Dallas - Graduate School of Management. He teaches courses in International Business Strategy and Corporate Sustainability. Bell's area of research includes corporate governance, international entrepreneurship, and venture capital strategy. Bell has presented research papers at the Academy of Management, Academy of International Business, Strategic Management Society, and Southern Management Association conferences. His research has been published in *Entrepreneurship Theory & Practice* and the *Journal of Small Business Management*.

G. Tyge Payne (PhD - Texas Tech University) is an associate professor of strategic management and holder of the Rawls Endowed Professorship of Management in the Rawls College of Business at Texas Tech University. His primary research interests include organization-environment fit/misfit, firm-level entrepreneurship, interorganizational relationships, and social capital. He has authored or co-authored numerous publications appearing in such outlets as *Entrepreneurship Theory and Practice*, *Journal of Business Ethics*, *Journal of Management*, *Journal of Management Studies*, and *Organization Science*, among others. He currently serves on the editorial boards of the *Journal of Management* and the *Journal of Small Business Management*. Also, Payne is on the Governing Board of the Southern Management Association.

Patrick M. Kreiser (PhD - University of Alabama) is an associate professor of strategic management and entrepreneurship at Ohio University. His primary research interests include entrepreneurial orientation, firm performance and organizational learning. He has published research in journals such as *Entrepreneurship Theory and Practice*, the *Journal of Small Business Management*, the *Journal of Business Research* and the *Journal of Developmental Entrepreneurship*.

Davis, Bell, Payne and Kreisler

Stewart, W.H. 1996. *Psychological correlates of entrepreneurship*. New York, NY: Garland Publishing, Inc.

Tosi, H.L., S. Werner, J.P. Katz and L.R. Gomez-Mejia. 2000. How much does performance matter? A meta-analysis of CEO pay studies. *Journal of Management* 26(2): 301-339.

Useem, M. 1979. The social organization of the American business elite and participation of corporation directors in the governance of American institutions. *American Sociological Review* 44(4): 553-572.

Westphal, J.D. 1998. Board games: How CEO's adapt to increases in structural board independence from management. *Administrative Science Quarterly* 43: 511-537.

Wright, P., M. Kroll, and D. Elenkov. 2002. Acquisitions returns, increase in firm size, and chief executive officer compensation: The moderating role of monitoring. *Academy of Management Journal* 45: 599-608.

Zahra, S. 1993. A conceptual model of entrepreneurship as firm behavior: A critique and extension. *Entrepreneurship Theory & Practice* 17(4): 5-21.

Appendix Table 1 The Covin & Slevin (1989) Entrepreneurial Orientation Scale		
Innovativeness		
<i>In general, the top managers of my firm favor...</i>		
A strong emphasis on the marketing of tried and true products or services	1 2 3 4 5	A strong emphasis on R&D, technological leadership, and innovations
<i>How many new lines of products or services has your firm marketed in the past 5 years?</i>		
No new lines of products or services	1 2 3 4 5	Very many new lines of products or services
Changes in product or services lines have been mostly of a minor nature	1 2 3 4 5	Changes in products or services line have usually been quite dramatic
Proactiveness		
<i>In dealing with its competitors, my firm...</i>		
Typically responds to actions that competitors initiate	1 2 3 4 5	Typically initiates actions that competitors then respond to
Is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc.	1 2 3 4 5	Is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.
<i>In general, the top managers of my firm have...</i>		
A strong tendency to "follow the leader" in introducing new products or ideas	1 2 3 4 5	A strong tendency to be ahead of other competitors in introducing novel ideas or products
Risk-Taking		
<i>In general, the top managers of my firm have...</i>		
A strong proclivity for low-risk projects (with normal and certain rates of return)	1 2 3 4 5	A strong proclivity for high-risk projects (with chances of very high returns)

Deans of AJB Sponsor Schools

The *American Journal of Business* is supported by ten schools of business and their deans. Every school is AACSB-accredited.



FROM LEFT: Rajib Sanyal, *Ball State University*; Rodney Rogers, *Bowling Green State University*; Charles Crespy, *Central Michigan University*; Robert Scherer, *Cleveland State University*; Roger Jenkins, *Miami University*; Denise Schoenbachler, *Northern Illinois University*; Hugh Sherman, *Ohio University*; Ravi Krovil (acting dean), *The University of Akron*; Thomas Gutteridge, *The University of Toledo*; Kay Palan, *Western Michigan University*