Power in the corporate boardroom: development of board power and CEO power indexes

David Gavin

University at Albany, State University of New York, david.gavin@marist.edu

The University at Albany community has made this article openly available. Please share how this access benefits you.

Follow this and additional works at: https://scholarsarchive.library.albany.edu/legacy-etd

Part of the Business Administration, Management, and Operations Commons

Recommended Citation
https://scholarsarchive.library.albany.edu/legacy-etd/178

This Dissertation is brought to you for free and open access by the The Graduate School at Scholars Archive. It has been accepted for inclusion in Legacy Theses & Dissertations (2009 - 2024) by an authorized administrator of Scholars Archive.
Please see Terms of Use. For more information, please contact scholarsarchive@albany.edu.
Power in the Corporate Boardroom:
Development of Board Power
and CEO Power Indexes

by

David J. Gavin

COPYRIGHT 2010
ABSTRACT

This study focused on the development of two new measures: one of board of director power and one of CEO power. The first goal was to develop a new measure of board power. While there have been many studies on the individual elements of board power, the empirical results have been inconsistent and mixed. The underlying position of this paper is that no single element adequately explains the relationship between board power and outcome variables such as firm financial performance. In this study, the new board power measure was composed of multiple elements and an index was created.

The second goal of the study was to create a new measure of CEO power. Many studies have attempted to establish the relationship between the CEO and relevant outcome variables. As mentioned above, one of the most important outcome variables is firm financial performance and as one of the central figures in the organization, the CEO is considered to have an important relationship to firm financial performance. In fact, the CEO may have the most direct role to improve and sustain the firm’s financial performance. In this study, multiple elements of CEO power were combined to form a new index of CEO power.

The third goal of the study was to examine the differences of board power and CEO power by industry type, firm size, and degree of globalization. These three variables may impact the effects between the predictor variables (board of director power and CEO power) and outcome variables.
The results indicated that the board power index was comprised of board size, board member composition, non-duality, lead director, board member ownership, and large investor ownership. CEO power index was comprised of CEO tenure, CEO-board member nominations, and CEO ownership. Regarding the differences of board power and CEO power by industry type, firm size, and degree of globalization, only CEO power by firm size was significant. CEOs of smaller firms have higher levels of power than CEOs of larger firms.
ACKNOWLEDGEMENTS

There are many people I would like to acknowledge for making this dissertation possible. First I would like to thank my dissertation committee: Cecilia Falbe, Ph.D., Ray Van Ness, Ph.D., and Paul Miesing, Ph.D. Their help and guidance were invaluable in helping bring this project to completion.

Next, I would like to thank Gary Yukl, Ph.D., who provided both guidance and inspiration throughout my time in the doctoral program at Albany. Additionally, I would like to thank the many professors who imparted their knowledge and insights during the doctoral program: Linda Shanock, Ph.D., Sue Faerman, Ph.D., Michael Kavanagh, Ph.D., Kevin Williams, Ph.D., James Zetka, Ph.D., and Dianne Newman, Ph.D.

I must also acknowledge the many people in the Marist community who were particularly helpful during the process: Elmore Alexander, Ph.D., Meg Marinaccio, Renee Stagnaro, Carmen Cirincione, Ph.D., Ellen Halpern, Ph.D., Helen Rothberg, Ph.D., Ken Sloan, Ph.D., Greg Tully, Ph.D., and Jim Melitski, Ph.D. Other colleagues who provided their expertise to my dissertation include: Chris Shook, Ph.D. and Jim Quick, Ph.D.

Finally, I need to acknowledge my loving and supportive family who has been patiently waiting for this process to conclude: Joanne and Dana Gavin. I am confident that they will be happy for me to get on with the next phase of my academic career.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>...iii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>...v</td>
</tr>
<tr>
<td>List of Tables</td>
<td>...viii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>...ix</td>
</tr>
</tbody>
</table>

## Chapter

1. **Introduction** ........................................................................................................... 1  
   - Major Goals of the Study ................................................................. 3  
   - Methods ................................................................................................. 4  
   - Distinctive Aspects ........................................................................ 5  
   - Relevance .......................................................................................... 6  

2. **Literature Review** ................................................................................................ 9  
   - Governance Theories ........................................................................... 9  
   - Influence of Power ............................................................................. 14  
   - Elements of Board Power ................................................................. 16  
   - Elements of CEO Power .................................................................. 33  
   - Corporate Governance Indexes ......................................................... 37  
   - Definitions and Research Questions ................................................ 42  
   - Working Definitions ......................................................................... 42  
   - Research Questions .......................................................................... 48  
   - Board Power Index ........................................................................... 49  
   - CEO Power Index ............................................................................. 53  
   - Control Variables ............................................................................. 54  

4. **Methods** .............................................................................................................. 57  
   - Research Design ................................................................................ 57  
   - Sample of Firms ................................................................................ 57  
   - Measures ............................................................................................ 64  
   - Data Analysis ..................................................................................... 67  

5. **Results** ................................................................................................................. 67  
   - Board Power Measure ...................................................................... 67  
   - CEO Power Measure ....................................................................... 69  
   - Control Variables ............................................................................ 70  
   - Scale Validation ............................................................................... 77
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td>82</td>
</tr>
<tr>
<td>Limitations</td>
<td>89</td>
</tr>
<tr>
<td>Future Research</td>
<td>91</td>
</tr>
<tr>
<td>Conclusions</td>
<td>95</td>
</tr>
<tr>
<td>References</td>
<td>98</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1 A</td>
<td>Descriptive Statistics and Correlations for Board Power Variables Used in the Exploratory Factor Analysis</td>
</tr>
<tr>
<td>1 B</td>
<td>Descriptive Statistics and Correlations for CEO Power Variables Used in the Exploratory Factor Analysis</td>
</tr>
<tr>
<td>2</td>
<td>Results of the Exploratory Factor Analysis for Board Power</td>
</tr>
<tr>
<td>3</td>
<td>Results of the Common Factor Analysis for Board Power</td>
</tr>
<tr>
<td>4</td>
<td>Results of the Exploratory Factor Analysis for CEO Power</td>
</tr>
<tr>
<td>5</td>
<td>Results of the Common Factor Analysis for CEO Power</td>
</tr>
<tr>
<td>6 A</td>
<td>Descriptive Statistics and Correlations for Board Power Variables</td>
</tr>
<tr>
<td>6 B</td>
<td>Descriptive Statistics and Correlations for CEO Power Variables</td>
</tr>
<tr>
<td>7</td>
<td>Means and Standard Deviations for Board Power for Industry Type</td>
</tr>
<tr>
<td>8</td>
<td>ANOVA Source Table- Board Power by Industry Type</td>
</tr>
<tr>
<td>9</td>
<td>Means and Standard Deviation for Board Power for Firm Size</td>
</tr>
<tr>
<td>10</td>
<td>ANOVA Source Table- Board Power by Firm Size</td>
</tr>
<tr>
<td>11</td>
<td>Means and Standard Deviation for Board Power for Degree of Globalization</td>
</tr>
<tr>
<td>12</td>
<td>ANOVA Source Table- Board Power by Degree of Globalization</td>
</tr>
<tr>
<td>13</td>
<td>Means and Standard Deviation for CEO Power for Industry Type</td>
</tr>
<tr>
<td>14</td>
<td>ANOVA Source Table- CEO Power by Industry Type</td>
</tr>
<tr>
<td>15</td>
<td>Means and Standard Deviation for CEO Power for Firm Size</td>
</tr>
<tr>
<td>16</td>
<td>ANOVA Source Table- CEO Power by Firm Size</td>
</tr>
<tr>
<td>17</td>
<td>Means and Standard Deviation for CEO Power for Degree of Globalization</td>
</tr>
<tr>
<td>18</td>
<td>ANOVA Source Table- CEO Power by Degree of Globalization</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>126</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

This study focused on the development of a new measure of board of director power and a new measure of CEO power. The agency theory perspective was used as a theoretical framework to guide the work. According to the agency theory perspective, powerful boards are an important aspect of maximizing firm performance, increasing shareholder value, and protecting the shareholders’ interests. In general, power may be defined as the ability to control the actions of others, resist the influence of others, and pursue an agenda favorable to one’s self-interests. The concept of power will be defined and discussed in greater detail in chapter two.

According to Finkelstein and Hambrick (1996), public companies have boards of directors for the purpose of hiring and firing top executives; setting top executive compensation; reviewing and approving the firm's strategy; and to oversee the firm's business. Others have also suggested that board of directors monitor the behavior of top executives and offer advice to the top management team as needed (Baysinger & Butler, 1985; Chatterjee & Harrison, 2005; Johnson, Daily, & Ellstrand, 1996). Additionally, the board members can provide links to external resources that might be beyond the networks of company insiders (Pfeffer & Salanchik, 1978). Bonazzi and Islam (2007) suggest that the board of directors’ role is to determine the firm's purpose and ethics and keep shareholders informed about company business. Finally, boards of directors are charged with protecting shareholder interests and must devise defenses against unwanted takeovers.
Three boards of directors’ roles have been identified in the governance literature. These roles are the control role, the service role, and the resource dependence role (Chatterjee & Harrison, 2005; Finkelstein & Hambrick, 1996). The control role describes how the board monitors the top management team members’ actions. The service role describes how the board dispenses advice to top management team members. The resource dependence role describes how board members provide access to external critical resources that the organization needs (Chatterjee & Harrison, 2005).

Boards are considered powerful if they are effective in carrying out their roles and duties. Boards are also considered powerful if they can remain independent of the influence of the people they are expected to monitor, supervise, and, when appropriate, discipline. Board independence is accomplished through the board’s structure, composition, and ownership. Structure is concerned with the board’s size, the formation of committees, and the roles of certain board members. Composition is concerned with the board members’ affiliation and relationships with the firm. Ownership is concerned with the ability of large shareholder to influence the decision-making and strategy direction of the firm.

CEOs are considered powerful if they are able to influence the board in a manner that allows them to pursue corporate strategies of their choosing. When CEOs are appointed as the firm’s leader of the top management team and the board of directors, they wield considerable power within the organization. CEOs gain power over time as
they are effective in directing the firm toward higher levels of success and increasing the firm’s value.

**Major Goals of the Study**

This study had three major goals. The first major goal was to develop a new measure of board power. While there have been many studies on the individual elements of board power, the empirical results have been inconsistent and mixed. The underlying position of this paper is that no single element of board power adequately explains the relationship between board power and outcome variables such as firm financial performance. In this study, the new board power measure was composed of multiple elements of board power and an index was created.

The second goal of the study was to create a new measure of CEO power. Many studies have attempted to establish the relationship between the CEO and relevant outcome variables. As mentioned above, one of the most important outcome variables is firm financial performance and as one of the central figures in the organization, the CEO is considered to have an important relationship to firm financial performance. In fact, the CEO may have the most direct role to improve and sustain the firm’s financial performance. In this study, multiple elements of CEO power were combined to form a new index of CEO power.

The third major goal of the study was to examine the differences of board power and CEO power by industry type, firm size, and degree of globalization. These three variables may impact the effects between the predictor variables (board of director power and CEO power) and outcome variables. One part of this study attempted to
examine the impact on board power and CEO power based on the influence of each of these control variables.

**Methods**

The sample for the study consisted of *Fortune* 1000 companies. *Fortune* 1000 companies were selected because they provided all of the characteristics needed for examining boards of directors and CEOs. As large public firms, they are under intense scrutiny by the federal government, investors, and the media. Public companies are required to have formal, active boards of directors. They are also required to provide regularly published data concerning all aspects of their operations.

This study utilized exploratory factor analysis and confirmatory factor analysis using archival data. Specifically, annual reports, 10-K, and proxy statements were used to collect data for the variables used to create the new measures.

The collected data were analyzed using factor analysis to construct the new indexes for both board power and CEO power. Data analysis also included descriptive and inferential statistical methods appropriate for the type of collected data. The data were summarized using frequency tabulations, cross tabulations, means, standard deviations, and correlation coefficients. The major statistical method employed principal components analysis and then principal axis factoring. Additional analysis employed one-way ANOVA to analyze the differences between board power and CEO power by industry type, firm size, and degree of globalization.
Distinctive Aspects

This study had a number of distinctive aspects. First, it extended prior research on governance, board power, and CEO power. Previous studies in this area examined individual or selected elements of board power and CEO power. For instance, a number of studies looked at the effect of board size on firm performance (e.g., Alexander, Fennell, & Halpern, 1993; Dalton, Daily, Johnson, & Ellstrand, 1999; Goodstein, Gautam, & Boeker, 1994; Mintzberg, 1983; Ning, Davidson, & Zhong, 2007; Pfeffer, 1972, 1973; Pfeffer & Salancik, 1978; Provan, 1980; Webb, 2006). Other studies looked at the combined roles of CEO and board chair and the effect on firm performance (Dalton, Daily, Ellstrand, & Johnson, 1998; Lam & Lee, 2008). Additional studies looked at board composition, the number of inside and outside directors, and the effect on firm performance (Dalton et al., 1998; Khanchel, 2007; Shivdasani & Yermack, 1999; Webb, 2006). This study used a combination of many elements of both board power and CEO power to develop measures that might be used to examine a broader impact on firm outcomes. Specifically, the study developed measures of board power and CEO power.

This study also added new elements of power to board power by including the active lead director and changes to the traditional elements of board structure and composition. The lead director is a relatively new position on boards of directors that is added to counteract the influence of the CEO-board chair dual roles. Lead directors add a measure of independence to the board. While the lead director position has been discussed in the literature since the late 1980s, the empirical evidence of the impact of this position on firm performance is lacking in the literature. In this study, the role of the
lead director is expanded to include a more active lead director rather than just the appointment of the lead director. The active lead director will: chair meetings for the independent directors and liaise between the independent directors and the CEO; plan board meetings and sets the agenda; facilitate communications between the independent director from the top management team; facilitate board committee work; conduct director evaluations and committee appointments; conduct CEO and outside advisor evaluations; and build relationships with key stakeholders (Penbera, 2009).

Board structure and composition are generally described as the board size, separation of the CEO and board chair roles, and the number of inside and outside directors on the board. In this study, more recent elements of board power were analyzed. The inclusion of the nominating and compensation committees, as elements of power, was also examined. Further, the composition of the committees and whether the committees have only independent directors was examined.

This study also added a new element of power to CEO power: the classified board. Classified boards are described as boards that elect only part of the board each year. It has been posited that classified boards allow the CEO to maintain favorable members on the board. This can be an element that increases CEO power by retaining sympathetic members on the board.

Relevance

Findings from this study may add to the current understanding of the impact of boards and CEOs on firm outcomes such as firm financial performance, risk taking, diversification, acquisitions, and executive compensation. This research can expand the
practitioner’s current level of understanding of effective boards and the relationship between boards and CEOs. This study can also add to theory development on board power and CEO power and their effect on firm outcomes.

The results of this study may help boards become more effective in protecting the interests of all stakeholders. The need for stronger, more effective governance appears to be more evident in the last twenty years. The actions of CEOs in major public companies have indicated on numerous occasions just how ineffective the board of directors can be in monitoring and controlling the CEO’s self-serving behavior. Companies such as Enron, Adelphia, Tyco, and WorldCom are just some of the companies that have shown that CEOs can do whatever they choose to the detriment of the shareholders. For example, the CEO of Adelphia Communications was convicted of pocketing $100 million of the firm’s money and misleading investors regarding the firm’s performance by hiding debts totaling $2 billion and Tyco’s CEO was convicted of looting the firm of more than $150 million through illegal bonuses and loans (Grant & Nuzum, 2004; Maremont, 2005). There are some that have questioned the relevance of the board’s role as protectors of the owner’s interests. In the wake of these corporate scandals, top executives have been imprisoned, investors have lost millions, and employees have lost their jobs and pensions.

The scale of devastation in the last decade has forced Congress to enact legislation in an effort to restore the legitimacy of the board of directors and the confidence of the investing public. One of the main goals of the legislation appears to be
to directly strengthen the boards’ role to monitor and discipline the CEO. Only time will judge how well these measures achieve their intended goals.

The results of this study may be helpful to boards in their development of structure, composition, and ownership. Boards may find that certain elements such as the number of board members, the use of committees, and the structure of the committees may lead to better monitoring and supervision of the CEO. Boards may also find that the use of the active lead director will lead to more effective boards. Additionally, boards may find the right structure for the CEO and the limits of CEO influence may lead to boards that are more effective in maximizing the shareholders’ interests.

The contribution of this study to theory development is that it extends existing research on board power and CEO power. To date, there does not appear to be an overarching study of either board power or CEO power, much less how they might vary depending on industry type, firm size, and degree of globalization. This study would help to fill that gap in the literature.
Chapter II

Literature Review

The literature review chapter is divided into five areas. The first area discusses the three basic governance theories: agency, stewardship, and resource dependence. However, it should be noted that agency theory was used to guide the overall study. The second area discusses power and the influence of power between the board of directors and the CEO. The third area discusses the elements of power related to the board of directors. The fourth area discusses the elements of power related to the CEO. Finally, the fifth area discusses corporate governance indexes.

Governance Theories

Agency Theory. Agency theory is concerned with the problems that occur when one party, called the principal, engages another party, called the agent, to perform work on its behalf. Agency theory attempts to resolve two problems. The first problem is referred to as the agency problem, which occurs when the goals of the principal and the agent conflict; and it is costly for the principal to monitor the agent’s actions (Dalton, Daily, Ellstrand, & Johnson, 1998; Eisenhardt, 1989; Oswald, Muse, & Rutherford, 2009). The second problem is referred to as the risk-sharing problem, which occurs because of different levels of risk tolerance between the principal and agent (Eisenhardt, 1989; Lazarides and Drimpetas, 2008;). Generally, the unit of analysis has been the contractual arrangement governing the principal-agent relationship (Eisenhardt, 1989). The aim of agency theory is to discover the most efficient contract between the parties (Eisenhardt, 1989; Oswald, Muse, & Rutherford, 2009). The efficient contractual arrangement is
thought to be either behaviorally-oriented or outcome-oriented (Eisenhardt, 1989). The behaviorally-oriented contract would include salaries and hierarchical governance; and the outcome-oriented contract would include commissions, stock-options, and market governance (Eisenhardt, 1989).

In today’s modern corporations, both principals and agents seek to maximize their opportunities for personal gain (Davis, Schoorman, and Donaldson, 1997). Principals make financial investments and implement governance systems to maximize their utility whereas agents maximize their utility by managing the principal’s investment, at the expense of other opportunities (Davis et al., 1997). If the principal’s and agent’s utility functions are the same, then the agency problem does not exist (Davis et al., 1997). However, when the principal’s and agent’s goals are different, then agency costs are created (Abdullah, 2006; Jensen & Meckling, 1976). The rationale is that agents will maximize their own utility at the expense of the principal’s utility (Pieper, Klein, & Jaskiewicz, 2008). To minimize costs and create the most efficient contract between the parties, principals implement internal controls to restrict the agent’s self-serving behavior (Davis et al., 1997; Jensen & Meckling, 1976). It has been suggested that agents who are focused only on maximizing their own power and prestige will allow the firm to lose its competitive position and fail (Walsh & Seward, 1990).

Agency theorists suggest that governance mechanisms should be implemented to protect shareholders, control agency costs, and align the agent’s goals with the principal’s goals (Davis et al., 1997). Two governance mechanisms, compensation plans
and governance structures have been given substantial attention (Combs, Ketchen, Perryman, and Donahue, 2007; Davis et al., 1997). Compensation plans are expected to align both parties’ goals by giving the agent long-term rewards which are tied to firm performance (Bonn & Pettigrew, 2009). Governance structures, such as boards of directors, keep agents in line by performing financial audits and conducting regular executive performance evaluations (Bonn & Pettigrew, 2009). Additionally, boards are expected to communicate the shareholder’s goals to the agent and monitor the agent’s actions to minimize agency costs (Bonn & Pettigrew, 2009). Maintaining board independence is desirable to provide objective agent oversight (Davis et al., 1997). While agency theorists acknowledge that poor firm performance can occur for many reasons, they are focused on failure that results from motivational issues (Davis et al., 1997).

**Stewardship Theory.** Stewardship theory suggests that executives are motivated to work in the principal’s best interests (Dalton, Daily, Ellstrand, & Johnson, 1998; Davis et al., 1997). Unlike the self-serving, individualistic behavior described in agency theory, stewardship theorists believe that agent’s behaviors are more organizationally oriented and collectivistic (Davis et al., 1997; Steen, 2004). Agents, as stewards, are motivated to place the organization’s goals above their own goals (Davis et al., 1997). Agents/stewards see greater utility engaging in cooperative behaviors instead of self-serving behaviors (Davis et al., 1997; Steen, 2004). Agents/stewards use firm performance to maximize the principal’s goals and, as a consequence, maximize their own utility functions (Davis et al., 1997).
Agents/stewards are aware of the tradeoff between their own needs and the organization’s needs and understand that by achieving the organization’s needs, their own needs will be met (Davis et al., 1997). Therefore, the agent/steward’s “opportunity set is constrained by the perception that the utility gained from pro-organizational behavior is higher than the utility that can be gained through individualistic, self-serving behavior” (Davis et al., 1997: 25). In short, agents/stewards believe that their goals are aligned with both the corporation and its principals (Davis et al., 1997).

Stewardship theorists argue that the firm’s structure can enhance the agent/steward’s performance (Davis et al., 1997). Under stewardship theory, stewards should be trusted and empowered and, therefore, their autonomy should be maximized (Davis et al., 1997). Argyris (1964) suggested that too much governance could be counterproductive by discouraging the stewards’ desire to engage in pro-organizational behaviors (Davis et al., 1997). The proposed leadership structure, under stewardship theory, is to combine the CEO and board chair roles (Davis et al., 1997). The combined CEO-board chair role leaves no doubt who is responsible for the firm’s fate and allows for the implementation of strategic decisions without the fear of being countermanded (Davis et al., 1997).

Resource Dependence Theory. Resource dependence theory refers to the board of directors’ ability to acquire resources for the firm (Boyd, 1990; Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978; Wernerfelt, 1984). When individuals are appointed to boards, the organization expects that the board member will support the organization, help solve its problems, and aid in the overall success of the organization (Hillman &
Dalziel, 2003; Pfeffer & Salancik, 1978). Some of the specific resource activities that board members can provide are giving advice and counsel to top management, adding legitimacy and improving the firm’s public image, act as channels for information, providing links to important stakeholders, and providing access to external resources such as financial capital (Baysinger & Hoskisson, 1990; Hillman & Dalziel, 2003; Hillman, Keim, & Luce, 2001; Lorsch & MacIver, 1989; Mizruchi & Sterns, 1988; Pfeffer & Salancik, 1978). Resource dependence theorists suggest that board resources are “directly related to firm performance” (Hillman & Dalziel, 2003: 386). Board resources can assist the organization by reducing dependency on external contingencies, reduce environmental uncertainty, mitigate transaction costs, and ensure the survival of the organization (Hillman & Dalziel, 2003).

Empirical evidence suggests that resources provided by board members have been positively related to firm performance (e.g. Carpenter & Westphal, 2001; Certo, Daily & Dalton, 2001; Hillman & Dalziel, 2003; Westphal, 1999;). For example, boards with connections to strategically related firms provided better advice and counsel, which has been found to be positively related to performance (Carpenter & Westphal, 2001; Westphal, 1999). Prestigious boards have been found to be positively related to better financial performance during initial public offerings, which also suggests that board member reputation can enhance the firm's credibility (Certo, Daily, & Dalton, 2001; Hillman & Dalziel, 2003). Hillman, Zardkoohi, and Bierman (1999) have suggested that boards with ties to the federal government have been positively related to shareholder value.
The Influence of Power between Boards and CEOs

Power within Agency and Stewardship Theories. The use of power is an important element in the principal-agent relationship (Davis, Schoorman, & Donaldson, 1997). Conflicts between the board and the CEO are typically resolved through the use of power (Finkelstein & Hambrick, 1996). According to Finkelstein and Hambrick (1996), the basis of agency theory is power and the distribution of power between boards and CEOs is a critical aspect of agency theory. Dalton et al. (1998) suggest that the basis of stewardship theory is also power/control but, contrary to agency theory, the distribution and use of power favors the CEO.

Using French and Raven’s (1959) typology of power bases, Davis et al. (1997) attempt to differentiate between the principal-agent and the principal-steward relationships. Coercive, legitimate, and reward power are characterized as institutional power and, within the context of agency theory, provide the source of influence in the principal-agent relationship (Davis et al., 1997). In particular, the principals use incentives and legal authority to control the agent (Davis et al., 1997). When necessary, the principals might use coercive power (in the form of threat of termination) to influence the agent (Davis et al., 1997). Expert and referent power are characterized as personal power and indicate the source of influence between parties in the principal-steward relationship (Davis et al., 1997). Within the context of the principal-steward relationship, personal power is enhanced over time and tends not to be affected by the formal roles of the parties (Davis et al., 1997). In other words, the effects of personal power can transcend formal titles.
BoardPower/CEO Power. While French and Raven examine the types of power individuals possess, this study looks at the power that exists between boards of directors and CEOs. Specifically, power at the board and CEO level may be characterized as the ability to pursue one’s own agenda and to resist the influence of others. Also, power may allow one party to control and restrict the actions of the other party. Within the context of corporate governance, two types of power are most frequently discussed: board power and CEO power (e.g. Combs, Ketchen, Perryman, & Donahue, 2007; Davis, Schoorman, & Donaldson, 1997; Finkelstein, 1992; Finkelstein & Hambrick, 1996). Board power allows the board to effectively monitor and control the CEO (Finkelstein & Hambrick, 1996). On the other hand, CEO power allows CEOs to exert their will and engage in non-profit maximizing activities (Finkelstein, 1992; Finkelstein & Hambrick, 1996). Feng, Ghosh, and Sirmans (2005) suggest that through the use of power, CEOs may have the ability to resist and stifle the board’s monitoring function. At any particular point in time, CEOs or boards of directors may have a higher level of power, which would allow them the opportunity to more aggressively pursue their own agenda (Finkelstein & Hambrick, 1996).

Board power variables include: board size, board composition, average board tenure, CEO non-duality, lead directors, and board member ownership (e.g. Allan & Widman, 2000; Khanchel, 2007; Lam & Lee, 2008; Ning, Davidson, & Zhong, 2007; Sundaramurthy, Rhoades, & Rechner, 2005). CEO power variables include: CEO tenure, ownership, duality, CEO nominations to the board, CEO-board member similarity, and
classified boards (e.g. Johnson, Daily & Ellstrand, 1996; Lam & Lee, 2008; Shakir, 2009; Young & Buchholtz, 2002).

Elements of Board Power


performance, suggested that larger boards were associated with better financial performance. Barnhart and Rosenstein (1998) suggested that firms with smaller boards were associated with higher firm performance than firms with larger boards. Yermack (1996) suggested that firms with smaller boards outperformed firms with larger boards.

Evidence suggests that board size may also have an indirect impact on firm performance (Goodstein, Gautam, & Boeker, 1994; Ning, Davidson, & Zhong, 2007; Williams, Fadil, & Armstrong, 2005). For example, Ning et al. (2007) found that board size was affected by economic forces and that cost-benefit analysis would lead to an understanding of how firms choose their board structure. Williams et al. (2005) suggested that larger boards were associated with higher monitoring capabilities and fewer illegal activities by top management teams. Finally, Goodstein et al. (1994) suggested that there was weak support for the relationship between board size and organizational strategic change.

However, there has been little consensus on the relationship between board size and firm performance (Mir & Seboui, 2008; Williams et al., 2005). Two of the more frequently cited studies, regarding board size and firm performance, are Dalton et al. (1999) and Yermack (1996). As mentioned above, the Dalton et al. (1999) meta-analysis, consisting of 27 studies, found support for the positive relationship between board size and firm performance. Further analysis revealed that the effect was greater for small firms than large firms (Dalton et al, 1999). Additionally, board composition (the percentage of outside directors) was found not to moderate the relationship between board size and firm performance (Dalton et al., 1999). On the other hand, the Yermack
(1996) study supported an inverse relationship between board size and firm financial performance. In other words, firm performance increases as board size decreases. The Yermack study is frequently used to gather support for smaller boards (e.g. Khanchel, 2007; Lee & Carlson, 2007, McIntyre et al, 2007).

It has been suggested that large boards may be ineffective for a number of reasons (e.g. Chiang, 2005; Goodstein et al., 1994; Jewel and Reitz, 1981; Judge and Zeithaml, 1992; Shaw, 1981). Goodstein et al. (1994) suggested that there are numerous reasons why large boards may be unable to reach consensus on major decisions. The reasons include: larger groups tend to be less cohesive (Shaw, 1981) and unmotivated because of less participation from all members (Jewel and Reitz, 1981); less inclined to engage in strategic decision-making (Judge and Zeithaml, 1992); more challenging to coordinate throughout the decision-making process (Gladstein, 1984); and more likely to form factions and coalitions (O’Reilly, Caldwell, & Barnett, 1989), which will further challenge reaching consensus (Goodstein et al, 1994). Chiang (2005) suggested that boards with too many members are simply inefficient in the decision-making process. Large board size may also promote social loafing, which describes how effort decreases as group size increases (Dalton et al., 1999). It has also been suggested that large boards are more easily manipulated by the CEO (Mintzberg, 1983) through building coalitions and selectively disseminating information (Dalton et al., 1999).

It has also been suggested that small boards may be ineffective for a number of reasons (Chiang, 2005; Sterns & Mizruchi, 1993; Williams et al., 2005). Chiang (2005) suggested that decision-making precision suffers in small boards because there are not
enough people to adequately discuss the issues. Smaller boards may not be able to provide the firm with the external links to critical resources (Dalton et al., 1999). Also, fewer board members may not have the expertise to properly advise the CEO on important matters (Dalton et al., 1999). Finally, smaller boards may limit the number of board interlocks, which are associated with effective acquisition of capital (Sterns & Mizruchi, 1993). Smaller boards may be lacking in diversity, which could lead to fewer decision alternatives and solutions to major problems (Williams et al., 2005).

It has been suggested that there may be an optimal board size that allows for effective monitoring of the CEO as well as functional role accomplishment (Lipton & Lorsch, 1992). Recent studies are attempting to find evidence for the Jensen (1993) study that suggested that “When boards get beyond seven or eight people they are less likely to function effectively and are easier for the CEO to control” (1993: 865). Jensen’s view was later supported by Firstenberg and Malkiel’s (1994) suggestion that boards with eight or less members were better able to focus, participate, and debate as they carry out their duties. Brown and Caylor (2009) suggested that more effective boards have between six and fifteen members.

Williams et al. (2005) suggested that there might be an optimal board size that would minimize the costs associated with board activities. The optimally-sized board will have enough members to bring the needed expertise and diversity to advise the CEO and assist in making major decisions (Firstenberg & Malkiel’s, 1994). The board will be large enough to provide effective monitoring of the CEO and TMT (Firstenberg & Malkiel’s, 1994). It will have enough members to provide adequate links to critical
external resources and large enough to provide useful interlocks with the CEOs of desired firms (Brown & Caylor, 2009). Lastly, the optimally-sized board will be small enough not to be easily controlled or manipulated by the CEO and will provide an excellent cost-benefit analysis for its size and existence (Jensen 1993).

While empirical evidence is scant, the suggested optimal board size appears to be between seven to eleven members (e.g. Jensen, 1993; Leblanc & Gillies, 2003; Lipton & Lorsch, 1992). However, the optimal size board may not be an exact number of members. For instance, in addition to the Jensen (1993) suggestion of seven to eight members, Lipton and Lorsch (1992) suggested that the ideal board size is eight members and can still be effective up to ten members. Also, Leblanc and Gillies (2003) suggest that an optimal board size is eight to eleven members.

In a recent survey of board size in U.S. firms, it was noted that boards of directors have been slowly shrinking over time (Lee & Carlson, 2007). Lee and Carlson (2007) found that the average board size of S & P 500 firms had been reduced to 11 members by the end of 2003. Additionally, the average board size of mid-cap firms was reported to be nine members and small-cap firms had only eight members during the same time period (Lee & Carlson, 2007).

**Board composition.** Board composition refers to the affiliation (relationship) of the board members to the CEO or other members of the firm and the demographic characteristics of the board members (Finkelstein & Hambrick, 1996). Board composition is one of the most studied areas of corporate governance (e.g. Abdullah, 2006; Barnhart & Rosenstein, 1998; Black, Jang, & Kim, 2006; Brown & Caylor, 2009;
Daily, & Ellstrand, 1996; Dalton, Daily, Ellstrand, & Johnson, 1998; Fich & Slezak, 2008; Goodstein, Gautam, & Boeker, 1994; Johnson, Khanchel, 2007; Lee & Carlson, 2007; McIntrye, Murphy, & Mitchell, 2007; Mir & Seboui, 2008; Petra, 2005; Pearce & Zahra, 1991; Reheja, 2005; Rhoades, Rechner, & Sundaramurthy, 2000; Webb, 2006). Fich and Slezak (2008) found that highly independent boards were an important factor in preventing bankruptcy in financially distressed firms. Mir and Seboui (2008) found that board independence contributed to explaining the differences between economic value added and created shareholder value. Barnhart and Rosenstein (1998) found weak support for a curvilinear relationship between board independence and firm performance. However, there appeared to be much stronger evidence that board composition and firm performance were jointly determined, indicating that corporate governance is subject to change over time allowing for value maximization (Barnhart & Rosenstein, 1998). McIntyre et al. (2007) discovered that certain board composition variables (experience, member age, and team tenure) were positively related to firm performance. Lee and Carlson (2007) found a positive relationship between board independence and firm performance. Petra (2005) found that outside, independent directors appear to increase board power. Dalton, Daily, Ellstrand, and Johnson’s (1998) meta-analysis of 159 samples, concluded that there was no meaningful relationship between board composition and firm financial performance. However, Rhoades, Rechner, and Sundaramurthy’s (2000) meta-analysis, consisting of 37 samples, discovered that board composition was, indeed, positively related to firm financial
performance. More importantly, their findings concluded that the relationship was dependent on the measures used to define board composition (Rhoades et al., 2000).

The issue of different definitions of board composition measures was echoed by Daily, Johnson, and Dalton (1999), who identified approximately twenty different operationalizations of board composition used in empirical corporate governance research. They classify the various operationalizations into the following categories: proportion of inside directors, proportion of outside directors, proportion of independent or interdependent directors, and the proportion of affiliated directors (those with close personal or professional relationship with the CEO or the firm) (Dalton et al., 1999). As with board size, there appears to be no consensus on the relationship between board composition and firm financial performance (Dalton et al., 1998; Rhoades et al., 2000).

The theoretical foundations for board composition can be found in agency and stewardship theories (Dalton et al., 1998). Agency theory would support the preference for boards with higher proportions of independent, outside directors. Agency theory is based on the idea that the separation of ownership and control may prevent the pursuit of self-gain by those in control, namely the CEO (Dalton et al., 1998). Stewardship theory would support the preference for boards with higher proportions of inside directors. Proponents of stewardship theory argue that the firm’s managers are both trustworthy and focused on attaining the highest returns for the firm’s owners (Dalton et al., 1998).

Board independence allows the board to carry out one of its most important functions: monitoring the top management team’s actions and objectively assessing the
CEOs performance (Finkelstein & Hambrick, 1996). Therefore, increased board member independence increases the overall power of the board over the CEO (Finkelstein & Hambrick, 1996).

Board independence is frequently identified as a factor that leads to better governance (e.g. Fich & Slezak, 2008; Lee & Carlson, 2007; Mir & Seboui, 2008; Rhoades et al., 2000). Specifically, independence is critical to effectively monitor the CEO and proponents of agency theory have consistently pushed for more board member independence (Lee & Carlson, 2007; Rhoades et al., 2000). Although the idea for more board independence has been around for several decades (Bacon & Brown, 1975; Dayton, 1984), it has gained intensity within the last ten years. The Securities and Exchange Commission and the New York Stock Exchange have increased regulations that require greater board independence (Lee & Carlson, 2007). “Sixty-four percent of Standard & Poor’s Super 1500 companies currently have boards that are at least two-thirds independent” (Lee & Carlson, 2007: 31).

**Board Tenure.** Board tenure has been identified as an element of board power. Specifically, board tenure can be an indicator of how effectively the board is able to monitor and supervise the actions of top management (Canavan, Jones, & Potter, 2004; Kesner, 1988; Kosnik, 1990; McIntyre, Murphy, & Mitchell, 2007; Vafeas, 2003). Board members with long tenure are associated with more experience, commitment, and competence, which gives the board member greater knowledge about the firm and the environment in which it operates (Kosnik, 1990; Vafeas, 2003). Long-tenured board members also gain greater insights into the actions of the top management team by
observing its decision-making processes over time. Long-tenured boards also offer the firm continuity of organizational knowledge, more credibility in the marketplace, and increased board dynamics and collegiality (Canavan et al, 2004). It has been posited that it takes a minimum of three to five years for board members to acquire a basic understanding of how a firm operates and a thorough understanding takes considerably longer (Kesner, 1988). Long-tenured boards are also associated with more conformity to the values and expectations of the firm’s leadership (Kosnik, 1990). Board stability, resulting in longer average board tenures, has also been associated with improved performance, especially among firms that are considered to be poor performers (Canavan et al., 1990).

Unlike newer board members, tenure allows the board members to avoid the impact of group pressure to conform (Kosnik, 1990). Newer board members may also suffer from a lack of confidence and a desire to avoid rocking the boat (Kosnik, 1990). Additionally, newer board members may not be able to influence senior management decisions due to a lack of firm specific knowledge (Kosnik, 1990).

The positive aspects of short-tenured board members include: higher levels of creativity, openness to new ideas, and fresh sets of eyes looking at the firm’s problems (Canavan, 2004; Kosnik, 1990). Short-term boards are considered to be more heterogeneous and, therefore, considered to be able to solve problems quicker than long-tenured boards (Kosnik, 1990).

Long-tenured boards have been also identified as being potentially ineffective for several reasons. For instance, long-tenured boards may become more entrenched
and overlook the impact of a changing business environment, support decisions that may no longer apply, fail to offer fresh solutions to the firm’s problem, and fail to act independently because of strong ties with other board members (Canavan et al., 1990).

It has been suggested that board members may begin to think and act as an insider as tenure increases (Canavan et al., 1990). Boards with very little turnover have been associated with higher levels of cohesiveness, which may be linked to ineffectiveness (Kosnik, 1990). Specifically, there may be pressure to conform, more homogeneous decision-making, and too many shared experiences, which may prevent critical thinking and confrontation (Janis, 1982; Kosnik, 1990). Long-tenured board members may become friendlier toward the CEO and more susceptible to being co-opted by management (Vafeas, 2003). This may lead to less supervision and monitoring of the CEO’s actions and decisions (Vafeas, 2003). Additionally, some evidence exists to suggest that longer-tenured boards are likely to make lenient decisions regarding CEO salaries and authorize higher levels of base pay (Canavan et al, 2004).

While it has been suggested that board members need three to five years to become meaningful contributors to the governance process (Kesner, 1988; McIntyre et al., 2007), optimum average board tenure has been suggested to be between eight to twelve years (Canavan et al, 2004; McIntyre et al., 2007). Further, the National Association of Corporate Directors has suggested that boards should promote turnover as members approach fifteen years of service (Canavan et al., 2004). However, there is empirical evidence to suggest that board tenure is positively related to firm performance (Kosnik, 1990).
Duality. Duality refers to the situation where the board chairman is also the firm’s CEO. Proponents of stewardship theory argue that CEO duality is beneficial because organizational control should be concentrated in the hands of the firm’s top management (Dalton et al., 1998). On the other hand, proponents of agency theory argue for the separation of the CEO and board chair positions to avoid domination of the board, which could reduce the board’s ability to effectively monitor managerial opportunism (Lam & Lee, 2008).

“Board leadership structure is one of the most controversial topics in corporate governance literature” (Lam & Lee, 2008: 300). Finkelstein and Hambrick (1996) described CEO duality as “one of the most contentious issues in public debates about the role of board of directors, with most commentators recommending a separation of the top two positions in a firm” (1996: 231). Yet, CEO duality is the dominant board leadership structure in U.S. corporations with more than seventy percent of firms favoring it (Lam & Lee, 2008).

Lorsch and MacIver (1989) suggest that duality increases the power of the CEO over the board through controlling the flow of information to the board members, controlling the agenda at board meetings, controlling the amount of debate during meetings, and controlling the appointments of new directors to the board. Baliga, Moyer, and Rao (1996) suggest that the financial markets are indifferent to changes in the firm’s leadership structure regarding CEO duality and there is only weak evidence to support that operating performance is affected by changes in CEO duality. Kang and Zardkoohi (2005) suggested that “firms that change from non-dual to dual board
leadership structure because of the presence of powerful CEOs will experience a
decrease in performance subsequent to the change in board leadership structure, all
else equal” (2005: 794).

The empirical evidence supporting the relationship between CEO duality and
firm financial performance is lacking consensus (e.g. Lam & Lee, 2008; Elsayed, 2007;
Dalton et al., 1998; Kang & Zardkoohi, 2005). For example, some studies support the
separation of the CEO and board chair roles (Daily & Dalton, 1994; Elsayed, 2007;
Rechner & Dalton, 1991); other studies support CEO duality (Brickley, Coles, & Jarrell,
1997; Coles, McWilliams, & Sen, 2001); while additional studies detect no relationship
between CEO duality and firm performance (Dalton et al., 1998; Dulewicz & Herbert,
2004).

Consensus is also lacking on the optimal board leadership structure and it has
been suggested that firms should choose a leadership structure based on the firm’s
characteristics and external environment (Faleye, 2007a; Rhoades et al., 2001; Boyd,
1995; Finkelstein & D’Aveni, 1994). For instance, powerful boards may allow CEO duality
when informal CEO power and firm performance is low, because the benefits of
command unity overshadow the possibility of CEO entrancement (Finkelstein & D’Aveni,
1994; Lam & Lee, 2008;). Informal power is derived from the CEO’s functional expertise,
tenure, directorships on other boards, compensation levels, related experience, and
elite education (Finkelstein & D’Aveni, 1994; Lam & Lee, 2008;). Boyd (1995) suggests
that CEO duality might be advantageous when the business environment includes scarce
resources and volatile conditions. Faleye (2007c) suggests that firms with complex
operations, small boards, high levels of managerial ownership and CEOs with strong reputations may favor CEO duality. Elsayed (2007) suggests that the benefits of CEO duality vary across industries, and are only positive when firm performance is low, indicating some support for both agency and stewardship theories.

Committees. Boards use committees to enhance the monitoring of the CEO and top management team (Khanchel, 2007). Board committees allow the board to create specialized groups that will focus on specific subject matters that are critical for the effective running of the organization (Rebiez and Salameh, 2006). Board committees allow the board to effectively deal with two important governance problems: limited time and complex issues within environmental uncertainty (Conyon & Peck, 1998; Lorsch & Maclver, 1989; Young & Buchholtz, 2002). The use of board committees is a common governance practice in the United States and three committees are most prevalent: the audit committee, the compensation committee, and the nominating committee (Rebiez & Salameh, 2006). Since the passage of the Sarbanes-Oxley Act of 2002, independent audit committees are mandated for all publically held firms, meaning that audit committee members cannot be affiliated with the firm (Valenti, 2008).

Independence is an important factor in determining the effectiveness of a board monitoring committee (Klein, 1998). Independent monitoring committees have been shown to be positively related to benefits that follow intense vigilance (John & Senbet, 1998). Newman and Mozes (1999) suggest that inside directors on compensation committees increase the likelihood of favoring the CEO’s interests. Similarly, the CEO’s presence on nominating committees has been linked to fewer independent, outside
directors and the appointment of more gray directors to the board (Khanchel, 2007; Shivdasani & Yermack, 1999; Webb, 2006). Gray directors are directors who are compensated for other services in addition to their board activities (Webb, 2006). Klein (2002) provided further evidence on the importance of committee independence when it was discovered that the CEO’s presence on the nominating committee was positively related to fewer independent directors of the audit committee.

Shivdasani & Yermack (1999) also found that stock markets tend to react favorably when a firm appoints independent, outside directors and the CEO is not involved in the selection process. Rebeiz and Salameh (2006) suggested that a “critical mass” of outside independent directors was positively related to superior market returns. Board member independence, indicated by member diversity, was also found to enhance firm value (Carter, Simkins, & Simpson, 2003; Webb, 2006).

The composition of audit committees, nominating committees, and compensation committees are considered to be in the category of board structure (Donker & Zahir, 2008; Korac-Kakabadse, Kakabadse, & Kouzmin, 2001). Audit committees, in general, are charged with overseeing the activities of the internal audit department and reviewing the firm’s audit plan, annual reports, and audit results (Petra, 2005). Additionally, audit committees oversee the selection and appointment of the firm’s external auditors (Petra, 2005). Empirical studies measuring the relationship between firms with independent audit committees and financial statement reliability have been inconsistent. On the one hand, there are studies supporting a positive relationship (Carcello & Neal, 2000; Dechow, Sloan, & Sweeney, 1996; McMullen, 1996),
while other studies do not show such a relationship (Beasley, 1996). It has been suggested that audit committees comprised of outside independent directors have the power to control the management’s reporting of financial results (Petra, 2005).

The board’s compensation committee evaluates and makes recommendation regarding the firm’s top executives, especially the CEO (Petra, 2005). The compensation committee arranges compensation plans to allow the firm to achieve its long-range performance targets while not subordinating the shareholders interests behind the CEO’s interests (Petra, 2005). Empirical evidence appears to support that CEO compensation is negatively related to the amount of control (power) assumed by the compensation committee (Petra, 2005). Some studies have supported that powerful boards (indicated by the presence and stock ownership of independent, outside directors) exercised higher levels of control (Boyd, 1994; Cyert, Kang, Kumar, & Shah, 1997).

The board’s nominating committee is responsible for nominating future directors to serve on the board (Petra, 2005). Shivdasani and Yermack (1998) suggest that firms without a nominating committee, or with the CEO on the nominating committee, are more prone to nominate individuals who will be disposed to follow the CEO’s lead. Latham (1999) suggested that CEO nominations should be considered as board member appointments. Empirical evidence supports that independent nominating committees tend to nominate independent outside directors who are more likely to challenge the CEO’s decisions (Shivdasani & Yermack, 1998).
Lead Director. One suggestion to counteract the influence and power of CEO
duality is the lead director position (Allan & Widman, 2000). The lead director is
generally responsible for the setting of the agenda at board meetings and overseeing
the work of the various board committees (Allan & Widman, 2000; Lorsch, 1995;).
Additionally, the lead director is responsible for holding and presiding over meetings
attended only by the independent board members so that there is a free discussion of
the CEO’s performance (Lorsch & Zelleke, 2005). While it has been suggested that the
lead director’s role should be purposely limited so as not to encroach on the
CEO/chairman’s role (Lorsch & Zelleke, 2005), Penbera (2009) suggested that the lead
director’s role is actually expanding. For instance, many lead directors currently chair
the independent director meetings, plan the board meeting agendas, and assure timely
communications among the directors (Penbera, 2009). However, there are growing
numbers of directors that are coordinating and overseeing the board committee’s work;
evaluating and recommending the board committee appointments; evaluating and
making selection recommendations on external advisors; and maintaining key
relationships with stakeholders such as institutional investors, financing sources, and
the media (Penbera, 2009).

Research regarding the role of the lead director has been scant. A review of the
literature indicates the subject has received limited theoretical discussion (Allan &
Widman, 2000; Lorsch, 1995; Lorsch & Zelleke, 2005). To date, the empirical evidence
on the relationship between lead directors and firm performance is non-existent.
Ownership. Outside director ownership has been used as a measurement of board vigilance (Finkelstein & D’Aveni, 1994; Finkelstein & Hambrick, 1996; Hoskisson, Johnson, & Moesel, 1994; Johnson, Daily & Ellstrand, 1996). Concentrated stock ownership provides its owner the power to pressure management to adopt suggested board reforms (Johnson, Daily & Ellstrand, 1996). Finkelstein and Hambrick (1996) suggest that the greater the percentage of stock owned by outside board members, the greater the intensity of board vigilance. Cremers and Nair (2005) posit that institutional investors may have more incentives to monitor the firm’s management and engage in more aggressive shareholder activism and Khanchel (2007) indicated that higher levels of executive and institutional ownership enhance governance quality.

The empirical research regarding the relationship between executive and institutional ownership with firm financial performance has been inconsistent (Sundaramurthy, Rhoades, & Rechner, 2005). Tsetsekos and DeFusco (1990) discovered no relationship between executive ownership and firm financial performance; Hambrick and Jackson (2000) found a positive relationship; and McConnell and Servaes (1990) discovered a non-linear relationship. The empirical evidence on the relationship between institutional ownership and firm performance has been similar to the results of executive ownership (Sundaramurthy, Rhoades, & Rechner, 2005). For instance, Baysinger, Kosnik, and Turk (1991) suggest a positive relationship between institutional ownership and firm performance, while Graves (1988) suggest a negative relationship. The Sundaramurthy, Rhoades, and Rechner (2005) meta-analysis suggested that a substantive relationship between ownership and firm performance does not exist. Li,
Lam, Qian, and Fang (2006) suggested that institutional ownership has a direct and significant effect on board composition, CEO duality, leadership diversity, and ownership concentration but only an indirect effect on firm profitability. Other studies have supported the indirect effect of governance on firm performance (Jonnergard & Svesson, 1995; Korac-Kakabadse, Kakabadse & Kouzmin, 2001; Maassen, 1999; Zahra & Pearce, 1989). Hsu (2007) suggested that equity ownership structure (board member ownership, institutional ownership, and managerial ownership) has an important relationship with the firm’s value. Chiang (2005) found a positive relationship between board member stock ownership and return on equity.

Donker and Zahir’s (2008) review of eight recent governance studies (Bauer, Guenster, & Otten, 2004; Brown & Caylor, 2006; Drobetz, Schillhofer, & Zimmermann, 2004; Foerster & Huen, 2004; Gompers, Ishii, & Metrick, 2003; Larcker & Richardson, 2004; Ricart, Rodriguez, & Sanchez, 2005; Rubach & Picou, 2005) suggests that the results “do not unambiguously support the broadly accepted statement that good corporate governance will lead to higher firm performance and a higher firm valuation” (2008: 87).

**Elements of CEO Power**

**CEO Tenure.** Increases in CEOs tenure are accompanied by increases in power (Finkelstein & Hambrick, 1996). Some reasons that may explain this phenomenon are: co-optation of the board of directors (especially if the CEO is responsible for their appointments), patriarchal aura, and increases in stock ownership (as part of the CEO’s compensation package) (Finkelstein & Hambrick, 1996; Miller, 1991). Advances in CEO
tenure are associated with increases in CEO power because long-tenured CEOs are generally found to have assumed the board chair role also (Brickley, Coles, & Jarrell, 1997; Coles, McWilliams, & Sen, 2001; Shakir, 2009). Shakir (2009) suggested that long-tenured CEOs have likely earned the shareholder’s trust and, therefore, require less monitoring by the board. CEOs with long tenure may also derive power from their experience and knowledge of the organization allowing them to make better decisions (Finkelstein, 1992; Schwenk, 1993; Shakir, 2009). Long-tenured CEOs can also derive power from their standing in the community (prestige power) as they may attain a “high profile” personality (Finkelstein, 1992; Shakir, 2009). Increasing tenure allows the CEO to accumulate power from the ability to control the flow of information and resources (Buchholtz, Young, & Powell, 1998). Increased CEO power may also allow the CEO to decouple pay and firm performance leading to high levels of compensation in spite of poor firm performance (Buchholtz, Young, & Powell, 1998). Shivdasani and Yermack (1999) suggested that powerful CEOs, identified by long tenure, stock ownership, or family connections, tend to be more involved in the selection of board members.

Combs, Ketchen, Perryman, & Donahue (2007) suggested that tenure increases the CEO’s power because of key relationships developed over time.

Empirical evidence regarding CEO tenure and firm performance has been both limited and mixed (Shakir, 2009). It has been suggested that a curvilinear relationship exists between CEO tenure and firm profitability; indicating that as tenure increases, firm performance increases up to a point and then starts to decrease (Hambrick & Fukutomi, 1991; Miller, 1991; Miller & Shamsie, 2001; Walters, Kroll, & Wright, 2007).
The research suggested that CEOs may go through two phases during long tenures: the first phase focused on achievement of the firm’s goals and the second phase focused on maintaining the status quo and a strong commitment to earlier strategies that may not apply to a changing environment (Shakir, 2009). Miller’s (1991) study also suggested that CEO tenure was negatively related to the firm’s profits and sales growth. Shakir’s (2009) study suggested that long-term CEO tenure, coupled with CEO duality, had a negative relationship with firm financial performance.

**CEO/Board Member Similarity and Board Nominations.** CEOs may gain power when their demographics are similar to those of the board members (Young & Buchholtz, 2002). The comparative demographic characteristics of group members who interact on a regular, ongoing basis are described as relational demography (Tsui & O’Reilly, 1989; Young & Buchholtz, 2002). Comparative demographic characteristics included age, gender, education, and race (Jackson, Brett, Sessa, Cooper, Julin, & Peyronnin, 1991; Wagner, Pfeffer, & O’Reilly, 1984; Wiersema & Bird, 1993; Young & Buchholtz, 2002). The suggestion is that people with similar demographic characteristics are more inclined to act favorably toward each other and more likely to maintain their relationships (Young & Buchholtz, 2002). Westphal and Zajac (1995) discovered that demographic similarities between CEOs and boards influenced the board’s justification of long-term incentive plans. Zajac and Westphal (1996) found that powerful boards were inclined to select CEOs whose characteristics are more similar to the board member’s demographic profiles. Westphal (1999) found that CEOs and board members
that had strong social ties also had enhanced provisions for consultation from outside
directors.

Westphal and Zajac (1995) found that when the incumbent CEO is more
powerful than the board, then new board members tend to be demographically similar
to the CEO; and when the board is more powerful than the CEO, then new directors
tend to resemble the existing board members. Westphal and Zajac (1995) further
discovered that when there is greater demographically similarity between the CEO and
the board members, the CEO compensation package tends to be more generous.

**Classified Boards.** Classified boards are boards that are typically divided into
three classes with only one of the classes coming up for election each year (Finkelstein
& Hambrick, 1996). This provision stands in contrast to the election of the entire board
each year. The use of classified boards prevents the unfriendly transfer of control to a
hostile acquirer due to the need to wait for, at a minimum, two annual meetings to gain
control of the board (Faleye, 2007b). Proponents of classified boards claim that they are
an effective defense against unwanted takeovers (Bebchuk & Cohen, 2005; Finkelstein &
Hambrick, 1996). Critics claim that classified boards disadvantage investors by allowing
management entrenchment and lessening board accountability to shareholders
(Bebchuk & Cohen, 2005; Faleye, 2007a).

The empirical evidence suggests that firms with classified boards are slow to
remove poorly performing CEOs (Faleye, 2007a). Classified boards tend to insulate
boards and CEOs from shareholder wrath (Faleye, 2007b). Faleye’s (2009) study found
that firms with classified boards made less R&D and other capital asset investments
than other firms. Firms with classified boards were also found to be negatively associated with value creation (Bebchuk & Cohen, 2005; Faleye, 2009).

**Corporate Governance Indexes**

Corporate Governance Indexes. In order to examine the relationship between corporate governance and firm performance, a number of studies have attempted to create a governance index that might shed light on such a relationship. For example, Brown and Caylor (2009), developed a governance index based on 51 governance provisions derived from a dataset collected by Institutional Shareholder Services. The governance provisions covered items such as a board approved succession plan in place, the board controlled by more than 50% independent directors, director term limits exists, and board members are subject to stock ownership rights. Their findings indicated that four governance provisions are positively related to U.S. firms operating performance. The provisions are that boards do not include former CEOs, pension plans do not include non employees, the CEO sits on two or less boards of other public firms, and the audit firm was ratified at the most recent annual board meeting. Another important finding of the study was that recent governance provisions, mandated by the US stock exchanges, were not positively related to firm operating performance. Two other governance provisions worth noting were that the firm was not authorized to issue blank check preferred stock and only a simple majority was required to approve a merger.

In their 2006 study, Brown and Caylor, developed a Gov-Score, which was a summary governance measure created from 51 internal and external governance
provisions. Then, Brown and Caylor derived an index based on seven of the 51 provisions which drive the relationship between the Gov-Score and firm value. The seven provisions are: options not re-priced within the last three years; option grants, within the last three years, did not exceed three percent of basic shares outstanding; directors attended 75% of board meetings; proxy statements contain board guidelines; board members are subject to stock ownership guidelines; annual board elections; and no poison pill provision (unless approved by shareholders).

Brown and Caylor’s (2006) study examined the relationship between corporate governance and firm performance. Using data from Institutional Investor Services, 51 governance factors were examined covering audit, boards, bylaws, director education, compensation, ownership, progressive practices, and state of incorporation. Their findings suggested that thirteen factors were related to good firm performance: board meeting attendance of 75%, more than 50% independent directors, independent nominating committee, governance committee meets once per year, board guidelines in proxy statement, options not re-priced within the last three years, minimal option burn rate, option re-pricing prohibited, executive stock ownership guidelines, director stock ownership guidelines, director mandatory retirement age, board performance reviewed regularly, and outside advisors mandatory for the board. Additional findings suggested that seven factors were associated with bad firm performance: consulting fees were less than audit fees paid to auditors, shareholder proposals addressed by managers within 12 months, annual board elections, simple majority required to approve merger, no
poison pill (unless approved by shareholders), bylaws amended with a majority vote, and directors own stock after one year of service.

Khanchel’s empirical study (2007) examined good governance factors in US firms. Specifically, four indexes were created: a board index, a board committee index, an audit committee index, and a composite index of all of the indexes. Khanchel’s findings indicated that the board committee’s index, the audit committee’s index, and the total index were statistically and positively related to firm size, investment opportunities, intangible assets, and directors and officer’s ownership. Other findings indicated that each index was positively related to institutional ownership and external financing needs. On the other hand, growth opportunities and firm performance were not found to have any impact on governance quality.

Gompers, Ishii, and Metrick’s (2003) empirical study created a governance index using 24 governance rules provided by the Investor Responsibility Research Center. The 24 governance rules were subdivided into five themes consisting of delay tactics against hostile takeovers, voting rights, director and officer protection, other takeover defenses, and state laws. Their findings suggested that firms with stronger shareholder rights were positively related to higher firm value, higher profits, higher sales growth, lower capital expenditures, and fewer acquisitions.

Khiari, Karaa, and Omri’s (2007) empirical study examined six governance areas to create a governance index. The six governance areas were: inside control efficiency, managerial discretion, ownership concentration, CEO dominance of the board, CEO entrenchment, and inside financial control efficiency. Inside control efficiency was
comprised of items like board size, director independence, audit committee size, types of board committees, committee meetings, and ownership levels. Managerial discretion was comprised of items like board committees, CEO presence on committees, ownership, board size, board independence, and audit committee size. Ownership concentration was comprised of items like percentage of shareholders holding 5% of the firm’s capital and percentage of capital held by institutions. CEO dominance of the board was comprised of items like CEO on compensation committee and CEO on nomination committee. Manager entrenchment was comprised of items like CEO tenure and CEO percentage of ownership. Inside financial control efficiency was comprised of items like the number of audit committee meetings per year and the existence of a charter. Their results indicated a significant and positive relationship on inside control efficiency and inside control efficiency with firm performance. Further, the results indicated a negative relationship with managerial discretion, ownership concentration, CEO dominance of the board, and CEO entrenchment with firm performance.

**Summary.** To summarize, the review of the extensive governance literature, over the last few decades, suggests that the empirical findings have been both inconsistent and inconclusive. In particular, there have been inconsistent findings on the direct effects between board/CEO characteristics and firm performance. Zahra and Pearce (1989) have suggested that a number of reasons may explain why there are inconsistent results in the governance research: contextual factors may not be accounted for such as the industry type, organization’s life cycle, and organizational strategy; how the board actually makes decisions; relying on univariate analysis of just one or two board
variables; measuring board variables differently across studies; and using contemporaneous measures of firm performance instead of lagged measures of performance. Finkelstein and Hambrick (1996) have suggested that individual board characteristics, such as board size or composition, may not have universal effects on firm financial performance. Instead, “boards may have an indirect effect on firm performance through the quality of their managerial monitoring or their involvement in strategy formulation” (Finkelstein & Hambrick, 1996: 239). Dalton, Daily, Ellstrand, and Johnson (1998) supported this view, following their meta-analysis on board composition and leadership structure, by suggesting that board’s impact on firm performance may not be easily understood by just looking at the board’s composition or structure. While Dalton et al. (1998) maintain that boards do have an impact on firm financial performance; their meta-analysis suggested that individual board variables failed to provide convincing evidence of a direct effect on firm performance.

If individual board variables do not provide evidence of a direct effect on firm performance, as suggested by Dalton et al. (1998), then one might speculate that a combination of variables may indicate a strong relationship between boards, CEOs, and firm performance. One interesting area of governance research has been the use of governance indexes (Brown & Caylor, 2006, 2009; Gompers et al., 2003; Khanchel, 2007), which have indicated a positive relationship between board variables and firm value (Brown & Caylor, 2009, 2006; Gompers et al., 2003). Extending the use of indexes to board and CEO power might provide valuable insight on the relationship between boards/CEOs and firm performance.
Chapter III

Definitions and Research Questions

This chapter is divided into five sections. The first section defines and discusses the definitions of corporate governance, power, board power, and CEO power. The second section defines and discusses the research questions that guided this study. The third section defines and discusses the elements of the board of director power index. The fourth section defines and discusses the elements of the CEO power index. The fifth section defines the control variables used in this study.

Working Definitions

The focus of this research is on board of director power and CEO power. In this chapter, the elements that make up board of director power and CEO power are operationally explained. The definitions are grounded in concepts that have been previously developed and found in the governance literature. The working definitions are based on previous studies in the areas of board of director power and CEO power. Where appropriate, the definitions were adapted and modified for this study.

Corporate Governance. Monks and Minow (2004) defined corporate governance as “the structure that is intended to make sure that the right questions get asked and that checks and balances are in place to make sure that the answers reflect what is best for the creation of long-term, sustainable value” (p.2). In their earlier work, Monks and Minow (1995) suggested that corporate governance is the relationship among the CEO, management, stockholders, and employees, which determine the firm’s direction and performance. Pound (2000) argued that the debate surrounding corporate governance
has long centered on the balance of power between the board and the CEO. However, Pound (2000) further suggested that corporate governance is more about ensuring that decision-making, at the highest levels in the organizations, is effective and less about power between the parties.

**Power.** Power is a difficult concept to define, measure, and operationalize (Pfeffer, 1981). To measure power, one must estimate: what would have occurred in the absence of the use of power; the actor’s intention through the use of power; and the likelihood that what the actor desired had a chance to actually take place (Pfeffer, 1981). While power may be hard to define and measure, it does exist in organizations (Perrow, 1970; Pfeffer, 1981).

Many definitions of power have been proposed by researchers (e.g. Emerson, 1962; Finkelstein, 1992; Pfeffer, 1981). For example, power has been defined as the ability of one social actor to overcome the resistance of another social actor in order to achieve a desired result (Pfeffer, 1981). Power may also be defined as the capability to obtain a desired outcome (Salancik & Pfeffer, 1977). Emerson (1962:32) defined power as: “The power of actor A over actor B in the amount of resistance on the part of B which can be potentially overcome by A”. Power may also be defined as a force: it is the force necessary to alter another person’s behavior from what it would have been without the application of force (Pfeffer, 1981). From the many definitions that can be found in the literature, it appears that “most definitions of power include an element indicating that power is the capability of one social actor to overcome resistance in achieving a desired objective or result” (Pfeffer, 1981).
Pfeffer (1981) suggested that to understand the concept of power one may begin by assessing power in organizations. Power can be assessed by examining its determinants, consequences, and representational indicators. Some of the determinants of power include the ability to provide resources, being irreplaceable, and the ability to affect the decision process (Pfeffer, 1981). The consequences of power may include financial allocations among the organization’s subunits, the allocation of positions throughout the organization, policy decisions, and business and corporate-level strategy decisions (Pfeffer, 1981). Representational indicators are identified by those people in critical roles such as membership on important committees, being on the board of directors, and critical administrative positions (Pfeffer, 1981).

At the individual executive level, power can be assessed by examining the organization’s structure, the ownership structure, the executive’s expertise, the executive’s prestige level, and the relationships formed by the CEO (Finkelstein, 1992; Young & Buchholtz, 2002). The executive’s structural power provides control over others within the organization (Finkelstein, 1992). Ownership power gives the executive some control over the board of director members (Finkelstein, 1992). The executive’s ability (expertise) to deal with environmental contingencies and contribute to the firm’s overall success gives the executive expert power (Finkelstein, 1992). The executive’s prestige power comes from his or her reputation, external contacts, and social ties (Finkelstein, 1992). Finally, relationships with executives, board members, and key stakeholders can add to the CEO’s power through support for the CEO’s decisions (Westphal & Zajac, 1995).
Board Power. In this study, board of director power was defined as the ability to effectively monitor, influence, control, and discipline the CEO; and provide for the shareholder’s primary goal of profit-maximization (Finkelstein & Hambrick, 1996). In the case of the board/CEO relationship, a powerful board is able to effectively influence the CEO in decision-making about long-term competitive strategy and resource allocation. The powerful board is also able to control the actions of the CEO if it appears that the firm is diverting from the predetermined strategy.

Board power increases as the board becomes more independent from the influence of the CEO (Daily, Johnson, & Dalton, 1999; Petra, 2005). As boards become more independent, they increase their ability to monitor and control the CEO’s actions (Chen 2007; Fema & Jensen, 1983). An ideal director is one who makes informed decisions with the firm’s best interests in mind and who is independent (Johnson, Daily, & Ellstrand, 1996).

Power accrues to the board based on the board’s structure, board composition, and the ownership of the board’s members (Abdullah, 2006; Bonazzi & Islam, 2007). It has been suggested that other factors may shift more power toward the board such as the appointment of a lead director, average board tenure, a compensation committee as well as a board member nominating committee (Klein, 1998; Penbera, 2009; Valenti, 2008). The board’s power increases when the committees are also independent of the firm’s management, particularly the CEO.

In this study, board structure was comprised of board size, non-duality, a formal compensation committee, a board member nominating committee, and the lead
director position on the board. Board size was the total number of board members.

Non-duality was defined as the board chair position and the CEO position being held by two different executives. The compensation committee was defined as a formal committee that reviews and sets the compensation and benefits package for the CEO and other top-level executives. The nominating committee was defined as the formal committee that sources, reviews the qualifications, and formally nominates new board of director members. Finally, the lead director was defined as the formal position on the board that provides leadership to all outside directors, sets the agenda for board meetings, and oversees the work of the board committees (Lorsch & Zelleke, 2005; Allan & Widman, 2000; Penbera, 2009). In addition to these duties, the active lead director facilitates communications to the independent directors from the top management team; conducts director evaluations and makes recommendations for committee appointments; conducts CEO evaluations; makes outside advisor recommendations and evaluations, and builds relationships with key stakeholders (Penbera, 2009).

In this study, board composition was defined as the composition of the board, the composition of the board committees, and the average board tenure. Board composition was the number of inside directors versus the number of outside directors. Inside directors were those board members that were currently employed by the firm or who had recently been employed by the firm. Outside, independent directors were defined as those board members who did not work for the firm and who had no affiliation with the firm or with any members of the firm. The composition of the committees was defined as the number of inside directors who were committee
members versus the number of outside, independent committee members. Average board tenure was defined as the average number of years each member has served on the board.

Board ownership was defined as the amount of voting shares of stock owned by the board members as a percentage of the outstanding voting shares of stock. Shareholder power was defined as the amount of voting shares of stock owned by the large shareholders as a percentage of the outstanding voting shares of stock.

**CEO Power.** CEO power can be defined as the ability to effectively run the organization, extend his or her tenure, and pursue strategies that will personally benefit the CEO (Combs, Ketchen, Perryman, & Donahue, 2007). CEO power is also the ability to make and carry out strategic decisions regardless of the board’s position or influence (Feng, Ghosh, & Sirmans, 2005; Finkelstein & Hambrick, 1996;).

Agency theorists would suggest that firm performance suffers when the CEO has too much power (Dalton et al., 1998). On the other hand, stewardship theory argues that a powerful CEO benefits the organization by allowing just one leader to command the firm, especially during times of crisis (Dalton et al., 1998). The powerful CEO is also able to easily influence the board into rubberstamping his or her decisions without much scrutiny (Pearce & Zahra, 1991).

Power accrues to the CEO through tenure, CEO duality, and the CEO’s ownership (Dalton et al., 1998; Finkelstein & Hambrick, 1996; Khanchel, 2007). It has also been suggested that CEOs gain power by serving on the board’s committees (such as the compensation and nominating committees); working with demographically similar
board members, the number of board member nominations made by the CEO; and whether the board members are elected on a staggered basis (classified boards) (Faleye, 2007; Tsui & O’Reilly, 1989; Westphal, 1999; Westphal & Zajac, 1995; Young & Buchholtz, 2002).

CEO tenure was defined as the number of years the CEO has been in position. As stated earlier, CEO duality was defined as the Board Chair position and CEO position being occupied by the same person. CEO ownership was defined by the amount of voting shares of stock held by the CEO. Demographically similar board members were defined as the number of board members that have similar age, education, and functional background as the CEO. Classified boards were defined as boards that are elected on a staggered basis such as boards where only one-third of the members come up for election each year.

**Research Questions**

The framework for this research is the agency theory perspective. The agency theory perspective suggests that governance mechanisms should be implemented to protect the shareholders interests, control agency costs, and align both the agent’s goals with the principle’s goals (Davis et al., 1997). Governance mechanisms include governance structures such as the boards of directors, financial audits, and executive performance evaluations (Bonn & Pettigrew, 2009).

Board independence is an important aspect of maintaining board effectiveness (Davis et al., 1997). A powerful board is considered to be an effective board (Finkelstein & Hambrick, 1996). Board power is determined by the board’s structure, the board’s
composition, and the level of ownership by board members and large shareholders. The board’s level of effectiveness can be mitigated by the CEO’s power (Finkelstein & Hambrick, 1996). Using the elements earlier identified as items of board power and CEO power, this study seeks to develop a new measure for board power and a new measure of CEO power.

Three major research questions guided this research:

Research Question 1: In the development of a new measure of board power, what elements would exhibit the appropriate properties?

Research Question 2: In the development of a new measure of CEO power, what elements would exhibit the appropriate properties?

Research Question 3: Do board power and CEO power vary according to industry, firm size, and degree of globalization?

**Board Power Index**

Previous research has focused on individual elements of power and the relationship to firm financial performance (e.g. Brown & Caylor, 2009; Dalton et al., 1998; Khanchel, 2007; Lorsch & Maclver, 1989; Ning, Davidson, & Zhong, 2007;). However, much of the research has shown to be inconclusive in finding definitive support for either agency or stewardship theory (Dalton et al., 1998). In this study, the focus is on a composite index of the elements of power that allow the board to effectively monitor and discipline the CEO. In keeping with agency theory, the basic position of this study is that a powerful board is needed to effectively carry out its roles and duties. As described earlier, the board’s roles include the control role, service role,
and the resource dependence role; while the board’s duties include hiring and firing the
top executives, setting compensation packages, and approving the firm’s strategy
(Chatterjee & Harrison, 2005; Finkelstein & Hambrick, 1996).

In this study, board power was defined by board structure, board independence,
and the ownership of board members and large shareholders. The elements of board
structure were board size, non-duality, the presence of the compensation committee,
the presence of the nominating committee, and the lead director position. Each of these
elements will be described in more detail below.

**Board Size.** Boards of *Fortune* 500 firms may have as few as five members or
more than 20 members. Research has suggested that both large and small boards can
be ineffective in monitoring the CEO. Small boards may become too homogenous
(Jackson, Brett, Sessa, Cooper, Julin, Peyronnin, 1991) and very large boards may be
easily manipulated by the CEO (Lee & Carlson, 2007). While McIntyre, Murphy, and
Mitchell (2007) suggested that as board size increased, firm performance tended to
decrease, others have suggested that there is a positive relationship between board size
and firm performance (Dalton, Daily, Johnson, & Ellstrand, 1999). In this study, the
position was taken that as board size increases, so does board power.

**CEO/Board Chair Duality.** Agency theorists would strenuously argue that CEO
duality prevents any meaningful monitoring and disciplining of the CEO by the board
(Dalton et al., 1999; Finkelstein & D’Aveni, 1994). Separating the board chair and CEO
positions allows the board to objectively monitor, evaluate, and discipline the CEO.
CEO duality reduces independence and puts more power into the hands of the CEO. Under stewardship theory, CEO duality is preferred because it allows for unity of command and the ability to react more decisively during times of crisis (Dalton et al., 1998). When CEOs also hold the board chair position, they have incredible power and influence over the decision-making process in the firm (Lorsch & Maclver, 1989; Lorsch & Zelleke, 2005). Duality allows the CEO to control the board meetings and the flow of information to the board members (Lorsch & Maclver, 1989).

**Average Board Tenure.** Board member tenure is an important indicator of the board member’s ability to effectively participate in the governance process (Canavan et al., 2004; McIntyre et al., 2007; Vafeas, 2003). Board members need sufficient time and exposure to the firm to learn how the firm operates and decisions are made. Additionally, board members need time to learn how to interact with other board members. Boards gain power as the average tenure of the board member increases. Boards with sufficient average tenure are likely to have the requisite experience, commitment, and competence to make effective decisions (Kosnik, 1990; Vafeas, 2003). Boards with longer tenure are likely to more effectively monitor and supervise the CEO (Canavan et al., 2004; Kesner, 1988; Kosnik, 1990; McIntyre et al., 2007; Vafeas, 2003).

**Compensation Committee.** The compensation committee is responsible for setting the CEO’s compensation package, which includes the incentives that are designed to align the CEO’s goals with the shareholder’s goals. Powerful boards, with structured compensation committees, tend to control CEO compensation better than
weak boards and use higher levels of performance-based incentives (Petra & Dorata, 2007).

**Nominating Committee.** Under agency theory, boards use nominating committees to evaluate and select board members that will help realize the shareholder’s goal of profit maximization. As a component of board power, nominating committees must work autonomously and without the influence of the CEO or any other special interest group, such as large investors. Consequently, nominating committees are expected to increase board independence and shift power to the board.

**Lead director.** Since the passing of the Sarbanes-Oxley Act of 2002, firms have been restructuring their governance mechanisms to strengthen the power of the board. One such mechanism that firms have used is the lead director position. The lead director provides for increased board member independence when the firm also has CEO duality. The lead director provides leadership to all outside directors to reduce the influence of the CEO. Lead director duties may include setting the agenda for board meetings and overseeing the work of the board committees (Allan & Widman, 2000; Lorsch & Zelleke, 2005). In some instances, they may hold separate meetings with the other independent directors so as to allow for candid discussions about the CEO’s performance (Firstenberg & Malkiel, 1994). The implementation of a lead director shifts power to the board and makes the board more independent.

As previously mentioned, independence is an important aspect of agency theory. Independence permits the board to operate without undue influence from those that
are being supervised. The elements of independence include board composition and committee independence.

**Board Composition.** Agency theory would suggest that only outside directors can meet the independence criteria. Any board member affiliation with the CEO would lessen the monitoring and disciplining function. Board power increases as board member independence increases.

**Committee Composition.** Under agency theory, total board independence would mean that the CEO does not have influence on the decisions that flow from the committees. This would insure that the board committees were acting independently. Independent committees increase the board’s power.

**Board Ownership.** The elements of ownership include board ownership and large shareholders. Board members that own substantial amounts of stock are expected to be more vigilant of the CEO’s actions and, therefore, more motivated to monitor and discipline the CEO. Board ownership shifts power to the board of directors.

**Large Shareholders.** Another element that shifts power toward the board is the presence of one or more institutional investors or large outside investors (Donker and Zahir, 2008). Institutional investors, or large outside investors, can shift the balance of power in favor of the board through the use of shareholder activism. When boards become complacent and firm performance suffers, large outside investors can use their influence to demand that the CEO take specific actions on their behalf. If effect, large investors can impose their will on both the board and the CEO. This type of power has become more evident in recent years. Large outside investors are not relying on boards,
or high profile CEOs, to achieve expected financial returns. When financial targets are not met, they use their influence to effect needed changes on either the composition of the board or the strategic focus of the firm. Large shareholders can shift power to the board.

**CEO Power Index**

According to agency theory, powerful CEOs, who are not properly monitored and disciplined, will eventually lead to lower firm financial performance. To attain their own goals, CEOs acquire power. CEO power can be found in structure, position, and relationships. In this study, the following elements of CEO power were examined: CEO tenure, CEO ownership, CEO/board member demographic similarity, CEO board nominations, and classified boards.

**CEO Tenure.** As CEOs extend their tenure, their power and ability to influence others increases (Finkelstein & Hambrick, 1996). Tenure allows the CEO to develop relationships with key individuals both in and out of the organization. Tenure also allows the CEO’s strategies to be fully implemented and adapted to meet the goals of the firm.

**CEO Ownership.** CEOs that own large amounts of stock tend to increase their tenure and wield great influence over the decision-making and long-term strategy in organizations (Boeker, 1992; Fizel & Louie, 1990). Large stock ownership shifts the balance of power in favor of the CEO.

**CEO-Board Member Similarity.** Elements of demographic similarity include age, education, and functional background (Westphal & Zajac, 1995). It has been suggested that, consistent with the similarity-attraction principle, demographic similarity can
increase interpersonal attraction and create bias in evaluations (Zajac & Westphal, 1996b). Additionally, social ties between the CEO and the board members may be enhanced when they are demographically similar (Westphal, 1999). Strong demographic similarity between the CEO and a large percentage of board members would indicate the balance of power in favor of the CEO (Westphal & Zajac, 1995).

**CEO-Board Member Nominations.** Board members that have been nominated by the CEO are considered to be more beholden to the CEO and sympathetic to the CEO positions (Daily & Dalton, 1994). A large number of board members appointed by the CEO would shift the balance of power in favor of the CEO.

**Classified Boards.** Many firms elect all board positions annually. Annual elections allow for the removal and replacement of poorly performing board members. Staggered (classified) boards elect only part of the board annually, which allows for board member entrenchment. Prior literature has suggested that classified boards shift power in favor of the CEO, especially when board members are sympathetic towards the CEO’s stances (Faleye, 2007).

**Control Variables**

Control variables are variables that are held constant in order to possibly clarify the relationship between the two other variables (Babbie, 2004). Three control variables have been identified for this study: industry, firm size, and degree of globalization. Each of these variables may influence the relationship between board power and CEO power and firm financial performance. In this study, industry was defined as the North American Industrial Classification System (NAICS) code of the industry in which the firm
operates. Firm size was defined as how large the firm is and was indicated by the total number of employees. Finally, degree of globalization was defined as the reach of firms beyond their country of origin.

**Conclusion.** In conclusion, this chapter was devoted to identifying and defining the elements of both board power and CEO power. Further, the importance of those elements in relation to the board power index and CEO power index was discussed. Finally, the control variables, used in this study, were identified and defined.

Within the context of the organization, there is an ongoing relationship between the board of directors and the CEO. Whether the relationship is adversarial or cooperative, each party seeks to acquire sufficient power to achieve its goals and fulfill its duties. As more power is acquired, the balance of power can shift back and forth between the board and the CEO. In other words, at times the CEO will have more power and, at other times, the board will have more power.

Agency theorists would suggest that firm performance will be maximized when the board is powerful, or more powerful than the CEO. Agency theory proponents would theorize that CEO power should not impact the relationship between board power and firm performance. Creating the proposed board power and CEO power indexes may go a long way to supporting agency theory.
Chapter IV

Methods

The research methods chapter is divided into four sections. The first section describes the design of the study. The second section discusses the samples of firms used in the study. The third section describes the measures used in the study. Finally, the fourth section describes the data analysis and statistical analysis used in the study.

Research Design

The study employed an exploratory factor analysis and confirmatory factor analysis using archival data. Data were collected from proxy statements, 10-K reports, and the firm’s annual reports. The proxy statements and the 10-K reports were examined on the SEC-Edgar web site for data collection.

The proxy statements provided data on the board power variables. Specifically, data were collected on board size, non-duality, compensation committee, nominating committee, lead director, board composition, committee composition, and ownership from the proxy statements. The proxy statements also provided data on the CEO power variables. Specifically data were collected on CEO ownership, CEO-board member demographic similarity, CEO-board member nominations, and classified boards from the proxy statements. The 10-K reports provided data on CEO tenure, industry characteristics, and firm size.

Sample

The sample for the study was Fortune 1000 corporations. Fortune 1000 firms were selected for this study because of the availability of data on the firms’ board of
directors and executive management. *Fortune* 1000 corporations also have active boards of directors that can have a significant influence on the firm’s strategies and on the shareholder’s interests.

The data for this study were collected after the enactment of the Sarbanes-Oxley Act of 2002. Specifically, the time frame of data collection was 2007-2008. This time frame was chosen to allow firms to make adjustments to their governance practices in compliance with the new regulations.

Firms used in this study represented industries such as: automotive, financial, energy, publishing, retail, wholesale, manufacturing, media, pharmaceuticals, healthcare, and technology. The size of the firms ranged from 500 employees up to 650,000 employees. The sampled firms conducted business in as few as one country to as many as 195 countries.

**Measures**

The goal of this study was to create two new measures: one for board power and one for CEO power. To accomplish this, two stages of data analysis were employed. In the first stage, the raw data were collected, inputted into SPSS, and analyzed to discover the properties. In the second stage, the results of the first stage analysis were used to create the actual board power index and the CEO power index.

**Board of Director Power.** During the first stage, the data were collected for the board of director index, which included: board size, non-duality, average board tenure, compensation committee, nominating committee, board composition, lead director,
committee composition, and board ownership and large outside investor ownership.

The board power variables data were collected as follows:

*Board Size.* Board size was measured as the total number of board members.

*Average board tenure.* Average board tenure was measured as the total number of years served on the board by all members divided by the number of members on the board.

*Non-duality.* Non-duality was measured as a dichotomous variable. If the firm separated the roles of board chair and CEO, then the variable was scored as 1. If the board chair was also the CEO, then the variable was measured as 0.

*Compensation Committee.* Compensation committee was measured as a dichotomous variable. If the firm had a formal compensation committee, then the variable was measured as 1, otherwise it was scored as 0.

*Nominating Committee.* Nominating committee was measured as a dichotomous variable. If the firm had a formal nominating committee, then the variable was measured as 1, otherwise it was scored as 0.

*Lead Director.* Lead director was measured as a dichotomous variable. If the firm had an active lead director, then the variable was scored as 1, otherwise it was scored as 0.

*Board Composition.* Board composition was measured by the percentage of outside, independent directors to the total number of board directors.
Committee Composition. Committee composition was measured as a dichotomous variable. If the board’s committees were comprised of only outside, independent members, then the variable was scored as 1, otherwise it was scored as 0.

Ownership. Board ownership was measured as the percentage of common stock owned by the board members. Shareholder ownership was measured as the percentage of common stock owned by large outside investors.

CEO Power. During the first stage, the data were collected for the CEO power index, which included: CEO tenure, CEO-board member similarity, CEO-board member nominations, CEO ownership, duality, and classified boards. The CEO power variables were collected as follows.

CEO Tenure. CEO tenure was measured as the total number of years in the CEO position.

CEO Ownership. CEO ownership was measured as the percent of common stock owned by the CEO of the total amount of outstanding common stock.

CEO-Board Member Demographic Similarity. CEO-board member demographic similarity was measured as the proportion of board members that were demographically similar to the CEO. The demographic characteristics that were compared among the subjects were age, education, and functional backgrounds (Westphal, 1998). The educational and functional characteristics were converted to categorical measures. For example, the educational backgrounds were categorized as: (1) less than a bachelor’s degree, (2) less than a master’s degree, (3) less than a doctoral degree, and (4) a doctoral degree (Westphal, 1998; Wiersema and Bantel, 1992). Then,
if the board member had similar educational background as the CEO, then it was scored as 1, otherwise it was scored as 0 (Westphal and Zajac, 1995).

The functional backgrounds were categorized as: (1) throughput functions (such as operations, engineering, or research and development), (2) output functions (such as marketing or sales), and (3) peripheral functions (such as finance or law) (Hambrick and Mason, 1984). Then, if the board member had similar functional background as the CEO, it was scored as 1, otherwise it was scored as 0 (Westphal and Zajac, 1995).

Age similarity was measured as the amount of variation between the CEO and the board members. If the board members age was within one standard deviation of the CEO’s age, it was scored as 1; otherwise it was scored as 0.

Finally, for each of the demographical similarity measures, a variant of the Blau’s index of heterogeneity was applied (Murray, 1989). Specifically, the proportion of the CEO-board member dyads was computed for each measure (age, education, and functional background). Finally, the overall degree of demographic similarity was computed by averaging the proportion of similarity for all measures.

**CEO-Board Member Nominations.** CEO-board member nominations were measured as the percentage of CEO nominated board members to the total board members since the CEO took office. Following Valenti (2008) and Gulati and Westphal (1999), it is assumed that new board members are being nominated by the CEO.

**CEO Ownership.** CEO ownership was measured as the percentage of common stock owned by the CEO.
Duality. CEO duality was measured as a dichotomous variable. If the firm combined the roles of board chair and CEO, then the variable was scored as 1. If the board chair was not also the CEO, then the variable was measured as 0.

Classified Boards. Classified boards were measured as a dichotomous variable. If the board elected members on a staggered basis, then the variable was scored as 1. If the board elected members annually, then the variable was scored as 0.

Control Variables. In this study, three control variables were analyzed: industry, firm size, and degree of globalization. These three particular variables were included because they may influence the relationship between board power, CEO power and firm’s financial performance. The industry in which each firm competes was identified by its NAICS code. Dummy variables were created for each NAICS code and were assigned to each of the firms in the sample. Firm size was measured using the logarithm of the firm’s total workforce. Degree of globalization was measured as the number of countries in which the firm conducted business or actually had a physical presence.

Stage Two Index Construction. An index is generally considered to be an efficient device for analyzing data. It summarizes many indicator variables into a single numerical score, while still capturing the meaning of the individual variables (Babbie, 2004). Indexes are composite measures of several indicator variables, commonly using a summative approach.

Babbie (2004) guided the construction of the indexes. The variables that demonstrated the appropriate properties in stage one were used in stage two to construct the indexes. The board of director power index was created by combining the
scores for each of the variables that were defined by the factor analysis. The variables included board size, board composition, lead director, nonduality, board member ownership, and outside investor ownership. The variables were first transformed into categorical variables. The transformation to categorical variables was necessary due to the broad range of the data on board size, board composition, board ownership and outside investor ownership. According to Babbie (2004), constructing an index should include an attempt to equally weight the items. To accomplish this, board size was transformed as follows: 7 - 8 members = 0, 9 - 11 members = 1, and greater than 12 members = 2. Board composition was transformed as follows: 70% - 79% = 0, 86% - 91.9% = 1, 92% - 100% = 2. Lead director was transformed into: 0 = no lead director, 1 = lead director, and 2 = very active lead director. Nonduality was transformed into: 0 = CEO and board chair positions combined and 2 = separated CEO and board chair roles. Board member ownership was transformed as follows: less than 1% = 0, 1% - 9% = 1, and greater than 10% = 2. Outside investor ownership was transformed as follows: less than 5% = 0, 10% - 25% = 1, and greater than 25% = 2. After transforming the variables, the scores from each of the variables were summed to arrive at a total board of director power score.

The CEO power index was created by combining the scores for each of the variables that were defined by the factor analysis. The variables included CEO tenure, CEO ownership, and CEO/board member nominations. The variables were first combined into categorical variables. CEO tenure was transformed as follows: 1 – 3 years = 0, 4 – 10 years = 1, and 10+ years = 2. CEO ownership was transformed as follows: less
than 1% = 0, 1- 4.9% = 1, and 5% and greater = 2. CEO- board member nominations were transformed as follows: less than 10% = 0, 11 – 25% = 1, and greater than 25% = 2. After transforming the variables, the scores from each of the variables were summed to arrive at a total CEO power score.

Data Analysis

In stage one of the analysis, the data for each index were first analyzed using exploratory factor analysis in SPSS. Specifically, principal components analysis was used to discover how many factors were drawn from the data. Prior to conducting the main analysis, the assumptions associated with factor analysis were analyzed. Descriptive statistics were used to summarize the frequencies of the variables for both the board power and CEO power indexes. After screening the data for missing items and outliers, exploratory factor analysis was used to determine which of the variables for the new board of director power measure were highly associated with each other. Factor loadings of .40 or higher were used to determine which of the variables were associated (Tabachnick & Fidell, 2001). Variables that cross loaded on more than one variable were eliminated. Variables with low factor loadings (less than .40) or variables that loaded on more than one factor were eliminated because they represented a weak (impure) measure of the factor (Tabachnick & Fidell, 2001). Additionally, factors with only one variable were also eliminated. Factors with only one variable were considered to be poorly defined and, therefore, represented an unreliable measure (Tabachnick & Fidell, 2001).
In stage two of the analysis, the variables that indicate the appropriate properties were entered into the confirmatory factor analysis in SPSS. Specifically, the data were analyzed using principal axis factoring (common factor analysis) to see if the variables that determined the factors in the exploratory factor analysis would still load onto the same factors. The variables, related with board power that loaded on only one factor and factors with more than one variable, were used for the confirmatory factor analysis. Confirmatory factor analysis (common factor analysis), using principal axis factoring, was used to determine if the factors discovered in the exploratory factor analysis were still viable.

Then, exploratory factor analysis was used to determine which of the variables for the new CEO power measure were highly associated with each other. Factor loadings of .40 or higher were used to determine which of the variables were associated (Tabachnick & Fidell, 2001). Variables that cross loaded on more than one factor were eliminated. Additionally, factors with only one variable were also eliminated.

The variables, related with CEO power that loaded on only one factor and factors with more than one variable, were used for the confirmatory factor analysis. Confirmatory factor analysis (common factor analysis), using principal axis factoring, were used to determine if the factors discovered in the exploratory factor analysis were still viable.

To examine how the board power and CEO power indexes might vary according to industry, firm size, and degree of globalization, the data were analyzed using Analysis of Variance (ANOVA). The data for each variable was transformed into categorical
variables and then analyzed in SPSS. Descriptive statistics were used to summarize the frequencies for all three variables. Prior to running the analysis, the assumptions associated with ANOVA were analyzed.

The cases were first arranged by industry classification and then the means for board of director power and CEO power ratings were computed and compared. Next, the cases were arranged by firm size (indicated by the number of employees) and the means for board of director power and CEO power ratings were computed and compared. Finally, the cases were arranged by degree of globalization (indicated by the number of countries in which the firm conducted business) and then the means for board of director power and CEO power ratings were computed and compared. Following the initial analysis, post hoc tests were conducted to determine where the differences between the means existed. Finally, where appropriate, eta squared was calculated to determine the effect size.
Chapter V

Results

This chapter has four sections. The first section discusses the findings from the
data analyses regarding the new board of director power measure. The second section
discusses the findings from the data analyses related to the new CEO power measure.
The third section discusses the analyses of the three control variables: industry, firm
size, and global diversity. The fourth section discusses the internal and external
validation of the indexes.

Board of Director Power Measure

Exploratory factor analysis (EFA) was performed to determine the number of
factors related to board of director power. Principal components extraction with
varimax rotation was performed through SPSS on 10 items related to board power. The
ten variables were board size, board composition, board ownership, average board
tenure, lead director, nonduality, large investor, compensation committee, nominating
committee, and committee composition. The original sample, used for the exploratory
factor analysis, included 353 cases but was reduced to 296 cases due to missing data
(Tabachnick & Fidell, 2001). One of the variables, compensation committee, was
eliminated when it was discovered that almost all cases exhibited the same score.
Descriptive statistics and a correlation matrix for all of the variables used in the EFA are
presented in Table 1 (A and B). The means and standard deviations for the variables
were acceptable, indicating that sufficient variance existed to proceed with the analysis.

Insert Table 1 (A and B) about here.

67
For board of director power, three factors were extracted. All factors were well defined by the variables and there were no complex variables. One factor was related to board structure (board size and director composition), a second factor was related to reducing CEO influence (nonduality and lead director) and the third factor was related to ownership (board member ownership and large investor ownership). Communality values were moderate: board size (.707), board composition (.637), lead director (.678), nonduality (.589), board ownership (.523), and large investor (.635) (Tabachnick & Fidell, 2001). The first factor explained 26.88% of the variance, the second factor explained 18.91% of the variance, and the third factor explained 17.04% of the variance. In sum, the three factors explained 62.83% of the total variance.

Confirmatory factor analysis (common factor analysis) was performed to determine the number of factors related to board of director power. Principal axis factoring with promax rotation was performed through SPSS on the 6 items related to board power found in the exploratory factor analysis. The sample was expanded to 604 cases but was reduced to 510 cases due to missing data. The three factors found in the exploratory factor analysis were confirmed in the confirmatory factor analysis. All factors were well defined by the variables and there were no complex variables. As in the EFA, one factor was related to board structure (board size and director composition), a second factor was related to reducing CEO influence (nonduality and
lead director) and the third factor was related to ownership (board member ownership and large investor ownership).

CEO Power Measure

Exploratory factor analysis (EFA) was performed to determine the number of factors related to CEO power. Principal components extraction with varimax rotation was performed through SPSS on 6 items related to CEO power. The original sample included 353 cases but was reduced to 296 cases due to missing data (Tabachnick & Fidell, 2001). For CEO power, two factors were extracted. All factors were well defined by the variables and there were no complex variables. One factor was related to CEO entrenchment (CEO tenure, nominations to the board, and CEO ownership) and a second factor was related to structure/influence (duality, classified boards, and CEO/board member similarity).

Confirmatory factor analysis (common factor analysis) was performed to determine the number of factors related to CEO power. Principal axis factoring with promax rotation was performed through SPSS on the 6 items related to CEO power supported in the exploratory factor analysis. The sample was expanded to 604 cases but
was reduced to 510 cases due to missing data. The two factors found in the exploratory
factor analysis were reduced to one factor in the confirmatory factor analysis.
Specifically, the factor related to CEO entrenchment (CEO tenure, nominations to the
board, and CEO ownership) was confirmed and the second factor was eliminated due to
the reduced loadings (less than .40) of duality (.173) and classified boards (-.091)
(Tabachnick & Fidell, 2001).

Insert Table 5 about here.

Control Variables

Three control variables were identified to examine their influence on the power
indexes. The three variables used in this analysis were the industry in which the firms
operated, firm size, and the firm’s degree of geographic diversity. Descriptive statistics
and a correlation matrix for all of the variables are presented in Table 6 (A and B). First
the firms were categorized according to their North American Industrial Classification
Code (NAICS). A description of the NAICS codes can be found in Figure 1:

Insert Table 6 (A and B) about here.

Insert Figure 1 about here.
**Board Power and Industry Type.** A one-way analysis of variance (ANOVA) was used to analyze the data. The fixed categorical independent variable was industry type with eleven classifications (according to NAICS code; see Figure 1); the continuous random dependent variable was board power as measured by the board power index presented in this study. Examination of the assumptions indicated that all assumptions were met. Presented in Table 6 are the means and standard deviations for each cell. The results of the ANOVA are presented in Table 7.

Examination of the results indicates there was no significant difference in board power depending on the type of industry in which the firm operates. Examining board power and type of industry, firms in the transportation/warehousing ($\bar{x} = 5.90$) and the finance/insurance/real estate ($\bar{x} = 5.83$) industries had the highest levels of board power. Firms in the mining ($\bar{x} = 4.70$) and utilities ($\bar{x} = 4.83$) industries had the lowest levels of board power. All other industries used in this study had moderate levels of board power: construction ($\bar{x} = 5.47$), manufacturing ($\bar{x} = 5.38$), wholesale trade ($\bar{x} = 5.19$), retail trade ($\bar{x} = 5.69$), information ($\bar{x} = 5.47$), technical services/waste management ($\bar{x} = 5.48$), healthcare ($\bar{x} = 4.96$), and entertainment/hospitality ($\bar{x} = 5.43$).

…………………………………………………………………
Insert Table 7 about here.
…………………………………………………………………
…………………………………………………………………
Insert Table 8 about here.
…………………………………………………………………
**Board Power and Firm Size.** A one-way analysis of variance (ANOVA) was used to analyze the data. The fixed categorical independent variable was firm size with six levels (level one = (1-5000); level two = (5001-10,000); level three = (10,001-15,000); level four = (15,001-30,000); level five = (30,001-50,000); level six = (50,001+)); the continuous random dependent variable was board power as measured by the board power index presented in this study. Examination of the assumptions indicated that all assumptions were met. Presented in Table 8 are the means and standard deviations for each cell. The results of the ANOVA are presented in Table 9.

Examination of the results indicates that there was no significant difference in board power by firm size. Examining board power and firm size, firms with 0-5,000 employees (\(\bar{x} = 5.08\)) and 10,001-15,000 employees (\(\bar{x} = 5.128\)) had the lowest levels of board power. Firms with 30,001-50,000 employees (\(\bar{x} = 5.82\)) had the highest levels of board power. Firms with 5,001-10,000 employees (\(\bar{x} = 5.60\)), 15,001-30,000 employees (\(\bar{x} = 5.58\)), and over 50,001 employees (\(\bar{x} = 5.38\)) had moderate levels of board power.
Board Power and Degree of Globalization. A one-way analysis of variance (ANOVA) was used to analyze the data. The fixed categorical independent variable was degree of globalization with four levels (level one = 1 country; level two 2-9 countries; level 3 = 10-19 countries; level four = 20-29 countries, level five=30-49 countries, level six=50-99 countries, and level seven=100 + countries); the continuous random dependent variable was board power as measured by the board power index presented in this study. Examination of the assumptions indicated that all assumptions were met. Presented in Table 10 are the means and standard deviations for each cell. The results of the ANOVA are presented in Table 11.

Examination of the results indicates that there was no significant difference in board power by degree of globalization. Examining board power and degree of globalization, firms conducting business in 30-49 countries (\( \bar{x} = 5.28 \)) and more than 100 countries (\( \bar{x} = 5.27 \)) had the lowest levels of board power. Firms conducting business in 20-29 countries (\( \bar{x} = 5.90 \)) had the highest levels of board power. Firms conducting business in a single country (\( \bar{x} = 5.43 \)), 2-9 countries (\( \bar{x} = 5.34 \)), 10-19 countries (\( \bar{x} = 5.42 \)), and 50-99 countries (\( \bar{x} = 5.60 \)) had moderate levels of board power.
CEO Power and Industry Type. A one-way analysis of variance (ANOVA) was used to analyze the data. The fixed categorical independent variable was industry type with eleven classifications (according to NAICS code; see Figure 1); the continuous random dependent variable was CEO power as measured by the CEO power index presented in this study. Examination of the assumptions indicated that all assumptions were met. Presented in Table 12 are the means and standard deviations for each cell. The results of the ANOVA are presented in Table 13.

Examination of the results indicates that there was no significant difference in CEO power by type of industry. Examining CEO power and industry type, firms in the utilities industry (\(\bar{x} = 3.39\)) and the transportation/warehousing industry (\(\bar{x} = 3.00\)) had the highest level of CEO power. Firms in the wholesale trade (\(\bar{x} = 1.96\)) and the information industry (\(\bar{x} = 1.67\)) had the lowest levels of CEO power; with the information industry having the lowest level of CEO power among all industries. All other industries had moderate levels of CEO power: mining (\(\bar{x} = 2.22\)), construction (\(\bar{x} = 2.24\)), manufacturing (\(\bar{x} = 2.73\)), retail trade (\(\bar{x} = 2.59\)), finance/insurance/real estate (\(\bar{x} = 2.56\)), technical services/waste management (\(\bar{x} = 2.71\)), healthcare (\(\bar{x} = 2.32\)), and entertainment/hospitality (\(\bar{x} = 2.56\)).
CEO Power and Firm Size. A one-way analysis of variance (ANOVA) was used to analyze the data. The fixed categorical independent variable was firm size with six levels (level one = (1-5000); level two = (5001-10000); level three = (10,001-15,000); level four = (15,001-30,000); level five = (30,001-50,000); level six = (50,001+)); the continuous random dependent variable was CEO power as measured by the CEO power index presented in this study. Examination of the assumptions indicated that all assumptions were met. Presented in Table 14 are the means and standard deviations for each cell. The results of the ANOVA are presented in Table 15.

Examination of the results indicate a significant difference in CEO power by firm size (F = 21.84; df = 5; p < .05). As noted in Table 13, 0-5,000 had a higher means (\( \bar{x} = 3.30 \)) on CEO power than any of the other firm sizes, while 30,001 – 50,000 had the least (\( \bar{x} = 1.70 \)). The other firms sizes were between the two in CEO power: 10,001 – 15,000 (\( \bar{x} = 3.10 \)); 5,001 – 10,000 (\( \bar{x} = 2.92 \)); 15,001 – 30,000 (\( \bar{x} = 2.44 \)); and 50,000 + (\( \bar{x} = 1.81 \)).

Results of the post hoc Tukey tests show that CEO power in firms with 0-5000 employees were significantly greater than that found for firms with 15,001 – 30,000 employees (p < .05); 30,001 – 50,000 employees (p < .05); and 50,001 + employees (p < .05). Eta squared strength of association indicated that 12% of the variability in CEO power could be accounted for by firm size.
CEO Power and Degree of Globalization. A one-way analysis of variance (ANOVA) was used to analyze the data. The fixed categorical independent variable was degree of globalization with seven levels (level one = 1 country; level two 2-9 countries; level 3 = 10-19 countries; level four = 20-29 countries, level five=30-49 countries, level six=50-99 countries, and level seven=100 + countries); the continuous random dependent variable was CEO power as measured by the CEO power index presented in this study.

Examination of the assumptions indicated that all assumptions were met. Presented in Table 16 are the means and standard deviations for each cell. The results of the ANOVA are presented in Table 17.

Examination of the results indicates that there was no significant difference in CEO power by degree of globalization. As noted in Table 15, 2 - 9 countries had a higher means on CEO power than the other degree of globalization ($\bar{x} = 2.82$), followed by 10 - 19 countries ($\bar{x} = 2.75$) and 1 country ($\bar{x} = 2.70$), 30 - 49 countries ($\bar{x} = 2.61$), 50 - 99 countries ($\bar{x} = 2.27$), and 20 - 29 countries ($\bar{x} = 2.24$), while 100 + countries ($\bar{x} = 2.05$) had the least amount of CEO power.

Insert Table 17 about here.

Insert Table 18 about here.
Scale Validation

**Index Validation.** Validating the indexes is an important step in determining whether the indexes actually measure what they purport to measure. Babbie (2004) suggested that index validation can be achieved by internal validation or external validation. Internal validation can be conducted by item analysis, which examines how well the index relates to, or predicts, the items in the index. External validation can be achieved by comparing the scores on the index with scores on other measures. Additionally, Babbie (2004) suggested that when beginning to construct a new index, one should always start with face validity. To establish face validity, the model, describing the items that made up board power and CEO power, was submitted to a panel of industry and academic subject matter experts. Four academics, in the field of management, examined the model and responded that the model was an accurate depiction of power between board members and CEOs. Then two industry experts, who held top management team positions, examined the model and suggested that it accurately described the elements of power between boards and CEOs.

**Internal Validation of the Board Power Index.** Each item that comprises the board of director power index: board size, board composition, nonduality, lead director, board ownership, and outside investor ownership was examined individually to determine how well it relates to board power. As previously discussed, board power is related to the board’s ability to monitor and supervise the CEO, remain independent from the CEO’s influence, and the ability to force the CEO to accept reforms suggested by the board. Board size has been identified as an indicator of the board’s ability to
properly monitor and supervise the CEO (Dalton et al. 1999; Williams et al. 2005). Board composition has been identified as an indicator of independence from the influence of the CEO and, therefore, allows the board to make decisions in the best interests of the shareholders (Mir & Seboui, 2008; Petra, 2005). Nonduality has been suggested as an indicator of a board’s ability to have better access to information about the firm as well as the ability to effectively manage the CEO (Lam & Lee, 2008). The lead director position has been identified as an indicator of board power because it counterbalances the effect of CEO duality and increases the independence of the board (Allan & Widman, 2000). Finally, board ownership and outside investor ownership have been used as indicators of board vigilance, which is a measurement of board power (Finkelstein & Hambrick, 1996; Johnson, Daily, & Ellstrand, 1996). Specifically, concentrated stock ownership allows the owner to pressure management to adopt board reforms (Johnson, Daily, & Ellstrand, 1996).

Additionally, Babbie (2004) suggested that individual items, within the index, can be examined for their contribution to the overall index. The item’s contribution can be determined by the percentage of cases contributing at various levels of the index. In order to achieve the highest score on the index, it was necessary to have scored the highest levels on all items. For example, board size had 16 percent of the cases at the lowest level, 71 percent of the cases at the moderate level, and 100 percent of the cases at the highest level. Board composition had 21 percent of the cases at the lowest level, 86 percent of the cases at the moderate level, and 100 percent of the cases at the highest level. Board ownership had 26 percent of the cases at the lowest level, 88
percent of the cases at the moderate level, and 100 percent of the cases at the highest level. Large outside investor had 14 percent of the cases at the lowest level, 60 percent of the cases at the moderate level, and 100 percent of the cases at the highest level. Nonduality has 65 percent of the cases at the lowest level and 100 percent of the cases at the highest level. Lead director had 54 percent of the cases at the lowest level, 91 percent of the cases at the moderate level, and 100 percent of the cases at the highest level.

**External Validation of the Board Power Index.** According to agency theory, there is a positive relationship between board power and firm financial performance. A number of the items that make up the board power index have also been shown to be positively related to firm financial performance. For example, board size has been shown to be positively related to firm financial performance (Dalton et al., 1999). Board composition, indicating higher levels of board independence, has been shown to be positively related to firm financial performance (Lee & Carlson, 2007; Rhoades et al., 2000). Nonduality has been shown to be positively related to firm performance (Elsayed, 2007). Board member and outside investor ownership has been shown to be positively related to firm performance (Hambrick & Jackson, 2000).

**Internal Validation of the CEO Power Index.** Each item that comprises the CEO power index: CEO tenure, CEO-board member nominations, and CEO ownership was examined to determine how well it relates to CEO power. CEO power is related to how much influence the CEO has with the board, how much the CEO controls the flow of information to the board, how many board member nominations have been provided
by the CEO, and the ability of the CEO to resist suggestions by the board and follow his or her own agenda. CEO tenure has been related to CEO power because long-tenured CEOs have the board’s trust, usually assume the board chair role, and require less monitoring by the board (Finkelstein & Hambrick, 1996; Shakir, 2009). CEO-board member nominations has been suggested as an indicator of board power because nominees tend to be demographically similar and may be beholden to the person who helps them gain access to board membership (Westphal & Zajac, 1995; Young & Buchholtz, 2002). CEO ownership may allow the CEO to resist the influence and suggestions made by the board.

As discussed above with the board index validation, individual index items can be examined for their contribution to the overall index (Babbie, 2004). The item’s contribution can be determined by the percentage of cases contributing at various levels of the index. In order to achieve the highest score on the index, it was necessary to have scored the highest levels on all items. For example, CEO tenure had 26 percent of the cases at the lowest level, 72 percent of the cases at the moderate level, and 100 percent of the cases at the highest level. CEO ownership had 73 percent of the cases at the lowest level, 95 percent of the cases at the moderate level, and 100 percent of the cases at the highest level. CEO nominations had 29 percent of the cases at the lowest level, 49 percent of the cases at the moderate level, and 100 percent of the cases at the highest level.

**External Validation of the CEO Power Index.** Consistent with agency theory, one would suggest that there is a negative relationship between CEO power and firm
financial performance. Empirical studies have supported that CEO tenure is negatively related to firm performance (Miller, 1991; Shakir, 2009). Further, Shakir’s (2009) study indicated that CEOs with long tenure and who also occupied the board chair position were associated with poor firm financial performance. Likewise, CEO-board member nominations have been shown to be positively related to the decisions that favor the CEO, which would increase the CEO’s power (Young & Buchholtz, 2002; Zajac & Westphal, 1995).
Chapter VI

Discussion

The primary goal of this study was to develop two measures: one for board power and the other for CEO power. The development of an index was chosen for each of the new measures. Beyond the primary goals, the secondary goal for this study was to examine how board power and CEO power differed based on firm size, type of industry, and degree of globalization.

Following exploratory and confirmatory factor analysis for board power, the resulting three factors seemed appropriate. One factor was related to the size of the board and the number of independent board members. It appeared that as boards got larger, the number of outside, independent board members also increased. As previously discussed, boards become more powerful as the board size increases and the number of independent directors increases (Dalton et al., 1999; Lee & Carlson, 2007). Larger boards are able to effectively supervise and monitor the CEO actions (Finkelstein & Hambrick, 1996; Lee & Carlson, 2007; Rhoades et al., 2000). Larger boards are also better able to staff committees that do much of the detail work. Larger boards are also able to select more diverse members so that appropriate experience (business, technical, legal, and financial) and connections to scarce resources can be attracted to the firm (Boyd, 1990; Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978; Wernerfelt, 1984). Boards with higher levels of independent members are more powerful because independent members are free from the influence of the CEO (Finkelstein & Hambrick,
Independence allows the board member to make tough decisions needed to keep the firm focused on its strategic goals.

The second factor for board power combined lead director and nonduality. Firms have been separating the board chair and CEO positions as a measure to increase board power. Separating the two positions allows the board to be more independent from the CEO’s influence (Finkelstein & Hambrick, 1996). Proponents of agency theory have long supported that it is impossible to effectively supervise, monitor, and discipline the CEO if he or she is also the board chair (Lam & Lee, 2008).

The lead director is a relatively recent addition to the governance practices of most Fortune 1000 firms (Allan & Widman, 2000). In some firms, it appears that the lead director is a token position merely to suggest that the board is attempting to be more independent (Penbera, 2009). In other firms, the lead director is given a significant role in the functioning of the board. For instance, a very active lead director will set the agenda at board meetings, hold separate meetings with the independent directors, conduct performance reviews of the CEO, and act as the liaison between the top management team and the board (Penbera, 2009). The lead director is expected to counterbalance the effect of duality, where the CEO is also the board chair (Penbera, 2009). The active lead director role increases board power by increasing the board’s independence from the CEO’s influence.

It is worth noting that the lead director variable had an inverse relationship with nonduality. This suggests that firms are more inclined to add the lead director position and to increase the lead director responsibilities when the CEO is also the board chair.
The third factor on board power combined board ownership and large investor ownership. Higher levels of ownership are expected to increase the board’s incentive to monitor, supervise, and discipline the CEO’s actions (Finkelstein & Hambrick, 1996). Increasing the monitoring, supervision, and disciplining of the CEO, increases the effectiveness of the board and, therefore, increases the board’s power (Finkelstein & D’Aveni, 1994; Finkelstein & Hambrick, 1996; Hoskisson, Johnson, & Moesel, 1994; Johnson, Daily & Ellstrand, 1996).

Following the exploratory and confirmatory factor analysis for CEO power, only one factor emerged. The variables that are associated with the factor were CEO tenure, CEO-board member nominations, and CEO ownership. Long CEO tenure has been frequently cited as one of the most important elements of CEO power (Brickley, Coles, & Jarrell, 1997; Coles, McWilliams, & Sen, 2001; Finkelstein & Hambrick, 1996; Shakir, 2009). Long tenure allows the CEO to develop strong ties with influential people both inside and outside the firm (Finkelstein, 1992; Shakir, 2009). Long tenure allows the CEO time to implement their strategies for firm success and make appropriate corrections as needed. They are also to surround themselves with subordinates who tend to be loyal to the CEO. Long-tenured CEOs are also likely to assume the board chair role (Brickley, Coles, & Jarrell, 1997; Coles, McWilliams, & Sen, 2001; Shakir, 2009).

CEO-board member nominations was the second element of the CEO power factor. CEO nominations to the board lead to more board members who are beholden to the CEO, thereby increasing CEO power (Westphal & Zajac, 1995). Board members who believe the CEO is responsible for their election to the board are more likely to be
loyal during difficult times, possibly extending the CEO’s tenure. CEO-board member nominations can greatly increase the CEO’s power (Westphal & Zajac, 1995).

CEO ownership was the third element of the CEO power factor. As CEO ownership increases, the CEO’s power increases. When CEOs acquire a controlling interest in the firm, then they have the power to implement self-serving policies and strategies. With majority ownership, CEOs acquire the legal power to make and enforce executive decisions.

CEO-board member similarity was the only element that sufficiently loaded on the second factor (.738) but unfortunately neither of the other two elements (duality and classified boards) loaded sufficiently. CEO-board member similarity was expected to add to CEO power because people who share similar demographic characteristics are supposed to have a natural affinity toward each other. In the case of the CEO and board members, the CEO would gain power by having a large number of demographically similar board members.

What was surprising was that duality did not sufficiently load onto the second factor. Duality has long been considered an element of CEO power. Duality allows the CEO to control the agenda at board meetings. Duality also allows the CEO to control the information flow to the board members. CEOs, who also serve as the board chair, would be reluctant to give up the CEO role and, therefore, may extend their tenure indefinitely.

Speculating on the reasons why duality did not load onto either factor might be that some firms have corporate bylaws that either forbid or demand that the CEO
occupy the board chair position. Another reason might be that firms make an arbitrary decision to combine the positions. Finally, since the Sarbanes-Oxley Act of 2002, firms may be arbitrarily separating the CEO and board chair roles to appease their stockholders (Valenti, 2007). Regardless, duality does not seem to be significantly associated with the other elements of CEO power.

Classified boards did not sufficiently load onto the second factor either. It has been suggested that classified boards increase the CEO’s power because the board members are insulated from turnover except when their term expires (Faleye, 2009). An entrenched board, which is supportive of the CEO, is likely to extend the CEO’s tenure and thereby increases the CEO’s power (Faleye, 2009).

The control variables analyses yielded only one important finding: CEO power was significantly related to firm size. Specifically, smaller firms had higher levels of CEO power than larger firms. This finding suggests that CEOs of smaller firms are able to acquire power more easily than CEOs of larger firms. A closer look at the data suggests that CEOs of smaller firms are able to stay in position longer and, therefore, are able to acquire more power. It could be that the environment of smaller firms is not as volatile or turbulent as the environment of larger firms. Thus, a lack of environmental turbulence may contribute to CEO longevity.

One interesting observation was that smaller firms appeared to have the highest levels of both board power and CEO power. Specifically, firms with 15,000 employees or less indicated that both boards and CEOs were able to acquire more elements of power than larger firms. This finding suggests that it may be easier for boards of smaller firms
to favorably control their structure and composition better than larger firms. It may also suggest that the ownership interests of smaller firms are more influential on the makeup of the board. CEOs of smaller firms appear to be able to accumulate more elements of power than CEOs of larger firms. It may be that CEOs of smaller firms are able to lengthen their tenure and, therefore, influence the number of nominations of new board members. Additionally, it may be that CEOs of smaller firms are also able to acquire more ownership interests in the firm. Of course, the situation may be that the CEO, with a large ownership interest, is able to acquire the other elements of power.

Since both boards and CEOs of smaller firms have the most power, there appears to be a better balance of power between the two parties than that of larger firms.

Firms with a lower degree of globalization appear to favor higher levels of CEO power. Firms operating in less than 10 countries had the highest levels of CEO power. This may be due to powerful CEOs being able to control the international growth of their firms. It is worth noting that CEOs of smaller firms, operating in fewer countries, appeared to have the highest levels of power. Firm size may also be associated with levels of globalization: smaller firms appear to have lower levels of globalization and CEOs are able to acquire more power in smaller firms.

CEOs of firms that operated in the most countries (100 + countries) appeared to have the lowest levels of CEO power. It may be that large international operations require organizational and governance structures that inhibit the CEOs power. For instance, CEO tenure and ownership interests may be lower in firms with large
international operations. Additionally, CEOs in the largest firms also had the lowest levels of CEO power.

Boards of firms with the highest levels of globalization had the lowest levels of power. Like the CEOs of these firms, boards appear to be lacking the ability to acquire the elements of power as described in this study. This phenomenon may be due to the governance policies of international firms that reduce the board’s ability to acquire power. For instance, firms with large international operations may use multiple, subsidiary boards to govern the enterprise. Also, firms with large international operations may not allow the concentration of ownership that may be found in less internationally diverse firms. Likewise, firms with large international operations may not have the board member independence that may be found in firms with smaller international presence.

Finally, it appears that firms in the transportation and warehousing industries allow the boards and the CEOs to acquire the highest levels of power. Firms in these industries tend to be some of the largest firms in the United States. This phenomenon seems to run contrary to the findings mentioned above where the largest firms, in general, had the lowest levels of CEO power and board power. Firms in these industries may attract higher levels of ownership and have much more elements of board member independence. Also, CEOs may be allowed to gain higher levels of tenure that, in turn, leads to higher levels of power.
Limitations

There are a number of limitations associated with this study that deserve to be identified and discussed. The limitations include generalizability, the use of archival data, the influence of the general business environment, the influence of increased government regulations, and unaccounted for variables. What follows is a discussion of each of these areas.

The sample for this study was large, publicly held, U.S. firms that were listed on the *Fortune* 1000 list. These firms were chosen because of the availability of their data and the governance structure within the firm. Hence, the findings may only be generalizable to large U.S. firms with a similar governance structure. Firms outside the U.S. may not have similar governance structure. Likewise, smaller, or privately held firms may not be organized as large firms. In some cases, boards of directors might not even be a formal function within the firm as in the case of an owner-managed company.

A second limitation might be the use of archival data. This study relied heavily on the use of archival data collected by the federal government. Archival data may not be subject to intense scrutiny and fact-checking and may be subject to errors. Also, the data may be subject to misinterpretation because it may have been collected for different reasons. Finally, archival data is sometimes not viewed within the context in which the data was originally collected.

A third limitation concerns the influence of the general business environment in which U.S. firms are currently operating. Within the last ten years, large, publically held, U.S. firms have had to endure intense scrutiny by the investing public due to corporate
scandals. Firms, such as WorldCom, Adelphia, and Enron that have been involved with self-serving behavior on the part of top management, have caused an investor backlash. In some cases, the backlash has been the collapse of the firm’s stock value, whereby investors lost their investment. The influence of these scandals has forced many U.S. firms to adopt certain governance policies and structural changes to appease investors. These changes may have impacted the determinants of power within the firm.

Increased government regulations may have unduly influenced the results of this study and may be a limitation worth noting. The recent scandals have forced increased scrutiny and influence by the federal government. Specifically, the Security and Exchange Commission has imposed increased regulations on the governance within publicly held U.S. firms in the form of the Sarbanes-Oxley Act of 2002 (Valenti, 2007). The Act forces firms to install an audit committee, dictates the staffing requirements of the committee members, and specifies the manner in which the Audit Committee functions (Valenti, 2007). The influence of these regulations could impact the power between the firm’s board of directors and top management.

Increased regulations by the stock exchanges may have an impact on this study. Along with the increased regulations from the federal government, the stock exchanges have implemented increased regulations on large, publicly held U.S. firms that have affected their governance policies and structure. For instance, the NASDAQ has required that listed firms adopt rules for board member independence and that the majority of board members be independent. Additionally, NASDAQ has strengthened the rules for audit committee’s authority. Such rules that impose requirements on the makeup of the
board in terms of governance structure and policies could have affected the outcomes of this study.

Another limitation may be unaccounted-for variables. While every effort was made to include relevant variables related to both board power and CEO power, it is possible that some variables were left out of this study. One example might be the ratio of CEO tenure to average board tenure, which might indicate that CEO power is a function of the amount of average tenure of the board.

**Future Research**

The development of these new measures of board power and CEO power offer many opportunities for future research. The general direction of future research concerns firm outcomes such as: firm performance, level of risk-taking, types and levels of diversification, mergers and acquisitions, divestments, selling the firm, and CEO compensation (Finkelstein & Hambrick, 1996; Lubatkin, Lane, & Schulze, 2005). Other areas that could provide interesting studies include resource management, executive succession, takeover defenses, and the strategic decision-making process (Lubatkin, Lane, & Schulze, 2005). Each of these areas presents a great opportunity to examine how board power and CEO power relate to them. Each area will be discussed below.

Firm performance is generally considered an important outcome variable in management strategy research. Most strategy research is directed toward discovering what factors influence firm financial performance. As discussed in the literature review, the results of much of the empirical research overwhelmingly points to a lack of consistency. For example, board size, board composition, duality, executive ownership,
institutional ownership, and CEO tenure have all had inconsistent or mixed results when examining the relationship to firm performance (Beasley, 1996; Boyd, 1995; Carcello & Neal, 2000; Dalton et al, 1998; Dechow, Sloan, & Sweeney, 1996; Faleye, 2007; Finkelstein & D’Aveni, 1994; McMullen, 1996; Mir & Seboui, 2008; Petra, 2005; Rhoades et al., 2000; Rhoades, & Rechner, 2005; Sundaramurthy, Williams et al., 2005).

One very interesting question that might be answered by examining the relationship between board power, CEO power, and firm performance would be: “Would either agency theory or stewardship theory be supported?” The underlying premise of agency theory is that left to their own devises, unsupervised/unmonitored CEOs are likely to engage in self-serving behaviors that are detrimental to the firm’s owners. On the other hand, stewardship theory suggests that CEOs are trustworthy and therefore should be allowed to acquire more elements of power. Discovering support for either theory would add greatly to the literature.

Level of risk taking refers to the amount of risk the firm engages in pursuit of its strategic objectives (Lubatkin, Lane, & Schulze, 2005). CEOs with lots of power may be inclined to engage in high risk ventures because of the potential high reward for them. However, when board power is high, it is suggested that CEOs will be constrained from engaging in too risky investments. This would be addressed in the amount of managerial discretion afforded the CEO.

CEO compensation may also be tied to this area of research. It has been suggested that the CEO pay-performance relationship is a function of the CEO’s discretion, the level of corporate control, and in how much risk the firm is engaged in
(Finkelstein & Hambrick, 1996). It would be worthwhile to discover the relationship between CEO compensation and firm performance when either board power or CEO power is high.

Strategic decision-making refers to the firm’s top management choosing how the firm will compete in the marketplace and achieve a competitive advantage. It has been suggested that when boards are powerful, they are more engaged in the strategic decision-making process (Finkelstein & Hambrick, 1996). Otherwise, when CEOs are powerful, they simply choose strategies that suit them. Using the proposed measures in this study might help shed new light on the relationships between these variables.

Diversification strategies can help firms minimize risk and allow new areas for growth. However, diversification can be very risky and costly. It has been suggested that when CEO power is high, the CEOs may engage in more risky diversification than if the board’s power is high (Lubatkin, Lane, & Schulze, 2005). The new measures of board power and CEO power might shed some light on this very important area.

Mergers and acquisitions are another strategy that many firm use to achieve their growth objectives (Lubatkin, Lane, & Schulze, 2005). However, many mergers and acquisitions fail to achieve levels of performance envisioned during the proposal phase. In fact, it has been estimated that as many as 70% of mergers and acquisitions are considered failures within two years of completion (Hitt, Ireland, & Hoskisson, 2009). It has been suggested that mergers and acquisitions can be beneficial to CEOs, depending on their compensation package, at the expense of the shareholders. It has also been
suggested that when boards are powerful, they are more engaged in the mergers and acquisition process (Lubatkin, Lane, & Schulze, 2005).

Divestments refer to the firm selling off less valuable parts of the firm. In order to achieve revenue or profit objectives, powerful CEOs may be inclined to hold onto low performing assets or strategic business units. However, it may be more advantageous to the firm in the long run to sell off the low performing asset. It has been posited that powerful boards are much more engaged in the divestment process (Lubatkin, Lane, & Schulze, 2005).

Selling the firm refers to the process of actively trying to sell the firm or accepting an offer to sell the firm. Generally, unless there is a good payoff for the CEO as a result of selling the firm, most CEOs would prefer to keep their jobs. However, boards would prefer to be fully engaged in all discussions that involve finding an acceptable buyer or evaluating all offers to buy the firm (Lubatkin, Lane, & Schulze, 2005). Powerful CEOs may be able to keep the board out of such negotiations. However, powerful boards are more likely to effectively engage in all phases of offers to buy the firm.

Resource management refers to how the firm’s leadership uses the firm’s assets for the betterment of the firm’s stakeholders. It has been suggested that powerful CEOs are inclined to use resources on projects that benefit them personally. On the other hand, powerful boards are likely to direct resources to projects that are likely to increase shareholder value (Lubatkin, Lane, & Schulze, 2005).

One area that has been extensively studied is CEO succession. However, understanding the balance of power between the outgoing CEO and the board may help
more fully understand the succession process (Finkelstein & Hambrick, 1996). Further, understanding the level of power for each party may shed some light on the entire succession planning process. For instance, does the succession process change based on the power level of the board versus the CEO? Next, does the outcome of the succession process change based on the level of power between the board and the incumbent CEO?

The final area to be addressed here is takeover defenses. Boards are generally expected to engage in the firm’s takeover defenses (Lubatkin, Lane, & Schulze, 2005). The implementation of many takeover defenses occurs well before any actual takeover actions. For instance, boards may implement golden parachutes for the firm’s top management team members, poison pill provisions, classified boards, and anti-takeover amendments (Lubatkin, Lane, & Schulze, 2005). While studies exist on all of these areas, it might be interesting to study how board power plays a role in the use of such anti-takeover defenses. It might also be interesting to see what role board power plays in the event of an actual takeover move, especially a hostile takeover action. Similar studies on the role of CEO power on these takeover defenses might also be interesting.

**Conclusion**

This study set out to develop new measures of board of director power and CEO power. Creating such measures would allow for interesting studies on the interactions between the board and the CEO. More importantly, examining how boards of directors and CEOs may influence firm outcomes would lead to important research findings.
The study did create two new measures: one for board of director power and the other for CEO power. Interestingly, board power examined ten variables that have been discussed at great length in the governance literature. However, the results of the factor analysis indicated that six of the ten variables were strongly associated with each other. Those six variables were: board size, board member independence, non-duality, lead director, board member ownership, and outside investor ownership.

For CEO power, six variables were examined, which have been the subject of many studies in the strategic management and governance literature. The six variables included: CEO tenure, CEO ownership, CEO/board member demographic similarity, CEO/board member nominations, duality, and classified boards. Again, the results of the factor analysis pared the six variables down to three variables that were strongly associated with each other: CEO tenure, CEO/board member nominations, and CEO ownership.

The findings of the control variables were somewhat disappointing in that only one variable provided a significant result: CEO power and firm size. It appears that CEO power is affected by firm size: CEOs of smaller firms apparently have much more power than CEOs of larger firms. Although the findings were not statistically significant, a review of the means for the control variables showed that both the boards and CEOs of smaller firms had slightly more power than the boards and CEOs of larger firms.

One of the more important aspects of this study is that future findings may provide direction to boards on the appropriate structure and policies of the board and the CEO, which will have the greatest positive impact for shareholders and stakeholders.
Such findings may allow boards to structure themselves and operate in such a way as to fulfill their main goals of monitoring and supervising the CEO. In turn, firms may not have to experience the devastation of failed governance structures and policies that have dominated the business headlines for the last ten years.
References


### Table 1 (A) – Descriptive Statistics and Correlations for Board Power Variables

<table>
<thead>
<tr>
<th>Board Power Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Board Size</td>
<td>10.19</td>
<td>1.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Board Composition</td>
<td>0.88</td>
<td>0.05</td>
<td>0.55*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Board Ownership</td>
<td>0.04</td>
<td>0.06</td>
<td>-0.16**</td>
<td>-0.23**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Board Tenure</td>
<td>8.83</td>
<td>3.46</td>
<td>-0.08</td>
<td>-0.11</td>
<td>-0.20**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Nominating Committee</td>
<td>0.75</td>
<td>0.43</td>
<td>-0.09</td>
<td>-0.03</td>
<td>-0.13*</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Committee Independence</td>
<td>0.49</td>
<td>0.50</td>
<td>-0.13*</td>
<td>-0.06</td>
<td>0.16</td>
<td>0.02</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Lead Director</td>
<td>0.59</td>
<td>0.67</td>
<td>-0.02</td>
<td>0.08</td>
<td>-0.05</td>
<td>-0.08</td>
<td>0.04</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Large Investor Ownership</td>
<td>0.18</td>
<td>0.11</td>
<td>-0.18**</td>
<td>-0.35**</td>
<td>0.16*</td>
<td>-0.03</td>
<td>0.04</td>
<td>0.06</td>
<td>-0.05</td>
<td></td>
</tr>
<tr>
<td>9. Nonduality</td>
<td>0.31</td>
<td>0.46</td>
<td>-0.02</td>
<td>-0.19**</td>
<td>0.19*</td>
<td>0.04</td>
<td>0.10</td>
<td>0.14*</td>
<td>-0.19**</td>
<td>0.13*</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01
N = 296.
<table>
<thead>
<tr>
<th>CEO Power Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CEO Tenure</td>
<td>7.77</td>
<td>7.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CEO Nominations</td>
<td>.35</td>
<td>.33</td>
<td>.67**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. CEO/BOD Similarity</td>
<td>.59</td>
<td>.20</td>
<td>-.04</td>
<td>.13*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Duality</td>
<td>.68</td>
<td>.47</td>
<td>.13*</td>
<td>.14*</td>
<td>.11*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Classified Boards</td>
<td>.43</td>
<td>.50</td>
<td>.11</td>
<td>.10</td>
<td>.00</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td>6. CEO Ownership</td>
<td>.01</td>
<td>.02</td>
<td>.41**</td>
<td>.30**</td>
<td>-.07</td>
<td>.12*</td>
<td>.04</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01

N = 296.
### Table 2  Results of the Exploratory Factor Analysis for Board Power

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Composition</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Director</td>
<td></td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Nonduality</td>
<td></td>
<td>-.72</td>
<td></td>
</tr>
<tr>
<td>Board Ownership</td>
<td></td>
<td></td>
<td>.70</td>
</tr>
<tr>
<td>Large Investor</td>
<td></td>
<td></td>
<td>.80</td>
</tr>
</tbody>
</table>

### Table 3  Results of the Common Factor Analysis for Board Power

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Composition</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead Director</td>
<td></td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Nonduality</td>
<td></td>
<td>-.50</td>
<td></td>
</tr>
<tr>
<td>Board Ownership</td>
<td></td>
<td></td>
<td>.44</td>
</tr>
<tr>
<td>Large Investor</td>
<td></td>
<td></td>
<td>.58</td>
</tr>
</tbody>
</table>
### Table 4  Results of the Exploratory Factor Analysis for CEO Power

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominations</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>CEO tenure</td>
<td>.846</td>
<td></td>
</tr>
<tr>
<td>CEO ownership</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>CEO/BOD similarity</td>
<td></td>
<td>.76</td>
</tr>
<tr>
<td>Duality</td>
<td></td>
<td>.574</td>
</tr>
<tr>
<td>Classified boards</td>
<td></td>
<td>-.42</td>
</tr>
</tbody>
</table>

### Table 5  Results of the Common Factor Analysis for CEO Power

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominations</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>CEO tenure</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>CEO ownership</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>CEO/BOD similarity</td>
<td></td>
<td>.74</td>
</tr>
<tr>
<td>Duality</td>
<td></td>
<td>.17</td>
</tr>
<tr>
<td>Classified boards</td>
<td></td>
<td>-.09</td>
</tr>
</tbody>
</table>
Table 6 (A) – Descriptive Statistics and Correlations for Board Power Variables

<table>
<thead>
<tr>
<th>Board Power Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Firm Size</td>
<td>3.46</td>
<td>1.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Industry</td>
<td>40</td>
<td>13.48</td>
<td>.28**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Degree of Globalization</td>
<td>3.31</td>
<td>2.13</td>
<td>.33**</td>
<td>.17**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Board Size</td>
<td>10.44</td>
<td>2.50</td>
<td>.20**</td>
<td>.03</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Board Composition</td>
<td>.86</td>
<td>.06</td>
<td>.01</td>
<td>-.08</td>
<td>-.01</td>
<td>.48**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Board Ownership</td>
<td>.04</td>
<td>.07</td>
<td>.09*</td>
<td>.06</td>
<td>-.01</td>
<td>-.13**</td>
<td>-.15**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Board Tenure</td>
<td>8.63</td>
<td>3.47</td>
<td>-.10*</td>
<td>.00</td>
<td>-.06</td>
<td>-.04</td>
<td>-.09</td>
<td>-.14**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Nominating Committee</td>
<td>.76</td>
<td>.43</td>
<td>-.06</td>
<td>.04</td>
<td>-.10*</td>
<td>-.08</td>
<td>-.02</td>
<td>-.15**</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Committee Independence</td>
<td>.47</td>
<td>.50</td>
<td>-.15**</td>
<td>.02</td>
<td>-.04</td>
<td>-.17*</td>
<td>-.09</td>
<td>.08</td>
<td>.02</td>
<td>.11*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Lead Director</td>
<td>.55</td>
<td>.65</td>
<td>-.05</td>
<td>-.08</td>
<td>-.07</td>
<td>.00</td>
<td>.12**</td>
<td>-.06</td>
<td>-.03</td>
<td>.07</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Large Investor Ownership</td>
<td>.21</td>
<td>.20</td>
<td>-.10*</td>
<td>.07</td>
<td>-.04</td>
<td>-.12**</td>
<td>-.08</td>
<td>.22**</td>
<td>-.10*</td>
<td>.04</td>
<td>-.03</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>12. Nonduality</td>
<td>.34</td>
<td>.48</td>
<td>-.02</td>
<td>.08</td>
<td>.03</td>
<td>-.03</td>
<td>-.16**</td>
<td>.13**</td>
<td>.01</td>
<td>.08</td>
<td>.13**</td>
<td>-.24**</td>
<td>.12**</td>
</tr>
</tbody>
</table>

* p < .05,  ** p < .01,  
N = 510.
Table 6 (B) – Descriptive Statistics and Correlations for CEO Power Variables

<table>
<thead>
<tr>
<th>CEO Power Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Firm Size</td>
<td>3.46</td>
<td>1.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Industry</td>
<td>40</td>
<td>13.48</td>
<td>.28**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Degree of Globalization</td>
<td>3.31</td>
<td>2.13</td>
<td>.33**</td>
<td>.17**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CEO Tenure</td>
<td>8.14</td>
<td>7.22</td>
<td>-.20**</td>
<td>-.04</td>
<td>-.10*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CEO Nominations</td>
<td>.39</td>
<td>.34</td>
<td>-.28**</td>
<td>-.04</td>
<td>-.11*</td>
<td>.69**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. CEO/BOD Similarity</td>
<td>.59</td>
<td>.16</td>
<td>.06</td>
<td>-.04</td>
<td>.09</td>
<td>-.03</td>
<td>.10*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Duality</td>
<td>.65</td>
<td>.48</td>
<td>.02</td>
<td>-.08</td>
<td>-.03</td>
<td>.19**</td>
<td>.14*</td>
<td>.10*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Classified Boards</td>
<td>.49</td>
<td>.50</td>
<td>-.10*</td>
<td>-.04</td>
<td>.12**</td>
<td>.08</td>
<td>.08</td>
<td>-.02</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. CEO Ownership</td>
<td>.02</td>
<td>.03</td>
<td>-.06</td>
<td>-.05</td>
<td>-.05</td>
<td>.34**</td>
<td>.27**</td>
<td>-.07</td>
<td>.09*</td>
<td>.07</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01
N = 510.
### Table 7: Means and Standard Deviations for Board Power for Industry Type

<table>
<thead>
<tr>
<th>INDUSTRY TYPE</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>26</td>
<td>4.73</td>
<td>1.51</td>
</tr>
<tr>
<td>Utilities</td>
<td>23</td>
<td>4.83</td>
<td>1.64</td>
</tr>
<tr>
<td>Construction</td>
<td>45</td>
<td>5.47</td>
<td>1.83</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>140</td>
<td>5.41</td>
<td>1.70</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>26</td>
<td>5.27</td>
<td>1.85</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>78</td>
<td>5.69</td>
<td>1.79</td>
</tr>
<tr>
<td>Transportation/Warehousing</td>
<td>18</td>
<td>5.78</td>
<td>1.48</td>
</tr>
<tr>
<td>Information</td>
<td>14</td>
<td>5.50</td>
<td>2.02</td>
</tr>
<tr>
<td>Finance, Insurance, and Real Estate</td>
<td>53</td>
<td>5.83</td>
<td>1.54</td>
</tr>
<tr>
<td>Technical Services/ Waste Management</td>
<td>29</td>
<td>5.48</td>
<td>1.94</td>
</tr>
<tr>
<td>Healthcare</td>
<td>23</td>
<td>4.97</td>
<td>1.36</td>
</tr>
<tr>
<td>Entertainment/ Hospitality</td>
<td>19</td>
<td>5.37</td>
<td>1.50</td>
</tr>
</tbody>
</table>

### Table 8: ANOVA Source Table

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Type</td>
<td>11</td>
<td>43.27</td>
<td>3.93</td>
<td>1.36</td>
</tr>
<tr>
<td>Within</td>
<td>482</td>
<td>1396.02</td>
<td>2.90</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>493</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 9  Means and Standard Deviation for Board Power for Firm Size

<table>
<thead>
<tr>
<th>FIRM SIZE</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5,000</td>
<td>87</td>
<td>5.08</td>
<td>1.60</td>
</tr>
<tr>
<td>5,001 – 10,000</td>
<td>87</td>
<td>5.60</td>
<td>1.59</td>
</tr>
<tr>
<td>10,001 – 15,000</td>
<td>80</td>
<td>5.12</td>
<td>1.83</td>
</tr>
<tr>
<td>15,001 – 30,000</td>
<td>100</td>
<td>5.58</td>
<td>1.77</td>
</tr>
<tr>
<td>30,001 – 50,000</td>
<td>67</td>
<td>5.82</td>
<td>1.74</td>
</tr>
<tr>
<td>50,001 +</td>
<td>83</td>
<td>5.38</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Table 10  ANOVA Source Table

Board Power by Firm Size

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Type</td>
<td>5</td>
<td>33.51</td>
<td>6.70</td>
<td>.042</td>
</tr>
<tr>
<td>Within</td>
<td>498</td>
<td>1437.77</td>
<td>2.89</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>503</td>
<td>1471.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11  Means and Standard Deviation for Board Power for Degree of Globalization

<table>
<thead>
<tr>
<th>DEGREE OF GLOBALIZATION</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Country</td>
<td>130</td>
<td>5.43</td>
<td>1.67</td>
</tr>
<tr>
<td>2 – 9 Countries</td>
<td>118</td>
<td>5.34</td>
<td>1.69</td>
</tr>
<tr>
<td>10 – 19 Countries</td>
<td>60</td>
<td>5.42</td>
<td>1.75</td>
</tr>
<tr>
<td>20 – 29 Countries</td>
<td>41</td>
<td>5.90</td>
<td>1.69</td>
</tr>
<tr>
<td>30 – 49 Countries</td>
<td>46</td>
<td>5.28</td>
<td>1.88</td>
</tr>
<tr>
<td>50 – 99 Countries</td>
<td>43</td>
<td>5.60</td>
<td>1.65</td>
</tr>
<tr>
<td>100 + Countries</td>
<td>66</td>
<td>5.27</td>
<td>1.74</td>
</tr>
</tbody>
</table>

Table 12  ANOVA Source Table
Board Power by Degree of Globalization

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Globalization</td>
<td>6</td>
<td>14.07</td>
<td>2.35</td>
<td>.570</td>
</tr>
<tr>
<td>Within</td>
<td>497</td>
<td>1457.21</td>
<td>2.93</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>503</td>
<td>1471.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 13  Means and Standard Deviation for CEO Power for Industry Type

<table>
<thead>
<tr>
<th>INDUSTRY TYPE</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>27</td>
<td>2.22</td>
<td>1.60</td>
</tr>
<tr>
<td>Utilities</td>
<td>23</td>
<td>3.39</td>
<td>1.40</td>
</tr>
<tr>
<td>Construction</td>
<td>45</td>
<td>2.24</td>
<td>1.57</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>140</td>
<td>2.77</td>
<td>1.78</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>27</td>
<td>1.96</td>
<td>1.82</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>78</td>
<td>2.59</td>
<td>1.72</td>
</tr>
<tr>
<td>Transportation/Warehousing</td>
<td>18</td>
<td>3.22</td>
<td>1.59</td>
</tr>
<tr>
<td>Information</td>
<td>14</td>
<td>1.71</td>
<td>1.49</td>
</tr>
<tr>
<td>Finance, Insurance, and Real Estate</td>
<td>53</td>
<td>2.66</td>
<td>1.83</td>
</tr>
<tr>
<td>Technical Services/ Waste Management</td>
<td>29</td>
<td>2.90</td>
<td>1.70</td>
</tr>
<tr>
<td>Healthcare</td>
<td>24</td>
<td>2.25</td>
<td>1.62</td>
</tr>
<tr>
<td>Entertainment/ Hospitality</td>
<td>20</td>
<td>2.65</td>
<td>1.42</td>
</tr>
</tbody>
</table>

Table 14  ANOVA Source Table
CEO Power by Industry Type

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Type</td>
<td>11</td>
<td>62.71</td>
<td>5.70</td>
<td>1.98</td>
</tr>
<tr>
<td>Within</td>
<td>486</td>
<td>1402.57</td>
<td>2.89</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>497</td>
<td>1465.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 15  Means and Standard Deviation for CEO Power for Firm Size

<table>
<thead>
<tr>
<th>FIRM SIZE</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5,000</td>
<td>88</td>
<td>3.30</td>
<td>1.40</td>
</tr>
<tr>
<td>5,001 – 10,000</td>
<td>87</td>
<td>2.92</td>
<td>1.85</td>
</tr>
<tr>
<td>10,001 – 15,000</td>
<td>80</td>
<td>3.10</td>
<td>1.85</td>
</tr>
<tr>
<td>15,001 – 30,000</td>
<td>100</td>
<td>2.44</td>
<td>1.69</td>
</tr>
<tr>
<td>30,001 – 50,000</td>
<td>69</td>
<td>1.70</td>
<td>1.29</td>
</tr>
<tr>
<td>50,000 +</td>
<td>86</td>
<td>1.81</td>
<td>1.50</td>
</tr>
</tbody>
</table>

### Table 16  ANOVA Source Table  
CEO Power by Firm Size

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Size</td>
<td>3</td>
<td>171.73</td>
<td>57.24</td>
<td>21.84</td>
</tr>
<tr>
<td>Within</td>
<td>497</td>
<td>1302.63</td>
<td>2.62</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>1474.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 17  Means and Standard Deviation for CEO Power for Degree of Globalization

<table>
<thead>
<tr>
<th>DEGREE OF GLOBALIZATION</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Country</td>
<td>131</td>
<td>2.70</td>
<td>1.73</td>
</tr>
<tr>
<td>2 – 9 Countries</td>
<td>119</td>
<td>2.82</td>
<td>1.68</td>
</tr>
<tr>
<td>10 – 19 Countries</td>
<td>61</td>
<td>2.75</td>
<td>1.86</td>
</tr>
<tr>
<td>20 – 29 Countries</td>
<td>41</td>
<td>2.24</td>
<td>1.59</td>
</tr>
<tr>
<td>30 – 49 Countries</td>
<td>46</td>
<td>2.61</td>
<td>1.80</td>
</tr>
<tr>
<td>50 – 99 Countries</td>
<td>44</td>
<td>2.27</td>
<td>1.66</td>
</tr>
<tr>
<td>100 + Countries</td>
<td>68</td>
<td>2.05</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Table 18  ANOVA Source Table
CEO Power by Degree of Globalization

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Globalization</td>
<td>6</td>
<td>38.09</td>
<td>6.35</td>
<td>2.16</td>
</tr>
<tr>
<td>Within</td>
<td>503</td>
<td>1477.00</td>
<td>2.94</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>509</td>
<td>1515.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Division</td>
<td>Industry Title</td>
<td>Count</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Agriculture, Forestry, and Fishing</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Mining, Oil and Gas Extraction</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Utilities</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Construction</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-33</td>
<td>Manufacturing</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Wholesale Trade</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Retail Trade</td>
<td>78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48-49</td>
<td>Transportation and Warehousing</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Information</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Finance, Insurance, and Real Estate</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54-56</td>
<td>Professional Services and Waster Management</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Health Care</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71-72</td>
<td>Entertainment and Hospitality</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>