

**MANAGERIAL PRESTIGE AND POST-IPO FIRM PERFORMANCE:  
A PARTIALLY MEDIATED MODEL**

A Dissertation

by

CHRISTOPHER RAY REUTZEL

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2007

Major Subject: Management

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## ABSTRACT

Managerial Prestige and Post-IPO Firm Performance:

A Partially Mediated Model. (August 2007)

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The role of top managers in shaping the performance of the firms that employ them represents a central issue to strategic management research. Indeed, a substantial amount of research has examined potential linkages between the characteristics of top managers and firm performance. However the empirical results of research in this area have been ambiguous. This study attempts to theoretically and empirically extend research on the influence of top managers on firm performance by examining the relationship between managerial prestige and firm performance in the post-IPO context.

Although upper echelons researchers have attempted to link top managers with firm performance in the past recent reviews of the upper echelons research note that little attention has been paid to top management characteristics other than those of top management team (TMT) heterogeneity, TMT size and TMT tenure. Additionally, recent reviews also suggest the need to consider potential intervening mechanisms between TMT characteristics and firm performance. This study addresses these two limitations of prior upper echelons research by examining the direct and indirect influences of managerial prestige on post-IPO firm performance.

In this study I develop a model which incorporates the resource based view and resource dependence theory with insights from upper echelons research and research on the IPO context. Results for the model developed in this study suggest the following. First, executive undergraduate prestige is positively related to post-IPO firm growth. The other aspects of managerial prestige examined in this study were not found to influence post-IPO firm performance. Second, the influence of the key external resource holders identified in this study, namely prestigious alliance partners and institutional investors with stable equity portfolios, were found to enhance firm survival rates, but were negatively associated with firm growth. Third, executive undergraduate prestige was found to garner the support of prestigious alliance partners. The remaining aspects of managerial prestige were not found to influence the support of prestigious alliance partners or dedicated institutional investors. Finally, no support was found for prestigious alliance partners and dedicated institutional investors as mediators of the relationship between managerial prestige and post-IPO firm performance.

## DEDICATION

I dedicate this research to my wife, Kristina, and my sons, Carter and Tyler.

Kristi, you have stood by me for nearly a decade while I have pursued my education. I never could have done it without your love and patience. Thank you for making the many sacrifices you have. I could never have pictured two finer sons than Carter and Tyler. I can't wait for our third to get here. Our boys are a reflection of you. Thank you for bringing them into my life, and your willingness to stay home and raise them.

I love you.

Carter, you have grown so much during the five years we have lived in College Station. You have always been such a little trooper. I am amazed at how resilient you are. Your dogged persistence will serve you well in life. I will always treasure my memories of you working on your schoolwork at the kitchen table while I worked on mine. Thank you for loving me unconditionally and for bringing such joy and happiness to my life.

Your energy and enthusiasm inspire me.

I love you.

Tyler, you joined our family here in Texas. Watching you learn and grow over the past three years reminds me of how much we are all capable, if we are willing to try. Your hugs and snuggles remind me of our Father in Heaven's love for each of us. Thank you for giving up your Daddy on so many evenings while I completed my education.

I love you.

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My dissertation committee has also played an important role in this research. My dissertation co-chairs S. Trevis Certo, and Albert A. Cannella, Jr. kept the wheels of my dissertation rolling when I thought they were going to fall off. I am grateful for the mentorship and friendship they have given me. Their selfless service, theoretical insights, and methodological prowess were indispensable throughout this process. Thank you, Trevis, for helping me to focus on the ultimate objective and for listening to my concerns. Bert, thank you for constantly supporting my development as a researcher, and for reminding me not to take any of this too seriously. I also appreciate the contributions and support of my committee members, Michael A. Hitt, R. Duane Ireland, and Dudley L. Poston, Jr. Each of you has individually and uniquely inspired me to become a better scholar and person. Thank you.

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## CHAPTER I

### INTRODUCTION

The influence of top managers on firm performance has long intrigued researchers from a variety of scholarly disciplines. For instance, the seminal works of organizational theorists (Barnard, 1938; Child, 1972; Thompson, 1967), sociologists (Selznick, 1957), and economists (Penrose, 1959) all highlight the role of top executives in shaping organizational performance. Complementing these perspectives, scholars from the field of strategy have developed the upper echelons perspective (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984). According to the upper echelons perspective, a dominant coalition of top executives (i.e., the top management team (TMT)) makes decisions consistent with the cognitive bases of its members, which influence key organizational outcomes (Hambrick & Mason, 1984). Drawing upon the propositions of Hambrick and Mason (1984), scholars have examined potential links between TMT demographic characteristics and organizational outcomes. These studies have generally argued that different aspects of TMT composition influence strategic decision making and firm performance (e.g., Bantel & Jackson, 1989; Hambrick et al., 1996).

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This dissertation follows the style of the *Academy of Management Journal*.

While numerous studies have attempted to empirically link top executive characteristics and firm performance the ambiguous results of these studies suggest ample room for additional theorizing and empirical research in this arena still exists (Carpenter et al., 2004; Finkelstein & Hambrick, 1996). Research suggests the need to integrate additional theoretical perspectives with the upper echelons perspective to explain the relationship between top executive characteristics and firm performance. For instance, empirical studies by Daily et al. (2000) as well as Carpenter et al. (2001) demonstrate the value of incorporating the resource based view (Barney, 1991; Wernerfelt, 1984) with the upper echelons perspective.

There exist a number of empirical studies examining the influence of top executive characteristics on firm performance, but relatively few studies have considered the influence of executives in the initial public offering (IPO) context. Moreover, the limited number of studies that do examine the influence of executives in the IPO context tend to focus on relationships between executive characteristics and IPO pricing (Chemmanur & Paeglis, 2005; Cohen & Dean, 2005; Lester et al., 2006). While these studies shed light into how top executives influence the initial pricing of IPOs, we currently lack knowledge about how top executives influence post-IPO firm performance.

The paucity of studies linking top executives to post-IPO firm performance is surprising given that the IPO setting presents a unique context in which to examine the influence of top executives. The IPO setting represents a transitional period in the life of a venture, which brings both benefits and challenges (Baron et al., 2001; Price

Waterhouse, 1995). Although IPOs may provide a firm with additional financial resources, the IPO represents a shift from one institutional environment to another as the firm transitions from the private arena to public markets (Fischer & Pollock, 2004). The transformational nature of this shift often diverts firm resources from operating routines to firm reorientation and adaptation processes following the IPO, thereby increasing firm failure rates following this transition (Fischer & Pollock, 2004). This has led scholars to suggest that the possession of certain organizational resources, termed transformational shields (Miner et al., 1990), serve to insulate firms from the harmful effects of transitioning to the public arena (Fischer & Pollock, 2004).

Top executives of newly public firms, as boundary spanning individuals who are ultimately responsible for the performance of their respective firms (Finkelstein & Hambrick, 1996), are likely to play a prominent role in overseeing this transition. As such, the experiences and social ties that top executive embody may act as transformational shield during a newly public firms adaptation to the rigors of public trading. However, with the exception of only a few studies (e.g., Chemmanur & Paeglis, 2005; Fischer & Pollock, 2004), the influence of top executives during this period has been largely left unexplored. This suggests the need to conduct additional investigation of the influence of top executives on post-IPO performance.

A review of extant literature on top executives and firm performance also reveals that prior research on the performance consequences of top executive characteristics largely focuses on only a small set of executive demographic characteristics such as TMT heterogeneity, TMT size, and TMT average tenure. This suggests there is a need

to expand the set of demographic characteristics examined in this area (Carpenter et al., 2004). While there exist a variety of potential top executive characteristics to examine, Carpenter and colleagues (2004) suggest the need for additional studies investigating the consequences of top executive managerial and business related experiences. Managerial prestige (D'Aveni, 1990), represents a group of such executive characteristics that has received scant attention in extant empirical research.

### **Purpose, Objectives and Research Questions**

Taken together, the need to integrate additional theoretical perspectives with the upper echelons perspective, the paucity of studies examining top executive influence in newly public firms, and the need to expand the set of top executive demographic characteristics beyond those commonly examined provide the backdrop for the current study. Consequently, the purpose of this study is to develop a foundation for theory and empirical evidence regarding the influence of top executive managerial prestige in newly public firms. In this study I integrate upper echelons theory with the resource based view and resource dependency theory to develop and empirically test a model of top executive influence on the performance of newly public firms.

The objective of this dissertation is to examine the mechanisms through which managerial prestige influences the performance of newly public firms. A limited number of studies have examined the direct effects of managerial prestige on firm performance (i.e., Chemmanur & Paeglis, 2005; D'Aveni, 1990). In this study, I add to

this small body of research by examining the direct effects of managerial prestige on post-IPO firm performance. Prior research has documented the influence of managerial prestige in garnering the support of external resource holders (i.e., Eisenhardt & Schoonhoven, 1996; Higgins & Gulati, 2003, 2006). Yet, there are no studies that demonstrate that managerial prestige influences firm performance outcomes *through* the external resource holder support it engenders. Specifically, I examine the influence of managerial prestige on post-IPO firm performance through the support of prestigious strategic alliance partners and dedicated institutional investors. Establishing links among managerial prestige, external resource holder support and firm performance may help researchers and practitioners understand how top executives influence firm performance.

The model developed in this study suggests that managerial prestige influences the performance of newly public firms in two ways. First, managerial prestige influences top executive ability to manage firm adaptation to the public arena. Second, managerial prestige influences the performance of newly public firm by facilitating access to support and resources from key external stakeholders which serve to shield newly public firms from the potentially deleterious effects of adapting to the rigors of public markets.

Specifically, in this dissertation research I develop a model of managerial prestige's influence on post-IPO firm growth and failure. Firm growth and failure are the focus of this study for three reasons. First, relatively few empirical studies have examined the growth or failure rates of newly public firms (Fischer & Pollock, 2004).

Second, obtaining the financial capital necessary to fuel firm growth and survival are often cited as a reason for undergoing the IPO process by both practitioners and researchers (Brau & Fawcett, 2006). Third, achieving high levels of sustained growth represents a top concern among CEOs and board chairs (Huston & Sakkab, 2006). In this study I attempt to address the following research questions:

1. Does managerial prestige influence post-IPO firm performance?
2. Do dedicated institutional investors and/or prestigious alliance partners shield IPO firms from the deleterious effects of transitioning into the public arena?
3. Does managerial prestige influence post-IPO firm performance by garnering the support of prestigious alliance partners and/or dedicated institutional investors?

### **Potential Contributions**

This research has the potential to make multiple contributions to organizational theory, and strategic management research. Prior research examining the influence of top managers on firm performance has principally focused on aspects of TMT composition such as TMT size, TMT heterogeneity, TMT tenure, and TMT average age (Carpenter et al., 2004). In contrast, this study explores the firm performance consequences of managerial prestige. Additionally, prior research examining the firm performance implications of managerial prestige has focused on large, established corporations (see D'Aveni, 1990). Thus, this study extends prior research linking upper



echelons characteristics to firm performance by examining the effects of managerial prestige on post-IPO firm performance. As such, this study enriches our understanding of the influence of top managers.

Prior studies examining the influence of top manager characteristics on firm performance have also principally considered the firm performance and resource procurement consequences of managerial characteristics separately. By integrating resource dependence theory (Pfeffer, 1981; Pfeffer & Salancik, 1978) with managerial prestige research this study develops a partially mediated model of managerial prestige's influence on firm performance outcomes. Consequently, this study represents one of the first to empirically determine whether managerial characteristics influence firm performance *through* the support of external resource holders they may engender. By considering the partially mediated effects of managerial prestige on firm performance, the model developed in this study contributes to our knowledge of *how* top executive influence firm performance.

Finally, the model developed in this dissertation research extends the work of Miner et al. (1990) and Fischer and Pollock (2004) by identifying managerial prestige as an additional organizational characteristic that protects firms from the deleterious effects of transformational change in two ways. First, the model developed in this study posits that prestigious top executive possess social and human capital that enables them to effectively manage the adaptation and reorientation processes typical of IPO transition. Second, prestigious top executives possess social and human capital that provides their

firms greater access to the support of key external resource holders as they adapt to public markets.

### **Research Methods Overview**

This study utilizes a sample of firms undergoing their IPO during the 1997 calendar year to test the theory and hypotheses developed in this study. I selected the 1997 calendar year because a relatively large number of firms conducted their IPOs that year and also because this time frame precedes the Internet bubble and bust. Consistent with prior research, I track each sample firm for up to 5 years following its IPO to develop measures of post-IPO firm performance (Fischer & Pollock, 2004; Welbourne & Andrews, 1996). I draw the data for this study from multiple archival sources. The initial sample of IPO firms and data on IPO performance is taken from the *Securities Data Corporation (SDC) Global New Issues* data base. I examine IPO prospectuses in order to collect data on TMT managerial and business experiences. I collect firm growth data from *Compustat* and firm survival data from *CRSP*. I collect data on firm strategic alliance formation from *SDC Mergers and Acquisitions* data base. Finally, I gather data on institutional ownership from *CDA/Spectrum Institutional Ownership Database* from Thomson Financial Publishing. In order to test the theory and hypotheses developed in this dissertation research I utilize random coefficients growth modeling (Bliese & Ployhart, 2002; Singer, 1998), Cox proportional hazards models (Allison, 1984; Yamaguchi, 1991), random effects time series cross-sectional negative binomial

regression models, and random effects time series cross sectional generalized least squares regression.

### **Organization of the Dissertation**

The remaining chapters of this dissertation are organized in the following manner. Chapter II provides reviews of the literature relevant to this study. Chapter III integrates the literature reviewed to develop theory and hypotheses. Chapter IV details the research methods used to empirically test the hypotheses generated in Chapter III. Chapter V presents the results of the empirical tests of the theory and hypotheses developed in Chapter III. Finally, Chapter VI provides a discussion of conclusions and limitations of this research, as well as implications for future research and practice.

## **CHAPTER II**

### **LITERATURE REVIEW**

The purpose of this chapter is to provide readers with an understanding of literature relevant to the theory and hypotheses developed in the next chapter regarding the influence of managerial prestige on post-IPO firm performance. Accordingly, the literature review presented in this chapter discusses theory and empirical evidence in three areas. First, I review literature on top executive demographic characteristics and firm performance. Second, I discuss the theory and research on managerial prestige. Third, I present a discussion of the IPO context and briefly review research on post-IPO firm growth and failure.

#### **Top Executives and Firm Performance**

Research on the role of top executives in shaping firm performance can be traced back to the beginnings of organizational theory (Barnard, 1938; Child, 1972). The centrality of top executives in shaping firm outcomes was also explicitly recognized in early conceptualizations of strategy (see Hoskisson et al., 1999 for a review). More recently, Pitcher and Smith (2001:1) note, “There are few more important subjects to strategy scholars, or for that matter practitioners, than the link between people at the strategic apex of the organization and that organization’s performance.” The validity of this statement is reflected in the rapid emergence and substantial amount research

addressing the question of whether top executives matter (Certo et al., 2006; Finkelstein & Hambrick, 1996).

The upper echelons perspective (Hambrick & Mason, 1984) specifically addresses this question. The upper echelons perspective suggests that organizations are a reflection of top executives and the decisions they make. Central to the upper echelons research is the utilization of demographic characteristics. As such, a central thrust of upper echelons research stream centers on examining potential relationships between top executive demographic characteristics and firm performance (Carpenter et al., 2004; Finkelstein & Hambrick, 1996).

While numerous studies have attempted to link the characteristics to of top managers to firm performance, the collective empirical results of research in this area have been ambiguous (Carpenter et al., 2004; Certo et al., 2006). Recent reviews of research on the performance implications of executive characteristics have suggest several potential explanations for the ambiguous nature of the findings in this stream of research. For instance, some suggest the lack of support for a consistent relationship between executive characteristics and firm performance outcomes may be in part a result of prior research's focus on a relatively narrow set of executive characteristics comprised primarily of TMT educational experience, functional background, age, tenure, and size (Carpenter et al., 2004).

Related to this issue is an emerging body of research that suggests the need to incorporate additional theoretical perspectives with upper echelons theory in order to expand the set of executive characteristics considered when examining the relationship

between top executive characteristics and firm performance. For instance, empirical studies by Daily et al. (2000), as well as Carpenter et al. (2001) demonstrate the value of incorporating the resource based view (Barney, 1991; Wernerfelt, 1984) with upper echelons theory to examine the influence of CEO and TMT international assignment experience on firm performance.

Another approach to addressing the ambiguity of findings regarding TMT characteristics and firm performance suggests that researchers need to explore the 'black-box' of the relationship between TMT characteristics and firm performance is to open the black box (Certo et al., 2006; Lawrence, 1997). In order to begin to open the 'black box' Certo and colleagues (2006) posit that researchers begin to consider the role of intervening constructs between TMT characteristics and firm performance outcomes.

### **Managerial Prestige**

Managerial prestige represents one set of top executive characteristics that have received substantially less attention with regard to their influence on firm performance. All top executives possess an element of managerial prestige (D'Aveni, 1990; Domoff, 1967; Dye, 1983). For instance, Mitchell (1982) discusses three types of status: social status, which refers to the standing of an individual in general society; occupational prestige, which is the value placed upon an occupation by society in general; and organizational status, which refers to the where one fits within the hierarchy of an

organization. Senior executives, in general, rank highly on each of these status characteristics in comparison to general society (D'Aveni, 1990).

Managerial prestige is defined by D'Aveni (1990:121) as, "the property of having status." Thus status characteristics are central to the theoretical underpinnings of managerial prestige. Research on status and the origins of status characteristics is largely rooted in the sociological literature addressing the nature of status characteristics theory (Berger & Webster, 2006). Drawing upon research in this area, D'Aveni (1990:121) suggests that "status indicates membership in an elite social circle." In a descriptive sense, status refers to an actor's position within a social system based upon a set of *relevant* dimensions (Deephouse, 1998). In an evaluative sense, status refers to the ranking of an actor according to the values of a social system (Deephouse, 1998).

While not specifically stated, prior research on upper echelons prestige implies that managerial prestige primarily resides in the stock of relevant human and social capital possessed by firm executives (Certo, 2003; D'Aveni, 1990). Accordingly, the theoretical underpinnings of managerial prestige also stem from research on human capital and social capital.

### *Theoretical Underpinnings*

In this section I review the theoretical underpinnings of managerial prestige and its influence on organizational outcomes. In doing so, I review three theoretical perspectives, each of which speak to the potential for managerial prestige to influence firm performance. Specifically, in the following sections I discuss status characteristics

theory (Berger et al., 1980; Webster & Foschi, 1988), human capital theory (Becker, 1964, 1975), and social capital theory (Burt, 1992; Coleman, 1988).

Status Characteristics Theory. The theoretical roots of managerial prestige, by virtue of its link to status, stem from research on status characteristics (Berger et al., 1980). According to status characteristics theory, individuals form cognitive expectations of actor performance based upon actor status characteristics (Berger et al., 2002; Webster & Foschi, 1988). Due to bounded rationality, when faced with uncertainty, individuals may ascribe different values, skills and abilities to individuals and organizations based upon these performance expectations (Berger et al., 1980; Berger & Webster, 2006; Webster & Foschi, 1988). With regard to managerial prestige D'Aveni (1990:124) notes, "the general assumption is that going to the proper schools, having impressive prior experience and associating with the right people indicate higher status, aggregated prestige and skill." Thus, managerial prestige acts as a cue to decision makers shaping their perceptions of managerial competence, trustworthiness, and quality.

Studies utilizing a status characteristics perspective suggest that the influence of managerial prestige on external resource holder support extends beyond simply implying managerial quality. Managerial prestige also influences external resource holder support by signaling organizational legitimacy to potential external exchange partners (Certo, 2003; D'Aveni, 1990). As boundary spanners who are highly visible to external constituencies, prestigious managers contribute to the legitimacy of the firms that employ them (D'Aveni, 1990; Cohen & Dean, 2005). Organizational legitimacy



embodies a key factor in garnering the external support and resources required for organizational survival and growth (Stinchcombe, 1965; Zimmerman & Zeitz, 2002).

Additionally, prestigious managers have substantial incentive to avoid affiliation with low-quality firms in order to protect their reputations (Blau, 1964; Cohen & Dean, 2005; Podolny, 1994). Accordingly, prior research suggests that external resource holders may be influenced by the presence of prestigious managers in a firm because they recognize this incentive and trust the ability of prestigious managers to discern firm quality and viability as a result of their perceived expertise (Cohen & Dean, 2005; Stuart, 1998; Stuart et al., 1999).

Managerial prestige may also influence external resource holders by transferring status to exchange partners (Podolny, 1993, 1994). As Podolny (1993:833) notes, “ties to higher-status actors enhance the prestige with which one is viewed.” As a result of the view that prestigious managers and high-status organizations will avoid association with low quality actors, prestige is transferred to exchange partners when such affiliations are publicized (Stuart, 1999). Thus, affiliations with firms who employ prestigious managers can be status enhancing for external resource holders (Podolny, 1993, 1994; Stuart, 1999). As such managerial prestige often provides a firm with greater opportunities to form exchange relationships (Eisenhardt & Schoonhoven, 1996). Additionally, the benefits provided by affiliations with high-status firms may cause external resource holders to concede contractual terms to firms who employ prestigious managers in order to gain such affiliations (D’Aveni, 1990; Podolny, 1994; Stuart, 1999).

Social Capital Theory. D'Aveni (1990) argues that managerial prestige stems from top executive social ties and associations. Consequently, while D'Aveni (1990) does not use the term social capital (Adler & Kwon, 2002; Coleman, 1988) per se, in essence he suggests that managerial prestige stems in part from the social capital possessed by top executives (Certo, 2003). Social capital refers to the, "sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998:243). Similarly, other scholars suggest that social capital represents, "the set of resources, tangible or virtual, that accrue to an actor through the actor's social relationships, facilitating the attainment of goals" (Leenders & Gabbay, 1999:2) Thus, social capital represents a quality of relationships rather than individuals (Burt, 1992, 1997; Nahapiet & Ghoshal, 1998).

Social capital theory suggests that individuals utilize their networks to form linkages with other individuals and institutions that provide access to information and resources (Adler & Kwon, 2002). The social ties of top executives are important because they facilitate exchange and acquisition of information and resources (Geletkanycz & Hambrick, 1997). Multiple studies have demonstrated the role of executive social capital in shaping firm performance. For example, Collins and Clark (2003) investigated the relationship between top management team external social networks and firm performance. They found that the range and strength of top management team external social ties were positively related to both firm sales growth and stock performance. Shane and Stuart (2002) examined the influence of founder

social ties in the new venture context. Utilizing a sample of 134 university startups these authors found that founder direct and indirect relationships with venture investors were positively related to new venture funding and survival.

Human Capital Theory. D'Aveni (1990) also suggests that managerial prestige stems from top executive experience. Thus, while D'Aveni (1990) does not use the term human capital (Becker, 1964, 1975; Coleman, 1988) specifically, he essentially suggests that managerial prestige also resides in the stock of human capital possessed by top executives (Certo, 2003). Human capital refers to the expertise, skill, experience, and knowledge that reside within an individual or group (Becker, 1964; Burt, 1992; Coleman, 1988).

Human capital theory suggests that individuals and groups possess a form of capital that is derived from the skills and knowledge they develop through their experiences (Flamholtz & Lacey, 1981). The human capital of top executives is commonly viewed as stemming from their educational and work experiences (Finkelstein & Hambrick, 1996). Becker (1975) suggests there are two forms of human capital: general and specific. General human capital resides in individual skills and abilities that have value in a variety of contexts (Becker, 1975; Certo, 2003). Educational background, and work experience represent examples of general forms human capital (Castanias & Helfat, 1991; Gimeno et al., 1997; Hitt et al., 2001). Contrastingly, specific human capital represents skill and abilities whose value is contingent on the context in which they are employed. Industry experience and firm

experience are examples of specific human capital (Castanias & Helfat, 1991; Gimeno et al., 1997).

Research demonstrates the potential role of executive human capital in shaping organizational performance (Castanias & Helfat, 2001; Finkelstein & Hambrick, 1996). For example, Pfeffer and Davis-Blake (1986) examined the influence of leader experience on organizational performance in the context of the National Basketball Association (NBA). These authors found that the ability and experiences of new NBA coaches were positively related to the subsequent performance of their new teams. More recently, Carpenter et al. (2001) examine the influence of CEO international experience on the performance of U.S. multinationals. They find that CEO international experience is positively related to firm performance. They also found that the positive relationship between CEO international experience was strengthened by the international experience of non-CEO TMT members.

#### *Consequences of Managerial Prestige: Empirical Evidence*

Having reviewed the theoretical underpinnings of managerial prestige, I now shift my focus to empirical evidence regarding the consequences of managerial prestige. While senior executives are members of the corporate elite who possess an element of managerial prestige, they are not all equal with regard to their level of managerial prestige they possess (D'Aveni, 1990; Useem & Karabel, 1986). As such, researchers have utilized a variety of executive characteristics to stratify top executives and link managerial prestige differences to multiple organizational outcomes. In the section that

follows I review empirical studies and summarize the relationships documented in these studies between managerial prestige and a variety of organizational outcomes.

Managerial Prestige and Bankruptcy. D'Aveni (1990) was one of the first to suggest that managerial prestige influences organizational performance. Specifically, D'Aveni (1990) posits that managerial prestige indicates managerial competence, credibility and trustworthiness, which contributes to creditor perceptions of firm trustworthiness and viability. D'Aveni (1990) further suggests that managerial prestige contributes to firm survival by creating creditor faith in a firm and its management. Utilizing a matched sample design, D'Aveni (1990) examines the influence of managerial prestige on the likelihood of bankruptcy. In partial support of his thesis, D'Aveni (1990) found that two (political and board connections) out of five managerial prestige characteristics were negatively related to the likelihood of firm bankruptcy in his matched sample of 57 large U.S. firms. Furthermore, D'Aveni (1990) found that failing firms attempted to increase their prestige three to four years prior to bankruptcy, and also found that those firms also experienced a 'bailout' of prestigious managers in the two years prior to bankruptcy.

Managerial Prestige and Alliance Formation. Eisenhardt and Schoonhoven (1996) drew upon managerial prestige in part to posit a link between top executive characteristics and alliance formation. With regard to managerial prestige, Eisenhardt and Schoonhoven (1996) argue that the prior industry and managerial experiences of TMT members signal managerial skill and trustworthiness as well as provide social ties to potential alliance partners. In line with this view, they furthered argued that the

amount of TMT prior industry experience and as well as the amount of prior TMT managerial experience would positively relate to the rate of firm alliance formation. Utilizing a sample of semi-conductor firms, they found support for their arguments. Specifically they found that both the amount of prior TMT industry experience and the amount of prior TMT managerial experience were positively related to the rate of firm alliance formation.

Managerial Prestige and Underwriter Prestige. Higgins and Gulati (2003) explored the influence of managerial prestige on underwriter prestige. Specifically, they examined the influence of upper echelons value chain affiliations (e.g., ties to firm suppliers or buyers) on underwriter prestige. Higgins and Gulati (2003) found that the prominence and range of upper echelons affiliations were positively related to underwriter prestige in a sample of IPO stage bio-technology firms. The results of their study also demonstrated that technological uncertainty moderates the relationship between upper echelons affiliations and underwriter prestige.

Managerial Prestige and IPO Performance. The influence of managerial prestige on external stakeholder support has also been examined by gauging investor reactions to initial public offerings. The IPO context has proven a valuable context in which to examine the influence of managerial prestige in contributing to organizational legitimacy given the uncertainty investors face regarding firm ability to adapt to the rigors of public trading (Certo, 2003). Three types of investor behavior have been linked to managerial prestige possessed by a firm at the time of its IPO: IPO under pricing, IPO investor

valuations, and institutional investing in IPOs. In the paragraphs that follow I review extant research linking managerial prestige to IPO outcomes.

Cohen and Dean (2005) examine the signaling influence of managerial characteristics on IPO under pricing. The notion that top management team characteristics signal IPO issuer legitimacy thus reducing IPO under pricing represents the central premise of Cohen and Dean's (2005) study. In support of their hypothesis, the authors found that TMT legitimacy was negatively related to IPO under pricing in a sample of U.S. IPO's undertaken from 1998 to 1999.

Similarly, Chemmanur and Paeglis (2005) examine the influence of various indicators of managerial quality on aspects of IPO firm performance. The central thesis of their study posits that managerial quality has a positive impact on both IPO and post-IPO firm performance. Chemmanur and Paeglis (2005) test this thesis on a sample of firms that undertook IPOs from 1993-1996. They found that managerial quality was positively related to IPO offer size, underwriter prestige, institutional investment, long-term IPO stock returns and post-IPO return on assets. Also, Chemmanur and Paeglis (2005) found a negative relationship between managerial quality and underwriting expenses and IPO under pricing.

More recently, Lester et al. (2006) examine the influence of TMT prestige on IPO investor valuations. Extending the logic of D'Aveni (1990) to the IPO context, the authors argue that TMT prestige signals organizational legitimacy and access to social resources, which may influence investor perceptions of IPO firm potential. Partially supportive of their hypotheses, Lester and colleagues (2006) find a positive relationship

between firm TMT educational prestige and IPO investor valuations in their sample of IPOs undertaken during 1996 and 1997.

Finally, Higgins and Gulati (2006) examine the influence of managerial affiliations on institutional investment in an IPO firm. Consistent with prior studies examining the signaling effects of managerial affiliations, Higgins and Gulati (2006) posit that managerial resources signal firm legitimacy, which is likely to influence external party perceptions of firm quality and potential. Specifically, Higgins and Gulati (2006) examine the influence of TMT employment affiliations (upstream or downstream in the value chain) as well as the role experience of core TMT members (CEO, CFO and Chief Scientific Officer) on the number of quality institutional investors that invest in a firm at the time of their IPO. These authors find that prominent downstream TMT employment affiliations, TMT employment affiliation diversity and prior role experience of the Chief Scientific Officer are positively related to the number of quality institutional investors investing in an IPO firm in their sample of biotechnology firms.

Managerial Prestige and Post-IPO Performance. Prior research has also link some aspects of managerial prestige to post-IPO firm performance. Chemmanur and Paeglis (2005) argue that higher quality managers enhance post-IPO operating performance because they are better able to select and implement investment projects. Regarding managerial prestige they found that the percentage of TMT members possessing an MBA, and the proportion of TMT members with prior TMT experience in other firms were positively related to post-IPO operating performance.



## **Initial Public Offerings**

While all firms require the support of critical external stakeholders (Pfeffer & Salancik, 1978; Thompson, 1967), IPOs represent a critical and unique transition in the life cycle of a firm (Certo et al., 2001b; Daily et al., 2005). For firms undertaking IPOs, acquiring the support of key members of the external environment is particularly salient to firm survival and growth. In order to relate top executives and their characteristics to post-IPO firm performance it is necessary to have a basic knowledge of the IPO process, prior research on post-IPO firm performance. Consequently, in the following sections I review 1) how the IPO process comes to pass, 2), the motivations for undergoing the IPO process, 3) the liabilities associated with transitioning from privately held to publicly traded, the paucity of studies examining post-IPO firm failure and growth.

### *IPO Process*

Firms undertaking IPOs adhere to a relatively standardized processes (Ellis et al., 2000). The descriptions of the IPO process by Certo (2003) and Daily et al. (2003a) are succinct and thorough. A review of their accounts of the IPO process suggests that there are several steps privately held firms take as they make the transition to the public arena. First, the executives of privately held firms enlist the service of an investment banker. Investment bankers play a central role in guiding privately held firms through the IPO process. Next, privately held firm managers, owners, investment bankers, and legal counsel work together to prepare a firm's prospectus and registration statement

(Anderson et al., 1995). After the filing of a firm's registration statement with the SEC, investment bankers and firm managers arrange to meet with potential institutional investors in order to create and gauge investor interest in the firm's offering (Edy, 2000; Lashinsky, 1999; Ritter, 1998). After querying institutional investor interest, investment bankers determine a final offer price, which represents the price at which a firm will begin trading when it first goes public. Finally, shares of a firm's stock are listed on public stock exchanges and are purchased by public market investors.

### *IPO Motivations*

While there exist multiple potential motivations for undergoing the IPO process (see Brau & Fawcett, 2006 for a review), two primary motivations are often cited in the finance, strategic management, and entrepreneurship fields. First, entrepreneurs and owners of privately held firms may choose to undergo the IPO process in order to diversify their holdings (Ritter & Welch, 2002; Zingales, 1995). By taking their private firms public, owners and entrepreneurs create a public market for their holdings. Creating a public market for a firm facilitates the conversion and diversification of firm ownership holdings (Mello & Parsons, 2000; Zingales, 1995).

Second, IPOs provide firms with a means of obtaining the capital funding necessary to expand and grow (Choe et al., 1993; Jain & Kini, 1994; Lowry, 2003; Mikkelson et al., 1997). As privately held firms grow, they may find it increasingly undesirable or difficult to finance their growth with debt (Rock, 1986). As a result, they

may turn to equity markets in order to convert their debt to equity as well as avoid the covenant restrictions often associated with commercial debt (Rock, 1986).

### *Post-IPO Liabilities*

While firms successfully navigating the IPO process may achieve a number of benefits (Husick & Arrington, 1998), the IPO process is not a panacea. IPO firms, by definition, face the demands of being publicly traded for the first time. Drawing on Aldrich's (1999) framework of transformational change, Fischer and Pollock (2004) suggest that the transition from a privately to publicly held company induces newly public firms to make changes in three key areas. First, moving from the private to public arena often requires a change of goals. For instance, public investors may be less tolerant of performance volatility and have shorter time horizons than private investors (Price Waterhouse, 1995). This suggests that managers of newly public firms must learn to adapt to the objectives and challenges presented by public shareholders (Fischer & Pollock, 2004). Second, firms are likely to undergo changes in firm boundaries following the IPO as managers utilize IPO proceeds to enter new product and geographic markets (Fischer & Pollock, 2004). Finally, newly public firms experience changes in their activity systems that are costly and require organizational learning (Fischer & Pollock, 2004). These changes stem from the increased formal governance procedures and reporting requirements of the Securities and Exchange Commission (Husick & Arrington, 1998; Price Waterhouse, 1995). A study by PWC Global conducted in 2000

estimated that the average direct costs of a firm being publicly traded constitute approximately ten percent of firm profits at the time of the IPO (Benninga et al., 2005).

This discussion suggests that the changes required of firms that move from the public to private arena are substantial. Examination of post-IPO firm performance provides further evidence of the potential perils of the IPO process. Research by Ritter (1991) as well as Ritter and Welch (2002), for example, suggests that the market returns of IPO firms are substantially less than their similarly sized industry peers. Furthermore, Fama and French (2004) recently show that the survival rates of newly listed firms are substantially less than those of more seasoned firms. More specifically, Fama and French (2004:230) find that seasoned firms have delisting rates of 17.9 percent from 1980-1991, while new issues (IPO firms) have 44.2 percent delisting rate from 1980-1991. In summary the IPO process presents firms with several unique challenges.

#### *Post-IPO Growth and Failure*

Despite the many unique practical and theoretical linkages between the IPO context and firm growth and survival, surprisingly few studies have examined the survival and growth patterns of newly public firms. For instance, Fischer and Pollock (2004) in their brief review of research examining IPO firm survival note only three studies (Jain & Kini, 2000; Platt, 1995; Welbourne & Andrews, 1996) that examined IPO firm failure. In my own search of the literature on IPO firm survival, I found three additional studies that model post-IPO firm survival (Bhabra & Pettway, 2003; Hensler et al., 1997; Jain & Kini, 1994).

My search of the literature also revealed a paucity of studies examining the growth of firms immediately following their IPOs. More specifically, I found only three studies that predict the growth of IPO firms (Brau et al., 2004; Kor, 2003; Robinson, 1999). This is surprising given the fact that procuring the financial resources necessary for growth represents a primary reason provided for firms undergoing the IPO process (Brau & Fawcett, 2006). In sum, relatively few studies empirically examine the survival and growth of newly public firms, of which only one (Fischer & Pollock, 2004) expressly addresses the challenges presented to adapting to the public arena.

### **Summary**

The preceding sections highlight several important points. First, understanding the relationship between top manager characteristics and firm performance is important for both researchers and practitioners. Prior empirical findings regarding such relationships are inconsistent. Consequently, some suggest the need to integrate other theoretical perspectives with upper echelons theory to predict firm performance. Second, prior research suggests that managerial prestige increases firm access to key environmental resources and support by signaling managerial quality and organizational legitimacy as well as transferring status to potential exchange partners. Yet extant research does not demonstrate that managerial prestige influences firm performance through the resource holder support it engenders. Rather, the prior empirical research reviewed in this chapter examines the consequences of managerial prestige directly by

operationalizing resource holder support and firm performance with the same measure. As such, I am unaware of any empirical study that has examined how resource holder support might mediate the influence the managerial prestige on firm performance.

Third, relatively few studies examine the influence of top managers on post-IPO firm performance, none of which examine the relationship between managerial prestige and post-IPO firm growth and survival. The IPO represent a transformational event in the life cycle of publicly traded firms, and as such it presents researchers with a unique context in which to consider the influence of top manager characteristics on firm performance.

## CHAPTER III

### THEORY AND HYPOTHESES DEVELOPMENT

The purpose of this chapter is to develop a framework to examine the influence of managerial prestige on post-IPO firm growth and survival. The research reviewed in Chapters II provides the foundation for the theory and hypotheses developed in this chapter. The theory developed in this chapter integrates the resource based view, resource dependence theory, and upper echelons theory to develop a model of managerial prestige's influence on post-IPO firm performance.

In the sections that following I do the following. First, I develop theory and hypotheses that explain why executive prestigious educational experience, prestigious firm managerial experience, and prestigious firm external directorate experience represent key aspects of managerial prestige in the post-IPO firm performance. Specifically, I utilize the resource based view to argue that executive elite educational experience, prestigious firm managerial experience, and prestigious firm external directorate experience represent valuable, rare and inimitable sources of human and social capital as IPO firms make the transition to the rigors of public trading. As such, I posit that these executive characteristics represent relevant stocks of managerial human and social capital in the post IPO context and therefore fit the definition of managerial prestige articulated in Chapter II. Second, I develop theory and hypotheses that identifies prestigious alliance partners and dedicated institutional investors as key

external resource holders in the post-IPO context. In doing so, I discuss how these key external resource holders provide newly public firms with information and resources salient to the IPO transition. Third, I draw upon resource dependency theory to suggest that executives who possess the aforementioned aspects of managerial prestige (i.e., prestigious educational credentials, prestigious firm managerial experiences, and prestigious firm external directorate experiences) are likely to influence external constituency perceptions of managerial ability to deal with the challenges faced by newly public firms. This, in turn, is likely to facilitate firm access to the support of key external resource holders, thus easing the transition made by IPO firms into the public arena. Finally, I hypothesize that the support and resources provided by prestigious alliance partners and dedicated institutional investors partially mediates the influence of the previously identified aspects of managerial prestige on post-IPO firm performance.

### **Post-IPO Firm Performance: Firm Growth and Failure**

The executives that lead newly public firms generally have substantial motivation to pursue both firm growth and survival. Firm growth and survival embody desirable and interrelated firm outcomes (Baum & Mezias, 1993; Baum & Oliver, 1991; Brush et al., 2000; Eisenhardt & Schoonhoven, 1990; Mishina et al., 2004; Penrose, 1959). Through growth, firms achieve the size necessary to achieve economies of scale (Chandler, 1990). The increased size that growth brings also serves to enhance firm



visibility, legitimacy, and survival prospects (Hannan & Freeman, 1984; Zimmerman & Zeitz, 2002).

A recent survey of CEOs and board chairs reveals that the sustaining high rates of growth represents a top concern among members of the upper echelons (Huston & Sakkab, 2006). Additionally, firm growth and survival influence executive career prospects (Boeker & Karichalil, 2002; Cannella et al., 1995) and board appointments (Fama, 1980; Johnson et al., 1996). Finally, acquiring the financial capital necessary to expand a firm's operations is often offered as a rationale for undergoing the IPO process by both researchers and practitioners (G & Fawcett, 2006).

### **The IPO and Transformational Change**

While newly public firms and their executives may have substantial motivation to pursue growth opportunities and ensure firm survival, the transformational nature of the transition from the private to public arenas presents them with several challenges in the pursuit of these ends (Certo, 2003; Fischer & Pollock, 2004). In particular, Fischer and Pollock (2004) suggest that newly public firms are often required to make changes to three key organizational aspects: organizational goals, organizational boundaries, and organization activity systems. These changes result in the disruption of organizational routines (Miner et al., 1990), which divert resources from operational and strategic activities to adaptation and reorientation processes (Fischer & Pollock, 2004). As a result of the diversion of resources from normal operations, newly public firms are likely

to face increased failure rates (Fischer & Pollock, 2004) and diminished growth prospects. The difficulties of transitioning from the private to public arenas are evidenced by the fact that many firms under perform and eventually fail following their IPOs (Fama & French, 2004). Indeed, Fischer and Pollock (2004) suggest that the IPO event represents a transformational event in the life cycle of a firm that resets the organizational clock re-exposing it to the liability of newness. This suggests that, in a manner similar to that which occurs at firm founding (Eisenhardt & Schoonhoven, 1990), firm characteristics at the time of the IPO transition are likely to have an enduring effect on firm performance (Fischer & Pollock, 2004).

### **Managerial Prestige in the Post-IPO Context**

As noted in Chapter II, prior research on managerial prestige provides three key insights regarding the definition of managerial prestige. First, D'Aveni (1990) states that that managerial prestige represents the property of possessing *status*. Second, status refers to an actor's position within a social system based upon a set of *relevant* dimensions (Deephouse, 1998). Third, managerial prestige stems from the stock of *human and social capital* possessed by top managers (Certo, 2003; D'Aveni, 1990). Taken together these three insights suggest that managerial prestige represents the *relevant stock of human and social capital possessed by a firm's TMT*.

Drawing upon these insights, in the sections that follow I endeavor to identify aspects of executive characteristics that meet the criteria of managerial prestige in the

post-IPO context by facilitating the transition of newly public firms to the rigors of public trading. Towards this end, I apply the logic of the resource based view (Barney, 1991; Wernerfelt, 1984) to different sources of top management human and social capital in order to identify some which fit the relevance criterion of managerial prestige in the post-IPO context. Specifically, I argue that prestigious educational credentials, managerial experiences in prestigious firms, and external directorates in prestigious firms represent<sup>1</sup> valuable, rare, and inimitable sources of executive human and social capital in the post-IPO context, and as such are highly relevant to the post-IPO context.

#### *A Resource Based Perspective*

The long-term performance of IPO firms, in part, depends on their ability to cope with the rigors and challenges of public trading (Fischer & Pollock, 2004). As such, the post-IPO context often represents a highly complex decision-making environment for top executives. Such complexity is likely to highlight the importance of top executives who have experiences relevant to the challenges faced by newly public firms. A central thesis of this study is that executives who possess elite educational credentials, managerial experiences in prestigious firms, and/or external directorate experiences in prestigious firms are better able to effectively manage the complexity of the post-IPO

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<sup>1</sup> Although managerial prestige is a multi-dimensional construct which may encompass a variety of top executive characteristics, this study focuses on executive characteristics that are specifically relevant to the IPO context. As will be discussed in more detail, multiple theoretical perspectives suggest that prestigious educational credentials, managerial experiences in prestigious firms, and external director experiences in prestigious firms are highly salient to the issues faced by firms making the transition from private to public markets.

environment faced by newly public firms as they transition to public markets than those without such experiences. In order to theoretically ground this argument I incorporate the logic of the resource based view and argue that executives who possess elite educational credentials, managerial experiences in prestigious firms, and external directorate experiences in prestigious firms represent valuable, rare and inimitable sources of human and social capital to newly public firms.

The resource based view suggests that resources which are valuable, rare, and inimitable represent potential sources of competitive advantage to the firms that control them (Barney, 1991; Penrose, 1959; Wernerfelt, 1984). Thus, in order to ascertain the benefits and relevance of executive experiences one must address questions regarding their value, rarity and inimitability. The answers to these questions are likely to be highly context dependent (Priem & Butler, 2001). Consequently, it is important to address these questions in light of the context in which executive experiences are to be utilized.

The IPO represents the context of this study. This context is unique for several reasons, many of which were discussed in Chapter III. Accordingly, I address the questions of the rarity, inimitability and value of executive prestigious firm managerial experiences, prestigious firm directorate experience, and elite educational credentials in light of this context.

Although the possession of prestigious firm managerial experience, prestigious firm external directorate experience and prestigious educational credentials may be typical of executives in large, well established, publicly trade firms, there are several

reasons to suggest that they may represent both rare and inimitable resources among newly public firms. First, executives of prestigious companies, executives with external directorate experience in prestigious firms, and executives with elite educational credentials represent members of elite managerial circles (Useem, 1979, 1984; Useem & Karabel, 1986). As such, the initial pool from which IPO firms can draw such executives is limited. Second, IPO firms are typically considered risky ventures (Certo, 2003), and as such executives who possess such experiences may shy away from them in order to protect their reputations from the stigma of being associated with a poorly performing firm (Blau, 1964; Cohen & Dean, 2005; Podolny, 1994). This suggests that even when a sizable pool of executives with these types of experiences exists convincing such an executive to join an IPO firm may require substantial compensation, which may dissuade IPO firms from pursuing them. Third, IPO firm executives who lack prestigious firm managerial experiences, prestigious firm external directorate experience and elite educational credentials may resist their replacement (Li & Cannella, 2003). In summary, there are several reasons why these particular executive experiences may represent rare and inimitable resources in the post-IPO context.

Having discussed the rarity and inimitability of managerial prestige, I now shift my focus to address value of these resources. Prior research suggests that the value of executive resources is also contingent on the context in which they are employed (Carpenter et al., 2001). In the sections that follow, I develop hypotheses that address the value of executives who possess prestigious firm managerial experiences, prestigious

firm external directorate experience and elite educational credentials in the IPO context and thus develop hypotheses regarding their influence on firm performance.

### *Prestigious Educational Credentials*

Prior research suggests that the educational credentials of top executives play an important role in determining TMT effectiveness (Cooper et al., 1994; D'Aveni, 1990). Top executive prestigious educational credentials, defined as the rank of degree granting institution from which top executives receive their college degrees, may represent a valuable resource in the IPO context for three reasons. First, the possession of prestigious educational credentials implies intellectual capability, and thus ability to deal with managerial complexity brought on by the IPO. Extant research provides a rationale for linking the possession of prestigious educational credentials to intellectual capability. For example, the level of individual educational achievement has been found to be positively related to individual cognitive complexity (Hitt & Tyler, 1991; Wally & Baum, 1994).

Second, elite educational credentials embody social ties to elite social networks (Domoff, 1970; Palmer & Barber, 2001). Consistent with this view, extant research suggests that elite educational social ties provide information regarding innovative administrative and management practices. For example Palmer et al. (1993) find that executive elite business school credentials are positively related to the rate of diffusion of the Multi-divisional form of organizational structure. This suggests that elite educational ties may provide executives with information and resources that contribute

to firm ability to adapt to the requirements of the public arena by facilitating the formalization of reporting routines, and the standardization of organizational structures required by public stock markets.

Third, a growing body of research suggests that the prestige of institutions from which top executives receive his/her educational credentials contribute to organizational legitimacy. For example, D'Aveni (1990) posited that the prestige of educational credentials possessed by a firm's top executive enhances firm legitimacy by indicating managerial competence, skill and trustworthiness. Consistent with this logic, Lester et al. (2006) demonstrated that the prestige of educational credentials possessed by top executives contribute to IPO firm ability to garner financial resources from capital markets.

In summary, this discussion suggests that the elite educational credentials possessed by top executives represent valuable sources of human and social capital for newly public firms. Specifically, this discussion suggests that the possession of elite educational credentials by top executives may enhance their ability to deal with the complexity of, as well as adapt organizational structures and routines to the public arena. Additionally, this discussion suggests that that top executive elite educational credentials contribute to the legitimacy of IPO firms. As such, such these executive characteristics are likely to represent valuable resources for newly public firms. Consequently, I hypothesize the following: *Hypothesis 1: Prestigious executive educational credentials at the time of a firm's IPO are positively related to post-IPO firm performance.*

### *Prestigious Firm Managerial Experience*

Prior research suggests that the prior managerial work experiences of top executive shape their abilities and predispositions (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984). Particularly salient in the context of newly public firms is managerial experience in prestigious firms. Extant research suggests that top executive managerial experience in prestigious firms may be valuable to newly public firms for multiple reasons. Theory and evidence on socio-cognitive processes suggest that through their personal experiences individuals develop 'knowledge structures' that allow more efficient information processing and accurate predictions (Ford & Baucus, 1987; Stabell, 1978; Walsh, 1995). Prior research also suggests that managerial skills are primarily based on tacit forms of knowledge (Cooper et al., 1994) which, by definition, are developed through personal experience. This suggests that executives with prior managerial experience in prestigious firms may develop tacit knowledge required to implement the strategies and management techniques of their successful and well-respected prior employers (Boeker, 1997; Westphal & Fredrickson, 2001). Thus, the possession of managerial experience in prestigious firms may represent a form of human capital that enables executives to cope with and adapt to the complexity of public trading.

Second, the prior managerial experiences of senior executives serve to expand a focal firm's social network by providing ties to prior employers and former colleagues (Geletkanycz & Hambrick, 1997). Thus, ties to the prestigious prior employers of top managers may provide preferential access to the resources and information of the prior



employer (Burton et al., 2002). Such ties may also serve to enhance the prestige with which a focal firm is viewed by other organizations (Podolny, 1993, 1994), thereby contributing to firm legitimacy.

The prior discussion suggests that the possession of prior experience in prestigious firms represents a valuable source of executive human and social capital. This intangible resource is suggested to contribute to firm ability to cope with the complexity of, as well as enhance firm legitimacy as newly public firms adapt to the public arena. Accordingly, I propose that top executive managerial experience in prestigious firms represents a firm resource beneficial to overcoming the deleterious effects of the IPO event. Thus, I hypothesize the following: *Hypothesis 2: Executive prior managerial experiences in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.*

#### *Prestigious Firm Core Executive Role Experience*

Prior research highlights the importance of executive role experience in the IPO context (Higgins & Gulati, 2006; Li & Cannella, 2003). Role experience refers to matching of prior executive roles with to current roles (Higgins & Gulati, 2006). Prior role experience in prestigious public firms may be beneficial for a couple of reasons. First, role experience in prestigious firms may allow executives to develop the managerial skills and tacit knowledge required to effectively fulfill the responsibilities of their positions. Second, extant research suggests that executive prior role experience contributes to the legitimacy of IPO firms by conforming to the roles proscribed by their

position (Higgins & Gulati, 2006). Consistent with the attention based view (Ocasio, 1997), I suggest that the legitimacy effects of prior executive role experience may be especially salient when such experience takes place in a prestigious firm given its relevance to the challenges faced by newly public firms.

Research suggests that the prior role experiences of ‘core’ members of the TMT are particularly salient in the IPO context (Higgins & Gulati, 2006). Top management teams often have a “stable core” and a “dynamic periphery” (Boeker, 1992; Finkelstein, 1992; Roberto, 2003). According to Roberto (2003), a small group of the most senior executives work together on all strategic decisions, while a larger group of lower ranking executives contribute to strategic decision making on an issue by issue basis (Roberto, 2003). Given their position at the pinnacle of the upper echelons, core members of a firm’s management group are exposed to, and possess experience in dealing with a broad range of strategic, organizational, and operational issues (Roberto, 2003). Accordingly, core members of a firm’s top management team invest a substantial amount of time in monitoring and controlling organizational processes and performance (Roberto, 2003).

This suggests that core executive experience in prestigious firms may be of substantial value as a firm makes the organizational, structural, and performance objective changes required as a newly public firm transitions from the private to public arena. Specifically, the possession of prior core executive experience in prestigious firms by a firm’s core executives may contribute to firm adaptation to public markets, as well firm legitimacy, both of which are likely to enhance post-IPO firm performance.

As such I hypothesize the following: *Hypothesis 3: Prior core executive role*

*experiences in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.*

### *Prestigious Firm External Directorships*

Lorsch and MacIver (1989:27) highlight the potential value of prestigious external directorships, citing one chief executive officer who stated, "Serving on a board is a way to see how somebody else is doing the same thing you're doing. I usually look at the company to see if they are a strong, growing firm." This suggests that as firm executives serve on the boards of other firms they gain insight into how things get done at other firms (Lorsch & MacIver, 1989). Supportive of this view, a sizable body of research suggests that external directorships facilitate the diffusion of corporate practices (Rao et al., 2000; Rao & Sivakumar, 1999), strategies (Carpenter & Westphal, 2001; Haunschild, 1993; Westphal & Fredrickson, 2001) and structures (Palmer et al., 1987).

Davis et al. (2003:301) note, "the point-to-point contagion process among boards is straightforward: boards meet frequently, and directors bring their knowledge and insights gained on one board to bear on the question faced by their other boards." In particular, serving as a director on the board of a prestigious firm provides executives the opportunity to observe and learn about the practices, structures, and strategies of highly respected and successful firms. As such, service on the board of prestigious firms may provide tops executive with tacit knowledge of the practices, structures, and strategies that may facilitate a newly public firm's transition to the public arena.

This discussion suggests that the prestigious external directorships of top management may increase executive ability to implement the required adaptation and reorientation processes required of newly public firm as they transition to the public arena. Consequently, top executive prestigious external directorships may represent valuable sources of executive human and social capital which aid newly public firms in adapting to the rigors of public trading, as well as contribute to organizational legitimacy. As a result I hypothesize the following: *Hypothesis 4: Executive external directorships in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.*

### **A Resource Dependence Perspective**

The transition from the private to public arena often results in substantial resource constraints for newly public firms (Fischer & Pollock, 2004). Extant research on transformational change suggests that the support of key external resource holders may shield a firm from the deleterious effects of the transformation process. For example, Miner et al. (1990) find that links between a newspaper and influential political parties increase the newspaper's ability to adapt to and survive transformational change. Specific to surviving the transformational change associated with the IPO event, Fischer and Pollock (2004) find the resources provided by embedded underwriters decrease the likelihood of firm failure.

Paradoxically, while newly public firms have substantial need for resources and support from key environmental constituencies, they likely face difficulty in procuring such support. The reason for this difficulty is that newly public firms face a liability of market newness (Certo, 2003). The liability of market newness stems from the uncertainty surrounding the viability of newly public firms given the fact that they often fail to adapt to the rigors of public markets (Certo, 2003). As a result of the uncertainty surrounding IPO firms, external constituencies may withhold their support and resources.

Consistent with resource dependency theory, I propose that managerial prestige enhances the performance of newly public firms by engendering the support of key environmental resource holders. Top executives are situated at the boundary of the firm that employs them (Pfeffer & Salancik, 1978). As individuals who are highly visible to and often interact with external constituencies (Pfeffer, 1981, 1983), prestigious top managers and the social capital they embody, may play a key role in the acquisition of support and resources from key environmental constituencies (Pfeffer & Salancik, 1978).

#### *Identifying Key External Resource Holders*

While managerial prestige may influence a variety of potential external resource holders in the pursuit of firm growth and survival, this study focuses on external resource holders who address the challenges and liabilities associated with the post-IPO context. Extant research suggests that newly public firms face numerous challenges in

adapting to the public arena, two of which are particularly salient to the current study (Fischer & Pollock, 2004). First, the transition from the private to the public arena diverts resources and managerial attention from normal operating activities to reorientation and adaptation. Second, newly public firms face challenges in coping with changes in goals resulting from potentially conflicting objectives and differing time horizons of new and often more numerous investors. In the following sections I develop hypotheses which suggest that the support provided by *dedicated institutional investors* and *prestigious alliance partners* aid newly public firms in overcoming these two challenges associated with adapting to the public arena.

#### *Prestigious Alliance Partners*

Resource constraints limit the growth and survival of all organizations (Penrose, 1959; Pfeffer & Salancik, 1978). In the context of post-IPO firm growth and survival, resource constraints stem from firm adaptation to the rigors and challenges of being publicly traded (Fischer & Pollock, 2004). Given the resource constraints faced by newly public firms, strategic actions that allow a firm to conserve and/or access additional resources are likely to enhance post-IPO firm growth and survival.

Strategic alliances represent one type of strategic action that may allow a firm to both conserve its own resources and access the resources of others. First, strategic alliances enable firms to share resources (Dyer & Singh, 1998; Hamel et al., 1989; Ohmae, 1989; Stuart, 1998). As Ireland et al. (2002:413) note, “strategic alliances are

cooperative arrangements between two or more firms to improve their competitive position and performance by sharing resources.”

Second, strategic alliances may also increase a newly public firm’s survival and growth prospects by signaling firm legitimacy (Baum & Mezas, 1993; Stuart, 2000). The challenges and difficulties in transitioning from the private to public arena can create uncertainty in the mind of potential stakeholders regarding the viability of IPO firms (Certo, 2003). This uncertainty may limit external stakeholder willingness to lend support to a newly public firm. In order to address uncertainty surrounding firm viability, external stakeholders are likely to search for indicators of firm legitimacy such as those provided by strategic alliances (Stuart et al., 1999).

Prior research generally suggests that strategic alliances increase firm growth prospects and survival chances. For instance, Stuart et al. (1999) find that the number of alliances formed is positively related to sales growth in start-ups. Sarkar et al. (2001) find that alliance proactiveness, defined as the extent to which an organization engages in identifying and responding to partnering opportunities, is positively related to market performance. Additionally, Singh and Mitchell (2005) find that alliances at the time of market entry as well as post-entry alliances are positively related to sales growth. Increases in sales growth may contribute to firm survival prospects (Mitchell et al., 1994). Finally, Mitchell and Singh (1996) demonstrate that strategic alliances may contribute to firm survival.

While research suggests strategic alliances often enhance firm growth and survival prospects (Singh & Mitchell, 2005), strategic alliances may require considerable

investments of managerial attention and resources (Gulati & Singh, 1998; Ireland et al., 2002). Research on strategic alliances suggests that the characteristics of a firm's alliance partners play an important role in determining the extent to which a firm actually benefits from a strategic alliance (Reuer, 1999). I suggest that prestigious alliance partners may be particularly beneficial to newly public firms. The formation of a strategic alliance with a prestigious firm may allow a newly public firm to observe and learn the practices, routines and organizational structures of its prestigious partner (Hamel et al., 1989). Indeed, there are numerous theoretical (Inkpen, 2000; Kogut, 1988; Larsson et al., 1998) and empirical studies (Hitt et al., 2000; Inkpen & Crossan, 1995; Inkpen & Dinur, 1998; Lane & Lubatkin, 1998) which link strategic alliances and organizational learning. Consistent with this literature, I suggest that the exposure of newly public firm to the practices of prestigious strategic alliance partners provide it with an opportunity to internalize the organizational capabilities, structures and routines of their prestigious partners. The internalization of these practices and routines, in turn, is likely to increase firm ability to implement the changes to organizational structures and practices required to transition to the public arena. Additionally, such affiliations are likely to contribute to firm legitimacy. This discussion suggests the following hypothesis: *Hypothesis 5: The number of post-IPO strategic alliances formed with prestigious firms is positively associated with post-IPO firm performance.*



*Dedicated Institutional Investors*

The transition made by IPO firms often presents them with the new challenge of satisfying the conflicting demands of multiple new investors who differ in their investment time horizons and objectives from early investors (Fischer & Pollock, 2004). In particular, newly public firms must adapt to the pressures of greater investor demand for meeting short-term performance objectives and less investor tolerance for performance volatility (Fischer & Pollock, 2004; Price Waterhouse, 1995). The pressures of effectively meeting the demands of multiple investment constituencies are likely to be a key concern for top executives because failure to do so typically leads to a variety of negative outcomes for top executives (Sanders & Carpenter, 2003).

Paradoxically, top executive preoccupation with these pressures may diminish post-IPO firm growth and survival in at least two ways. First, increased investor concern with short-term performance may reduce managerial willingness to invest in long-term projects and strategies that foster firm growth and survival. For instance, prior empirical research suggests that the short-term (long-term) time preferences of institutional investors decreases (increases) firm investment in research and development activities, human resources, and international diversification (Baysinger et al., 1991; David et al., 2001; Tihanyi et al., 2003), each of which are essential to sustained firm performance. Second, managerial concern regarding investor and analyst reactions to short-term performance volatility can divert managerial resources and attention away from firm strategic and operational initiatives (Rao & Sivakumar, 1999) to developing ways of satisfying firm investors (Sanders & Carpenter, 2003).

*Dedicated institutional investors* may represent key external resource holders that can reduce the pressures faced by top executives of newly public firms to satisfy the various constituencies to which they are beholden. Dedicated institutional investors are institutional investors who own, “large, long-term holdings, which are concentrated in only a few firms” (Bushee, 1998:310). As a result of the nature of their holdings, dedicated institutional investors have substantial incentive to monitor managers and, more importantly, to focus on measures of firm performance other than short-term earnings in assessing managerial performance (Bushee, 1998; Porter, 1992a, b). Additionally, dedicated institutional investors provide firms with a stable base of investors who have long-term investment objectives, resulting in less stock churning (Bushee, 1998) and lower stock price volatility (Carter & Dark, 1993; Ellis et al., 2000).

This discussion suggests that the extent to which a firm’s stock is owned by dedicated institutional investors may diminish the amount of short-term earnings pressure faced by managers of newly public companies. Consequently, this lack of pressure on short-term earnings may aid top executives of newly public firms in focusing their attention on other more long-term strategic and operational issues that foster firm growth and survival. As such I hypothesize the following: *Hypothesis 6: The amount of dedicated institutional investment in a newly public firm is positively associated with post-IPO firm performance.*

### *Garnering the Support of Key External Resource Holders*

Having identified prestigious strategic alliance partners and dedicated institutional investors as key external resource holders in the IPO context, I now shift my focus to addressing the role of managerial prestige in garnering their support. Resource dependence theory (Pfeffer & Salancik, 1978), as well as multiple empirical studies (Cohen & Dean, 2005; Eisenhardt & Schoonhoven, 1996; Higgins & Gulati, 2003, 2006; Lester et al., 2006) suggest that executives, as important sources of firm level social capital, play a critical role in garnering the support of key external resource holders. Consequently I posit that the prestige of top executives play a central role in creating opportunities for IPO firms to garner the support of key external resource holders.

The attention based view suggests that the actions of decision makers, such as those of key external resource holders, are dependent on the issues they focus on (Ocasio, 1997). The attention based view also suggests that the issues decision makers focus on depends on the context they face (Ocasio, 1997). This is consistent with prior research which suggests a central concern of external resource holders when deciding whether to support newly public firms is that of whether an IPO firm will be able to adapt to the public market (Certo, 2003). This concern, termed the liability of market newness (Certo, 2003), represents a primary deterrent to newly public firms garnering the support of key external resource holders. This suggests that factors which address the ability of newly public firm to adapt to the rigors of public trading are likely to reduce the effects of the liability of market newness, suffered by newly public firms,

thereby providing them with greater opportunity to garner the support of key external resource holders.

I draw upon prior research to suggest three primary reasons why managerial prestige may represent one of such factors. First, the prestige of top executives contributes to organizational legitimacy by signaling managerial competency and firm quality (D'Aveni, 1990; Lester et al., 2006). As indicators of managerial ability to cope with the complexity of being publicly traded, executive educational prestige, prior managerial experiences, and external directorships speak directly address the liability of market newness. Second, the social ties embodied in managerial prestige foster awareness of opportunities for entering transactions (Eisenhardt & Schoonhoven, 1996). Finally, the social ties embodied in managerial prestige engender trust between transacting parties (Eisenhardt & Schoonhoven, 1996).

Prior research also suggests that firm characteristics at the time of the IPO may make a lasting impression on external resource holder perceptions of firm legitimacy. For example, prior research examining decision making demonstrates that individual evaluations tend to be biased toward an initial anchor (Slovic & Lichtenstein, 1971). In support of this view Pollock et al. (2002) find that IPO under pricing, venture capital backing at the time of the IPO, and underwriter reputation are positively related to resource acquisition subsequent to the IPO.

Taken together these points suggest that managerial prestige at the time of a firm's IPO is likely to be highly relevant to garnering the support of key external resource holders in the post-IPO context. This leads me to hypothesize the following:

*Hypothesis 7: Executive managerial prestige at the time of the IPO is positively related to the number of post-IPO strategic alliances formed with prestigious alliance partners.*

*Hypothesis 8: Executive managerial prestige at the time of the IPO is positively related to the amount of dedicated institutional investment in a newly public firm.*

### *The Partially-Mediated Effects of Managerial Prestige*

Having discussed the performance effects of prestigious alliance partners and dedicated institutional investors on post-IPO firm performance, as well as how managerial prestige may engender their support, I now shift my focus to detailing how they may mediate the relationship between executive managerial prestige and post-IPO firm performance. Previously I hypothesized that managerial prestige diminishes the liability of market newness, increasing the willingness of key external resource holders such as prospective dedicated institutional investment and prestigious alliance partners to enter into exchange relationships with newly public firms. I also previously argued that the support and resources provided by dedicated institutional investment and prestigious alliance partners serve to buffer newly public firms from the harmful effects of transitioning from private to public markets, thus increasing post-IPO firm performance. Specifically, I have proposed that the support provided by prestigious alliance partners and dedicated institutional investment diminish the resource constraints associated with adaptation and reorientation to the public arena.

The preceding arguments suggest that managerial prestige may increase post-IPO firm performance *through* the acquisition of resources and support provided by

prestigious alliance partners and dedicated institutional investment. However, I anticipate only partial mediation of the effects of managerial prestige on post-IPO firm performance by publicly traded strategic alliance partners and dedicated institutional investment. The rationale for this is that, as hypothesized earlier, the characteristics embodied by managerial prestige represent valuable sources of human and social capital in the IPO context, in and of themselves. As a result, I suggest they are likely to continue to influence firm performance directly even when controlling for the effects of publicly traded alliance partners and dedicated institutional investment. Thus, I hypothesize the following: *Hypotheses 9: The positive relationship between managerial prestige at the time of a firm's IPO and post-IPO firm performance is partially mediated by the number of post-IPO strategic alliances that a newly public firm forms with prestigious firms. Hypotheses 10: The positive relationship between managerial prestige at the time of a firm's IPO and post-IPO firm performance is partially mediated by the amount of dedicated institutional investment in a newly public firm.*

## CHAPTER IV

### METHODOLOGY

The purpose of this chapter is to describe how the hypotheses developed in Chapter III are empirically tested. This chapter consists of five sections. The first section presents a discussion of the sample. The second, third, fourth and fifth sections describe the nature of the dependent, independent, mediators, and control variables respectively used in this study. This chapter concludes with a description of the statistical models utilized in testing the hypotheses developed in Chapter III.

#### Sample

The theory and hypotheses in this study were tested on a sample of firms undergoing the IPO process during the calendar year of 1997. This sample was selected for several reasons. First, the theoretical arguments developed in this dissertation focus on the challenges faced by newly public firms. Second, the Securities and Exchange Commission's (SEC) website, *EDGAR*, has complete electronic copies of all firm SEC filings for the calendar year 1997, whereas it contains only partial firm filings in the prior year. Third, selecting IPO firms from 1997 allowed each IPO firm to be tracked for up to 5 years following its IPO to develop measures of post-IPO firm growth and survival. Finally, 1997 was a very active year in terms of IPOs (Ritter & Welch, 2002).

The base sample for this study was drawn from two primary sources. First, the *Securities Data Corporation (SDC) Global New Issues* database provides information on (484 IPOs). Second, Jay Ritter has compiled an annual list of IPO firms, along with their founding year (436 IPOs). Utilizing these two data sources I was able to link 391 IPOs, by firm name, to create the initial sample for this study. Based upon this initial sample, IPO prospectuses were identified from *EDGAR* resulting in a final sample of 379 firms.

Each of the 379 sample firms listed in Table 1 were subjected to the following criteria for inclusion in the final sample. First, each firm must have issued stock to public markets (i.e., NASDAQ, NYSE, and AMEX) for the first time. Second, each firm must have been headquartered in the United States at the time of the IPO. Meeting this criterion controls for potential cultural differences that are beyond the scope of this study. Third, in line with prior research on IPOs (Ritter, 1991), each firm must not have been classified as any of the following: corporate spin-offs, unit issues, mutual to stock conversions, real estate investment trusts or leveraged buy outs.



**TABLE 1**  
**Sample Firm Identifiers and IPO Date**

PERMNO	IPO Date	Company Name
84385	1/28/1997	Administaff Inc
84391	1/30/1997	HomeSide Inc
84394	1/23/1997	RDO Equipment Co
84396	1/30/1997	Trigon Healthcare Inc
84412	1/22/1997	CD Warehouse Inc
84413	1/30/1997	Cerus Corp
84414	1/28/1997	Coulter Pharmaceuticals Inc
84416	1/28/1997	Coldwater Creek Inc
84418	1/21/1997	EarthLink Network Inc
84420	1/30/1997	EPIX Medical Inc
84421	2/3/1997	ErgoBilt Inc
84422	1/17/1997	Eco Soil Systems Inc
84426	1/29/1997	Medialink Worldwide Inc
84427	1/28/1997	Medirisk Inc
84428	1/29/1997	Metro Information Services Inc
84429	1/30/1997	Medical Manager Corp
84430	1/29/1997	National Auto Finance Company
84434	1/29/1997	Photoelectron Corp
84436	1/22/1997	SEEC Inc
84438	1/9/1997	Sun Hydraulics Corp
84440	1/29/1997	Template Software Inc
84509	2/13/1997	Advanced Electronic Support
84510	2/19/1997	Apex PC Solutions Inc
84511	2/4/1997	Aastrom Biosciences Inc
84513	2/12/1997	Birman Managed Care Inc
84514	2/12/1997	Biosite Diagnostics
84517	2/10/1997	Coast Dental Services Inc
84519	2/7/1997	CIENA Corp
84523	2/12/1997	Daou Systems Inc
84525	2/5/1997	Digital Lightwave Inc
84526	2/25/1997	Deltek Systems Inc
84530	2/25/1997	Edge Petroleum Corp
84531	2/3/1997	Electronic Processing Inc
84534	2/27/1997	First Aviation Services Inc
84535	2/7/1997	Four Media Co
84536	2/7/1997	General Bearing Corp
84537	2/13/1997	Gentle Dental Service Corp
84543	2/20/1997	ILEX Oncology Inc
84545	2/14/1997	Judge Group Inc
84549	2/18/1997	Micro Therapeutics Inc
84550	2/28/1997	Mercury Waste Solutions Inc
84555	2/21/1997	Overland Data Inc
84556	2/5/1997	Preferred Employers Holdings

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
84559	2/3/1997	Premier Research Worldwide Inc
84560	2/12/1997	Qualix Group Inc
84561	2/12/1997	Radiant Systems Inc
84562	2/6/1997	Specialty Care Network Inc
84563	2/13/1997	Silgan Holdings Inc
84564	2/25/1997	Special Metals Corp
84565	2/18/1997	VDI Media
84568	2/27/1997	Vistana Inc
84569	2/12/1997	Wesley Jessen (Bain Capital)
84570	2/5/1997	Yurie Systems Inc
84573	2/20/1997	Brylane Inc
84578	2/11/1997	Community Capital Corp, SC
84580	2/28/1997	General Cigar Holdings Inc
84583	2/7/1997	Puro Water Group Inc
84587	2/21/1997	US Rentals Inc
84588	2/3/1997	Vail Resorts Inc
84589	2/5/1997	Brunswick Technologies Inc
84594	3/4/1997	Aviation Distributors Inc
84595	3/27/1997	AHL Services Inc
84597	3/3/1997	Ameritrade Holding Corp
84599	3/5/1997	Complete Business Solutions
84600	3/17/1997	Colonial Downs Holdings Inc
84604	3/21/1997	Cell Therapeutics Inc
84605	3/19/1997	Endocardial Solutions Inc
84606	3/6/1997	Euronet Services Inc
84607	3/6/1997	EMCORE Corp
84609	3/20/1997	Physicians Specialty Corp
84612	3/19/1997	Fieldworks Inc
84624	3/12/1997	Macrovision Corp
84625	3/13/1997	NeoMagic Corp
84626	3/20/1997	Omniquip International Inc
84627	3/20/1997	PalEx Inc
84628	3/12/1997	ProMedCo Management Co
84631	3/11/1997	Storage Dimensions Inc
84632	3/11/1997	Total Control Products Inc
84645	3/10/1997	Pluma Inc
84649	3/4/1997	Riviera Tool Co
84662	4/17/1997	Essex International
84663	4/24/1997	Hertz Corp
84718	4/11/1997	AccelGraphics Inc
84720	4/15/1997	ASI Solutions Inc
84721	4/10/1997	BEA Systems Inc
84722	4/25/1997	Bionx Implants Inc
84728	4/16/1997	DeCrane Aircraft Holdings Inc

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
84737	4/3/1997	Gulf Island Fabrication Inc
84741	4/29/1997	International CompuTex Inc
84746	4/9/1997	Meade Instruments Corp
84752	4/3/1997	Objective Communication Inc
84753	4/17/1997	ONSALE Inc
84755	4/8/1997	Peregrine Systems Inc
84763	4/10/1997	Valley National Gases Inc
84768	5/30/1997	American Retirement Corp
84776	5/15/1997	General Cable Corp
84778	5/21/1997	Hartford Life (ITT Hartford)
84779	5/7/1997	Journal Register Co
84780	5/9/1997	Knoll Inc (Warburg, Pincus)
84785	4/30/1997	Weider Nutrition International
84788	5/15/1997	Amazon.com Inc
84789	5/29/1997	Ascent Pediatrics Inc
84790	5/13/1997	ASD Group Inc
84792	5/8/1997	Brigham Exploration Co
84793	5/1/1997	Brookdale Living Communities
84796	5/27/1997	Carey International Inc
84801	5/28/1997	DSI Toys Inc
84802	5/2/1997	DTM Corp
84805	5/15/1997	First Sierra Financial Inc
84811	5/21/1997	Healthcare Recoveries Inc
84815	5/6/1997	Kaynar Technologies Inc
84816	5/19/1997	Lexington Healthcare Group
84818	5/2/1997	Marine Management Systems Inc
84823	5/29/1997	NetSpeak Corp
84827	5/13/1997	Rambus Inc
84997	6/19/1997	Aurora Biosciences Corp
84998	6/24/1997	Acorn Products Inc
84999	6/27/1997	Advanced Communication Systems
85001	6/18/1997	Aris Corp
85005	6/5/1997	Cardima Inc
85010	6/17/1997	Genesys Telecommun Labs
85011	6/19/1997	Great Plains Software Inc
85012	6/10/1997	HTE Inc
85013	6/17/1997	inTEST Corp
85015	6/12/1997	IWL Communications Inc
85016	6/26/1997	800-JR Cigar Inc
85018	6/10/1997	JetFax Inc
85021	6/19/1997	Laser Power Corp
85023	6/4/1997	Melita International Corp
85025	6/25/1997	New Century Financial Corp

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
85026	6/18/1997	New Era of Networks Inc
85028	6/17/1997	ORBIT/FR
85030	6/10/1997	Peapod Inc
85031	6/5/1997	PSW Technologies Inc
85032	6/23/1997	Qwest Communications Corp
85034	6/11/1997	Racing Champions Corp
85035	6/3/1997	RF Micro Devices Inc
85036	6/26/1997	Robocom Systems Inc
85038	6/19/1997	RWD Tech Inc
85040	6/18/1997	Simulations Plus Inc
85042	6/25/1997	Staff Leasing Inc
85043	6/12/1997	Star Telecommunications Inc
85044	6/24/1997	Saxton Inc
85045	6/17/1997	SysComm International Corp
85046	6/25/1997	3Dfx Interactive Inc
85048	6/19/1997	Professional Transportation
85051	6/13/1997	Waste Industries Inc
85055	6/18/1997	ARM Financial Group Inc
85059	6/27/1997	Comfort Systems USA Inc
85063	6/23/1997	Domain Energy Corporation
85065	6/26/1997	JLK Direct Distribution Inc
85067	6/12/1997	Maximus Inc
85071	6/4/1997	Pameco Corp
85072	6/11/1997	Polo Ralph Lauren Corp
85075	6/5/1997	Silverleaf Resorts Inc
85077	6/18/1997	StarTek Inc
85078	6/24/1997	Waterlink Inc
85157	7/10/1997	Apollo International of
85158	7/7/1997	Allstar Systems Inc
85160	7/11/1997	At Home Corp
85162	7/8/1997	Axiom Inc
85165	7/28/1997	BioReliance Corp
85166	7/29/1997	Corsair Communications Inc
85168	7/1/1997	Cal Dive International Inc
85171	7/24/1997	CMP Media LLC
85173	7/2/1997	Coinstar Inc
85174	7/2/1997	Centennial HealthCare Corp
85177	7/2/1997	8x8 Inc
85180	7/21/1997	Friede Goldman International
85184	7/3/1997	Hagler Bailly Inc
85187	6/30/1997	Heska Corp
85188	7/30/1997	Information Management Assocs
85190	7/23/1997	JLM Industries Inc
85193	7/17/1997	Monarch Dental Corp

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
85196	7/28/1997	Net.B@nk Inc
85198	7/17/1997	Bank of the Ozarks, AK
85203	7/2/1997	Peritus Software Services Inc
85208	7/1/1997	Schick Technologies Inc
85210	6/30/1997	Schuff Steel Co
85212	7/1/1997	SpectRx Inc
85213	7/24/1997	Scheid Vineyards Inc
85214	7/17/1997	Total Entertainment Restaurant
85215	7/9/1997	Telegroup Inc
85216	7/23/1997	Trailer Bridge Inc
85217	7/22/1997	Travel Services International
85218	7/1/1997	TSI International Software Ltd
85219	7/2/1997	Transcend Therapeutics Inc
85223	7/30/1997	Visual Data Corp
85224	7/30/1997	Vestcom International Inc
85225	7/2/1997	Vista Medical Technologies Inc
85227	7/8/1997	World of Science Inc
85239	7/24/1997	Galileo International Inc
85240	6/30/1997	Hanover Compressor Co
85242	7/8/1997	Horizon Pharmacies Inc
85245	7/10/1997	InfoCure Corp
85246	7/16/1997	LaSalle Partners Inc
85247	7/10/1997	Metals USA Inc
85249	6/30/1997	Pierce Leahy Corp
85258	8/18/1997	Clearview Cinema Group Inc
85268	8/19/1997	US Liquids Inc
85272	8/14/1997	Aehr Test Systems Inc
85273	8/27/1997	Authentic Specialty Foods Inc
85276	8/12/1997	CorporateFamily Solutions Inc
85277	8/1/1997	Concentric Network Corp
85278	7/31/1997	Continental Natural Gas Inc
85280	8/6/1997	Carrizo Oil & Gas Inc
85281	8/20/1997	CTB International Corp
85284	8/14/1997	Discas Inc
85288	8/27/1997	ExecuStay Corp
85289	8/18/1997	Vision Twenty-One Inc
85290	8/11/1997	fine.com International Corp
85291	8/7/1997	GlobeComm Systems Inc
85292	8/4/1997	Hall Kinion & Associates Inc
85293	8/7/1997	Hyseq Inc
85296	8/14/1997	International Isotopes Inc
85298	8/22/1997	Kendle International Inc
85300	8/15/1997	LeukoSite Inc

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
85302	8/22/1997	INSpire Insurance Solutions
85304	8/4/1997	Ocular Sciences Inc
85306	8/8/1997	Omtool Ltd
85307	8/13/1997	On Stage Entertainment
85310	8/21/1997	Premium Cigars International
85311	8/6/1997	Pegasus Systems Inc
85314	8/6/1997	QAD Inc
85315	8/11/1997	Computer Motion Inc
85318	8/13/1997	Sterigenics International Inc
85319	8/12/1997	Syntel Inc
85320	8/8/1997	A Consulting Team Inc
85331	9/23/1997	Avis Rent A Car Inc
85333	9/16/1997	Box Hill Systems Corp
85336	9/23/1997	Industrial Distribution Group
85343	9/17/1997	Security Capital Group Inc
85351	9/5/1997	AutoCyte Inc
85353	9/25/1997	Advantage Learning System Inc
85356	9/25/1997	Big Dog Holdings Inc
85357	9/24/1997	BridgeStreet Accommodations
85360	9/30/1997	Best Software Inc
85361	9/23/1997	Boron LePore & Associates Inc
85363	9/12/1997	Castle Dental Centers Inc
85365	9/18/1997	Coyote Sports Inc
85366	9/3/1997	Compass Plastics
85371	9/23/1997	EduTrek International Inc
85372	9/17/1997	FARO Technologies Inc
85373	9/22/1997	First International Bancorp
85378	9/18/1997	Il Fornaio America Corp
85379	9/19/1997	International Total Services
85380	9/23/1997	JD Edwards & Co
85382	9/15/1997	MegaBios Corp
85388	9/26/1997	NextLink Communications Inc
85390	9/18/1997	Children's Place Retail Stores
85393	9/19/1997	ProBusiness Services Inc
85395	9/25/1997	Pervasive Software Inc
85400	9/11/1997	Signature Eyewear Inc
85402	9/24/1997	Star Buffet Inc
85405	9/18/1997	UNIFAB International Inc
85408	7/30/1997	American Champion
85411	10/8/1997	American Italian Pasta Co
85415	10/22/1997	Audio Book Club Inc
85419	10/30/1997	Capital Senior Living Corp
85424	10/22/1997	Dril-Quip Inc
85427	10/29/1997	Group 1 Automotive Inc

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
85429	9/30/1997	Ivex Packaging Corp(Acadia)
85432	10/16/1997	Mac-Gray Corp
85436	10/1/1997	Petersen Companies Inc
85437	10/1/1997	Securacom Inc
85440	10/10/1997	Stoneridge Inc
85452	10/9/1997	A C Moore Arts & Crafts Inc
85454	10/30/1997	AVTEAM Inc
85456	10/28/1997	Beringer Wine Estates Holdings
85458	10/15/1997	Concord Communications Inc
85459	10/15/1997	CH Robinson Worldwide Inc
85463	10/1/1997	Corixa Corp
85464	10/28/1997	Casella Waste Systems Inc
85466	10/30/1997	Faroudja Inc
85473	10/23/1997	ITC Deltacom Inc
85474	10/22/1997	Innovative Valve Technologies
85475	10/7/1997	Jevic Transportation Inc
85476	10/10/1997	Kofax Image Products Inc
85478	10/16/1997	Vari Lite International Inc
85479	10/28/1997	Metromedia Fiber Network Inc
85481	10/28/1997	MMC Networks Inc
85482	10/10/1997	National Research Corp
85483	10/17/1997	N2K Inc
85484	10/20/1997	Neutral Posture Ergonomics Inc
85486	9/30/1997	Omega Research Inc
85488	10/1/1997	OSI Systems Inc
85489	10/24/1997	OutSource International Inc
85492	10/23/1997	Paula Financial Co
85493	10/20/1997	Petroglyph Energy Inc
85496	10/31/1997	Pericom Semiconductor Corp
85499	10/8/1997	Renex Corp
85500	10/21/1997	Rock of Ages Corp
85502	10/6/1997	SCM Microsystems Inc
85504	10/1/1997	SPR Inc
85505	10/9/1997	Startec Global Communications
85507	10/30/1997	TransCoastal Marine Services
85508	10/10/1997	Track 'n Trail Inc
85509	10/20/1997	Toymax International Inc
85511	10/7/1997	Trimeris Inc
85512	10/28/1997	Tropical Sportswear Intl Corp
85513	10/30/1997	UBICS Inc
85514	10/22/1997	White Cap Industries Inc
85515	10/29/1997	Zymetx Inc
85518	10/22/1997	AmeriPath Inc
85521	11/21/1997	Applied Films Corp

**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
85522	11/25/1997	Applied Micro Circuits Corp
85524	11/20/1997	American Physician Partners
85526	11/24/1997	Bioanalytical Systems Inc
85528	11/5/1997	Bay Bancshares, Laporte, Texas
85531	11/7/1997	Bright Horizons Holdings Inc
85536	11/24/1997	Motor Cargo Industries
85538	11/20/1997	CrossZ Software Corp
85539	11/14/1997	C3 Inc
85541	11/4/1997	Dental Care Alliance Inc
85542	11/20/1997	Denali Inc
85544	11/24/1997	Electric Lightwave Inc
85546	11/18/1997	Franchise Mortgage Acceptance
85548	11/14/1997	Friendly Ice Cream Corp
85549	11/21/1997	Gene Logic Inc
85550	11/25/1997	GameTech International Inc
85553	11/24/1997	Holt's Cigar Holding Inc
85555	11/21/1997	HealthWorld Corp
85556	11/12/1997	Hybrid Networks Inc
85557	11/5/1997	International Aircraft
85560	11/19/1997	InterVU Inc
85561	11/17/1997	Landmark Systems Corp
85562	11/5/1997	LINC Group Inc
85564	11/26/1997	Medical Science Systems Inc
85565	11/26/1997	Nanophase Technologies Corp
85568	11/6/1997	Precision Auto Care Inc
85571	11/19/1997	Progenics Pharmaceuticals Inc
85573	11/20/1997	PRT Group Inc
85574	11/19/1997	Preview Travel Inc
85575	11/24/1997	Paper Warehouse Inc
85576	11/21/1997	RealNetworks Inc
85578	11/6/1997	Somnus Medical Technologies
85579	11/13/1997	SportsLine USA Inc
85581	11/21/1997	Teligent Inc
85584	11/4/1997	T&W Financial Corp
85588	11/4/1997	Excel Switching Corp
85590	11/4/1997	Young Innovations Inc
85596	11/6/1997	American Skiing Co
85597	11/3/1997	AMF Bowling Inc
85598	11/4/1997	Bayard Drilling Technologies
85603	11/20/1997	Dan River Inc
85606	11/6/1997	Group Maintenance America
85609	11/21/1997	HomeUSA Inc
85610	11/25/1997	Howmet International Inc
85611	11/14/1997	Hypercom Corp



**TABLE 1**  
**Continued**

PERMNO	IPO Date	Company Name
85612	11/13/1997	IRI International Corp
85613	11/18/1997	International Home Foods Inc
85618	11/25/1997	Meadowcraft Inc
85622	11/18/1997	Noble International Ltd
85625	11/20/1997	Rayovac Corp
85627	11/10/1997	Sonic Automotive Inc
85629	11/24/1997	Trammell Crow Co
85633	12/3/1997	Apex Mortgage Capital Inc
85641	12/19/1997	Big City Radio Inc
85646	12/17/1997	Delco Remy International Inc
85653	12/23/1997	Friedman Billings Ramsey Group
85655	12/18/1997	Legg Inc
85663	12/18/1997	United Rentals Inc
85670	10/9/1997	USA Floral Products Inc
85689	12/12/1997	FlexiInternational Software
85690	12/11/1997	Focal Inc
85696	12/3/1997	ImageMAX Inc
85697	12/17/1997	IC Isaacs & Company Inc
85700	12/4/1997	Midway Airlines Corp
85702	12/2/1997	MPW Industrial Services Group
85704	12/18/1997	Made2Manage Systems Inc
85707	12/4/1997	OMNI Energy Services Corp
85709	12/19/1997	PacificHealth Laboratories Inc
85710	12/12/1997	Power Integrations Inc
85713	12/16/1997	Princeton Video Image Inc
85716	12/17/1997	Tier Technologies Inc
85718	12/1/1997	US Vision Inc
85719	12/5/1997	USWeb Corp
85722	4/23/1997	Go2Net Inc
86210	12/8/1997	Broughton Foods Co

### Dependent Variables

#### *Firm Failure*

Data on firm *failure* was gathered from the *Center for Research on Securities*

*Pricing* (CRSP) data base. CRSP records a delisting code for firms who de-list from a

stock exchange. Because firms may de-list from a stock exchange for a variety of reasons (merger, acquisition, etc.) that do not correspond to firm failure, prior research has utilized delisting codes ranging from 500 to 585. These codes indicate a firm's inability to meet the requirements for listing on an exchange as a measure of firm failure (Fischer & Pollock, 2004). Based upon this same range of *CRSP* delisting codes I coded firm survival (0) or firm failure (1) for each of the five years following a firm's IPO. As was appropriate for my analytic technique, and consistent with prior studies examining IPO firm failure (Fischer & Pollock, 2004), a firm was dropped from the sample after delisting, and the remaining firms were right-censored.

### *Firm Growth*

Post-IPO firm growth was based on firm revenue data obtained from *Compustat*. Specifically, the natural logarithm of one plus *firm revenues* for 1996 and each of the five years following a firm's IPO (1997-2001) was used to compose a firm growth trajectory. Firm growth trajectories were calculated by utilizing random coefficients modeling (RCM) (Bliese & Ployhart, 2002; Singer, 1998).

## **Independent Variables**

### *Managerial Prestige*

Data on each of the aspects of managerial prestige was collected from firm IPO prospectuses. Consistent with prior operationalizations of top management groups,

biographical information was collected for each executive officer listed in their respective firm's IPO prospectus (Higgins & Gulati, 2006; Lester et al., 2006).

Undergraduate Prestige. A measure of educational prestige was created using the following procedures. First, the educational background of each executive officer listed in the IPO prospectus was coded, noting whether an executive received a college degree (undergraduate) as well as the name of the college attended. Second, each college an executive graduated from was assigned a value based upon the inverse of its *U.S. News and World Report's America's Best Colleges* for 1996. Executives who graduated from educational institutions not counted among the 202 schools ranked by *U.S. News and World Report* were coded 0. Next, I created a variable that represent executive *undergraduate prestige*. I did this by calculating  $1 + \ln(\sum \text{inverse college rankings})$  of the colleges attended by a given firm's executives for their undergraduate degree.<sup>2</sup>

Prestigious Firm Managerial Experience. I developed a measure of *prestigious managerial experience* utilizing the following steps. First, I coded executives that had previously held the title of vice-president or higher<sup>3</sup> in another firm as possessing 'prior

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<sup>2</sup> I created similar measures for executive graduate education, but excluded them from the analysis because their high correlation (as high as .92) with the undergraduate measures created multi-collinearity issues. Analyses including graduate educational prestige measures and excluding undergraduate prestige provided results that were similar, but statistically less significant than those of undergraduate prestige.

<sup>3</sup> Commonly coded titles included CEO, CFO, COO, Ex. Vp., Sr. Vp., Controller, Treasurer, Managing Director, and VP.

managerial experience.’ Second, for those executives deemed to have had prior managerial experiences, I noted the names of their former employers. Third, I determined whether these managerial experiences took place in a firm that was publicly traded at the end of 1997. I identified these publicly traded firms by name using a list (1977-1997) of firm names from the *CRSP* data base. Finally, I created a measure of firm level executive public firm managerial experience by summing the number of publicly traded firms for which an IPO firm’s executives had previously worked for in a managerial capacity. In order to address skewness the final measure of prestigious managerial experience was logged.

Prestigious Firm External Directorates. I coded an IPO firm executive as possessing prestigious public firm external directorates in a manner similar to that described for prestigious public firm managerial experience. First, I coded executives that had previously served as an outside director in another firm as possessing external directorate experience. Second, for those executives deemed to have external directorate experience I noted the name of the firm whose board they served. Third, I determined whether these directorate experiences took place in firms that were publicly traded. I identified publicly traded firms by name using the *CRSP* data base. Finally, I created a measure of firm level executive public firm external directorate experience (*prestigious external directorates*) by summing the number of publicly traded firms for which an IPO firm’s executives had served as an outside director.

Prestigious Firm Core Executive Role Experience. I developed a measure of prestigious firm core executive role experience (*prestigious core role experience*) by

following the procedures outlined below. Consistent with prior research I defined core executive positions as those with “C-level” titles (Higgins & Gulati, 2006). C-level titles embody those that begin with “Chief”, namely the Chief Executive Officer, Chief Financial Officer, and Chief Operations Officer. Next, I determined in how many instances the core executives (CEO, CFO, COO) of my sample IPO firms had previously held their same positions in a publicly trade firm and assigned each of these experiences a value of 1 (0 otherwise). Finally, I created a firm level measure of prestigious core executive role experience by these summing these values for each IPO firm core executive.

### **Mediating Variables**

#### *Prestigious Strategic Alliance Partners*

I developed a measure of the number of alliances with prestigious alliance partners held by newly public firms by collecting data from the *SDC's Mergers and Acquisitions* (SDC M&A) data base. This data base contains information on a broad range of firms and strategic alliances. For each of my 1997 IPO firms I identified all of their firm alliance partners from 1997 to 2001 in the *SDC M&A* data base. I then created an annual count of publicly traded strategic alliance partners by summing the number of publicly traded strategic alliance partners each IPO firm formed alliances with during that year. Information on the publicly traded status of each IPO firm strategic alliance partner was collected from *SDC M&A*. This variable, *prestigious alliance partners*, was

logged and lagged one year when testing all hypotheses, with the exception of hypothesis 6, which treats this measure as the dependent variable. In this case I did not log the *prestigious alliance partners DV* in order to preserve its count nature.

### *Dedicated Institutional Investment*

Broadly speaking, in order to capture the amount of dedicated institutional investment in each of my sample IPO firms I characterize 1) the nature of investment behavior of each of the individual institutional investors who own equity in at least one of my sample firms, 2) characterize the nature of institutional investment in each IPO firm based upon its' institutional investors' prior investment behavior, and 3) gauge the overall amount of dedicated institutional investment in each of my sample firms. Consequently, I develop measures of individual institutional investor dedication based upon the nature of individual institutional investor portfolio investment behavior. In turn, I then utilize these measures of individual institutional investor dedication as a basis for creating a measure of the overall amount of dedicated of institutional investment in each of my sample IPO firms used in testing my hypotheses. The specific procedures and data sources that I rely upon to do so are outlined below.

As previously discussed in Chapter IV, dedicated institutional investors are characterized by, “large, long-term holdings, which are concentrated in only a few firms” (Bushee, 1998:310). Consequently, I created the following two measures for each of the individual institutional investors that own equity in at least one of my sample firms in order to characterize the *nature* of their investment behavior. First, I created a

measure of portfolio stability to address the variability of institutional investor portfolio holdings that I adapted from Bushee (1998). The formula to calculate this variable can be expressed as follows:

$$PS_i = (\sum W_k - \sum \Delta W_k) / \sum W_k$$

where,

$W_k$  is the two year total of the quarterly portfolio weights (shares held times stock price at quarters end) in firm  $k$  reported at the end of each quarter;

$\Delta W_k$  is the two year total of the absolute value of quarterly portfolio weight changes in firm  $k$  reported at the end of each quarter;

Portfolio stability ( $PS_i$ ) thus represents the percentage of an institutional investor's equity portfolio that does not change during the last two years.

Second, I also created a measure of institutional investor portfolio concentration ( $PC_i$ ). I created this variable by calculating the average percentage of an institutional investor's portfolio invested in each of its holdings. The formula to calculate this variable can be expressed as follows:

$$PC_i = (\sum W_k / \sum NSTK_t) / \sum W_k$$

where,

$W_k$  is the one year total of the quarterly portfolio weights (shares held times stock price at quarters end) in firm  $k$  reported at the end of each quarter;

$NSTK_t$  represents the total number of stocks owned by institutional investor  $i$  at the end of each quarter for one calendar year.

Having developed measures of individual institutional investor dedication based on the nature of individual institutional investor portfolio investment behavior I used the portfolio stability ( $\mathbf{PS}_i$ ), and portfolio concentration ( $\mathbf{PC}_i$ ) measures of individual institutional investors discussed above to capture the overall nature of each IPO firm's institutional investment. First, for each sample firm I created a sum of weighted average of institutional investor portfolio stabilities ( $\mathbf{APS}_k$ ). I assigned the weights for these averages based upon the percentage of IPO firm institutional investment owned by each individual institutional investor. The formula to calculate this variable can be express as follows:

$$\mathbf{APS}_k = \sum[\mathbf{PS}_{ik} * (\mathbf{I}_{ik}/\mathbf{I}_k)]$$

where,

$\mathbf{PS}_{ik}$  represents the portfolio stability of firm  $k$ 's  $i^{th}$  institutional investor;

$\mathbf{I}_{ik}$  represents the number of shares in firm  $k$  owned by institutional investor  $i$  at the year's end;

$\mathbf{I}_k$  represents the total shares of firm  $k$ 's stock owned by institutional investors at the year's end<sup>4</sup>.

For each sample firm I also created an average of institutional investor portfolio concentration. I created a sum of weighted average of institutional investor portfolio stabilities ( $\mathbf{APC}_k$ ). I assigned the weights for these averages based upon the percentage

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<sup>4</sup> Except in cases in which an institutional investor did not report at the years end, in which cases I utilized the data reported by that institutional investor closed to the year's end.



of IPO firm institutional investment owned by each individual institutional investor. The formula to calculate this variable can be express as follows:

$$\mathbf{APC}_k = \sum[\mathbf{PC}_{ik} * (\mathbf{I}_{ik}/\mathbf{I}_k)]$$

where,

$\mathbf{PC}_{ik}$  represents the portfolio concentration of firm  $k$ 's  $i$ '<sup>th</sup> institutional investor;

$\mathbf{I}_{ik}$  represents the number of shares in firm  $k$  owned by institutional investor  $i$  at the year's end;

$\mathbf{I}_k$  represents that total shares of firm  $k$ 's stock owned by institutional investors at the year's end.

To create the final measures of the amount of dedicated institutional investment in each IPO firm used in testing my hypotheses ( $\mathbf{IIS}_k$  and  $\mathbf{IIC}_k$ ), I multiplied the sum of weighted average of institutional investor portfolio stabilities ( $\mathbf{APC}_k$ ) and the sum of weighted average of institutional investor portfolio stabilities ( $\mathbf{APS}_k$ ) by the total percentage of IPO firm equity owned by all institutional investors. The mathematical formula to express this can be represented as follows:

$$\mathbf{IIS}_k = \mathbf{APS}_k * (\mathbf{I}_k / \mathbf{S}_k)$$

$$\mathbf{IIC}_k = \mathbf{APC}_k * (\mathbf{I}_k / \mathbf{S}_k)$$

where,

$\mathbf{I}_k$  represents that total shares of firm  $k$ 's stock owned by institutional investors at the year's end;

$S_k$  represents the number of shares of firm  $k$ 's common stock outstanding at the year's end.<sup>5</sup>

These two final measures of dedicated institutional investment, i.e., *institutional investment stability* ( $IIS_k$ ) and *institutional investment concentration* ( $IIC_k$ )<sup>6</sup>, were added to one and logged (natural logarithm) and updated annually. Additionally, these variables were lagged on year.

The data used to create these measures of the amount of dedicated institutional investment were drawn from the *CDA/Spectrum Institutional Ownership Database* (CDA) from Thomson Financial Publishing accessible through *Wharton Research Data Systems*. CDA collects ownership information on all institutions required to file an SEC form 13-f. As Higgins and Gulati (2006:9) note, "The Spectrum database 'reverse' - compiles this information so that information may be obtained for companies invested in, rather than the company doing the investing". Utilizing this information I was able to identify institutional investors who own equity in my sample firms as well as characterize their investment behavior.

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<sup>5</sup> The last reported valued was utilized in instances in which data was not available at the calendar year end.

<sup>6</sup> After initially calculating this variable I found its mean to be fairly small. As a result, I subsequently multiplied this variable by 100 in order to ensure there existed decimal spaces sufficient to for the calculations conducted when running statistical analysis.

## Controls

### *Firm Age*

A central premise of this study is that newly public firms face a liability of market newness (Certo, 2003). While this liability is highly relevant to the IPO setting IPO firms may also suffer the liability of newness referred to by institutional theorists as well (Freeman et al., 1983; Singh et al., 1986). Institutional theory suggests that young IPO firms may derive greater benefits from managerial prestige than their older counterparts as a result of the liability of newness (Freeman et al., 1983; Singh et al., 1986). As such, in this study I control for firm age. To measure firm age I calculated the natural logarithm of one plus the firm's age at the time of its IPO. The data for this measure was collected from Jay Ritter's IPO website which provides information on the date of IPO firm incorporation.

### *IPO Firm Size*

Institutional theory also suggests that small firms may derive greater benefits from managerial prestige than their larger counterparts as a result of the liability of smallness (Baum & Oliver, 1991; Freeman et al., 1983). Accordingly, except when modeling firm growth, I controlled for firm size as follows. I included a measure of firm size based on the natural log of one plus firm revenues. I drew firm revenue data from *Compustat*. This variable was lagged one year, logged to correct for skewness (natural log of 1+firm revenues), and updated annually.

### *Underwriter Prestige*

Prior research suggests that underwriters play a key role in certifying IPO firms to public markets (Carter & Manaster, 1990; Carter et al., 1998). In order to measure *underwriter prestige* I rely upon the widely used Carter-Manaster measure of underwriter prestige (Ritter & Welch, 2002). This measure is based on analyses of underwriter position in IPO tombstone announcements. To correct for skewness, I took the natural logarithm of this variable.

### *Venture Capital Backing*

I control for firm *venture capital (VC)* backing with a dummy variable indicating whether or not a firm is VC backed at the time of its IPO. A number of studies suggest that venture capitalists may influence IPO firm performance and outcomes (Gompers et al., 2004; Daily et al., 2005; Higgins & Gulati, 2003; Jain & Kini, 2000). The data necessary to construct this measure was collected from the (SDC) *Global New Issues* database.

### *IPO Performance*<sup>7</sup>

By undergoing the IPO process, firms raise capital from investors. While various measures of IPO firm performance exist, one of the commonly utilized is IPO under pricing. In this study I rely upon IPO under pricing to indicate firm IPO performance.

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<sup>7</sup> Missing values for IPO under pricing and IPO proceeds were replaced with sample mean values for 13 sample firms.

IPO under pricing represents both money left on the table for the IPO firm and a means to achieve organizational legitimacy (Daily et al., 2003a; Pollock et al., 2002). I measure *IPO under pricing* by taking the natural log of one plus the percentage change in stock price between the initial price set for the stock and the closing price of the stock on the first day of trading (Pollock et al., 2002).

I also controlled for *IPO proceeds*, which represent the financial resources garnered as a result of the IPO. Prior research suggest firms with greater IPO proceeds may be more capable of funding firm growth and expansion (Fischer & Pollock, 2004; Jain & Kini, 2000). I calculated this variable by taking the natural logarithm of the product of the total number of shares offered and the share price at the end of the first day of trading. I collected the data on IPO under pricing and proceeds from the (SDC) *Global New Issues* database.

#### *Pre-IPO Alliances*

I also collected data from the *SDC M&A* data base to identify and control for firm alliances formed before the IPO. Pre-IPO alliance activity may influence subsequent growth and survival of IPO firms (Stuart et al., 1999). This measure represents the natural logarithm of one plus the count of the number of pre-IPO alliances identified in the *SDC M&A* data base.

### *High Tech Industry*

Consistent with prior research I controlled for firm industry with a dummy variable indicating whether a firm is from a *high technology* industry or not (Certo et al., 2001a; Fischer & Pollock, 2004). Firms in high tech industries may experience greater growth as well as higher failure rates. I collected the data required to create this dichotomous variable from the (SDC) *Global New Issues* database.

### *Profitability*

I also control for firm profitability by calculating 100 times firm return on assets (*ROA*). I drew the data on firm income and assets required to calculate this variable from *Compustat*. This variable was updated annually, logged<sup>8</sup>, and lagged one year.

### *Board Size*

I also controlled for board size at the time of the IPO. Prior research suggests that firms with larger boards have greater access to external resources (Dalton et al., 1999). To create this variable I calculated the natural logarithm of one plus the total number of directors on a sample firm's board. I collected the data needed to create this variable from each firm's IPO prospectus.

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<sup>8</sup> Because the range of this variable extended into negative numbers I took the natural logarithm of 1 plus the absolute value of the sample minimum ROA value added to firm ROA.

### *TMT Size*

Prior research also suggests that TMT size may also influence firm performance (Eisenhardt & Schoonhoven, 1990; Finkelstein & Hambrick, 1996; Pfeffer & Salancik, 1978). As such, I also controlled for TMT size. I developed this variable by calculating the natural logarithm of one plus the number of executive officers listed in each firms IPO prospectus.

### *TMT Tenure*

I control for average TMT tenure by taking the natural log of 1 plus the average of executive tenures with an IPO firm as reported in the IPO prospectus. Firms possessing TMTs with substantial experience working together may be better able to coordinate and implement firm growth initiatives (Eisenhardt & Schoonhoven, 1990; Kor & Mahoney, 2000; Penrose, 1959). The information needed to calculate this measure was also collected from each firm's IPO prospectus.

### *IPO CEO Turnover*

I also controlled for the turnover of the IPO CEO turnover following the IPO. Prior research has demonstrated that executive turnover precedes firm failures (Cannella et al., 2002; D'Aveni, 1990). *CEO turnover* was coded as 0 in years during which the CEO at the time of a firm's IPO still held the title of CEO and as 1 in years in which someone other than the CEO at the time of the IPO held the CEO title. The data utilized

to construct this variable was collected from firm proxy statements, other SEC filings, and the world wide web.

### Statistical Methods

I utilized random coefficient growth modeling, Cox proportional hazards analysis, time series cross-sectional negative binomial regression, and time series cross-sectional generalized least squares regression to test the hypotheses. All of these statistical modeling techniques are multivariate in form, and take into account the nature of the measures previously discussed in this chapter.

#### *Random Coefficient Growth Modeling*

First, to test the hypotheses regarding post-IPO firm growth I utilized random coefficient growth models (RCM) (Singer, 1998). RCM's are particularly adept at examining the influence of predictors measured at one point in time on subsequent subject growth patterns (Bliese & Ployhart, 2002; Chen, 2005). In general, the statistical model of random coefficient growth models can be expressed as follows:

$$\text{Level 1: } Y_{ij} = \pi_{0j} + \pi_{1j} (\text{time}_{ij}) + r_{ij}$$

$$\text{Level 2: } \pi_{0j} = \beta_{00} + \beta_{01}(X_j) + u_{0j}$$

$$\pi_{1j} = \beta_{10} + \beta_{11}(X_j) + u_{1j}$$

where,

$Y_{ij}$  = DV score for individual/unit  $j$  at time  $i$ ;

$\pi_{0j}$  = Level 1 intercept (initial score on the DV) for individual/unit  $j$ ;

$\pi_{1j}$  = Time–DV slope for individual/unit  $j$ ;



$\mathbf{X}$  = Individual/unit-level predictor;  
 $\beta\mathbf{s}$  = Level 2 intercepts and slopes;  
 $r_{ij}$  = Level 1 residual;  $u_{0j}$  &  $u_{1j}$  = Level 2 residuals.

### *Cox Proportional Hazard Analysis*

To test the hypotheses regarding post-IPO firm failure I utilized Cox proportional hazard analysis (Allison, 1984; Yamaguchi, 1991). Event history analysis, or Hazard analysis, is concerned with the patterns and correlates of event occurrence (Yamaguchi, 1991). Hazard analysis is particularly well suited to analyze longitudinal data where the outcome of interests represents a discrete event, and the timing of that event's occurrence is of central interest (Allison, 1984; Yamaguchi, 1991). A Cox proportional hazard model was selected over other forms of hazard analysis for multiple reasons. First, similar to other research examining post-IPO outcome (Li, 2004), I chose a Cox model because the interval between the IPO date and the end of the first fiscal year are not equal across sample firms, which unlike other forms of hazard analysis, relaxes this assumption. Second, proportional hazards models do not require researchers to specify the how time influences the outcome of interest. Third, Yamaguchi (1991) notes that proportional hazards model represents a popular approach in terms of analyzing the timing of event occurrence. The Cox proportional hazard model may generally be specified as follows (Rabe-Hesketh & Everitt, 2007; Yamaguchi, 1991):

$$\mathbf{h}_i(t) = \mathbf{h}_0(t)\exp[\sum b_k X_{ik}(t)]$$

where,

$h_0(t)$  represents the baseline hazard function;

$X_{ik}(t)$  represents the value of the  $k^{\text{th}}$  co-variate for firm  $i$  at time  $t$ .

Similar to prior studies examining firm failure (Fischer & Pollock, 2004), the data in this study were measured at the firm-year level. As noted previously, *firm failure* was coded 1 if a sample firm failed in that year, and coded 0 otherwise for each firm year. As a result, in this study the hazard of sample firm failure at time  $t$  represents the probability of firm failure during the interval  $t$  to  $t+1$ .

#### *Time Series Cross Sectional Negative Binomial Regression*

To test hypothesis 5 regarding the number of post-IPO prestigious strategic alliance partners I estimated random effects time series cross-sectional negative binomial regression (TSNB) models (Long, 1997; Long & Freese, 2003). This form of statistical analysis was chosen for several reasons. First, a negative binomial regression model was selected because of the count nature of the post-IPO strategic alliance partner variable used as the dependent variable. Second, a negative binomial regression model was selected over a Poisson model (another method of analyzing count data) in order to control for possible over-dispersion. Over-dispersion violates the Poisson regression assumption of conditional variances being equal to conditional means (Long, 1997; Long & Freese, 2003). Third, TSNB was selected rather than a traditional negative binomial regression because of the longitudinal nature of the post-IPO alliance partner counts used as the dependent variable (Zeger, 1998). The specification of TSNB controls for auto-correlation and hetero-skedasticity, which are symptomatic of

longitudinal analysis (Conway, 1990). Fifth, a random effects model was chosen because of the time-variant and time-invariant nature of the various predictors utilized in testing Hypothesis 5. Lastly, following the recommendations of Certo and Semadeni (2006) regarding the analysis of cross-sectionally dominated data sets with random effects models, time dummies were included in the model to control for contemporaneous correlations.

#### *Time Series Cross Sectional Generalized Least Squares Regression*

In order to test hypothesis 6 regarding dedicated institutional investment I estimated random effects time series cross sectional generalized least squares regression models (random effects). The random effects model may generally be specified as follows (Rabe-Hesketh & Skrondal, 2005):

$$y_{it} = (\beta_1 + \zeta_i) \beta_2 x_{2it} + \beta_p x_{pit} + \varepsilon_{it}$$

where,

$y_{it}$  represents the vector of dependent variables of the  $i^{th}$  observation at time  $t$ ;

$\beta_1 + \zeta_i$  represents the firm specific intercept;

$\beta_p$  represents the vector of estimated coefficients of independent variables and control variables;

$x_{pit}$  represents the vector of independent variables or control variables for the  $i^{th}$  observation at time  $t$ ;

$\varepsilon_{it}$  represents the estimation error of the  $i^{th}$  observation at time  $t$ .

Due to the longitudinal nature of this study, the sample observations are unlikely to be statistically independent (Certo & Semadeni, 2006). As a result, controlling for potential coefficient biases stemming from serial correlation, contemporaneous correlation of estimate residuals, and heteroskedasticity is necessary (Certo & Semadeni, 2006; Maddala, 1992). Time series cross sectional models correct for these potential sources of bias (Rabe-Hesketh & Skrondal, 2005). A random effects model was chosen due to the time-variant and time-invariant nature of the various predictors utilized in testing hypothesis 6. Finally, following the recommendations of Certo and Semadeni (2006) regarding the analysis of cross-sectionally dominated data sets with random effects models, time dummies were included in the model to control for contemporaneous correlations.

### **Summary**

The purpose of this chapter has been to discuss the methodology used to empirically test the hypothesized relationships stated in Chapter III. Accordingly, I discussed the sample selection procedures, operationalization of theoretical constructs, and statistical methods implemented to test the hypotheses developed in the present study.

## **CHAPTER V**

### **RESULTS**

The purpose of this chapter is to discuss empirical evidence regarding support for the hypotheses developed in Chapter III. A summary of the results of hypotheses tests is provided in Table 2. This chapter is divided into six primary sections. The first summarizes the sample data sets utilized in this study. The second section presents the result of hypotheses dealing with the relationship between managerial prestige and post IPO firm performance. The third section reports the results regarding the impact of dedicated institutional investment and prestigious strategic alliance partners and firm performance. The fourth section discusses empirical evidence regarding the role of managerial prestige in garnering the support of key external resource holders. A fifth section treats the mediated effects of dedicated institutional investment and prestigious strategic alliance partners on the positive influence of managerial prestige on firm performance. The final section summarizes the empirical results of this study.

**TABLE 2**  
**Summary of Hypotheses Tests**

Hypothesis	Models Tested	Support	No Support
1) <i>Elite executive educational credentials at the time of a firm's IPO are positively related to post-IPO firm performance.</i>	<b>5b, 5d, 6b, and 6d</b>	Partially supported: Undergraduate prestige is positively related to firm growth	
2) <i>Executive prior managerial experiences in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.</i>	<b>5b, 5d, 6b, and 6d</b>		<b>X</b>
3) <i>Prior core executive role experiences in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.</i>	<b>5b, 5d, 6b, and 6d</b>		<b>X</b>
4) <i>Executive external directorships in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.</i>	<b>5b, 5d, 6b, and 6d</b>		<b>X</b>
5) <i>The number of post-IPO strategic alliances formed with prestigious firms is positively associated with post-IPO firm performance.</i>	<b>5c, 5d, 6c, and 6d</b>	Partially Supported: Prestigious alliance partners are negatively related to firm failure	
6) <i>The amount of dedicated institutional investment in a newly public firm is positively associated with post-IPO firm performance.</i>	<b>5c, 5d, 6c, and 6d</b>	Partially Supported: Institutional investment stability is negatively related to firm failure	

**TABLE 2**  
**Continued**

	Hypothesis	Models Tested	Support	No Support
7)	<i>Executive managerial prestige at the time of the IPO is positively related to the number of post-IPO strategic alliances entered into with prestigious alliance partners.</i>	<b>7b</b>	Partially Supported: Executive undergraduate prestige is positively related to the number of prestigious alliance partners.	
8)	<i>Executive managerial prestige at the time of the IPO is positively related to dedicated institutional investment. The positive relationship between managerial prestige at the time of a firm's IPO and post-IPO firm performance is</i>	<b>8b, and 8d</b>		<b>X</b>
9)	<i>positively and partially mediated by the number of post-IPO strategic alliances that a newly public firm enters into with prestigious firms.</i>	<b>5b, 5c, 5d, 6b, 6c, 6d, and 7b</b>		<b>X</b>
10)	<i>The positive relationship between managerial prestige at the time of a firm's IPO and post-IPO firm performance is positively and partially mediated by the amount of dedicated institutional investment in a newly public firm.</i>	<b>5b, 5c, 5d, 6b, 6c, 6d, 8b and 8d</b>		<b>X</b>

### Sample Summary

This study relied upon two separate data sets to test the hypotheses developed in Chapter III. The first data set (Data 1) consisted of data collected at the time of the IPO and up to five year after the IPO (1997-2001). I analyzed Data 1 in hypotheses tests utilizing TSNB, random effects, and Cox Proportional models. Data 1 has 1683 observations on 379 sample firms. The longitudinal structure of Data 1 was based upon *CRSP* delisting codes. Specifically, sample firms for which no delisting codes were provided were included in the sample for the full five years of the sample window. Firms for which any type of delisting code was provided by *CRSP* during the sample window were censored for the years following their delisting. This study's focus on firm adaptation to public trading was the primary rationale for structuring the sample in this manner.

When constructing this data set missing data presented an issue for sample firm financial and institutional investment variables. This was evidenced by preliminary analyses using only the raw data which excluded 30 of the 72 instances of firm failure in this sample. In order to address this issue, missing data points for *firm size* (141 obs.), *ROA* (141 obs.), *institutional investment stability* (33 obs.), and *institutional investment concentration* (33 obs.), were replaced with firm means. The exception to this was in instances where firm data for the entire case was missing. In such cases, sample averages were substituted instead (4 cases for *ROA* and *firm size*, 7 cases for *institutional investment concentration* and *stability*). An additional missing data issue was present by



lagging *institutional investment stability* and *institutional investment concentration* one year<sup>9</sup>. This resulted in missing data during for the year of 1997. In order to address this issue missing *institutional investment stability* (379 obs.) and *institutional investment concentration* (379 obs.) data were replaced with their respective values from 1998.

The second data set (Data 2) is a duplicate of Data 1 with the exception that it consisted of data ranging from one year prior to the IPO up to five years after the IPO (1996-2001). Data 2 was utilized in hypotheses tests utilizing RCM. A time range of 1996 to 2001 rather than 1997 to 2001 was used for Data 2 in order to capture firm growth that occurs during the period immediately following the IPO. Data 2 contains 2062 observations on 379 sample firms. Data 2, as a quasi-duplicate of Data 1 exhibited similar missing data patterns as Data 1. Accordingly, missing data in Data 2 was generally treated in the same manner as Data 1. Exceptions to this stem from including observations from 1996 in Data 2, which created additional missing data issues with regard to the data needed to calculate *ROA* and the dedicated institutional investment variables. As a result of the lack of data, additional missing values for firm *ROA* in 1996 (88 obs.) were replaced in the same manner as in Data 1. Additionally *institutional*

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<sup>9</sup> Data from 1996 on institutional investment in my IPO firms is missing because institutional investors filing SEC form 13f (i.e., those in the Thomsen data) are only required to report their holdings of publicly traded securities. Given that my sample IPO firms were not publicly traded in 1996 lagging institutional investment variables one year creates missing values in 1997. However, if I do not lag the institutional investment variables, values for these variables in years in which a firm is de-listed are likely to be biased or missing because institutional investment may be not reported for de-listed firms at the year's end. Results of supplementary RCM and Cox analysis with and without lagging the institutional investment data were substantively the same, with the lagged results being more conservative in their support of this study's hypotheses.

*investment stability* (379 obs.) and *institutional investment concentration* (379 obs.) in 1996 were replaced with values from 1997.

Sample means, standard deviations, and correlation coefficients are reported in Tables 3 and 4 for Data 1 and Data 2, respectively. All correlations greater than .048 in Table 3 are statistically significant ( $p < .05$ ). All correlations greater than .043 in Table 4 are statistically significant ( $p < .05$ ). Not surprisingly, sample means, standard deviations and correlations in Table 3 are similar to those listed in Table 4. Additionally, most of the strong correlations reported in Tables 3 and 4 are fairly intuitive. For example, TMT tenure is strongly correlated with firm age. Additionally, firm size/revenues are positively and strongly correlated with underwriter prestige and IPO proceeds. Pre-IPO alliances also exhibit a strong positive correlation with prestigious alliances. Finally, prestigious managerial experience exhibits a strong positive correlation with prestigious core role experience.

**TABLE 3<sup>a</sup>**  
**Means, Standard Deviations, and Correlations - Data 1 (1997 to 2001)**

#	Variable	obs	mean	s.d.	1	2	3	4	5	6	7	8	9
1	firm failure	1683	0.043	0.202									
2	firm age	1683	2.193	0.996	-0.070								
3	firm size	1683	4.162	1.677	-0.023	0.320							
4	underwriter prestige	1683	1.912	0.418	-0.156	0.125	0.418						
5	venture capital backing	1683	0.332	0.471	-0.006	-0.148	-0.228	0.136					
6	under-pricing	1683	0.106	0.379	0.010	-0.081	-0.024	0.033	-0.044				
7	IPO proceeds	1683	17.519	0.976	-0.090	0.125	0.553	0.558	-0.134	0.392			
8	pre-IPO alliances	1683	0.116	0.339	-0.051	0.031	-0.027	0.102	0.157	0.064	0.132		
9	hi-tech industry	1683	0.450	0.498	-0.008	-0.123	-0.101	-0.045	0.219	0.095	-0.031	0.063	
10	ROA	1683	6.023	0.217	-0.127	0.098	0.233	0.067	-0.169	0.008	0.103	-0.057	-0.059
11	board size	1683	1.975	0.305	0.014	0.048	0.074	0.096	0.072	-0.023	0.113	0.051	-0.105
12	TMT size	1683	1.969	0.359	-0.015	0.139	0.261	0.277	0.084	-0.010	0.276	0.066	0.021
13	TMT tenure	1683	1.558	0.723	-0.100	0.600	0.207	0.052	-0.153	-0.054	0.040	0.087	-0.111
14	CEO turnover	1683	0.053	0.224	0.199	0.004	0.017	-0.057	0.003	0.014	-0.011	-0.016	0.005
15	undergraduate prestige	1683	2.755	2.966	-0.003	-0.027	-0.187	0.013	0.165	0.087	-0.099	0.160	0.150
16	prestigious managerial experience	1683	0.547	0.581	-0.011	-0.145	0.079	0.194	0.236	0.089	0.198	0.127	0.093
17	prestigious core role experience	1683	0.133	0.301	0.016	-0.048	0.073	0.111	0.141	0.089	0.129	0.096	0.018
18	prestigious external directorates	1683	0.141	0.358	-0.009	0.074	0.084	0.082	0.022	0.045	0.199	0.091	-0.030
19	prestigious alliance partners	1683	0.113	0.334	-0.039	-0.075	0.063	0.106	0.150	0.080	0.129	0.329	0.163
20	prestigious alliance partners DV	1683	0.217	0.793	-0.032	-0.079	0.079	0.099	0.150	0.077	0.121	0.281	0.156
21	II concentration	1683	0.047	0.101	-0.050	0.005	0.080	0.148	0.085	0.037	0.164	0.110	0.034
22	II stability	1683	0.177	0.119	-0.110	0.152	0.400	0.354	0.048	0.079	0.461	0.034	-0.039

**TABLE 3**  
**Continued<sup>a</sup>**

#	Variable	10	11	12	13	14	15	16	17	18	19	20	21
11	board size	-0.036											
12	TMT size	0.019	0.092										
13	TMT tenure	0.108	-0.110	0.014									
14	CEO turnover	-0.048	0.048	-0.018	-0.064								
15	undergraduate prestige	-0.094	-0.030	0.095	-0.012	-0.005							
16	prestigious managerial experience	-0.069	0.135	0.280	-0.298	0.053	0.073						
17	prestigious core role experience	-0.049	0.072	0.151	-0.125	0.019	0.017	0.495					
18	prestigious external directorates	-0.016	0.123	0.170	-0.024	0.005	-0.047	0.241	0.138				
19	prestigious alliance partners	-0.075	0.032	0.093	-0.088	-0.011	0.153	0.172	0.089	0.076			
20	prestigious alliance partners DV	-0.065	0.040	0.094	-0.097	0.009	0.144	0.173	0.094	0.085	0.938		
21	II concentration	-0.008	0.091	0.005	0.034	-0.025	-0.046	0.061	0.060	0.065	0.019	0.022	
22	II stability	0.082	0.084	0.162	0.092	-0.029	-0.151	0.061	0.058	0.114	0.052	0.046	0.302

<sup>a</sup> All correlations greater than |.047| are statistically significant at  $p < .05$

**TABLE 4**  
**Means, Standard Deviations, and Correlations - Data 2 (1996 to 2001)**

#	Variable	Obs	Mean	s.d.	1	2	3	4	5	6	7	8	9
1	firm revenues	1796	4.187	1.691									
2	time	2062	2.296	1.650	0.201								
3	firm age	2062	2.191	0.997	0.323	0.004							
4	underwriter prestige	2062	1.909	0.421	0.406	0.027	0.120						
5	venture capital backing	2062	0.331	0.471	-0.220	-0.010	-0.161	0.141					
6	under-pricing	2062	0.106	0.376	0.011	0.021	-0.056	0.061	-0.016				
7	IPO proceeds	2062	17.514	0.977	0.572	0.017	0.150	0.570	-0.120	0.358			
8	pre-IPO alliances	2062	0.115	0.337	-0.027	0.005	0.032	0.107	0.164	0.067	0.140		
9	hi-tech industry	2062	0.450	0.498	-0.085	0.006	-0.130	-0.042	0.221	0.095	-0.030	0.045	
10	ROA	2062	6.881	0.063	0.356	-0.008	0.144	0.113	-0.236	0.031	0.159	-0.088	-0.054
11	board size	2062	1.975	0.305	0.078	0.003	0.010	0.104	0.080	-0.009	0.135	0.052	-0.095
12	TMT size	2062	1.969	0.358	0.258	0.000	0.148	0.275	0.080	0.008	0.278	0.066	0.019
13	TMT tenure	2062	1.556	0.723	0.208	0.007	0.619	0.053	-0.158	-0.039	0.066	0.093	-0.117
14	CEO turnover	2062	0.043	0.203	0.008	0.236	0.010	-0.035	0.006	-0.003	-0.011	-0.020	-0.003
15	undergraduate prestige	2062	2.750	2.965	-0.167	0.024	-0.007	0.030	0.154	0.089	-0.098	0.159	0.135
16	prestigious managerial experience	2062	0.546	0.580	0.081	0.003	-0.125	0.191	0.232	0.085	0.172	0.135	0.098
17	prestigious core role experience	2062	0.132	0.301	0.085	0.018	-0.028	0.112	0.132	0.095	0.118	0.112	0.018
18	prestigious external directorates	2062	0.141	0.357	0.087	-0.004	0.101	0.081	0.011	0.043	0.177	0.098	-0.025
19	prestigious alliance partners	2062	0.096	0.309	0.086	0.147	-0.061	0.105	0.136	0.079	0.117	0.311	0.115
20	II concentration	2062	0.047	0.101	0.092	0.019	-0.005	0.145	0.076	0.032	0.160	0.104	0.036
21	II stability	2062	0.174	0.116	0.412	0.121	0.158	0.341	0.029	0.072	0.452	0.018	-0.049

**TABLE 4**  
**Continued**

#	Variable	10	11	12	13	14	15	16	17	18	19	20
11	board size	-0.069										
12	TMT size	0.047	0.095									
13	TMT tenure	0.135	-0.108	0.022								
14	CEO turnover	-0.022	0.039	-0.033	-0.052							
15	undergraduate prestige	-0.101	0.002	0.111	-0.013	-0.005						
16	prestigious managerial experience	-0.076	0.143	0.256	-0.277	0.039	0.076					
17	prestigious core role experience	-0.049	0.082	0.142	-0.100	0.022	0.016	0.488				
18	prestigious external directorates	-0.021	0.106	0.141	0.009	-0.008	-0.057	0.190	0.116			
19	prestigious alliance partners	-0.028	0.025	0.091	-0.075	0.004	0.149	0.159	0.080	0.056		
20	II concentration	0.009	0.099	-0.007	0.035	-0.022	-0.071	0.050	0.052	0.060	0.006	
21	II stability	0.153	0.074	0.151	0.114	-0.029	-0.172	0.028	0.038	0.090	0.037	0.299

<sup>a</sup> All correlations greater than  $|\text{.042}|$  are statistically significant at  $p < .05$

## **Managerial Prestige and Post-IPO Firm Growth and Failure**

Having discussed the nature of the samples used in this study I now discuss the tests of the hypotheses developed in Chapter III. The theoretical model developed in Chapter III posits a total of four hypotheses regarding the direct effects of managerial prestige on post IPO firm performance. Specifically, I argued that while top managers of newly public firms have substantial motivations to pursue strategies that ensure the survival and growth of their respective firms, they face liabilities of market newness which may limit their ability to do so. Drawing upon insights from the resource based view (Barney, 1991; Wernerfelt, 1984) and upper echelons theory (Hambrick & Mason, 1984), I proposed that elite educational credentials, prestigious managerial experience, prestigious core executive role experience, and prestigious external directorships would positively influence post-IPO firm failure and growth rates.

### *Prestigious Educational Credentials*

The first hypothesis I developed focuses on the prestige of managerial educational background. Specifically, in this hypothesis I argued that the possession of elite educational credentials would allow top managers to better deal with and adapt to the challenges faced by new public firms. I proposed that elite educational credentials embody human and social capital resources which aid top executives in addressing the resource constraints and adaptation requirements confronted by newly public firms. Accordingly, this first hypothesis formally states: *Hypothesis 1: Prestigious executive*

*educational credentials at the time of a firm's IPO are positively related to post-IPO firm performance.*

Models 5b and 5d of Table 5 present the results of this hypothesis with regard to firm failure. No support for this hypothesis is found with regard to firm failure. This is evidenced by lack of statistical significance for the coefficients of *undergraduate prestige* in both model 5b (b=-.006) and model 5d (b=-.002). Models 6b and 6d of Table 6 present the results of Hypothesis 1 regarding firm growth. Consistent with prior research analyzing rates of change utilizing RCM (Chen, 2005), this is determined by examining the coefficients of *time\*undergraduate prestige*. In both model 6b (b=.010; p<.10) and model 6d (b=.008; p<.10) the coefficients for *time\*undergraduate prestige* are positive and moderately significant. This suggests that executive undergraduate educational prestige positively influences post-IPO growth rates. Based upon the combined results presented in Tables 5 and 6, Hypothesis 1 receives partial support.



**TABLE 5**  
**Cox Proportional Hazard Model Coefficient Estimates of IPO Firm Failure**

Variable	Model 5a	Model 5b	Model 5c	Model 5d
firm age	-0.126	-0.151	-0.154	-0.170
firm size	0.221 **	0.254 **	0.304 ***	0.331 ***
underwriter prestige	-1.286 ***	-1.267 ***	-1.198 ***	-1.179 ***
venture capital backing	0.138	0.208	0.252	0.283
under-pricing	1.224	1.079	1.807	1.678
IPO proceeds	-0.399 †	-0.413 †	-0.249	-0.256
pre-IPO alliances	-1.079	-0.919	-0.782	-0.671
hi-tech industry	-0.479 †	-0.455 †	-0.479 †	-0.466 †
ROA	-0.535 ***	-0.543 **	-0.895 ***	-0.902 ***
board size	0.048	0.137	0.009	0.094
TMT size	0.425	0.545	0.415	0.511
TMT tenure	-0.442 *	-0.499 *	-0.406 *	-0.465 *
CEO turnover	1.716 ***	1.711 ***	1.550 ***	1.542 ***
undergraduate prestige		-0.006		-0.002
prestigious managerial experience		-0.410		-0.379
prestigious core role experience		0.314		0.338
prestigious external directorates		0.125		0.194
prestigious alliance partners			-1.114 †	-1.112 †
II concentration			-2.059	-1.852
II stability			-4.188 *	-4.235 *
<i>N</i>	1683	1683	1683	1683
<i># IPO Firm Failures</i>	72	72	72	72
<i>Chi-square</i>	166.73	186.51	175.45	190.80
<i>Chi-square p-value</i>	<.001	<.001	<.001	<.001
	† p < .10	* p < .05	** p < .01	*** p < .001

**TABLE 6**  
**RCM Parameter Estimates of Predictors of Post-IPO Firm Growth**

Variable	Model 6a	Model 6b	Model 6c	Model 6d
Intercept	-19.470 ***	-18.443 ***	-17.910 ***	-17.105 ***
time	-3.338 ***	-3.507 ***	-3.168 ***	-3.298 ***
firm age	0.262 ***	0.275 ***	0.250 **	0.263 ***
underwriter prestige	0.532 **	0.564 **	0.499 **	0.530 **
venture capital backing	-0.558 ***	-0.542 ***	-0.590 ***	-0.579 ***
under-pricing	-0.940 ***	-0.850 ***	-0.898 ***	-0.824 ***
IPO proceeds	0.770 ***	0.721 ***	0.688 ***	0.651 ***
pre-IPO alliances	-0.360 †	-0.263	-0.397 *	-0.319 †
hi-tech industry	-0.034	0.006	-0.010	0.022
ROA	1.001 ***	0.963 ***	0.949 ***	0.918 ***
board size	-0.027	-0.013	-0.018	-0.009
TMT size	0.427 *	0.487 **	0.455 *	0.495 **
TMT tenure	0.461 ***	0.459 ***	0.442 ***	0.450 ***
CEO turnover	0.856 ***	0.839 ***	0.873 ***	0.859 ***
undergraduate prestige		-0.069 **	0.368 ***	-0.062 **
prestigious managerial experience		0.060	0.051	0.083
prestigious core role experience		-0.039	1.706 ***	-0.024
prestigious external directorates		-0.143		-0.136
prestigious alliance partners				0.370 ***
II concentration				0.013
II stability				1.537 ***
time*firm age	-0.003	-0.007	-0.001	-0.005
time*underwriter prestige	-0.050	-0.060	-0.045	-0.054
time*venture capital backing	0.060 †	0.047	0.061 †	0.049
time*under-pricing	0.006	-0.016	-0.003	-0.021
time*IPO proceeds	0.056 **	0.059 **	0.069 **	0.070 **
time*pre-IPO alliances	-0.009	-0.033	-0.004	-0.023
time*hi-tech industry	0.000	-0.005	-0.005	-0.008
time*ROA	0.439 ***	0.461 ***	0.388 **	0.408 ***
time*board size	0.024	0.015	0.019	0.011
time*TMT size	-0.038	-0.065	-0.046	-0.068
time*TMT tenure	-0.173 ***	-0.161 ***	-0.167 ***	-0.159 ***
time*CEO turnover	-0.301 ***	-0.298 ***	-0.301 ***	-0.299 ***

**TABLE 6**  
**Continued**

time*undergraduate prestige		0.010	†		0.008	†	
time*prestigious managerial experience		0.025			0.016		
time*prestigious core role experience		0.081			0.079		
time*prestigious external directorates		0.036			0.031		
time*prestigious alliance partners				-0.096	**	-0.098	**
time*II concentration				0.060		0.066	
time*II stability				-0.307	**	-0.268	*
	<i>N</i>	1796		1796		1796	
	<i># IPO firms</i>	379		379		379	
	<i>Chi-square</i>	2254.50		2232.73		2237.58	
	<i>Chi-square p-value</i>	<.001		<.001		<.001	
		† p < .10		* p < .05		** p < .01	
						*** p < .001	

### *Prestigious Firm Managerial Experience*

My second hypothesis deals with the influence of top executive prior managerial experiences. In particular this hypothesis addresses the role of executive prestigious prior managerial experiences. In developing this hypothesis I argued that prestigious prior managerial experiences provide top managers with human and social capital valuable in the post-IPO context. Specifically, I posited that prestigious managerial experience enables top managers to overcome the deleterious effect of the IPO process on post IPO firm growth and survival by facilitating access to resources and firm adaptation to the rigors of public trading. This hypothesis is formally stated as follows:

*Hypothesis 2: Executive prior managerial experiences in prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.*

Models b and d of Table 5 present the results of Hypothesis 2 with regard to firm failure. No support for this hypothesis is found with regard to firm failure. This is

evidenced by the negative and statistically insignificant coefficients of *prestigious managerial experience* in both model 5b (b=-.410) and model 5d (b=-.379). Models 6b and 6d of Table 6 present the results of Hypothesis 2 regarding firm growth. Support is not found for this hypothesis with regard to firm growth. This is determined by examining the coefficients of *time\*prestigious managerial experience*, which in both model b (b=.025) and model d (b=.016) of Table 6, which are not statistically significant. In summary, no support is found for Hypothesis 2.

#### *Prestigious Firm Core Executive Role Experience*

The third hypothesis developed in this study addressed the value of prestigious executive role experience in the post-IPO context. Specifically, in developing this hypothesis I argued that core executive role experience in prestigious firms provides top managers with tacit knowledge and skills which enable them to fulfill their responsibilities more effectively than those without such experience. I also posited core executive experience provides top executives with experience in dealing with a broad range of strategic, organizational, and operational issues (Roberto, 2003). Accordingly, core members of a firm's top management team may garner a substantial amount of experience in monitoring and controlling organizational processes and performance. I argued that such experience is particularly valuable in the post-IPO context given the changes to organizational structure, processes and performance objectives faced by newly public firms, thereby contributing to firm legitimacy. The third hypothesis formally proposes the following: *Hypothesis 3: Prior core executive role experiences in*

*prestigious firms at the time of a firm's IPO are positively related to post-IPO firm performance.*

Models b and d of Tables 5 present the results of Hypothesis 3 with respect to firm failure. No support is found for this hypothesis regarding firm failure. This is determined by the lack of statistical significance for the coefficients of *prestigious core role experience* in both model 5b (b=.314) and model 5d (b=.379). Models 6b and 6d of Table 6 present the results of Hypothesis 3 regarding firm growth. No support is found for this hypothesis with respect to firm growth. This is determined by examining the coefficients of *time\*prestigious core role experience*, which, in both model 6b (b=.081) and model 6d (b=.079) of Table 6, are not statistically significant. Accordingly, no support for this hypothesis is found for *prestigious core role experience* as a predictor of firm failure.

#### *Prestigious External Directorships*

The fourth hypothesis developed in Chapter III centers on the consequences of executive prestigious external directorships and post-IPO firm performance. In developing this hypothesis I argued that the possession of prestigious external directorships by firm executives represents human and social capital resources which enhance top management's ability to cope with and reduce the resource constraints faced by newly public firms as they adapt to the rigors of being publicly traded. In developing these arguments I cited a number of studies documenting the access to resources, information, and experiences provided to executive who serve as external directors.

This fourth hypothesis is formally stated as follows: *Hypothesis 4: Executive prestigious external directorships at the time of a firm's IPO will be positively related to post-IPO firm performance.*

Models b and d of Tables 5 present the results of Hypothesis 4 with respect to firm failure. No support for this hypothesis is found for *prestigious external directorships* as predictors of firm failure. Evidence of this is found in the lack of statistical significance for the coefficients of *prestigious external directorships* in both model 5b (b=.125) and model 5d (b=.194). Models 6b and 6d of Table 6 present the results of Hypothesis 4 regarding firm growth. No support exists for this hypothesis with respect to firm growth either. The coefficients of *time\* prestigious external directorships* in both model 6b (b=.036) and model 6d (b=.031) of Table 6, are not statistically significant. The combined results presented in Tables 5 and 6, demonstrate that Hypothesis 4 receives no support.

### **Identifying Key External Resource Holders**

The theoretical model presented in Chapter III develops two hypotheses regarding the effect of key external resource holder support on post IPO firm performance. Drawing upon prior research examining the challenges of the post-IPO context I argued that newly public firms face a variety of resource constraints stemming from the transformational nature of the IPO transition. Applying a resource dependence

perspective, I argued that prestigious alliance partners and dedicated institutional investors represent two groups of key external resource holders for newly public firms.

### *Prestigious Alliance Partners*

The influence of prestigious alliance partners on post-IPO firm performance are the focus of the fifth hypothesis developed in Chapter III. Utilizing insights from prior research on the performance consequences of strategic alliances and organizational learning, I posited that alliances with prestigious strategic alliance partners alleviate the deleterious effects of the IPO transition in two ways. First, I posited that prestigious strategic alliance partners may provide IPO firms with a means of conserving and sharing resources, thereby reducing the resources constraints synonymous with the IPO transition. Second, I argued that alliances with prestigious partners serve to enhance organizational legitimacy. Third, I argued that alliances with prestigious strategic alliance partners provide IPO firms with opportunities to internalize the processes, routines and structures of their prestigious strategic alliance partners. Hypothesis number five is formally stated as follows: *Hypothesis 5: The number of post-IPO strategic alliances formed with prestigious firms is positively associated with post-IPO firm performance.*

Models c and d of Tables 5 present the results of Hypothesis 5 with respect to firm failure. Support for this hypothesis is found for *prestigious alliances* as predictors of firm failure. Evidence of this is found in the statistical significance for the coefficients of *prestigious alliances* in both model 5c ( $b=-1.114$ ;  $p<.10$ ) and model 5d

( $b=-1.112$ ;  $p<.10$ ). Models 6c and 6d of Table 6 present the results of Hypothesis 5 regarding firm growth. No support exists for this hypothesis with respect to firm growth. The coefficients of *time\*prestigious alliances* in both model 6c ( $b=-.096$ ;  $p<.01$ ) and model 6d ( $b=-.098$ ;  $p<.01$ ) of Table 6, are negative and statistically significant. Opposite of Hypothesis 5, this suggests that forming strategic alliances with prestigious firms diminishes post-IPO firm growth rates. The combined results of hypothesis tests, provide partial support for Hypothesis 5.

#### *Dedicated Institutional Investors*

The role of dedicated institutional investment in shaping newly public firm performance prospects represents the focus of the seventh hypothesis developed in Chapter III. Drawing upon research on institutional investment, I argued that the extent to which a firm's stock is owned by dedicated institutional investors diminishes the amount of short-term earnings pressure faced by executives of newly public companies. I further argued that this lack of pressure regarding short-term earnings aids top executives of newly public firms in their pursuit of firm growth and survival by focusing their attention on other more long-term strategic and operational issues. Thus, the sixth hypothesis states: *Hypothesis 6: The amount of dedicated institutional investment in a newly public firm is positively associated with post-IPO firm performance.*

Models c and d of Tables 5 present the results of Hypothesis 6 with respect to firm failure. Hypothesis 6 was tested using measures of *institutional investment concentration* and *institutional investment stability*. No support for this hypothesis is



found for *institutional investment concentration* as a predictor of firm failure. As demonstrated by the lack of statistical significance for the coefficients of *institutional investment concentration* in both model 5c ( $b=-2.059$ ) and model 5d ( $b=-1.852$ ). Support for *institutional investment stability* is found for Hypothesis 6 in the case of institutional investment stability and firm failure. As shown in models 6c ( $b=-4.188$ ;  $p<.05$ ) and 6d ( $b=-4.235$ ;  $p<.05$ ) of Table 5, the coefficients for *institutional investment stability* are both negative and statistically significant. These results suggest that institutional investment stability is associated with a decreased likelihood of post-IPO firm failure.

Models 6c and 6d of Table 6 present the results of Hypothesis 6 with respect to firm growth. No support for this hypothesis is found for *institutional investment concentration* as a predictor of firm growth. This is determined by examining the coefficients of *time\*institutional investment concentration*. In both model 6c ( $b=.060$ ) and model 6d ( $b=.066$ ) of Table 6, are not statistically significant. The results of models c and d do not support Hypothesis 6 with regard to *institutional investment stability* and firm growth either. The coefficients of *time\* institutional investment stability* in both model 6c ( $b=-.307$ ;  $p<.01$ ) and model 6d ( $b=-.268$ ;  $p<.05$ ) are negative and statistically significant. Contrary to Hypothesis 6, these results suggest *institutional investment stability* is negatively related to post-IPO firm growth. In sum, the combined results shown in Tables 5 and 6 provide partial support for Hypothesis 6.

### Garnering the Support of Key External Resource Holders

The theoretical model developed in Chapter III posits a total of two hypotheses regarding the role of managerial prestige in garnering the support of dedicated institutional investors and prestigious strategic alliance partners. Specifically I draw upon insights from prior research on upper echelons prestige (Certo, 2003), and resource dependence theory (Pfeffer & Salancik, 1978), to argue that managerial prestige reduces the liability of market newness faced by newly public firms. In doing so, managerial prestige thereby increases the likelihood that a newly public firm will garner the support of prestigious alliance partners and dedicated institutional investors. Accordingly, hypotheses number seven and eight posit the following: *Hypothesis 7: Executive managerial prestige at the time of the IPO is positively related to the number of post-IPO strategic alliances entered into with prestigious alliance partners. Hypothesis 8: Executive managerial prestige at the time of the IPO is positively related to dedicated institutional investment.*

Model 7b of Table 7 presents the results the test of Hypothesis 7<sup>10</sup>. Examining the results of model 7b show that only the coefficient (b=.091) of *undergraduate*

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<sup>10</sup> Because the managerial prestige predictors used to test Hypothesis 7 and 8 were time invariant I also used cross sectional approaches (OLS regression and Zero-inflated negative binomial regression) in supplementary analyses. The results of the cross-sectional analyses were generally similar to the results utilizing longitudinal analyses. An exception was the loss of support for a positive relationship between undergraduate prestige and the number of prestigious alliance partners when using the cross-sectional analysis. Accordingly, the partial support received for Hypothesis 7 using TSCSNB should be interpreted with this caveat in mind.

*prestige* is statistically significant ( $p < .01$ ). This suggests that undergraduate prestige is positively related to the formation of alliances with prestigious alliance partner. The remaining coefficients of the aspects of managerial prestige, *prestigious managerial experience* ( $b = .255$ ), *prestigious core role experience* ( $b = -.149$ ), and *prestigious external directorates* ( $b = .121$ ) are not statistically significant. Accordingly, Hypothesis 7 receives only partial support.

**TABLE 7**  
**TSNB Estimates of Annual Prestigious Strategic Alliance Partner Counts**

Variable	Model 7a	Model 7b
Intercept	-3.740	-4.485 †
firm age	-0.208	-0.217
firm size	0.052	0.070
underwriter prestige	0.198	0.098
venture capital backing	0.449 *	0.361
under-pricing	0.790	0.549
IPO proceeds	0.231	0.261 †
pre-IPO alliances	1.453 ***	1.329 ***
hi-tech industry	0.809 ***	0.736 ***
ROA	-0.305 †	-0.270 †
board size	-0.231	-0.230
TMT size	0.390	0.255
TMT tenure	-0.310 †	-0.250
CEO turnover	-0.305	-0.314
undergraduate prestige		0.091 **
prestigious managerial experience		0.255
prestigious core role experience		-0.149
prestigious external directorates		0.121
	<i>N</i>	1683
	<i># IPO Firms</i>	379
	<i>Chi-square</i>	173.29
	<i>Chi-square p-value</i>	<.001

Note: Year dummies are included in these models, but are omitted from this table

†  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

The results of tests of Hypotheses 8 are found in Models 8b and 8d of Table 8. No support for this hypothesis is found for any of the aspects of managerial prestige examined in this study as predictors of *institutional investment concentration*. This is determined by examining the coefficients of *undergraduate prestige* ( $b=-.002$ ), *prestigious managerial experience* ( $b<.001$ ), *prestigious core role experience* ( $b=.009$ ), and *prestigious external directorates* ( $b=.006$ ) in model 8b; none of which are statistically significant. Hypothesis 8 is not supported for any aspects of managerial prestige as predictors of *institutional investment stability* either. The results of model 8d demonstrate that *prestigious managerial experience* ( $b=-.012$ ), *prestigious core role experience* ( $b=.002$ ), and *prestigious external directorates* ( $b=.011$ ) are not statistically significant. While the coefficient for *undergraduate prestige* ( $b=-.004$ ) is statistically significant ( $p<.05$ ) it is also negative, which is contrary to the direction posited in hypothesis 8. In summary the results of models 8b and 8d found in Table 8 show no support for Hypothesis 8.

### **The Partially-Mediated Effects of Managerial Prestige**

The final set of hypotheses developed in Chapter III deal with the role of prestigious strategic alliance partners and dedicated institutional investment as mediators of the relationship between managerial prestige and post-IPO firm performance. In particular, I incorporated the theory behind the three prior sets of hypotheses to argue that prestigious alliance partners and dedicated institutional investment positively and

partially mediate the relationship between managerial prestige and post-IPO firm performance.

**TABLE 8**  
**Random Effects Estimates of IPO Firm Dedicated Institutional Investment**

Variable	<i>II Concentration</i>		<i>II Stability</i>	
	Model 8a	Model 8b	Model 8c	Model 8d
Intercept	-0.214 †	-0.184	-0.655 ***	-0.615 ***
firm age	-0.004	-0.004	0.005	0.005
firm size	0.000	0.000	0.016 ***	0.015 ***
underwriter prestige	0.012	0.013	0.012	0.016
venture capital backing	0.018 †	0.018 †	0.038 ***	0.042 ***
under-pricing	-0.007	-0.005	-0.009	-0.004
IPO proceeds	0.016 *	0.015 *	0.042 ***	0.039 ***
pre-IPO alliances	0.019	0.020	-0.011	-0.006
hi-tech industry	0.006	0.007	-0.006	-0.003
ROA	-0.013	-0.013	-0.001	-0.001
board size	0.024 †	0.023 †	0.005	0.005
TMT size	-0.017	-0.017	-0.009	-0.003
TMT tenure	0.010	0.010	0.002	0.000
CEO turnover	0.001	0.001	-0.024 **	-0.024 *
undergraduate prestige		-0.002		-0.004 *
prestigious managerial experience		0.000		-0.012
prestigious core role experience		0.009		0.002
prestigious external directorates		0.006		0.011
<i>N</i>	1683	1683	1683	1683
<i># IPO Firms</i>	379	379	379	379
<i>Chi-square</i>	42.54	44.64	310.77	320.77
<i>Chi-square p-value</i>	<.001	0.002	<.001	<.001

†  $p < .10$       \*  $p < .05$       \*\*  $p < .01$       \*\*\*  $p < .001$

Note: Year dummies are included in these models, but are omitted from this table

Formally stated, I hypothesized the following in Chapter II: *Hypotheses 9: The positive relationship between managerial prestige at the time of a firm's IPO and post-IPO firm performance is positively and partially mediated by the number of post-IPO*

*strategic alliances that a newly public firm enters into with prestigious firms.*

*Hypotheses 10: The positive relationship between managerial prestige at the time of a firm's IPO and post-IPO firm performance is positively and partially mediated by the amount of dedicated institutional investment in a newly public firm.*

In order to conduct empirical tests of Hypotheses 9 and 10 I utilized the approach outlined by Baron and Kenny (1986). The Baron and Kenny (1986) approach for testing mediation consists of four steps. First, a predictor variable must influence the outcome variable in the direction hypothesized ( $x \rightarrow y$ ). Second, a predictor variable must influence the presumed mediator in the direction hypothesized ( $x \rightarrow m$ ). Third, a mediator must influence the outcome variable in the hypothesized manner while controlling for the predictor variables ( $m \rightarrow y$ ). Finally, a previously significant relationship between a predictor and the outcome variable must be reduced in the presence of the mediator. Partial mediation is found when a previously significant relationship between a predictor and the outcome variable is reduced in the presence of the mediator, but still maintains statistical significance.

The empirical evidence regarding support for Hypotheses 9 and 10 are found in the combined results of the tests of Hypotheses 1-8. Following the Baron and Kenney (1986) logic I first examined the  $x \rightarrow y$  relationships (Hypotheses 1-4) between managerial prestige and post-IPO firm performance outcome, growth and failure (Hypotheses 1-4). As summarized in Table 2, I only found support for a positive relationship between undergraduate prestige and firm growth. Next I examined the  $x \rightarrow m$  relationships between the hypothesized aspects of managerial prestige and the

hypothesized mediators, prestigious alliance partners, and dedicated institutional investment (Hypotheses 7 & 8). Table 2 shows that support for the hypothesized relationships was only found for undergraduate prestige and prestigious alliance partners. Next, I examined the  $m \rightarrow y$  relationships posited by Hypotheses 5 and 6. As shown in Table 2, I only found support for the hypothesized relationships in the case of institutional investment stability and firm failure, and in the case of prestigious alliance partners and firm failure. Given the results discussed above, I was unable to establish the pattern of relationships required by the Barron and Kenny approach. As such, the combined results of prior hypothesis tests provide no support for Hypotheses 9 and 10.

### Summary

This chapter presents the results of the tests of the hypotheses developed in Chapter III. The empirical evidence regarding the hypothesized relationships may be summarized as follows. First, a positive relationship between executive undergraduate prestige and post-IPO firm growth which provides partial support for Hypothesis 1. Second, no statistically significant relationship between executive prestigious firm managerial experience and post-IPO firm performance. Third, no statistically significant relationships were found between prior core executive role experiences in prestigious firms and post-IPO firm performance, lending no support to Hypothesis 3. Fourth, no statistically significant relationships were found between executive external directorates in prestigious firms and post-IPO firm performance, thereby showing no support for

Hypothesis 4. Fifth, a positive relationship was found between prestigious alliance partners and firm failure. However, contrary to Hypothesis 5 a negative relationship was found between prestigious alliance partners and post-IPO firm growth. Thus Hypothesis 5 received partial support.

Sixth, with respect to Hypothesis 6 no support was found for a relationship between institutional investment concentration and post-IPO firm performance. Also regarding Hypothesis 6, a negative relationship was found between institutional investment stability and both IPO firm growth and failure. The negative relationship for institutional investment stability was opposite the direction hypothesized. Combined, these results provide partial support for Hypothesis 6. Seventh, in partial support of Hypothesis 7, I found a positive relationship between executive undergraduate prestige and the number of alliances formed with prestigious firms. Eighth, I found no support for Hypothesis 8. The only statistically significant predictor I found in tests of Hypothesis 8 was executive undergraduate prestige, but its effect was opposite that of Hypothesis 8. Finally, the combined results of Hypotheses 1-8 fail to meet the pattern of relationships prescribed by Baron and Kenny for partial mediation of the effects of managerial prestige on post-IPO firm performance by either of the mediators proposed in Hypotheses 9 and 10. Thus, Hypothesis 9 and Hypothesis 10 were not supported. Having summarized the results of the hypothesis tests conducted in this study, I now shift my focus to providing some concluding remarks regarding this study.



## **CHAPTER VI**

### **CONCLUSION**

In this chapter I conclude this study by discussing the following topics. First, I present a brief overview of the objectives of this study. Second, I discuss the results presented in Chapter V and their implications for theory and managerial practice. Third, I discuss the limitations of this study. Finally, I present a discussion of avenues for extending and building upon this research in future.

#### **Discussion**

The influence of top executives on organizational outcomes has long interested researchers from a variety of academic disciplines. This study has attempted to extend research on this topic in three primary ways. First, this study examined the influence of managerial prestige on organizational outcomes. With a few exceptions, this group of executive characteristics has received little attention in prior research. Second, this study examined the influence of managerial prestige in a unique context, the time period following firm's IPO. Finally, this study has attempted to open the 'black box' of executive influence on organizational performance, by examining the potential mediated effects of managerial prestige's influence on firm performance by identifying key external resource holders in the post-IPO context. The results of hypothesis tests presented in Chapter V provide some noteworthy empirical evidence regarding the

theoretical model developed in Chapter III. In the sections that follow I address the conclusions regarding the results of my hypothesis tests.

#### *Managerial Prestige and Post-IPO Firm Performance*

A central proposition of this study is that managerial prestige at the time of the IPO directly influences post-IPO firm performance. Specifically, the model developed in Chapter III also posited positive relationships between executive educational prestige (Hypothesis 1), experience in prestigious firms (Hypothesis 2), core executive role experience in prestigious firms (Hypothesis 3), and prestigious external directorships (Hypothesis 4). The arguments behind these hypotheses drew upon human capital (Becker, 1964, 1975), social capital (Adler & Kwon, 2002; Coleman, 1988) and status characteristics (Berger et al., 1972; Ravlin & Thomas, 2005) theories to argue that such experiences provide executives with knowledge, skills, and social ties that are valuable in the post-IPO context. In line with this view, I proposed that firm executives would be better equipped to deal with the adaptation and resource constraints presented by transitioning from being privately held to publicly traded. Some support for this proposition was provided by the results of hypothesis tests discussed in Chapter V.

In support of Hypothesis 1, this study found a positive relationship between executive undergraduate prestige and post-IPO firm growth. To my knowledge, this is the first time a relationship between these two constructs has been documented. This finding provides support for Carpenter et al.'s (2004) contention that upper echelons researchers should expand the set of executive characteristics beyond those commonly

examined. This finding also provides some support for the logic articulated in Chapter III, that executive educational prestige represents a valuable source of firm human and social capital in the post-IPO context.

It was also argued in this study's theoretical model that managerial experience in prestigious firms also represents a valuable resource in the post-IPO context given the adaptation and resource constraints faced by newly public firms. While the sign for the coefficients testing this hypothesis were in the directions proposed, they were not statistically significant. This finding suggests that the amount of prior managerial experience in a prestigious firm possessed by firm executives at the time of the IPO has no influence on post-IPO firm performance.

Prior core executive role experience in prestigious firms was also argued to represent a valuable firm resource in the post-IPO context. The logic underlying this hypothesis was that such experience would provide firm executives with knowledge and skill useful in overseeing the organizational and structural changes required by the IPO transitions. Additionally, I posited that such experiences would enhance organizational legitimacy. Unfortunately, the empirical evidence presented in Chapter V does not support the logic underlying this hypothesis.

Finally, the model developed in Chapter III posited a positive relationship between the possession of prestigious external directorate experience and post-IPO firm performance. Specifically, I argued that such experiences provide managers with opportunities to learn about and observe the practices, policies and structures of the prestigious firms whose board they serve on. In line with this logic, I posited that such

affiliations would contribute to the legitimacy of newly public firms. However that empirical evidence presented in Chapter V lends no support to the theory behind this hypothesis.

While the lack of support for the majority of the aspects of managerial prestige examined in this study was somewhat disappointing, it might not be surprising to some. Indeed, recent reviews of upper echelons research cited earlier in this study have found that establishing a consistent link between the characteristics of top managers and organizational performance has proven difficult (Carpenter et al., 2004; Certo et al., 2006). Prior researchers have suggested that one reason for this may be that a variety of intervening mechanisms may exist between the characteristics of members of the upper-echelons and firm performance (Certo et al., 2006; Daily et al., 2003b). Prior researchers have also suggested that the demographic proxies relied upon by upper echelons research such as this study do not adequately capture the underlying psychological constructs they are meant to proxy (Boal & Hooijberg, 2001; Priem et al., 1999).

On the other hand, the lack of support for the remaining aspects of the managerial prestige characteristics examined in this study may be surprising to others given that upper echelons theory (Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984) and research on transformational change (Amburgey et al., 1993; Fischer & Pollock, 2004) suggest that the post-IPO context examined in this study represents a context which should provide top executives with ample discretion and opportunity to influence subsequent firm performance outcomes. In sum, this study has documented

that some aspects of managerial prestige do influence post-IPO firm performance. In doing so this study has provided some support for the contention that upper echelons researchers should consider additional executive characteristics beyond those commonly examined in prior research. In summary, while little empirical support was found for the managerial prestige hypotheses developed in this study, multiple methodological limitations may, in part, explain the lack of findings in this study. Accordingly, these limitations are discussed in greater detail in the limitations section of this chapter.

#### *External Resource Holders and Post-IPO Firm Performance*

This study applied resource dependence theory and research on the transformational nature of the IPO transition to suggest that the support of key external resources holders would reduce the deleterious effects of the post-IPO transition on newly public firms. Drawing upon prior research on transformational change, I identified dedicated institutional investors and prestigious strategic alliance partners as key external resource holders in the post-IPO context. A discussion of the results regarding external resource holder support and post-IPO firm performance follows.

First, this study finds that the having prestigious alliance partners is negatively associated with post-IPO firm failure. This finding lends support to the idea that prestigious alliance partners provide newly public firms with enhanced access to information and resources that facilitates firm adaptation to the rigors of public trading. In contrast, however, this study also finds a negative relationship between prestigious alliance partners and post-IPO firm growth. While the influence of prestigious alliance

partners on post-IPO firm growth and survival are juxtaposed against one another, the finding of these converse relationships may serve to highlight the tradeoffs firms face in pursuing firm survival and firm growth. A more detailed discussion of the theoretical implications of this finding regarding these tradeoffs is provided in the section discussing the theoretical implications of this study.

Second this study finds that having equity relationships with institutional investors whose portfolios are concentrated does not influence either post-IPO firm failure or growth. Accordingly, having large amounts of firm equity owned by institutional investors with concentrated equity portfolios may not buffer newly public firms from pressures of public trading as proposed by the theoretical model developed in this study. This suggests that potential monitoring benefits alluded to by Bushee (1998) may not be beneficial in the post-IPO context. Rather, this finding may suggest that such monitoring benefits may be negated by excessive oversight which would actually serve to increase the pressure to manage firm earnings faced by the executives of newly public firms.

In contrast, this study finds that equity relationships with institutional investors whose equity portfolios are stable are negatively related to both post-IPO firm survival and growth. These findings parallel those regarding prestigious alliance partners and growth in that they suggest that the antecedents of firm failure and firm growth may differ. Accordingly, these findings may also serve to demonstrate the tradeoffs inherent to firm growth and survival. The finding of a negative association between firm equity relationships with institutional investors whose equity portfolios are stable provides

some support for the logic articulated in Chapter III. Specifically, this finding provides some support for the view that dedicated institutional investors serve to buffer the executives of newly public firms from the earnings pressures typically faced by newly public firms.

#### *Managerial Prestige and External Resource Holder Support*

An additional aspect of the theoretical model developed in this study centers on the influence of managerial prestige characteristics in garnering the support of key external stakeholders. Specifically, the theory developed in this study suggests that managerial prestige serves to reduce the liability of market newness faced by newly public firms, and as such key external resource holders will be more willing to transact with firms who employ prestigious managers. However these arguments were largely unsupported. This may not be surprising given the fact that this study measured managerial prestige at the time of the IPO and did not track it overtime. As such, the lack of support for these hypotheses may be due to a limitation of this study rather than the theory it draws upon.

An exception to the largely unresponsive results of this aspect of the model developed in this study was the finding of a positive relationship between executive undergraduate educational prestige and alliances with prestigious alliance partners. I am unaware of any other studies that have documented such a relationship. This result supports that logic underlying Hypothesis 8 that the human and social capital embodied in such educational credentials serves to overcome the liability of market newness faced

by newly public firms as they seek to acquire the support of key external resource holders in the post-IPO context. In doing so, this characteristic of top management provides newly public firms with greater opportunity to enter alliances with prestigious partners.

#### *Partially Mediated Effects of Managerial Prestige on Post-IPO Firm Performance*

The final theoretical component to the model developed in this study focuses on the role of key external resource holders as partial mediators of the positive relationship between managerial prestige and post-IPO firm performance outcomes. This aspect of the theory represents an attempt to explore the black box of the linkage between TMT characteristics and post-IPO firm performance outcomes referred to by Certo and colleagues (2006). The discussion of the results of hypotheses tests presented in Chapter V concludes that no support was found for the mediated effects of the positive relationship between managerial prestige and post-IPO firm performance.

The lack of support for this aspect of my theoretical model suggests that intervening mechanisms other than those identified in this study may be at play between the managerial prestige characteristics found to influence post-IPO firm performance. Consequently, future researchers may want to consider alternative intervening mechanisms between managerial prestige and firm performance outcomes. For example, the buy, hold, or sell recommendations of stock analysts may represent another key external resource holder group in the post-IPO context. Researchers may also consider ways to examine the influence of managerial prestige and external resource



holder support in a more longitudinal manner. As discussed in the limitations section of this study, this study examined managerial prestige at the IPO.

The lack of support for the mediated effects posited by the theoretical model developed in this study is largely a result of failure to establish the direct effects of managerial prestige posited by Hypotheses 1-4. As such, the methodological limitations that may have precluded the finding of support for Hypotheses 1-4 may also represent reasons why no support was found for the mediated relationships hypothesized in this study. A more detailed discussion of such limitations is presented in the section that follows.

### **Limitations**

Like all research, this study is not without its limitations. Accordingly, in this section I discuss the potential limitations of this study. These limitations include, but may not be limited to, missing data issues, the use of demographic proxies for managerial prestige, reliance upon IPO prospectuses for executive experience data, construct measurement error, mis-specified models, sample generalizability, and potential confounds stemming from reverse causality and/or endogeneity.

#### *Missing Data*

Although this study relied upon multiple data sources, reliance upon archival data sources, presented some missing data issues. This represents a common issue when relying upon archival data sources. Missing data primarily occurred in the cases of pre-

IPO firm financial data and institutional investment data. While publicly traded firms and institutional investors are required to disclose these types of information to the SEC, privately held firms and private firm institutional investors are not. As a result, missing pre-IPO financial data and institutional investment data were replaced with sample data as discussed in Chapter IV.

#### *Demographic Proxies*

Another limitation of this study is that I did not directly measure managerial prestige. Extant research, as well as the theory and hypotheses developed in this study suggest that managerial is multidimensional latent theoretical construct. As a result obtaining direct measures of managerial prestige can prove difficult. Similar to prior studies on managerial prestige, in lieu of direct measures of managerial prestige, this study relied upon demographic proxies as measures of managerial prestige.

Accordingly, this study suffers from the same limitations as other upper echelons research which relies upon demographic characteristics to serve as proxies for latent constructs. Some suggests that individual demographic characteristics may not be entirely congruent with the underlying theoretical constructs they are intended to represent (Lawrence, 1997; Priem et al., 1999). As such the results of this study should be interpreted with this potential limitation in mind.

### *IPO Prospectuses*

Solely relying upon IPO prospectuses as the source of managerial prestige characteristics presents another limitation of this study. Specifically, firm managerial prestige characteristics were measures at the time of the IPO only. While obtaining longitudinal measures of managerial prestige would have been ideal, the lack of data availability, and resource constraints precluded doing so in this study. Additionally, as discussed in Chapter III, there exist multiple theoretically grounded reasons to suggest that managerial prestige at the time of a firm's IPO will have an enduring effect on organizational outcomes (Fischer & Pollock, 2004; Pollock et al., 2002). The empirical results of this study provide some support for these theoretical arguments.

### *Measurement Error*

This study may suffer from limitations regarding the measurement of key constructs. For example, I was the only individual to code the executive experiences listed in each sample firm's IPO prospectus. Accordingly, it may be beneficial in the future to have additional raters code the executive experiences examined in this study in order to ensure data reliability. Additionally, the measures of dedicated institutional investment proposed in this study, while adapted from Bushee (1998), are new and therefore warrant some inspection. However, this approach to characterizing the nature of firm institutional investment rather than simply summing up the shares owned represents a methodological contribution beyond those to theory made by this study.

### *Mis-Specified Models*

Another potential limitation of this study may be that the models in this study are mis-specified. For example, firm adaptation actions were not observable, and therefore not included as controls in the tests of this study's hypotheses. Such actions may represent a source of omitted variable bias in this study, given the importance of firm adaptation to the institutional environment presented in the post-IPO context. Additionally, the omission of outside director prestige may also represent a source of omitted variable bias. Prior research suggests that the prestige of outside directors may also represent a valuable firm resource in the post-IPO context (Certo, 2003). Accordingly, key external resource holders may also focus on the characteristics of outside directors, in addition to those of a firm's TMT. In sum, firm adaptation actions, and outside director characteristics may represent sources of omitted variable bias, and as such, the results of this study should be interpreted with this caveat in mind.

### *Sample Generalizability*

A limited sample may represent an additional limitation of this study. By utilizing only IPO firms that I was able to identify by firm name in both Jay Ritter's IPO data and SDC, I have likely excluded some of the IPOs that occurred during 1997. Additionally, this sample only examines IPO firms that occurred during 1997. As a consequence, the generalizability of this study may be limited. In order to address this limitation, future research may consider ways to expand upon the sample utilized in this study.

### *Reverse Causality and Endogeneity*

Finally, the design and analytic tools used in this study do not preclude the potentially confounding issues of reverse causality or endogeneity regarding the relationships hypothesized in this study represent another limitation of this study. In an attempt to partially remedy these issues, where possible I collected longitudinal data, and lagged them one year. I also controlled for a variety of factors which extant research suggests may influence the outcomes of interest in this study.

## **Implications**

The results of this study extend our understanding of the influence of top managers, equity owners, alliance partners and firm performance in several ways. In the sections that follow I discuss the implications of these results for both theory and management practice.

### *Theoretical Implications*

The findings of this study support the recommendation of Carpenter and colleagues (2004) that researchers need to expand the set of executive characteristics beyond those most commonly examined to upper echelons research. Specifically, this study demonstrated that executive undergraduate prestige positively influenced firm performance. Consequently, this study demonstrates the potential benefits of expanding the net of executive characteristics examined in upper echelons research.

The findings of this study also have implications for research on the transformational nature of the post-IPO period. This study contributes to research in this area in two ways. First, some of the results of this study support the contention of Fischer and Pollock (2004) that firm characteristics at the time of IPO can have an enduring impact on the long-term performance of newly public firms. Second, the results of this study extend prior research in this area by identifying executive undergraduate prestige as an additional firm resource which aids firms as they cope with the challenges of transformational change.

This study also contributes to research on the influence of institutional ownership on post-IPO organizational outcomes. Prior research (Fischer & Pollock, 2004; Higgins & Gulati, 2006) has alluded to potential linkages between the nature of firm institutional ownership and post-IPO firm performance. However, this study is the first that I am aware of that has documented relationships between any aspect of dedicated institutional investment and post-IPO firm performance. In doing so, this study highlights the importance of firm stockholders in shaping post-IPO firm performance outcomes. Particularly, this finding lends some support to the notion that institutional investors and the pressures they exert on top managers may influence subsequent firm performance outcomes. This support, maybe tempered however, by potential endogeneity issues regarding institutional investor equity selection.

An additional theoretical implication of this study pertains to research on strategic alliances. The results of this study suggest that entering into alliances with publicly traded alliance partners enhance the survival chances of newly public firms, but

are negatively related to post-IPO growth. This suggests that while alliances with public firms may provide newly public firms with opportunities for learning about the structure and routines which are necessary for functioning in public markets, they may also inhibit their ability to grow.

In a related vein, this study indirectly sheds light into the research addressing the nature of the relationship between firm growth and other aspects of firm performance (Penrose, 1959). In developing the theory and hypothesis tested in this study, I implicitly assumed that firm growth and survival outcomes would co-vary. However the contradictory results of hypothesis test regarding the influence of prestigious alliance partners and institutional investment stability on firm survival and growth may disconfirm this assumption. Consequently, the results of this study provide some support for theory which suggests firm growth and survival represent distinct theoretical constructs, whose antecedents differ (Delmar et al., 2003; Sapienza et al., 2006).

### *Managerial Implications*

This research also provides at least two implications for management practice. First, the results of this study regarding the long-term performance implications of managerial prestige at the time of its IPO suggest the importance of exhibiting substantial care when configuring a firm's TMT prior to its IPO. Indeed, the results of this study combined with those of others (Fischer & Pollock, 2004) suggest that managerial characteristics at the time of the IPO may have an enduring effect on firm performance. While at this point in the development of research in this area it would be

premature to make prescriptive recommendations, this study does suggest that decision makers may want to consider the source of educational credentials of prospective executives when making staffing decisions.

Second, the conflicting results regarding the influence of institutional investment stability and prestigious alliance partners on firm survival and growth provide some implications for firm strategy. These results may suggest that while the support of prestigious alliance partners and institutional investors with stable equity portfolios enhance a newly public firm's survival chances, they may also reduce its rate of growth. Accordingly, managers may want to weigh these tradeoffs when during IPO road shows, and when considering prospective alliance partners.

### **Future Research**

The results of this study also suggest areas that may be fruitful for future research. First, this study examined the influence of managerial prestige at the time of the IPO. Future research may consider ways to track managerial prestige as it evolves over time. One approach to doing this would be to focus on managerial prestige changes associated with the title of CEO. Researchers might examine how the characteristics of executives holding the title of CEO change as IPO CEOs turnover. This approach would circumvent some of the data availability issues associated with examining the entire TMT longitudinally. As mentioned in the limitations section, pursuing this opportunity



may serve to address issues of reverse causality and endogeneity associated with this study.

Second, future research may consider extending this research by considering the influence of managerial prestige in contexts other than that immediately following the IPO. In order to do so, researchers may look to incorporate the resource based view (Barney, 1991; Penrose, 1959; Wernerfelt, 1984), as this study has, in order to identify managerial status characteristics which are context relevant. In doing so, our understanding regarding the context specific nature of managerial prestige would be enhanced.

Third, this study might also be extended by applying the theory and measures of managerial prestige used in this research to IPO performance. While some studies have examined the influence of D'Aveni's (1990) measures of managerial prestige (i.e., Lester et al., 2006), I am unaware of any studies that have distinguished between ties to publicly traded firm and privately held firms when predicting IPO performance. Given the challenges associated with adaptation to the public arena, it may be that IPO investors pay greater attention to ties to public firms than ties to privately held firms. If such were the case, one would expect to find stronger relationships between ties to publicly traded firms and IPO outcomes than those to privately held firm.

Fourth, this study might also be extended by considering potential contingencies to the relationships between managerial prestige examined in this study and post-IPO firm performance documented in this study. For instance, environmental and technological uncertainty may increase external resource holders' tendency to rely upon

managerial prestige characteristics as indicators of managerial competence and organizational legitimacy, thereby increasing their influence on post-IPO firm performance. Pursuing this research opportunity would provide researchers with a better understanding of the boundary conditions of managerial prestige's influence on post-IPO firm performance outcomes.

Fifth, future research may build upon this study by considering the influence of additional external resource holders in the post-IPO context. For instance, given the pressure faced by newly public firms to establish their legitimacy, the recommendations of stock analysts may play an important role in ensuring firm survival. If such a relationship were established, researchers might also test to see if such recommendations mediate the relationship between managerial prestige characteristics and post-IPO firm performance. Similar relationships might be explored for IPO proceeds, and secondary equity offerings as well.

Examining the relationship between outside director prestige and post-IPO firm performance may represent another means of extending this study. Resource dependence theory suggests that outside directors represent a key mechanism by which firms co-opt the support of key external resource holders (Pfeffer & Salancik, 1978). Additionally, prior research suggests that outside director prestige may serve to reduce the liability of market newness faced by newly public firms (Certo, 2003; Certo et al., 2001b). While tests of this view have not yielded conclusive results with regard to IPO performance, prior tests have not incorporated the distinction between ties to publicly traded firms and privately held firms. Accordingly, researchers may consider this

distinction when examining the influence of outside director prestige on both IPO and post-IPO firm performance.

The results of this study also suggest that additional future research opportunities may also be found in examining the influence of institutional investment characteristics and other outcomes. For instance researchers might examine the influence of institutional investor portfolio stability on such firm level outcomes as research and development spending, innovation, international diversification, as well as executive level outcomes such as compensation structure and turnover. Such studies would increase our knowledge of the importance of firm equity owners and their characteristics.

### **Summary**

As noted earlier in this study, the influence of top managers on organizational performance has long intrigued researchers from a variety of academic disciplines. Accordingly, a substantial amount of research has been conducted that attempts to link executive characteristics to firm performance outcomes (Finkelstein & Hambrick, 1996). The results of this body of research have are ambiguous (Carpenter et al., 2004; Certo et al., 2006). This study attempted to extend research on top managers and firm performance by examining the direct and mediated influence of managerial prestige in the post-IPO context.

This study posited that executive educational prestige, managerial experience in prestigious firms, core executive role experience in prestigious firms, and prestigious external directorships would positively influence post-IPO firm performance. The theoretical model developed in this study also identified dedicated institutional investors and prestigious alliance partners as potential mediators of the relationships posited by this study between managerial prestige and post-IPO firm performance. As such, positive relationships were posited between the support of these external resource holders and post-IPO firm performance. Additionally, the theory developed in this study proposed that the aspects of managerial prestige examined in this study would serve to garner the support of key external resource holders such as prestigious alliance partners and dedicated institutional investors. Finally, the theoretical model developed in this study posited that the support of prestigious alliance partners and dedicated institutional investors partially mediates the relationship between managerial prestige and post-IPO firm performance.

The results of this study provide some support for the arguments it articulates. First, executive educational prestige was found to positively influence post-IPO firm growth. Second, prestigious alliance partners were found to be negatively related to firm failure. Third, the amount of firm equity owned by institutional investors with stable equity portfolios was found to be negatively related to firm failure. Finally, executive undergraduate prestige was found to be positively related to the formation of alliances with prestigious partners.

Although some support was found for the theory developed in this study, no support was found for relationships between executive managerial experience in prestigious firms, core executive role experience in prestigious firms, or prestigious external directorates and post-IPO firm performance. Additionally, no support was found for the mediated relationships posited by the model developed in this study. Consequently, the lack of support for these hypothesized relationships potentially casts doubt upon the methodology and/or the theoretical arguments utilized in this study. While several of the hypotheses developed in this study were not supported, perhaps this study will lay a foundation for future research attempts to more fully understand the influence of top managers on the performance of the firms that employ them.

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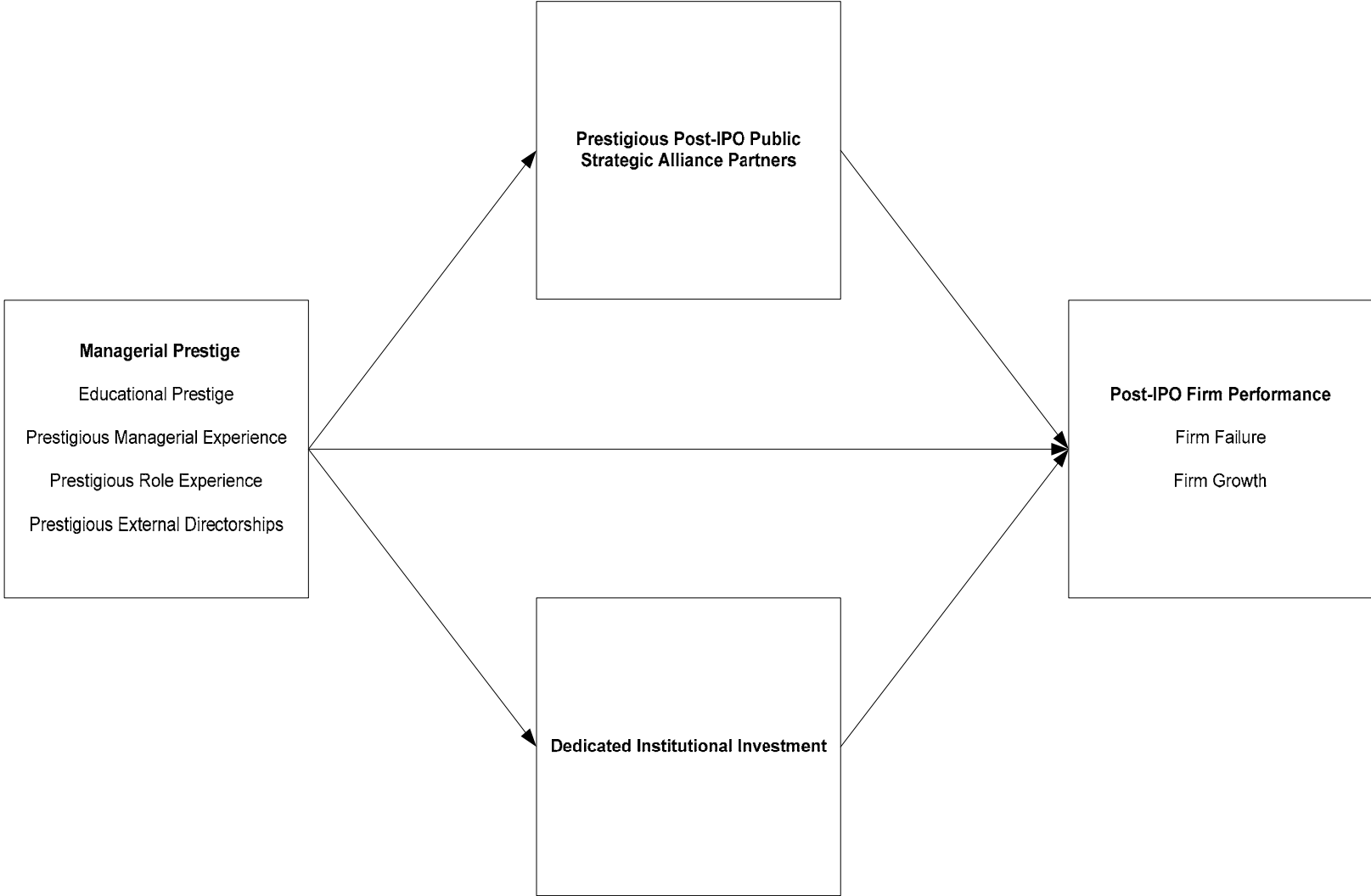
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**APPENDIX A**

**CONCEPTUAL MODEL**



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