INFLUENCING INITIAL PUBLIC OFFERING INVESTORS WITH PRESTIGE: SIGNALING WITH BOARD STRUCTURES

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I describe how board structures influence the decision-making processes that investors use when purchasing shares of firms undertaking initial public offerings (IPOs). IPO firms are relatively unknown to investors and suffer from a liability of market newness. I rely on signaling theory, institutional theory, and sociological research on prestige to suggest that investor perceptions of board prestige signal organizational legitimacy, thereby reducing the liability of market newness and improving IPO firm stock performance. I also propose that the characteristics of investors, namely prestige, influence their perceptions of board prestige.

Scholars in multiple disciplines have relied on a number of theories to describe the purposes and efficacy of boards of directors (for excellent reviews see Dalton, Daily, Ellstrand, & Johnson, 1998, and Dalton, Daily, Johnson, & Ellstrand, 1999). Dominant theoretical perspectives on board research include agency theory (e.g., Jensen & Meckling, 1976), stewardship theory (Donaldson & Davis, 1991, 1994), resource dependence theory (Pfeffer & Salancik, 1979), social network theory (Burt, 1992), and institutional theory (Meyer & Rowan, 1977). Although these diverse theories prescribe different, and often contrasting, board characteristics, there exists one commonality among these perspectives: the tangible actions and activities performed by boards influence firm outcomes. Implicitly, this research suggests that board activities improve firm operating performance.

In contrast, in this paper I extend the board literature by suggesting that the characteristics of boards of directors influence organizational legitimacy and, thus, market performance. I suggest that, in some contexts, boards have a symbolic role that is independent of the board’s tangible activities. To develop the symbolic role, I rely on signaling theory (Spence, 1973), institutional theory (DiMaggio & Powell, 1983), and sociological research on prestige (e.g., MacKinnon & Langford, 1994; Wegener, 1992) to suggest that investors value prestigious board structures.

The symbolic role of prestigious board structures may be particularly pertinent in the initial public offering (IPO) context, since IPO performance primarily depends on the perceptions of potential investors. An IPO represents a critical transition point in the firm’s development—a transition that advances the privately held firm to the public arena. Private firms undertaking IPOs typically are unknown to potential investors and suffer from a liability of market newness. An examination of boards in the IPO context, then, links board studies on entrepreneurial firms (e.g., Daily & Dalton, 1992, 1993) with board studies on large, publicly traded firms (e.g., Boyd, 1995; Rosenstein & Wyatt, 1997; Yermack, 1996).

I propose that board structures represent important nonfinancial information that IPO investors consider when making investment decisions. The propositions developed herein are consistent with recent research in accounting that suggests the decreasing relevance of financial information (e.g., earnings, cash flows, book values) and the increasing importance of nonfinancial information in determining equity values (e.g., Amir & Lev, 1996; Lev & Zarowin, 1999). Kim and Ritter (1999) suggest that the relationship between financial information and equity values is particularly tenuous in the IPO context.

While the examination of boards of directors among IPO firms provides a unique context in which to further develop theory, understanding boards in the IPO context may also prove practically significant for entrepreneurs, investors, and investment bankers. In 2000, firms established a record by raising over $80 billion through IPOs (Ceron, 2001). Understanding IPO performance represents an important area of investigation, since the ability to raise capital in
an IPO influences the firm's ability to hire new managers, establish a sales force, and invest in new projects and equipment. Consequently, a firm’s ability to complete a successful IPO may influence long-term measures of firm performance (e.g., Allen & Faulhaber, 1989; Rahman & Yung, 1999; Ritter, 1991), as well as the firm’s survival capabilities (e.g., Jain & Kini, 1999, 2000).

The remainder of the paper proceeds as follows. I begin by describing the IPO process, the liability of market newness associated with IPO firms, and the role of signaling theory in the IPO context. I next discuss the importance of organizational legitimacy for IPO firms and how investor perceptions of prestigious board structures signal organizational legitimacy. Following this, I discuss how the prestige of investors may influence their perceptions of board prestige. Finally, I discuss the paper’s contributions and possible extensions.

### IPOs

#### The IPO Process

To undertake an IPO, the owners and managers of the firm must adhere to the standardized IPO process (for a detailed description of the IPO process, see Ellis, Michaely, & O’Hara, 1999). The first step in this process involves enlisting the assistance of an investment banker. With the assistance of the investment banker, the managers prepare a registration statement that includes the firm’s prospectus. After this preliminary registration statement has been compiled, the investment banker arranges for the firm’s managers to market the company to potential investors via road shows. These road shows—presentations describing the firm’s operations, products or services, and management—are attended by only the most influential institutional investors (Edy, 2000; Lashinsky, 1999). After observing the road show and evaluating the firm’s prospectus, institutional investors decide whether to purchase shares of the company’s equity.

Institutional investors play a prominent role in the IPO process, since they are allocated a majority of the equity available in IPOs (Aggarwal, Prabhala, & Puri, in press; Ljungqvist & Wilhelm, in press). However, they may be reluctant to purchase shares of a firm because they may be uncertain about the firm’s quality (Rock, 1986). Because the IPO transitions the private firm into the arena of public trading, firms undertaking IPOs have not yet demonstrated clear performance records with the public markets. Firms undertaking IPOs must overcome what I term a liability of market newness. This liability differs from the traditional liabilities of newness and smallness (Freeman, Carroll, & Hannan, 1983; Singh, Tucker, & House, 1986), since IPO firms generally vary in terms of both firm age and size. Instead, liability of market newness refers to the discount that investors place on IPO firms because these firms have not demonstrated an ability to cope effectively with the demands of public trading (e.g., market fluctuations, meetings with analysts, and so forth).

Liability of market newness creates valuation difficulties for potential investors. These difficulties are evidenced by a great deal of research demonstrating how the equity values of IPO firms fluctuate in the initial days of public trading (for a review of this research, see Ritter & Welch, 2002). These fluctuations illustrate the difficulty investors face when determining the “true” values of IPO firms (Libin & Wrona, 2001).

Investment bankers attempt to reduce this uncertainty through “bookbuilding” (for an excellent description of this process, see Cornelli & Goldreich, 2001). After each road show investment bankers query institutional investors regarding their interest in purchasing shares of the IPO firm. These queries often reveal how many shares institutional investors desire, as well as the prices they are willing to pay for each share of equity. Investment bankers use these data to determine the final offer price, which represents the price at which the IPO firm sells its equity shares to the public.

Various types of companies participate in the IPO process. In fact, some of the largest IPOs in recent history involve spin-offs and equity carve-outs. It is important to note that the associations these firms have with their corporate parents decrease their liabilities of market newness. In this article, however, I exclude such

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1 Because of the inherent complexities surrounding the IPO process, legal scholars have recently questioned whether individual investors are even suitable for investments in IPO firms (e.g., Libin & Wrona, 2001).
firms and concentrate primarily on private, independent firms seeking public equity for the first time. It is these IPO firms that are most susceptible to the liability of market newness.

**Influencing IPO Investor Decision Making**

Signaling theory describes the process used by decision makers in situations of information asymmetry (Spence, 1973). In his seminal formulation, Spence (1973) utilized the labor market as an example of one such context: potential employers encounter information asymmetry when attempting to distinguish between high-quality and low-quality candidates. In this example education serves as a signal in the labor market that helps to reduce information asymmetry. Presumably, high-quality applicants prove their quality by withstanding the rigors of higher education, and this signal allows employers to select high-quality candidates consistently.

In this example the signal fulfills two important criteria: the signal is both observable and costly to imitate (for a review of these criteria, see Ross, 1977). First, potential employers can verify the educational degree. Second, the degree is costly or difficult to imitate; candidates of inferior quality do not possess the skills or abilities needed to earn such a degree.²

Scholars have applied signaling theory to several topics in corporate finance research. Ross (1977), for example, has contended that firms retain debt in an effort to signal quality. Similarly, Bhattacharaya (1979) has argued that firms attempt to signal quality by issuing dividends. Both models meet the signaling criteria. Only high-quality firms can afford to repay the debt and issue the dividends consistently, and low-quality firms attempting to imitate the signal will ultimately suffer bankruptcy.

In a number of IPO studies, researchers have relied on signaling theory (Spence, 1973) to explain IPO performance. These studies suggest that potential investors associate uncertainty with IPO firms and that managers send signals to these investors to indicate firm quality, thereby improving IPO performance (e.g., Beatty, 1989; Carter & Manaster, 1990). Research demonstrates, for example, that the reputations of investment bankers (Carter et al., 1998), auditors (Beatty, 1989), and venture capitalists (Megginson & Weiss, 1991) serve as signals in the IPO process. Investors view these as credible signals; reputable investment bankers, for example, would be aligned with only high-quality IPO firms, because affiliations with low-quality IPO firms would result in reputation damages.³ In fact, Titman and Trueman formally model the relationship between auditor reputation and IPO performance and suggest the applicability of their model "to the entrepreneur's choice of the quality of any outsider who can provide information about the firm" (1986: 16).

Consistent with this assertion, in the following sections I develop the importance of organizational legitimacy in the IPO context and describe how prestigious boards of directors can contribute to organizational legitimacy.

**ORGANIZATIONAL LEGITIMACY AND IPO PERFORMANCE**

Institutional theory suggests that organizational legitimacy is paramount for firm performance and survival (Barringer & Milkovich, 1998; Eisenhardt, 1988). To gain legitimacy, organizations respond to institutional forces emanating from such sources as suppliers of capital, consumers, and regulatory agencies by adopting the same organizational form (DiMaggio & Powell, 1983; Greenwood & Hinings, 1996). This homogenization process, otherwise known as isomorphism (Hawley, 1988), forces one organization in the population to resemble other organizations that

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² Recent signaling theory research suggests that firms may also use costless signals (Austin-Smith & Banks, 2000; Bhattacharrya & Ditmar, 2001). Bhattacharaya and Ditmar (2001) examined stock repurchase announcements and suggested that relatively ignored firms use costless signals to draw attention from investors. The IPO process, however, introduces firms to investors; consequently, IPO firms are not often ignored. Therefore, the research on IPO firms has relied on costly signals—for example, managerial equity (Leland & Pyle, 1977), underwriter reputation (Carter, Dark, & Singh, 1998), and auditor reputation (Titman & Trueman, 1986).

³ Logue, Rogalski, Seward, and Foster-Johnson (in press) provide evidence that prestigious investment bankers do not improve IPO performance per se. Instead, they suggest that prestigious investment bankers improve IPO performance indirectly, through their premarket underwriting activities. In other words, investment banker prestige facilitates the completion of premarket activities that improve IPO performance.
face the same set of environmental circumstances (DiMaggio & Powell, 1983). Researchers have found that isomorphism affects organizational characteristics, such as structures and practices (Meyer & Rowan, 1977; Tolbert & Zucker, 1983). The adoption of these prevailing practices and procedures leads to increases in organizational legitimacy, which helps organizations acquire resources and survive (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Pfeffer & Salancik, 1978).

Legitimacy performs an important role for firms undertaking IPOs. Research indicates that legitimate firms are less likely to fail (Baum & Oliver, 1991; DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Consequently, suppliers of capital may accept lower risk premiums (e.g., lower interest rates) in loan repayment schedules when contracting with legitimate firms (Mizruchi, 1996; see also Cornell & Shapiro, 1987, and Miller & Bromiley, 1990). Similarly, suppliers of capital may also accept lower risk premiums when purchasing shares of legitimate firms undertaking IPOs.

Given the tendency of firms to either underperform (Ritter, 1991) or fail (Jain & Kini, 2000) in the years immediately following their IPOs, potential investors may be particularly interested in determining firm quality at the time of the IPO (e.g., Rock, 1986). By demonstrating organizational legitimacy, then, managers may raise more capital and enjoy improved stock performance.

**Proposition 1:** For firms undertaking IPOs, signals of organizational legitimacy will positively influence firm stock performance.

**PRESTIGIOUS BOARD STRUCTURES AND ORGANIZATIONAL LEGITIMACY**

Despite legitimacy's influence on IPO performance, managers of IPO firms may have an onerous time demonstrating organizational legitimacy. As mentioned previously, these private firms have not established an ability to negotiate the trials of public markets; therefore, potential investors associate a liability of market newness with IPO firms. Given the need to influence these investors, firms may adopt organizational structures to signal legitimacy, because "organizations that incorporate societally legitimated rationalized elements in their formal structures maximize their legitimacy and increase their resources and survival capabilities" (Meyer & Rowan, 1977: 352).

Conceptual research indicates that such organizational structures include boards of directors. In particular, this research suggests that board prestige enhances organizational legitimacy, which allows managers to influence the perceptions of customers, suppliers, and investors. Pfeffer and Salancik, for example, note that "prestigious or legitimate persons or organizations represented on the focal organization's board provide confirmation to the rest of the world of the value and worth of the organization" (1978: 145). Mizruchi echoes similar sentiments:

Boards of directors perform an important function regarding the reputation of a firm.... When investors decide whether to invest in a company, they consider the firm's strength and the quality of its management. By appointing individuals with ties to other important organizations, the firm signals to potential investors that it is a legitimate enterprise worthy of support (1996: 276).

While the aforementioned conceptual work indicates a positive influence of prestigious board structures, the empirical research on the influence of board prestige, which is based on top management team (TMT) prestige research (e.g., D'Aveni, 1990; D'Aveni & Kesner, 1993), remains mixed. One stream of research indicates that prestigious board structures positively influence firm outcomes (e.g., Certo, Daily, & Dalton, 2001b; Finkle, 1998; Provan, 1980; Subrahmaniam, Rangan, & Rosenstein, 1997), but other research indicates negative associations between board prestige and firm outcomes (e.g., Beasley, 1996). Additional studies report no relationship between board prestige and firm outcomes (e.g., Cotter, Shivdasani, & Zenner, 1997; Manry & Nathan, 1999).

The equivocal evidence of the influence of board prestige on firm outcomes may result from the inconsistent—and at times unsophisticated—operationalizations of board prestige. Although research indicates that prestige is a

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As noted by Shenkar and Yuchtman-Yaar (1987), some confusion exists regarding the distinction between the concepts of reputation and prestige. Following their logic, I assume that reputation is a neutral concept, whereas prestige is associated with positive connotations. In other words, prestige refers to an individual's positive qualities, while an individual's reputation may be positive, negative, or neutral.
multidimensional construct (e.g., D'Aveni, 1990), a majority of board prestige research has depended on the number of additional directorships as the sole indicator of board prestige (for a notable exception see Provan, 1980). In the following sections I attempt to define more clearly the components of board prestige.

### The Facets of Board Prestige

In his examination of top management teams, D'Aveni defines prestige as the "property of having status" (1990: 121). He contends that prestige is a multidimensional construct and that "the general assumption is that going to the proper schools, having impressive prior experience and associating with the right people indicate higher status" (1990: 125; see also Daily & Johnson, 1997). In the context of boards of directors, this definition of status suggests that board prestige is the aggregation of each director's skills, experiences, and social connections. Based on D'Aveni's conceptualization of prestige, the limited work investigating prestige in the organizational context relies primarily on objective indicators as measures of prestige.

In contrast, empirical work in sociology indicates that prestige is partly a subjective concept (for a review of the prestige literature in sociology, see Wegener, 1992). This sociological research suggests that an individual's prestige resides in the minds of other individuals—specifically, that individuals subjectively associate prestige with another's occupational characteristics (Alexander, 1972; Wegener, 1992).

Consistent with these research streams, I suggest that board prestige results from the subjective evaluations that individuals associate with the board's objective characteristics. In particular, I integrate D'Aveni's (1990) notion of prestige with the sociological perspective and contend that individuals form perceptions of board prestige based on the board's skills, experiences, and social connections. Stated differently, I propose that perceptions of board prestige are derived from the board's aggregated human capital and social capital.

**Human capital.** As noted previously, D'Aveni (1990) argues that an individual's education and prior experiences denote status (see also Fershtman, Murphy, & Weiss, 1996). This definition of status is closely related to Piketty's more recent assertion that status is a function of "public beliefs about one's 'smartness'" (1998: 115). These descriptions suggest that status is derived, in part, from an individual's skills and abilities. In other words, status is partly a function of an individual's human capital.

Becker (1975) distinguishes between general and specific human capital. General human capital refers to an individual's skills and abilities that are useful in a variety of contexts. Typical indicators of general human capital include levels of education and prior work experience (e.g., Gimeno, Folta, Cooper, & Woo, 1997; Hitt, Bierman, Shimizu, & Kochhar, 2001). In contrast, specific human capital refers to human capital that is more specific to the focal firm. Although potentially more valuable for the focal firm, specific human capital is not as easily transferred across firms as general human capital. Past research indicates that typical indicators of specific human capital include firm or industry experience (e.g., Gimeno et al., 1997; Pennings, Lee, & Wittekoostuin, 1998).

When directors serve on boards, they supply firms with human capital. For example, directors bring knowledge in the form of education to the firm. Additionally, directors supply firms with their previous work experiences, which can provide important information regarding the firm's industry, customers, and suppliers (Carpenter & Westphal, 2001; Pfeffer & Salancik, 1978). Alternatively, directors may provide firms with expertise derived from their functional backgrounds, international experiences, or knowledge outside the focal firm's industry (e.g., Fredman, 2002).

**Social capital.** In addition to skills and abilities, D'Aveni (1990) also suggests that status is a function of an individual's personal associations (see also D'Aveni & Kesner, 1993). This component of status implicitly refers to an individual's social capital, which represents "an individual's personal network and elite institutional affiliations" (Belliveau, O'Reilly, & Wade, 1996: 1572). The relationships provided by these affiliations supply individuals with social capital. In contrast to human capital, social capital resides in relationships, not individuals (Burt, 1992; Nahapiet & Ghoshal, 1998).

In a recent review of the social capital literature, Adler and Kwon (2002) indicated that individuals use their networks to form direct and indirect links to other individuals and institutions. These linkages are important for firm per-
formance, since the social capital residing in these relationships facilitates exchange (Nahapiet & Ghoshal, 1998). Through these exchanges individuals accumulate goodwill from others and leverage this goodwill to obtain information, influence, and solidarity (Adler & Kwon, 2002).

As with human capital, directors also supply firms with social capital. For example, the social capital of directors may help to update critical information pertaining to the firm’s external environment. Director networks may also supply the firm with managerial talent (Rosenstein, Bruno, Bygrave, & Taylor, 1993). Additionally, directors may use their networks to keep the firm up to date with other firms’ practices and procedures (e.g., Davis, 1991; Haunschild, 1993).

In sum, then, I propose that board prestige contains both subjective and objective components. I suggest that individuals form impressions of board prestige based on the board’s objective characteristics (e.g., D’Aveni, 1990). Importantly, various individuals form perceptions of board prestige, with notable examples including investors, customers, and suppliers.

Proposition 2: Perceptions of board prestige are derived from the board’s aggregated human capital and social capital.

Board Prestige in the IPO Context

While in the previous section I indicated that individuals form perceptions of board prestige, here I focus on board prestige in the IPO context. As developed previously, institutional investors represent important and powerful stakeholders in the IPO process. I propose that board prestige may be used to signal firm quality to these investors, which may increase IPO performance.

Several types of human capital that improve board prestige in the IPO context may exist. For example, directors with high levels of education or directors who attended prestigious educational institutions may influence investor perceptions of board prestige. Additionally, firms may add directors with pertinent experience in an effort to improve board prestige (Pfeffer & Salancik, 1979). For example, directors with experience in taking firms public or in managing publicly traded firms (e.g., CEOs) may improve board prestige (Davis & Mizruchi, 1999). Such experiences may be necessary for firms undertaking IPOs, because many managers of private firms are unfamiliar with both the IPO process and managing publicly traded companies (Wat, 1983). IPO firms also may add directors with financial expertise, since this experience may help the company negotiate the trials of public markets (e.g., Marshall, 2001).

Boards with high levels of social capital also may improve board prestige in the IPO context. For example, managers may increase board interlocks to strengthen the firm’s connections to other prestigious organizations (e.g., Mizruchi, 1996). Board affiliations with prestigious clients or suppliers might contribute to investor perceptions of board prestige. Additionally, directors with increased levels of social capital may use their contacts to help the company recruit new top managers (Barry, Muscarella, Peavy, & Vetsupens, 1990). Thus, IPO firms may benefit from directors with high levels of social capital, since these connections demonstrate to investors that the focal firm is embedded within a prestigious social network (e.g., Granovetter, 1985; Mizruchi, 1996).

The signaling role of boards of directors in the IPO context fulfills signaling theory’s criteria that credible signals must be both observable and costly to imitate. Because a firm undertaking an IPO must include director biographical information in its prospectus, all potential investors are able to observe the signal. Board signals are also costly to imitate (Certo et al., 2001b). Fama and Jensen contend that outside directors accept these appointments to signal to internal and external labor markets that “they are decision experts” (1983: 315). Finkelstein and Hambrick argue that individuals choose their directorships with care, because “directors who sit on the board of a poorly performing firm may threaten their own position in the elite” (1996: 217). Finally, Pfeffer and Salancik suggest that “a board member is publicly identified with the organization, and thus may be expected to accept some responsibility for its actions” (1978: 163).

Empirical evidence supports the assertion that board signals are costly to imitate by suggesting that affiliations with poorly performing firms damage the reputations of the directors. Gilson (1990), for example, found that the number of additional directorships held by directors of financially distressed firms decreased each
year for three years following financial distress (see also Farrell & Whidbee, 2000, and Kaplan & Reishus, 1990). This evidence indicates that alignments with firms are potentially costly for directors; consequently, they choose their additional directorships carefully.

In sum, I propose that investor perceptions of board prestige are a function of the board's aggregated human and social capital. Consistent with Pfeffer and Salancik (1978), I contend that prestigious board structures improve organizational legitimacy and, subsequently, the stock performance of IPO firms (see also D'Aveni, 1990, and Mizruchi, 1996). This is particularly important in the IPO context, because it is difficult for investment bankers and institutional investors to determine the IPO firm's "true" value (Libin & Wrona, 2001). Prestigious board structures are costly to imitate and, thus, credible.

**Proposition 3: For firms undertaking IPOs, investor perceptions of board prestige will signal organizational legitimacy, thereby improving firm stock performance.**

Board prestige is, in part, a subjective concept; different investors view a board's credentials (e.g., aggregated human and social capital) and form alternative opinions of prestige. While the above proposition indicates a positive relationship between board prestige and investor perceptions of organizational legitimacy, the positive relationship may be stronger in some circumstances than others. In the following section I suggest that the characteristics of investors, namely prestige, influence this relationship.

**BOARD PRESTIGE: THE ROLE OF INVESTOR PRESTIGE**

As noted previously, prior research implicitly suggests that board prestige is observable and remains constant across audiences (e.g., Pfeffer & Salancik, 1978). In this section, however, I contend that individuals form different opinions of board prestige. In other words, gauging board prestige represents a social judgment, and the characteristics of individuals (e.g., judges) may influence such judgments.

Decision-making theory indicates that, when making social judgments, individuals are guided by anchors (Chapman & Johnson, 1999). The use of anchoring in the context of prestige judgments has received some attention by sociologists, who suggest that a judge's perception of another individual's prestige is influenced by his or her own level of prestige. Alexander indicates that "systematic perceptual differences in status structures are a function of the perceiver's position" (1972: 767). Although sociological studies are more concerned with occupational, as opposed to managerial or organizational, prestige (Shenkar & Yuchtman-Yaar, 1997), this line of inquiry may inform investigations of board and managerial prestige as well.

Wegener (1992) has reviewed this research and discussed the influence of end anchoring on perceptions of prestige (see also Alexander, 1972). According to this perspective, judges of prestige are influenced by the end points of their individual prestige continuums (e.g., end anchors). Individuals' positions on their prestige continuums tend to influence their perceptions of others; individuals toward the top anchor will reinforce the top anchor, and individuals near the bottom anchor will tend to reinforce the bottom anchor. Wegener (1992) also points out that an individual's bottom anchor often lowers the top anchor. In other words, individuals with lower bottom anchors tend to have shorter continuums.

Wegener (1992) provides an empirical example of prestige judgments to illustrate these concepts. In his example respondents rank the prestige of several occupations. His results suggest that higher-status respondents assign higher prestige judgments to the ten highest occupations and lower prestige judgments to the ten lowest occupations. In contrast, lower-status respondents assign lower prestige judgments to the highest occupations and higher prestige judgments to the lowest occupations (see also Alexander, 1972). Wegener summarizes these results and suggests that "low status observers tend to level the social grading continuum; high status observers tend to polarize it" (1992: 270). These results support early work suggesting that "individuals visualize class groups above less clearly than those below them... and that class distinctions are made with decreasing precision as social position becomes lower" (Davis, Gardner, & Gardner, 1941: 72).

The main assertion of this stream of research is that prestigious judges are better able to identify another individual's prestige than less pres-
igious judges. As noted previously, perceptions of board prestige serve as important signals in the IPO context, which is associated with high levels of uncertainty. These findings in the sociological literature, then, may have important implications regarding how IPO investors gauge board prestige. Evaluations of board prestige may vary with changes in investor prestige.

Consistent with Wegener's (1992) research, prestigious investors may better differentiate between prestigious and nonprestigious board structures, whereas less prestigious investors may tend to group together prestigious and nonprestigious board structures. As mentioned previously, the perceptions of institutional investors play an important role in determining IPO offer values. The prestige levels of these institutional investors may influence their perceptions of board prestige and, consequently, IPO performance. Stated differently, institutional investors may view a board's objective credentials (e.g., human capital and social capital) and yet form alternative perceptions of board prestige based on their own levels of prestige.

Although there exists no systematic empirical research on the prestige of institutional investors, it is safe to presume that institutional investors, like investment bankers, attorneys, and top executives, have varying levels of human and social capital. For example, the education (e.g., level, institution) of institutional investors may influence the prestige they associate with a board member who graduates from an elite institution. Also, institutional investors with high levels of social capital may associate more prestige with a board's social capital than an institutional investor with relatively few social linkages. Accordingly, the influence of prestigious board structures on investor perceptions of organizational legitimacy and, subsequently, IPO performance may vary with levels of investor prestige.

**Proposition 4:** For firms undertaking IPOs, investor perceptions of board prestige will act as stronger signals of organizational legitimacy among prestigious investors.

**DISCUSSION**

In contrast to most research on boards of directors among large firms (e.g., Dalton et al., 1998, 1999), in this paper I focus on the board structures of firms undertaking IPOs and suggest that, in this unique context, boards of directors perform a symbolic role. In particular, I suggest that investor perceptions of board prestige allow IPO firms to overcome the liability of market newness. This paper complements recent empirical research on boards of directors in the IPO context (Beatty & Zajac, 1994, 1995; Certo, Covin, Daily, & Dalton, 2001a; Certo et al., 2001b; Finkle, 1998).

From a methodological standpoint, IPOs present researchers with a unique opportunity. An IPO provides investors with the first opportunity to value the firm's entire board of directors. This characteristic should not be understated. While in some extant research scholars have investigated the stock market reaction associated with announcements of individual director appointments found in business publications (e.g., Rosenstein & Wyatt, 1990, 1997), at perhaps no other time can investor perceptions of an entire board of directors be evaluated. In effect, the IPO prospectus "announces" the entire board of directors.

Further investigation of board structures among IPO firms may represent an important area of future research. In 1999, for example, firms raised a record $68.8 billion through IPOs; in 2000, another record was established as firms raised over $80 billion through IPOs (Ceron, 2001). Understanding how boards of directors influence investor impressions of organizational legitimacy may help firms determine how to structure boards to improve firm stock performance.

**Contributions**

Most conceptual work regarding boards of directors focuses on the activities directors undertake to improve the focal firm's operating performance. According to Jensen and Meckling (1976), for example, boards of directors monitor top managers and ensure that managerial decision making is consistent with shareholder goals. Vigilant boards ensure that managers invest in the most profitable opportunities and prohibit managers from engaging in activities detrimental to shareholder concerns (e.g., perquisite consumption, stock option repricing, etc.). Additionally, resource dependence theorists (Pfeffer & Salancik, 1978) and social network theorists (e.g., Burt, 1992) describe how di-
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Directors improve firm performance by supplying the focal firm with critical information (e.g., customer data) and resources (e.g., capital).

In contrast to the aforementioned theoretical perspectives, in this paper I contend that boards of directors improve market performance by influencing the perceptions of potential investors. This proposition complements recent research suggesting that the importance of financial information (e.g., earnings, cash flows, and book values) in determining equity values has decreased steadily over the past two decades (Lev & Zarowin, 1999). The decreasing relevance of financial information has motivated a stream of research that indicates the increasing importance of nonfinancial information in determining equity valuations (e.g., Amir & Lev, 1996; Lev & Zarowin, 1999, Trueman, Wong, & Zhang, 2000).

I propose that board prestige represents an example of such nonfinancial information. Consistent with D'Aveni (1990), I suggest that institutional investors associate prestige with the human capital and social capital provided by members of the board and that investor perceptions of board prestige signal organizational legitimacy, thereby improving market performance. While research on the influence of board and managerial characteristics on institutional investor decision making is limited, the propositions presented in this article are consistent with some preliminary research suggesting that the credibility of management is an important factor for institutional investors (Mavrinac & Siesfeld, 1998).

In this paper I also attempt to clarify the board prestige construct. Relying on research in sociology (e.g., Wegener, 1992), I argue that prestige is, in part, a subjective concept (Wegener, 1992). I also suggest that investors form perceptions of board prestige based on the board's aggregated human and social capital. For the most part, extant research has neglected the board prestige construct, and providing such a definition may help to advance our understanding of how the status of directors influences the firm's exchange relationships. Moreover, this focus on prestige implies that directors are heterogeneous in terms of the prestige they supply to firms. This heterogeneity may aid in explaining the inconsistent results found in studies of boards of directors that rely primarily on such variables as board composition and board size (e.g., Dalton et al., 1998, 1999).

The final contribution of this article is the proposition that investors have alternative perceptions of board prestige. In particular, I suggest that investors with different levels of prestige form alternative views of board prestige. This proposition, based on sociological research on prestige (e.g., Wegener, 1992), represents an attempt to open the "sociological research "black boxes" of boards of directors and investor decision making and extends corporate governance research by examining the influence of sociocognitions (Carpenter & Westphal, 2001).

The theoretical propositions developed here are open to empirical validation. Surveys and experiments may represent the most useful research designs to answer the questions posed in my attempt to peer into the black box of investor decision making. For example, surveys of investors could corroborate the contention that perceptions of board prestige are derived from the board's aggregated human and social capital.

In addition, surveys of institutional investors might validate the extent to which board prestige influences IPO investment decisions. When designing such tests, however, researchers should distinguish between the isomorphic and rational effects of prestigious board structures (Westphal, Gulati, & Shortell, 1997). In other words, investors may invest in IPO firms with prestigious board structures because of anticipated efficiency gains and not because such structures confer organizational legitimacy. Properly designed surveys and experiments, however, may rule out such alternative explanations.

Finally, researchers might also test the proposition that investor prestige influences investor perceptions of board prestige. Survey designs could examine, for example, whether prestigious institutional investors value board prestige more than less prestigious institutional investors. In addition to institutional investors, similar designs could also test this proposition among individual investors. However, such designs must also attempt to control for alternative explanations. The theory of managerial hegemony, for example, may lead to similar conclusions (e.g., Kosnik, 1987). It may be that prestigious institutional investors invest in firms with prestigious boards in an effort to perpetuate the powers of the capitalist elite. Again, however, surveys and experiments may be constructed to rule out this alternative explanation.
Possible Extensions.

Effects of TMT prestige. As mentioned previously, the limited research on prestige in the organizational context focuses primarily on TMTs (e.g., D'Aveni, 1990; D'Aveni & Kesner, 1993). A potential extension of this paper may involve examining the role of TMT prestige in the IPO context. While D'Aveni (1990) provides some evidence that declining organizations add prestigious executives, an examination of the top executives in the IPO context would allow researchers to isolate the value that investors associate with TMT prestige. Such studies would complement extant TMT research, which focuses largely on TMT characteristics among larger firms (e.g., Carpenter & Fredrickson, 2001; Carpenter, Sanders, & Gregersen, 2001).

Future research may also benefit from understanding how TMT prestige interacts with board prestige. TMT prestige may, for example, substitute for board prestige. In other words, firms with prestigious TMTs may not require prestigious boards to improve organizational legitimacy. In contrast, investors might require prestigious board structures to balance the power of prestigious TMTs. While the answers to such questions remain unresolved, research in this domain would help to integrate the similar, yet mostly independent, research streams concerning TMTs and boards of directors (e.g., Daily & Schwenk, 1996).

Board structures after the IPO. While this article focuses on the influence of prestigious board structures at the time of the IPO, the need for such board structures may change as the firm advances after the IPO. Specifically, advances after the IPO allow management to demonstrate an ability to negotiate the trials of public trading. In other words, there may exist a life cycle of public trading, and as public firms advance through this life cycle, the liability of market newness disappears, and the need for signals of organizational legitimacy to attract investor attention diminishes.

Research underscores the importance of understanding how boards of directors and other corporate governance mechanisms evolve as firms progress after the IPO (Beatty & Zajac, 1994). For example, Espenlaub notes:

There is a clear need for further examinations of the evolution of companies after going public and the links between company evolution (specifically in terms of ownership and control developments) and post-IPO investment and operating performance. Such studies should be couched within a theoretical framework (1999: 1315).

In future research scholars could investigate how board structures evolve after the IPO and how the roles of boards of directors change as firms advance through the life cycle of public trading. Over time, for example, firms may require more vigilant board structures for improved performance. Consistent with research on the substitutability of monitoring mechanisms (e.g., Agrawal & Knoeber, 1996), the requirement for alternative roles may vary as a function of the presence of alternative monitoring mechanisms, such as equity (e.g., Shleifer & Vishny, 1997), debt (e.g., Kochhar, 1996), or dividends (e.g., Easterbrook, 1984).

While board prestige may be less important for more mature firms demonstrating an ability to advance through the life cycle of public trading, future research might also benefit from an examination of the influence of prestigious board structures among declining firms. Such firms may be declining in organizational legitimacy levels, and the addition of prestigious directors might restore such levels of organizational legitimacy. In his study of bankrupt firms, for example, D'Aveni (1990) found that, in the years preceding bankruptcy, firms attempted to increase managerial prestige in an effort to secure additional resources. Similarly, declining firms might add prestigious board members to secure these additional resources. Research on this topic would complement Daily and Dalton's (1994a,b) work on board composition changes among declining firms.

Investor prestige. Although I address the notion of investor perceptions in this paper, it is important to note that there exist two broad classes of investors. According to the Securities Industry Fact Book (2000), institutional investors own approximately 58 percent of U.S. equities. Moreover, research indicates that institutional investors “agree that they are investing on theories about fundamentals” (Pound & Shiller, 1987: 51). Research also suggests, however, that different types of institutional investors are associated with alternative investment theories (Hoskisson, Hitt, Johnson, & Grossman, in press). This paper focuses solely on IPO firms, but understanding how institutional investors incorporate nonfinancial information such as board
prestige into their investment theories would be important for all publicly traded firms.

Complementing this focus on institutional investors, understanding the decision-making processes used by individual investors may also represent a potential avenue for future research. According to the Securities Industry Fact Book, the household sector (individuals) owns approximately 42 percent of U.S. equities. Despite this substantial presence, Barber and Odean (2000) suggest that little is known about individual investors. Thus, surveys or interviews of individual investors could examine how prestigious boards of directors influence the decision-making processes of individual investors. Again, understanding such processes may have important implications for researchers and the investment community.

In addition to working at gaining an understanding of how investors incorporate prestige and other nonfinancial information in their decision-making processes, researchers might also examine how prestige varies among investors. While researchers have examined prestige among executives (e.g., TMTs) and professional service firms (e.g., investment bankers, auditors, and attorneys), there is no extant research on prestige among individual and institutional investors. Consistent with the propositions developed herein, such examinations are critical for understanding how prestige influences capital market transactions.

As applied to private firms, this study might also have extensions regarding venture capitalists. Research suggests that, like investment bankers and auditors, venture capitalists are associated with differing levels of prestige (e.g., Megginson & Weiss, 1991). Understanding how venture capitalist prestige influences investment decisions would be of interest to managers of entrepreneurial firms.

It may also be that the prestige of boards and TMTs influences investor decision making indirectly. For example, the prestige of a firm’s strategic leaders may help investors to estimate the quality of a firm’s financial statements—a topic receiving a great deal of attention in the business/financial press (e.g., Wessel, 2002). Specifically, investors may be more likely to accept financial reports certified by prestigious strategic leaders, because these individuals have more to lose in the event their financial statements prove incorrect. In the terminology of signaling theory, financial statements associated with prestigious executives and directors serve as more credible signals, compared with financial statements associated with less prestigious strategic leaders. While this represents a plausible hypothesis, empirical research may uncover whether or not this is the case.

Prestige of other firm stakeholders. Finally, the concepts developed in this paper may have implications for stakeholders other than investors. Thompson (1967) suggests that prestige plays an important role in relationships with customers and suppliers. While Thompson does not explicitly describe the role of board prestige in relationships between a firm and its customers and suppliers, prestigious directors may provide more valuable links to customers or suppliers (e.g., Pfeffer & Salancik, 1978).

The principle regarding the subjectivity of prestige can be applied to stakeholders other than investors. For example, a firm’s customers and suppliers may have varying levels of prestige. Consistent with the final proposition, then, prestigious board structures may be more valuable for transactions with more prestigious customers and suppliers. While Thompson (1967) focuses on suppliers and customers, this argument may also apply to additional stakeholders, such as employees, their unions, strategic alliance partners, governments, and political and religious groups.

Conclusion

I suggest that board prestige may influence investor decision-making processes. Board prestige may be particularly important for IPO firms, since these firms suffer from a liability of market newness and must demonstrate organizational legitimacy to potential investors. The propositions I develop in this paper are open to empirical validation. While this paper offers several possible research extensions regarding boards of directors and investor decision making, future research is needed to validate the concept of board prestige and to understand how investor characteristics influence perceptions of prestige.

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