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WEALTH AND THE EFFECTS OF FOUNDER MANAGEMENT AMONG IPO-STAGE NEW VENTURES

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IPO underpricing is inherently related to both wealth retention and wealth creation. This paper reviews the relationship between IPO underpricing and wealth, then presents the results of an empirical study of the impact of CEO founder status (i.e., is the CEO also the founder?) on IPO underpricing. Results based on data collected from 368 IPO-stage new ventures suggest that founder management has a positive impact on IPO underpricing, and that the founder management–underpricing relationship is moderated by (a) the IPO market share of the investment banker employed and (b) the proportion of insiders on the IPO firm's board of directors. Copyright © 2001 John Wiley & Sons, Ltd.

INTRODUCTION

Wealth creation is widely viewed as a defining objective of the entrepreneurial process. Deeds, DeCarolis, and Coombs (1998: 56) recently noted, for example, that '[w]hile entrepreneurs may create organizations for reasons other than economic gain, such as personal challenge or lifestyle choices, from an economic perspective, the goal of entrepreneurship remains the creation of wealth through innovative activity.' Not all wealth created by entrepreneurs, however, is retained by these individuals, or by other initial shareholders of their firms. Among firms that transition from private to public ownership, the initial shareholders, in effect, sell equity to an investment banker who then sells the stock to first-day investors. This sale of equity represents the realization of some portion of the firm's wealth by the initial shareholders since the shareholders will have appropriated value from their firm through this sale. If the value of the equity sold to the investment banker increases during the first day of public trading, the appreciation in value benefits the first-day investors rather than the initial shareholders who sold their equity to the investment banker (Tinic, 1988).

The wealth that accrues to the first-day investors when the initial offer price is less than the first-day stock closing price—a phenomenon known in the finance literature as initial public offering (IPO) 'underpricing'—can be viewed as wealth the initial shareholders fail to retain. In short, underpricing represents both wealth creation for first-day investors who purchase stock at the initial issue price (or at any price point below the first-day closing price) and unretained wealth for the initial shareholders who sold their equity to the investment banker at a price below where it is valued by the investor market.

This paper examines the phenomenon of IPO underpricing, focusing on two research questions:

Research question 1: Is IPO underpricing any more or less prevalent among new ventures

Key words: founder management; initial public offerings (IPOs); going public; underpricing
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whose CEOs are their founders relative to new ventures with nonfounder CEOs?

Research question 2: Is the relationship between IPO underpricing and CEO founder status moderated by (a) the IPO market share of the investment banker employed and/or (b) the proportion of insiders on the IPO firm's board of directors?

The current research focus on the relationship between IPO underpricing and CEO founder status contributes to the growing body of knowledge concerning the firm performance-related effects of founder management. While past research has examined the effects of founder management on accounting- and certain market-based measures of firm performance (e.g., Daily and Dalton, 1992; Begley, 1995; Jayaraman *et al.*, 2000), prior research has not explored the extent to which an IPO firm's market valuation may be affected by the presence of founder CEOs. As detailed in subsequent sections, there are sound reasons for assuming that founder management may impact IPO underpricing. Gaining a better understanding of the possible impact of founder management on IPO underpricing is important because such understanding would further delineate how entrepreneurs create wealth. Past theory and research have characteristically and implicitly viewed entrepreneurs' contributions to wealth creation as principally occurring as a result of their involvement in the organizational *founding* and *growth* processes. The current research extends the role of the entrepreneur as a catalyst for wealth creation by recognizing the possibility that entrepreneurs may also contribute to wealth creation through their involvement in the IPO process. Moreover, by examining the role of theoretically significant contextual factors (namely, investment banker share of the IPO market and proportion of insiders on the IPO firm's board) as potential moderators of the underpricing–CEO founder status relationship, the current research may enable contingency-based prescriptions for creating wealth to be identified.

The following section presents the research hypotheses and supporting theory. The sample, measures, and analytical techniques are then discussed in the Methods section. The Results section reviews the research findings. Finally, implications of the research are presented in the concluding sections.

THEORETICAL BACKGROUND

IPO underpricing and wealth

IPO underpricing is an easily measured phenomenon, calculated by subtracting the initial stock offer price from the closing price on the first day of trading, then dividing this figure by the initial offer price (e.g., Bruton and Prasad, 1997; McGuiness, 1993). IPO underpricing is also a very complex phenomenon whose causes have been the subject of much speculation. Table 1 summarizes several of the 'hypotheses' advanced in prior literature as theoretical explanations of the underpricing phenomenon.

The relationship between IPO underpricing and wealth is not always easily inferred from the literature. Nonetheless, even a cursory review of past theory and research reveals that IPO underpricing cannot be meaningfully and appropriately discussed as either a generally positive or generally negative phenomenon. This is because the value and desirability of underpricing vary according to the impact of this phenomenon on the stakeholder in question. The complexity of the wealth accumulation and transference issues inherent in underpricing defy the development of compelling and overarching normative models of this phenomenon. However, many descriptive models of underpricing have been developed and tested over the years, and the wealth-related implications of these models are sometimes interpreted from the perspectives of the stakeholders involved (e.g., Beatty and Ritter, 1986; Hanley, 1993; Schultz and Zaman, 1994). Three stakeholder groups are most relevant to understanding underpricing and its relationship to wealth: the initial shareholders who sell their equity to the investment banking firm, the investment banking firm itself, and the first-day investors who purchase the IPO firm's stock.

The initial shareholders of an IPO firm may realize the greatest financial benefit when they sell their equity to an investment banker at a high price. The higher the negotiated purchase price, the more wealth realized by the initial shareholders per unit of equity sold. The presence of underpricing, from the perspective of initial

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Table 1. Theoretical explanations of underpricing[a]

Risk-averse underwriter hypothesis	Investment bankers who underwrite IPOs set offer prices low to avoid the risks and costs associated with an unsuccessful issue
Monopsony power hypothesis	Large, reputable investment bankers' bargaining power over IPO firms enables these bankers to set low offer prices on stocks made available to their preferred customers, thereby indirectly compensating these customers for their business
Speculative bubble hypothesis	Stock prices rise during the first day of trading because speculation results in investors willing to pay more for the same stocks they could not obtain at the initial offer price due to oversubscription
Asymmetric information hypothesis	Underpricing results from the asymmetry of information that often exists, for example, between more vs. less informed investors or between the investment banker and the issuer
Implicit insurance hypothesis	Underpricing decreases the likelihood of legal action being taken against the investment banker for promoting issues that perform below expectations
Market feedback hypothesis	Investment bankers' underpricing of stock sold to preferred investors during the pre-selling period will induce these investors to truthfully reveal their evaluations of this stock (which will be useful information to the investment banker when pricing the issue)
Bandwagon hypothesis	Underpriced stocks are useful for inducing the critical first few investors to buy, which can be a necessary impetus for inducing more cautious investors into the market
Signaling hypothesis	Underpricing contributes to positive reputational effects which can enable the investment banker to sell subsequent new issues at higher prices than otherwise possible
Ownership dispersion hypothesis	The issuing firm may prefer an underpriced stock because the high demand for such stocks often leads to a large number of shareholders (which increases the liquidity of the market for the stock and makes it more difficult for outsiders to exert control over management)

[a]Abstracted from Tinic (1988) and Ritter (1998)

shareholders who sell their equity to an investment banker, represents what is commonly referred to as 'money left on the table'. The underpricing gap is the market-ascribed value of the equity the initial shareholders did not receive when the investment banker sold their equity to the first-day investors.

One might expect that initial investors would react negatively to underpricing since the wealth that arguably should have been theirs has been, in essence, transferred to the first-day investors. Recent empirical evidence suggests this is not the case. McGough and Smith (1999) report that pre-issue shareholders may be so elated by any first-day wealth appreciation that they are not particularly concerned about 'leaving money on the table' in the form of underpricing. Implicit in this observation is the fact that most initial shareholders do not sell their entire equity holdings to the investment banker. The more equity the initial shareholders retain in their firm, the more wealth they potentially accumulate through the effects of underpricing.

A second major stakeholder whose wealth may be affected by IPO underpricing is the investment banker. Investment bankers are commonly paid a percentage of the IPO firm's offer value as their compensation for brokering the firm's stock. As such, there is a financial incentive for investment bankers to set a high issue price. A high issue price reduces the likelihood of underpricing since first-day investors are less apt to pay escalating premiums for a stock whose issue price suggests it is not undervalued. These observations collectively suggest that investment bankers will seek to avoid underpricing as this phenomenon can adversely affect their wealth.

Several counterarguments, however, have been advanced regarding why investment bankers favor underpricing. For example, Loughran and Ritter (1999) have argued that investment bankers benefit in at least two ways from negotiating deals

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with IPO firms that involve low initial offer prices. First, low initial offer prices make it easier to find investors for IPOs, thereby reducing the marketing costs associated with these IPOs. Second, when an investment banker offers many ‘hot deals,’ as represented by underpriced stocks, investors will engage in more transactions with that investment banker in order to improve their priority for future share allocations of high-performing stocks. Thus, underpriced stocks can be a form of indirect compensation to investment bankers. In short, there are strong arguments regarding why investment bankers should be both favorably and unfavorably disposed toward underpricing.

Of the three principal stakeholders involved in underpricing, the relationship between underpricing and wealth is most clear for first-day investors. These investors experience an increase in wealth if the price they paid for the IPO firm’s stock is less than the first-day market closing price (Anderson, Beard, and Born, 1995).

The collective observations and arguments in existing models of underpricing suggest that a reasonably complete model of underpricing must contain variables that relate to the IPO firm, the investment banker, and the investor market, broadly reflecting the three principal stakeholders whose wealth is affected by underpricing. The current research model includes a variety of variables that relate to these stakeholder groups. CEO founder status is the IPO firm-related variable of primary interest in the current research. The derivation of the research model followed from the choice of CEO founder status as the principal explanatory variable. Two contextual variables were identified as plausible moderators of the CEO founder status–underpricing relationship. These are the investment banker’s share of the IPO market and the proportion of insiders on the IPO firm’s board of directors. Investment banker market share was chosen for examination because of the reputed relationship between this variable and IPO underpricing (large share investment bankers tend to engage in more frequent and extensive underpricing; see Beatty and Welch, 1996) and because large share investment bankers may be more prone than smaller bankers, for reasons detailed later, to exhibit an IPO firm valuation bias when founders are the firms’ CEOs. Proportion of insiders on the IPO firm’s board was chosen for examination because of the recognized importance of managerial variables in investment bankers’ and investor markets’ valuations of IPO firms (see, for example, Tinic, 1988) and because of the possibility that board composition affects the value attached by investment bankers and first-day investors to founder CEOs. The following sections describe why CEO founder status is thought to relate to IPO underpricing, and why this relationship may be moderated by investment banker market share and proportion of insiders on the IPO firm’s board.

Founder management and wealth

A likely yet previously unexamined determinant of IPO underpricing is whether or not the IPO firm’s CEO is also its founder. The plausibility of CEO founder status as a determinant of IPO underpricing is readily inferable through insights gleaned from the entrepreneurship and underpricing literatures.

Most founders who take their firms public are doing so for the first time and, therefore, represent ‘untested management’ (Wat, 1983). The investment banking firm must, nonetheless, determine an issue price that reflects its valuation of management. With a bias toward risk aversion, investment banking firms tend to set issue prices low for IPOs whose values are difficult to accurately determine (Bruton and Prasad, 1997; Ritter, 1998). Several information asymmetry-based explanations (e.g., Baron, 1982; Leland and Pyle, 1977; Rock, 1986) suggest a positive relationship between the *ex ante* uncertainty surrounding an IPO and subsequent underpricing. If investment bankers associate more uncertainty with firm founders, they are likely to set lower prices for IPO firms with founders as their CEOs than for IPO firms with nonfounder CEOs. The lower prices, then, would increase underpricing.

For example, information asymmetries are likely to exist between the investment banker and the first-day investor in the area of the founder CEO’s perceived objectivity as a manager. The ability of an executive to objectively appraise his or her firm’s strengths and weaknesses, as well as the environment’s opportunities and threats, has long been regarded as essential to effective general management (e.g., Drucker, 1974; Steiner, 1979). Research suggests that such objectivity may be rare among founders. In fact, founders characteristically exhibit an ‘extreme bias toward

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optimism' (Cooper, Woo, and Dunkelberg, 1988: 106; see also, Busenitz and Barney, 1997).

Due to their frequent interactions with entrepreneurs, investment bankers who underwrite initial public offerings may suspect that founders are prone to have upwardly biased opinions of their firms' strengths and associated prospects for long-term success, and this lack of objectivity may result in poor management decisions. Conversely, investment bankers could view nonfounder CEOs as generally more objective in their appraisals of their firms. This greater objectivity by nonfounder CEOs can be attributed, in part, to the greater 'emotional distance' nonfounders have from the firms they manage. This emotional distance will increase the accuracy with which the nonfounder CEO views his or her firm's capabilities and challenges.

Given these realities, investment bankers are likely to be more prone to 'discount' the issue price of IPO firms managed by their founders. This situation—the investment banker's 'founder bias discount'—could result in the initial offer price being closer to the first-day stock closing price (which represents the market's, not the investment banker's, valuation of the firm) among nonfounder-managed than founder-managed firms. Unlike investment bankers, first-day investors may not discount the value of founder CEOs. Rather, given their presumably less frequent dealings with entrepreneurs and the pro-entrepreneurship bias that is common in the popular business press, these investors would simply view founders of IPO-stage firms as successful entrepreneurs and not attach any negative attributions to this fact. The presence of a founder bias discount among investment bankers combined with the likely absence or weakness of such a discount among first-day investors would produce lower retained wealth for the initial shareholders who sell their equity (or, equivalently, higher wealth creation for the first-day investors) among IPO firms with founder when compared to nonfounder CEOs.

A second argument supporting this same conclusion can be constructed from organizational life cycle theory premises. Organizational life cycle theory holds that different demands are made of general managers across an organization's phases of existence or life cycle (e.g., Clifford, 1975; Hanks, 1990). However, years of research have revealed that while managers can acquire new skills over time, fundamental changes in management style do not commonly emerge in response to the demands of an evolving organizational context (e.g., Barrick and Mount, 1991; Fiedler, 1971). Research conducted by Tashakori (1980) suggests this problem is particularly acute in the case of founder management. Based on her interviews with venture capitalists, Tashakori (1980: 28) concluded: 'The large majority of entrepreneurial owner-founders do not make the transition to a professional style of management …' Perhaps most significant for the current study, the venture capitalists interviewed by Tashakori strongly held this belief. If such beliefs are commonplace in the financial community, it is plausible that investment bankers will assume that founders eventually become liabilities to their businesses. Such an assumption forms one basis for the aforementioned founder bias discount.

Several of the underpricing-related hypotheses summarized in Table 1 can be used to explain why founder management may be positively associated with underpricing among IPO firms. The risk-averse underwriter hypothesis suggests that underpricing is a logical response to investment bankers' uncertainty about the quality of an issue. The research of Wat (1983) and Tashakori (1980) suggests that CEO-related uncertainty is greatest under founder management. An accurate assessment of the quality of an IPO firm's management is a top priority among investment bankers (Tinic, 1988). Therefore, the presence of a founder CEO could sway investment bankers to set low initial offer prices, thereby promoting underpricing.

The implicit insurance hypothesis, likewise, suggests that investment bankers will exhibit a conservative bias when pricing the stocks of IPO firms. The rationale for setting low initial offer prices under the implicit insurance hypothesis is that the investment banker will be less of a target for any potential adverse legal actions by investors if the issue price is low. If founders do represent increased uncertainty, investment bankers may believe that the likelihood of potential shareholder lawsuits is higher for founder-managed firms. The setting of low initial offer prices by the investment banker would be a logical response under such a scenario.

Finally, the preceding theory offered in support of a founder management–underpricing relationship is consistent with the asymmetric information

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hypothesis. As noted, investment bankers and the investor market can be expected to respond very differently to founder CEOs. Due to their experience with and knowledge of common founder biases and capabilities, investment bankers are likely to exhibit caution when pricing the stock of founder-managed IPO firms. First-day investors, on the other hand, may feel less apprehensive about the presence of founder CEOs in IPO firms. Founder CEOs are, after all, successful entrepreneurs who have just demonstrated an ability to take their firms into the public ownership arena. In short, asymmetry of information between investment bankers and first-day investors can be used to explain the founder bias discount and, in turn, underpricing.

Based on the preceding arguments, it is hypothesized that:

Hypothesis 1: Founder CEOs retain less wealth for their IPO firms' initial shareholders than do nonfounder CEOs.

Moderators of the CEO founder status–IPO underpricing relationship

The relationship between CEO founder status and IPO underpricing is likely to be affected by the context in which this relationship exists. This context is multidimensional and composed of variables specific to the investor market, the investment banking firm, and the IPO firm itself. The current research focuses on investment banker market share and proportion of insiders on the IPO firm's board as contextual variables with possible impact on the CEO founder status–underpricing relationship.

Investment banker market share

Investment banking firms gain market credibility based, in part, on their histories of successfully marketing IPO new issues. From the perspective of the investment banker, the presence of underpricing serves as evidence that a new issue has been 'successfully' marketed since there is obvious market acceptance of and enthusiasm for the issue (Ritter, 1998). IPO firm owners want their firm's stock to perform well on the market, so they may favor investment bankers with large shares of the IPO market as their financial agents. Consistent with the monopsony power hypothesis, this desire of IPO firm owners for the services of reputable investment bankers with significant market presence places such investment bankers in advantageous bargaining positions *vis-à-vis* their IPO firm clients. The fact that large investment bankers tend to underprice more than smaller ones (e.g., Beatty and Welch, 1996) can be interpreted as a manifestation of this bargaining power imbalance.

Assuming for the moment that investment bankers' long-term interests are generally best served by underpricing new issues, investment bankers with large shares of the IPO market, due to their market credibility and the bargaining power this affords them, are better able than smaller share investment bankers to negotiate low or modest initial offer prices with IPO firm owners. Investment bankers with large shares of the IPO market are not forced to come through with high initial offer prices in order to gain the IPO firm's business. The IPO firm owners may even find this situation acceptable if they believe that any of their potentially unretained wealth created by agreeing to a low issue price will be more than offset by wealth appreciations in the equity they do not sell to the investment banker.

Of particular relevance to the current study, investment banking firms may exhibit operational biases most strongly when the firms' services are in high demand. The founder bias discount described previously represents one such potential operational bias. Thus, investment bankers with large shares of the IPO market can often set low initial offer prices for founder-managed IPO firms because their superior bargaining power enables them to employ the founder bias discount. It is hypothesized that:

Hypothesis 2: The impact of founder management on wealth retention among IPO firms' initial shareholders is more positive when the investment banker has a small rather than large share of the IPO market.

Proportion of insiders on the board

Board composition continues to be a primary focus in studies of the relationships between corporate governance and firm outcomes. While a meta-analysis by Dalton *et al.* (1998) demon-

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strated no systematic relationships between various measures of board composition and firm performance, the specialized context of the IPO, in conjunction with founder management, provides a venue where a strong relationship may manifest. Specifically, inside directors will reduce the likelihood of IPO underpricing among founder-managed firms.

Inside directors have been found to provide several benefits to the firms they serve. Baysinger, Kosnik, and Turk (1991), for example, found a positive and significant relationship between inside director representation and expenditures for research and development. Such expenditures have been observed to have positive long-term effects on firm performance (e.g., Ravenscraft and Scherer, 1982). Similarly, Zahra (1996) has suggested that boards of directors with high proportions of company insiders may be more innovative and maintain a more strategic outlook than boards dominated by outside directors. Inside directors can contribute to boardroom discussions in ways outside directors cannot because the former will have direct knowledge of firm operations and capabilities (e.g., Baysinger and Hoskisson, 1990; Hill and Hoskisson, 1987).

Among IPO-stage firms, potential investors critically view and value clarity of strategic direction. Inside directors, due to their detailed firm-specific knowledge, are likely to be superior to outside directors in assisting CEOs with defining and maintaining a clear strategic focus for their firms (e.g., Dallas, 1996). Inside board members are in unique positions to serve as knowledgeable sounding boards and active participants in the formulation of company strategy and policy (e.g., Zahra, 1996). Outside directors, by comparison, often are less effective in this role since they are typically not privy to the same depth of firm-specific information and their interactions with the firm are relatively infrequent.

Most pertinent to the current research focus, inside directors can provide an important complement to the founder CEO. As previously mentioned, research has suggested that founder CEOs, as compared to nonfounder CEOs, are likely to be less objective in the assessment of their firms (e.g., Cooper *et al.*, 1988). The biases a founder CEO holds can be tempered by inside directors who are able to provide an additional source of high-quality, firm-specific information than by outside directors who are less familiar with the firm's operations and capabilities and the CEO's biases. Thus, it is possible that investment bankers will be less likely to apply the founder bias discount when valuing founder-managed IPO firms with insider-dominated boards. This absence of a significant founder bias discount could result in the initial offer price more closely approximating the first-day stock closing price. In short, the preceding observations suggest that initial shareholder wealth retention will be enhanced when founder CEOs are paired with boards dominated by insiders.

Outside directors are often valued for their ability to monitor and control firm management (Johnson, Daily, and Ellstrand, 1996). This control function is arguably less important to IPO-stage firms than among more mature firms. Much of the discussion about the need to control firm management is grounded in agency theory (e.g., Jensen and Meckling, 1976). Agency theory suggests that the board should operate to protect shareholders from misappropriation of firm resources by management. As developed by Jensen (1986), agency problems are more problematic in firms with high levels of free cash flow and relatively few new projects in which to invest. Under these circumstances, managers may appropriate cash flows in ways inconsistent with shareholders' interests. A dominant reason firms undertake an IPO, however, is to procure funding necessary for new projects (Rock, 1986). IPO firms are typically cash-poor firms, not firms with free cash flow. Therefore, agency problems are not as prevalent among IPO firms, and the control-related benefit of having outside directors may not be as great.

Another important role fulfilled by outside directors, especially affiliated outside directors, is resource acquisition. The acquisition of financial resources, in particular, is a dominant need among IPO-stage firms. Such resources can be procured through select outside directors (e.g., board members who are executives in financial institutions). However, this need is principally addressed in IPO firms through the firm's relationship with its investment banker. As such, while affiliated outside directors may represent important resource linkages for the IPO firm, the investment banker's association with the IPO firm diminishes, at least temporarily, the need for outside directors with ties to financial resources.

Outside directors can also bring expert advice

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and objective perspectives to the firm (Dalton *et al.*, 1998). Such benefits may be particularly important among IPO-stage firms whose typically modest size, young age, and limited organizational slack can result in acute vulnerability to poor managerial decisions. The presence of outside directors may constitute a signal to first-day investors that the IPO firm's interests are likely being well served. Such an interpretation by first-day investors could result in a willingness of these investors to pay a premium over the initial offer price to acquire equity in IPO firms with heavy outsider representation on the board. This scenario creates an underpricing or unretained wealth gap. The positive regard with which investors likely hold founder CEOs—they are successful entrepreneurs—can further contribute to this gap. That is, the combination of outsider-biased boards and founder CEOs will be particularly well received by the investor community, resulting in significant first-day stock appreciations.

There is reason to believe that investment bankers are less enamored with this combination. Like first-day investors, investment bankers may appreciate the expert and objective advisory role and associated value outside directors can bring to the IPO firm. Nonetheless, it is plausible that investment bankers will more highly value an IPO-stage firm with an outsider-biased board if a nonfounder CEO manages the firm. Consistent with the founder bias discount argument, investment bankers are likely to regard founder CEOs as optimistically biased and relatively unreceptive to information that fails to confirm their beliefs. Such predispositions could preclude founder CEOs from taking full advantage of outside directors' input. In short, founder CEOs will have the effect of limiting the ability of outside directors to add value as part of the IPO firm's governance structure. This will result in higher initial offer prices (hence more retained wealth or less underpricing) when IPO firms with outsider-biased boards are paired with nonfounder CEOs. Collectively, the preceding observations suggest that the impact of an outsider-biased board on wealth retention among a firm's initial shareholders is more positive among nonfounder-managed than founder-managed IPO firms.

Equivalently stated from the perspective of founder CEOs, it is hypothesized that:

Hypothesis 3: The impact of founder management on wealth retention among IPO firms' initial shareholders is more positive when the board has a high rather than low proportion of insiders.

METHODS

Sample and data collection

All U.S.-based firms that undertook IPOs between the years 1990 and 1998, as identified in the Compact D/New Issues Database, were contacted for possible participation in this study. This population includes 2787 firms. Written requests for prospectuses were sent to each of these firms, and 1156 responded for an initial response rate of 36 percent. Of the 1156 firms, 408 were excluded because the furnished information was incomplete or incorrect (e.g., a 10K report, not a prospectus, was sent) (n = 150); the firm had a complex 'dual class' stock offering, making it inappropriate for the current study (n = 120); or the firm was a financial organization whose governance structure is subject to special regulations (n = 138). The 748 remaining firms represent an effective response rate of 26.8 percent. The sample was then restricted to those firms that were 10 years old or less (n = 368), consistent with our focus on new ventures. The 368 firms operate in a total of 45 different manufacturing or service industries, as defined at the 2-digit SIC code level. Their mean ages and sizes at the time of their IPOs were 5.31 years (S.D. = 2.80) and $67 million in revenues (S.D. = $164 million), respectively. Equality of means t-tests revealed no significant differences between the respondents and nonrespondents on the variables IPO offer value and unretained wealth (operationalized by the traditional underpricing measure).

Measures

The dependent variable in this study is IPO underpricing which, as previously discussed, represents unretained wealth for the pre-issue shareholders who sell their stock to the investment banker. Given the current research focus on wealth and founder management, the dependent variable is labeled 'unretained wealth.' CEO founder status is the independent variable. Invest-

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ment banker market share and proportion of insiders on the board are treated as control variables in testing Hypothesis 1 and as moderator variables in testing Hypotheses 2 and 3, respectively. Finally, firm age, CEO retained equity percentage, number of risk factors, additional directorships held by board insiders, CEO age, and an industry dummy are treated as control variables in all analyses. Each of these variables is discussed below. Data for these variables were gathered from the IPO firm prospectuses, the Compact D/New Issues Database, the Trade and Quote (TAQ) data base, and the Institute for the Study of Security Markets (ISSM) data base.

Unretained wealth

Unretained wealth was calculated by subtracting the initial stock offer price from the closing price on the first day of trading, then dividing this figure by the initial offer price (e.g., McGuiness, 1993; Prasad *et al.*, 1995). The initial, pre-issue shareholders retain their wealth, rather than see their wealth transferred to the first-day investors, if there is no net appreciation in the market value of their offer by the end of the first day. An unretained wealth figure of zero (14 percent of the current sample) implies that the initial offer price negotiated between the issuing firm and its investment banker perfectly mirrors the first-day closing market value of the stock. Unretained wealth figures of greater than zero, which is the most typical scenario (81% of the current sample), imply that the pre-issue valuation of the IPO does not fully capture the first-day closing market value. Therefore, the initial shareholders of these 'underpriced' IPO firms fail to fully retain their portions of the wealth of their firms. Rather, wealth is transferred to the first-day investors in that the share value of these investors' stock is worth more than the share value negotiated between the investment banker and the issuing firm for the initial shareholders' equity. Finally, unretained wealth figures of less than zero (5% of the current sample) imply that the IPO firm's stock was 'overpriced.' In this case, the first-day investors have paid more for the IPO firm's stock than the market indicates it is worth at the close of the first day of trading. Thus, wealth is lost for the first-day investors.

CEO founder status

Forty-eight percent of the IPO firms in the sample had CEOs who were also the firms' founders. The remaining 52 percent had nonfounder CEOs. CEO founder status was treated as a dummy variable in the analysis by assigning a value of one to IPO firms with founder CEOs and a value of zero to firms with nonfounder CEOs.

Investment banker market share

Theory suggests that the involvement of large, prestigious investment bankers in an IPO deal may signal to the market that the issue price is an accurate appraisal of a firm's worth (see Booth and Smith, 1986). This possibility could affect the extent to which the issue price changes over the first day of trading. Consistent with Megginson and Weiss's (1991) approach, investment banker market share was measured by summing the value of the IPO deals underwritten by the investment banking firm during the sample period, then dividing this figure by the total value of all IPO deals completed during this same period.

Proportion of insiders on the board

The proportion of insiders on the board of directors is calculated as the ratio of board members currently serving as firm officers to total board members (Johnson, Hoskisson, and Hitt, 1993; Seward and Walsh, 1996). The proportion of insiders was treated as a control variable when it was not being examined as a potential moderator variable (i.e., in testing Hypothesis 3) because board membership (i.e., proportions of insiders/outsiders) has been argued to influence the market's appraisal of the likelihood of effective board advising and monitoring activity (Gompers, 1995). As such, membership representation could affect the unretained wealth measure through its impact on the first-day stock closing price.

Firm size

The natural log of one plus the IPO firm's sales revenue was used as the measure of firm size. Research indicates that larger IPO firms tend to outperform smaller ones in terms of stock appreciation (e.g., Megginson and Weiss, 1991; Mikkelson, Partch, and Shah, 1997). Given the

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current study's operationalization of unretained wealth as the absence of first-day stock appreciation, it was necessary to control for firm size.

Firm age

Firm age was operationalized in the current research as the natural log of one plus the difference between the firm's founding date and its IPO date. Age was used as a control variable in the analyses because older firms have been found to financially outperform younger firms, both prior to and following the IPO (Ritter, 1998). As such, age could affect the unretained wealth measure through its influence on the initial offer price, the first-day stock closing price, or both.

CEO retained equity percentage

The amount of equity retained by the CEO has been identified as an indicator of the CEO's perception of the firm's likelihood of success, with greater retained equity being associated with higher expectations for firm performance (Leland and Pyle, 1977). Consistent with this observation, Carter and Van Auken (1990) found that the magnitude of financial problems experienced by firms during their first year of operation was inversely related to the percentage of the entrepreneur's personal funds in the total initial capitalization. Moreover, founder CEOs have been shown to retain a greater equity investment in their firms than nonfounder CEOs (Willard, Krueger, and Feeser, 1992). Given that CEO retained equity can, therefore, relate to both the independent and dependent variables in this research, it was controlled in the data analysis.

Number of risk factors

Publicly traded firms are legally required to list risk factors in their IPO prospectuses (Feltham, Hughes, and Simunic, 1991). The risk factors identified in a prospectus, while unique to the firm, share common format or categorization schemes across firms. Examples of the types of issues listed as risk factors in the sampled firms' prospectuses include manufacturing capacity limitations, rapid technological change, intense competition, need for additional capital, and uncertainty regarding patents and protection of proprietary rights.

The risk factors associated with a firm can affect both performance expectations and realized performance. Therefore, these factors may influence the components used to compute the unretained wealth ratio. Consistent with Beatty and Zajac (1994), a firm's risk position was operationalized as the number of risk factors reported in the prospectus, the assumption being that while all risk factors are not equally impactful, more risk factors generally indicate a higher risk position.

Additional directorships held by board insiders

The holding of additional directorships by inside board members can be interpreted as a sign that these board members are capable and valued in the eyes of outside organizations (D'Aveni, 1990; Davis and Mizruchi, 1999). The presence of such insiders could, therefore, influence investors' and investment bankers' opinions regarding the quality of managerial talent that extends beyond the current CEO. These opinions would, in turn, affect the components of the unretained wealth ratio, the significance attached to CEO founder status, or both. As such, insider additional directorships was used as a control variable.

CEO age

Older CEOs may be valued more highly than younger CEOs by first-day investors because of the greater maturity and/or business experience these former individuals are assumed to possess. Investment bankers, on the other hand, will have interacted with the IPO firm's CEO and will have a sense of his/her maturity and know the amount, relevance, and value of his/her business experience. Investment bankers will, therefore, be less likely than first-day investors to rely on age-related stereotypes when assessing CEO competence. Also, older CEOs, particularly those near retirement, may have different motivations and associated compensation desires from younger CEOs (see Coughlin and Schmidt, 1985). As such, older CEOs are more likely than younger CEOs to work toward the underpricing of their IPO firm's stock, retain a significant amount of firm equity, and realize a quick gain by selling that equity if the value of the stock appreciates.

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Industry dummy variable

IPO firms in technology-based industries were generally well received by the stock market throughout the 1990s, with significant appreciations in issue price being commonplace during the initial phases of trading (e.g., Ewing, 2000; Hennessey, 1999; Koretz, 2000). This suggests an industry effect on unretained wealth. As such, a control variable for industry was included in the current research.

Given the aforementioned technology-related bias in IPO issue price appreciation, a dummy variable representing the high-tech/low-tech distinction seemed particularly appropriate for controlling the effects of industry on unretained wealth. Research into the matter of which SIC codes represent high-tech vs. low-tech industries revealed no consensus. Moreover, the only government-generated listing of high-tech industries uncovered through our research (that presented by Davis in 1982) did not reflect current industry exposure (i.e., the industry code for telecommunications, SIC 48, was not on the list). For our current study, then, we compiled a listing of high-tech industries based on their associated 2-digit SIC codes as follows: computer hardware (SIC 35), computer software (SIC 73), semiconductors and printed circuits (SIC 36), biotechnology (SIC 28), telecommunications (SIC 48), pharmaceuticals (SIC 28), specialty chemicals (SIC 28), and aerospace (SIC 37). Using this set of SIC codes, 50.3 percent of the sample is high-tech and 49.7 percent is low-tech.

Analytical techniques

The data were analyzed using hierarchical multiple regression analysis, following the procedure advocated by Sharma, Durand, and Gur-Arie (1981). Consistent with Hypothesis 1, a positive (and significant) regression beta is expected for the CEO founder status variable. The betas for the interaction terms implied by Hypotheses 2 and 3 are anticipated to be positive and negative, respectively.

RESULTS

Summary statistics and inter-item correlations among the research variables are shown in Table 2. Three results in this table are particularly noteworthy. First, the theoretically defined moderator variables (investment banker market share and proportion of insiders) are not highly correlated with the independent variable (CEO founder status), suggesting that multicollinearity will not be a problem in the data analysis. Second, investment banker market share is significantly and positively correlated ($r = 0.36$, $p < 0.001$) with unretained wealth. This finding has three possible interpretations: (1) consistent with the theory developed in support of Hypothesis 2, investment banks with higher shares of the IPO market may be prone to set initial offer prices below those that would be set for the same stock by a smaller share investment bank; (2) first-day investors exhibit especially strong demand for IPO stocks offered through investment banks with high IPO market share, which contributes to the price escalation of these stocks; or (3) both 1 and 2. Third, the industry dummy (where 0 = low-tech and 1 = high-tech) is significantly and positively correlated ($r = 0.23$, $p < 0.001$) with unretained wealth. Therefore, the current data reflect past empirical observations and conventional wisdom that the market tends to react favorably to high-tech IPOs, resulting in their frequent underpricing (e.g., Ewing, 2000; Hennessey, 1999; Koretz, 2000).

Table 3 presents the results of the regression analyses used to test the hypotheses. As shown in Model 2, CEO founder status significantly impacts unretained wealth ($p < 0.05$), and in the manner specified by Hypothesis 1. Thus, founder CEOs tend to retain less wealth for their initial, pre-issue shareholders than do nonfounder CEOs. As shown in Model 3, the cross-product of CEO founder status and investment banker market share has a positive beta and is statistically significant ($p < 0.01$), indicating strong support for Hypothesis 2. Specifically, the data indicate that the impact of founder management on wealth retention among the IPO firms' initial shareholders is more positive when the investment banker has a small rather than large share of the IPO market. Consistent with Hypothesis 3, Model 4 reveals that the interaction of CEO founder status and proportion of inside directors is negative and statistically significant ($p < 0.05$). As such, the impact of founder management on wealth retention among the IPO firms' initial shareholders is more positive when the board has a high, rather than low, proportion of insiders.

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Table 2. Means, standard deviations, and inter-item correlations for the research variables

Research variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Unretained Wealth	0.17	0.23										
2. Firm Size (Sales Revenue)	67.00	164.00	0.06									
3. Firm Age	5.31	2.80	–0.07	0.11*								
4. Investment Banker Market Share	0.04	0.04	0.36***	0.19***	–0.04							
5. CEO Retained Equity (%)	13.50	17.26	0.08	0.09	0.04	–0.10						
6. Risk Factors	17.79	4.63	0.06	–0.32***	–0.07	–0.10	–0.02					
7. Proportion of Insiders	0.39	0.18	–0.02	0.04	–0.04	–0.18**	0.30***	0.00				
8. Insider Additional Directorships	1.25	1.91	–0.01	–0.01	–0.18**	0.00	–0.11*	0.04	0.17**			
9. CEO Age	47.07	8.04	–0.04	–0.01	–0.01	0.06	–0.02	–0.22**	–0.02	0.04		
10. Industry Dummy	0.50	0.50	0.23***	0.00	0.17**	0.14**	0.01	0.14**	–0.03	–0.08	–0.09	
11. CEO Founder Status Dummy	0.48	0.50	0.13*	0.02	0.12*	–0.06	0.37***	0.00	0.07	–0.12*	–0.14**	0.09

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

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Table 3. Regression analysis results[ab]

	Model 1		Model 2		Model 3		Model 4	
	Beta	S.E.	Beta	S.E.	Beta	S.E.	Beta	S.E.
Constant	0.083	0.118	0.039	0.119	0.087	0.118	–0.019	0.121
Firm Size	0.000	0.003	0.001	0.003	0.001	0.003	0.001	0.003
Firm Age	–0.035	0.021	–0.039	0.020	–0.040*	0.020	–0.034	0.020
Investment Banker Market Share	1.949***	0.286	1.965***	0.285	1.098**	0.377	1.919***	0.284
CEO Retained Equity (%)	0.001*	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Risk Factors	0.003	0.003	0.003	0.003	0.002	0.003	0.003	0.003
Proportion of Insiders	0.011	0.067	0.017	0.066	0.030	0.065	0.141	0.088
Insider Additional Directorships	0.000	0.006	0.001	0.006	0.002	0.006	0.000	0.006
CEO Age	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
Industry Dummy	0.083***	0.023	0.080***	0.023	0.079**	0.023	0.081***	0.023
CEO Founder Status			0.056*	0.024	–0.011	0.031	0.158**	0.053
Founder × IB Market Share					1.098**	0.377		
Founder × Proportion of Insiders							–0.269*	0.124
R^2	0.182		0.195		0.221		0.205	
ΔR^2			0.013		0.026		0.010	
Equation F-value	8.855***		8.624***		9.158***		8.347***	

[a]The dependent variable is unretained wealth, measured as the underpricing ratio.
[b]Unstandardized regression coefficients are reported because, unlike standardized regression coefficients, they are not affected by the points of origin of the independent variables. See Southwood (1978) for details.

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Additional analyses were conducted to assess whether the results reflect robust relationships in the data. The regression equations used to test Hypotheses 1–3 were rerun with 25 percent of the sample randomly deleted from the data base. In each of these regression runs, Hypotheses 1–3 retained their statistical support at the $p < 0.05$ level or better. When 50 percent of the sample was randomly deleted from the data base, support for Hypothesis 1 dropped in significance from $p < 0.05$ to $p < 0.10$, and Hypotheses 2 and 3 retained their support at the $p < 0.05$ level or better. Overall, these findings suggest that the results are not spurious but, rather, reflect a definite structure within the data that is supportive of the hypotheses.

To gain a better understanding of what the data reveal about the interaction relationships in question, separate regression equations were run for founders and nonfounders using the analytical technique proposed by Hitt, Hoskisson, and Kim (1997). The results of this analysis are depicted in Figures 1 and 2.

As shown in Figure 1, founder CEOs have a negative impact on underpricing (unretained wealth) when the investment banker has an IPO market share of less than 1.38 percent and a positive impact on underpricing when the investment banker has an IPO market share of greater than 1.38 percent. This figure of 1.38 percent is within the observed investment banker market share range of 0.01 percent to 13.28 percent. Thus, the presence of founder CEOs may either increase or decrease the likelihood of underpricing depending upon the market share of the investment banker employed.

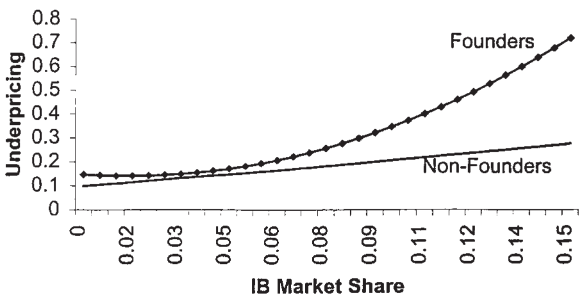

Figure 1. Interaction effects of founder and IB market share on underpricing.
The equations graphed by the lines presented in Figure 1 are as follows: *Founder CEOs*: Underpricing (Unretained Wealth) = 0.15 − 0.86 × IBMS + 31.17 × IBMS^2. Inflection point on the IBMS scale = 0.0138 (within the observed IBMS scale range of 0.0001 to 0.1328). *Nonfounder CEOs*: Underpricing (Unretained Wealth) = 0.10 + 1.04 × IBMS + 0.88 × IBMS^2. Inflection point on the IBMS scale = −0.5923 (outside the observed IBMS scale range of 0.001 to 0.1328).

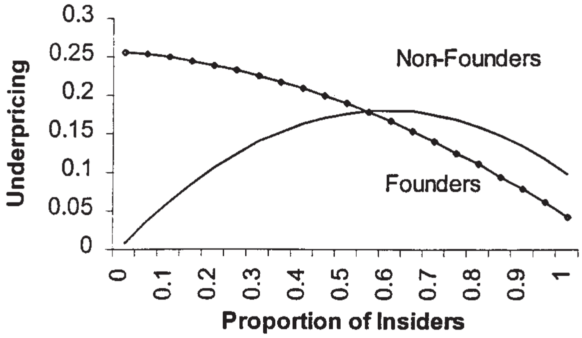

Figure 2. Interaction effects of founder and proportion of inside directors on underpricing.
The equations graphed by the lines presented in Figure 2 are as follows: *Founder CEOs*: Underpricing (Unretained Wealth) = 0.26 − 0.05 × PI − 0.16 × PI^2. Inflection point on the PI scale = −0.1676 (outside the observed PI scale range of 0 to 1.0). *Nonfounder CEOs*: Underpricing (Unretained Wealth) = 0.01 + 0.59 × PI –0.50 × PI^2. Inflection point on the PI scale = 0.5913 (within the observed PI scale range of 0 to 1.0).

By contrast, Figure 2 shows that founder CEOs have a negative effect on underpricing (unretained wealth) when the IPO firm's board has a low proportion of insiders, and the higher the proportion of board insiders, the more negative this relationship becomes. There is no inflection point within the observed range of the proportion of insiders scale at which point the impact of founder CEOs on underpricing changes from negative to positive. Rather, this inflection point occurs outside the observed range of the proportion of insiders scale (inflection point = −17%, observed scale range = 0% to 100%).

In short, founder management is nonmonotonically related to underpricing over the observed investment banker market share range and monotonically related to underpricing over the observed proportion of board insiders range.

DISCUSSION AND CONCLUSIONS

As the entrepreneurial firm grows and ages it faces various milestones. One such milestone occurs when and if the entrepreneurial firm seeks a change in ownership status from private to

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public through offering stock on the open market. At this point in a firm's evolution, the wealth amassed by the firm can quickly change in volume and be redistributed among the firm's claimants. Founders who maintain their roles as senior managers and shareholders through this IPO stage typically have significant financial stakes in their firms. Therefore, these founders' financial fortunes are often greatly affected by the financial transactions inherent to the IPO process. Moreover, it is not just the founders who typically have much to gain (or occasionally lose) during the IPO of a firm; it is also the larger set of initial shareholders who constitute the firm's pre-IPO owners, the investment banking firm that floats the firm's stock, and the investors who purchase this stock.

The current research explores the relationship between IPO underpricing and wealth and demonstrates that the wealth retained by the initial pre-issue shareholders, as well as the wealth created for investors during the first day of trading, is a function of whether or not the firm's CEO is also the firm's founder. Founder CEOs were less likely than nonfounder CEOs to negotiate initial offer prices with investment bankers that reflected the first-day investors' valuations of the stock. This dynamic results in a transfer of wealth from the initial shareholders to the first-day investors.

Several of the finance literature's theoretical explanations of underpricing can be used to explain the founder management effect observed in the current research. For example, information asymmetry-based explanations of underpricing are common in the finance literature (e.g., Baron, 1982; Rock, 1986). It is arguable that information asymmetry between investment bankers and first-day investors is a root cause of the observed relationship between CEO founder status and underpricing in that these parties will attach different value to founder management. The specific information asymmetry argument advanced in the current theoretical model is premised upon the existence of an investment banker 'founder bias discount' effect. The plausibility of such an effect is supported by the common argument in the underpricing literature that investment bankers have a bias against risk and characteristically assign low initial offer prices (thereby contributing to underpricing) to IPO firms of indeterminate value (Prasad *et al.*, 1995). Founder managers are typically inexperienced as the CEOs of publicly held firms (Wat, 1983) and, therefore, often represent a significant managerial uncertainty to the investment banker. Consistent with the aforementioned 'risk-averse underwriter' and 'implicit insurance' hypotheses, the presence of founder CEOs can be expected to lead to lower valuations of IPO firms by investment bankers.

An appropriately balanced interpretation of this study's results demands that their statistical significance as well as their practical significance be discussed. Regarding the statistical significance of the results, Table 2 reveals that while each of the three hypotheses is supported at the $p < 0.05$ level or better, the actual variance explained by each model is quite modest. R^2 changes of 1.3 percent, 2.6 percent, and 1.0 percent are associated with the CEO founder status main effect, the CEO founder status $\times$ investment banker market share interaction effect, and the CEO founder status $\times$ proportion of insiders interaction effect, respectively. The intent of the study was to test for the possible presence of a founder management effect on underpricing rather than to construct a model that would maximize the amount of explained variance in underpricing using variables of known predictive power. Still, the fact that so much of the variance in underpricing is not explained by the models examined should not be overlooked.

The practical significance of the results is also at issue. From the perspective of the initial shareholders who sell their equity to the investment banker, there is a financial liability associated with founder management, and the magnitude of this liability is not insignificant. In the current sample, having a founder as the firm's CEO cost the IPO firm's initial shareholders an average of \$3.2 million during the first day of trading. This figure represents the average value of the money 'left on the table' when a founder serves as the IPO firm's CEO. Alternatively, this figure can be viewed as the wealth an IPO firm's initial shareholders fail to retain under founder management. To put this founder liability figure of \$3.2 million in perspective, the mean IPO value of the sample was \$52.5 million. Thus, the presence of founder CEOs resulted in the IPO firms' initial shareholders failing to retain over 6 percent of their firms' average value during the first day of trading.

From the perspective of the first-day investors, this same figure of \$3.2 million represents the

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average total wealth appreciation attributable to the IPO firm having a founder as its CEO. It appears that a founder CEO is not a liability to first-day investors; rather, the current data suggest that founder-managed IPO firms will provide additional wealth for first-day stock purchasers. The average monetary impact of founder-managed IPO firms on investment bankers' wealth is impossible to calculate from the current data, and it cannot be known with certainty whether having a founder as the IPO firm's CEO generally has a positive or a negative impact on investment banker wealth. The data indicate that investment bankers underprice founder-managed IPO firms more than nonfounder-managed firms. While the theoretical evidence of an underpricing-related benefit to investment bankers is equivocal, recent empirical evidence suggests that greater trading profits accrue to investment bankers that underprice (Ellis, Michaely, and O'Hara, 2000). Therefore, it is reasonable to expect that investment bankers may realize the greatest wealth appreciations when they broker the stock of founder-managed IPO firms. This is, however, an empirical issue best addressed through future research.

There appear to be several actions founder CEOs might take prior to engaging in an IPO that could mitigate or reverse the adverse impact their presence has on wealth retention by the pre-issue shareholders. Founder CEOs should consider enlisting the services of investment banking firms that are not large players in the IPO market. In the current sample, the first-day market closing price was closer to the initial offer price, reflecting retention of wealth among the initial shareholders, when founder-managed firms employed investment bankers with smaller shares of the IPO market. These smaller share investment bankers, as discussed in the Theoretical Background section of this manuscript, may have less opportunity or ability to employ the 'founder bias discount' due to their relative lack of bargaining power over the IPO firm. The presence of high proportions of insiders on a firm's board of directors may also help to offset the liability of founder management among IPO-stage firms. Analysis of the regression results revealed that the initial shareholders of founder-managed firms retain more wealth when their boards are dominated by inside directors. Thus, a significant presence of insiders may facilitate the ability of founder CEOs to negotiate initial offer prices with investment bankers that accurately reflect the market's first-day valuations of their firms.

Of course, there is another way of looking at the wealth-related implications of this research. The IPO firm's initial shareholders may not be concerned about wealth they fail to retain (due to underpricing) if the volume of any retained equity they may have enables them to significantly benefit from underpricing-related appreciations in stock value. The initial shareholders can appropriate a portion of any wealth created through underpricing by retaining equity in their firm. The results of the current research suggest that the larger the investment banking firm employed, and the greater the proportion of outsiders on the board, the more the initial shareholders of founder-managed IPO firms can financially benefit from equity retention. Thus, the presence of a founder CEO represents a wealth accumulation opportunity, not just a liability, to the IPO firm's initial shareholders.

Any discussion of the effects of founder management on underpricing would not be complete without at least briefly considering the possible implications of this relationship for the IPO firm's capacity to create wealth. It seems plausible that positive reputational effects will accrue to founder-managed IPO firms due to their performance in the investor market. Such effects portend the possibility of future wealth creation by the firm. Ironically, then, while investment bankers may be skeptical about the capacity of founders to add value to IPO-stage firms, the favor shown founder-managed IPO firms by capital markets may, at least in the short term, contribute to the wealth creation capabilities of these firms.

Collectively, the preceding observations suggest that managerial variables in the IPO-stage firm represent an underexplored area of underpricing research. The current study does more than simply support the belief that an IPO firm's value is partially a function of the perceived quality of its management. It suggests that this perceived quality is a function of the evaluative lenses used by investment bankers and first-day investors, and that these lenses are very different. Moreover, the current study demonstrates that entrepreneurs create wealth in a way that has been wholly overlooked in prior entrepreneurship literature. Entrepreneurs create wealth (for first-day investors) through their very presence as CEOs of IPO-stage firms. Thus, wealth creation occurs not

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only when entrepreneurs build their businesses but also when and if they personally lead their businesses into the public ownership domain.

The preceding conclusions should be considered in light of the study's limitations. Two limitations are most noteworthy. First, unretained wealth, operationalized in the current study as IPO underpricing, is a highly specialized, context-specific performance variable. Generalizations from this study concerning the likely performance implications of founder management should be made with caution and appropriate qualifications. Second, and related to the preceding point, an 'initial returns' measure of IPO underpricing was employed in the current research. In particular, underpricing was assessed over a one-day period. While first-day stock returns are commonly examined in the finance literature and considered appropriate for assessing the underpricing phenomenon (Bruton and Prasad, 1997), we cannot infer long-term wealth transference volumes or rates from such returns.

Future research on the topics of founder management and/or underpricing could productively follow any of several paths. For example, future research might investigate whether the process or content of a founder's negotiation with an investment banker is typically any different from that of a nonfounder, and whether this possibility has any impact on where initial offer prices are set. Another potentially fruitful area for research could involve an examination of the possible underpricing-related implications of other managerial variables (aside from CEO founder status) in IPO firms. Particular CEO and top management team demographic variables, for example, may be associated with the presence of underpricing. Regardless of the specific focus of related future research, one realization about such research should be clear from the preceding discussions—entrepreneurship and underpricing are inherently related to wealth. Research at the interface of these phenomena, therefore, holds much promise for expanding our knowledge of the wealth creation process.

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