DOI: 10.1002/sej.1451



# Do the personal attributes of CEOs matter in the IPO pricing process? An examination of charisma and humility

Jeffrey A. Chandler<sup>1</sup> | Oleg V. Petrenko<sup>2</sup> | Nathan Hayes<sup>3</sup> | Andrew B. Blake<sup>4</sup> | Federico Aime<sup>5</sup>

<sup>1</sup>Department of Management, G. Brint Ryan College of Business, University of North Texas, Denton, Texas, USA

<sup>2</sup>Department of Strategy, Entrepreneurship, & Venture Innovation, Sam M. Walton College of Business, University of Arkansas, Fayetteville, Arkansas, USA

<sup>3</sup>Department of Management, Belk College of Business, University of North Carolina at Charlotte, Charlotte, North Carolina, USA

<sup>4</sup>Department of Management, Spears School of Business, Oklahoma State University, Stillwater, Oklahoma, USA

<sup>5</sup>Area of Management, Rawls College of Business, Texas Tech University, Lubbock, Texas, USA

### Correspondence

Oleg V. Petrenko, Department of Strategy, Entrepreneurship, & Venture Innovation, Sam M. Walton College of Business, University of Arkansas, Fayetteville, AR 72701, USA. Email: opetrenko@walton.uark.edu

### Abstract

**Research Summary:** Building on upper echelons theory and implicit leadership theory, we examine if the personal attributes of CEOs of firms undertaking an initial public offering influence the pricing decisions of investment bankers. We argue that charisma and humility in CEOs alter two of the most important decisions of investment bankers: determining the firm's offer price range and setting the firm's actual offer price. Specifically, we argue that the perceptions and negotiation abilities of more charismatic CEOs result in higher offer prices and smaller offer price ranges for their firms. We also argue that the perceptions and negotiation abilities of more humble CEOs result in lower offer prices and broader offer price ranges for their firms.

Managerial Summary: We investigate how charisma and humility in CEOs of firms undertaking an initial public offering influence two of the most important decisions of investment bankers: determining the firm's offer price range and setting the firm's actual offer price. We show that firms led by more charismatic CEOs enjoy higher offer prices and smaller offer price ranges due to their perceptions of being an effective leader and their strong negotiation abilities. We also show that firms led by more humble CEOs have lower offer prices and broader offer price ranges since humble leaders fall outside of expected perceptions of effective

© 2022 Strategic Management Society.

1

<sup>2</sup> WILEY-

leaders and lack strong negotiation abilities. Ultimately, our study demonstrates the importance of CEO characteristics on pricing decisions throughout the initial public offering process.

### KEYWORDS

CEO charisma, CEO humility, chief executive officers, initial public offerings, videometric technique

# 1 | INTRODUCTION

Entrepreneurship researchers have had a longstanding interest in understanding how investment bankers make pricing decisions for firms undertaking an initial public offering (IPO; Beatty & Ritter, 1986; Benveniste & Spindt, 1989; Bradley, Cooney, Jordan, & Singh, 2004; Logue, 1973; Logue & Lindvall, 1974). Studies have documented the lasting impact that investment bankers have on the success of IPO firms (for a review, see Certo, Holcomb, & Holmes, 2009), especially regarding two important pricing decisions: determining the range of an IPO firms' potential offer price and setting the actual offer price itself (Daily, Certo, & Dalton, 2005). Researchers have noted that these important decisions are shaped by two distinct processes throughout the IPO pricing process, in that IPO pricing decisions depend on both the perceived investment interest of institutional investors that is gauged via the bookbuilding process (for a description of this process, see Cornelli & Goldreich, 2001) and also the negotiation process that follows between investment bankers and IPO firms (Bradley et al., 2004; Kotlar, Signori, De Massis, & Vismara, 2018). Accordingly, studies throughout the literature have shown that a variety of IPO firm characteristics influence both the interest of institutional investors (Jenkinson & Jones, 2009) and the firms' ability to negotiate a more suitable offer price (Bradley et al., 2004), which ultimately shape the final pricing decisions made by investment bankers (Baker & Gompers, 2003; Bradley et al., 2004; Daily et al., 2005).

However, despite significant insights throughout the literature (Baker & Gompers, 2003; Daily et al., 2005), almost no attention has been given to how the personal attributes of chief executive officers (CEOs) may shape IPO pricing decisions. Nevertheless, this issue is important given that firms are a reflection of their CEOs (Hambrick & Mason, 1984) as their personal attributes (e.g., charisma, humility) are manifested both in the extrinsic evaluations of firms by investors (Fanelli, Misangyi, & Tosi, 2009; Petrenko, Aime, Recendes, & Chandler, 2019) and the strategic behaviors of their firms like negotiations (Hambrick, Cho, & Chen, 1996; Hayward & Hambrick, 1997). Media articles in the popular press reinforce this notion suggesting that external stakeholders view and interpret the potential success of a firm in light of their CEO (Green, DiLallo, & Feroldi, 2016) given the CEO's role as the most visible leader and ultimate decision-maker for the organization (Hambrick, 2007). Given their importance in constructing the perception of the firm and their responsibility to lead firm negotiations (Finkelstein, Hambrick, & Cannella, 1996; Hambrick et al., 1996), it can be expected that certain CEO personal attributes will influence the pricing decisions of IPO firms (i.e., offer prices; offer price ranges) since these decisions are inherently subjective by nature (Benveniste & Spindt, 1989; Mason & Stark, 2004; Megginson & Weiss, 1991).

In this study, we examine how the personal attributes of CEOs affect IPO firms' offer price and IPO firms' offer price range. Theory and evidence suggest that IPO pricing decisions are based on subjective criteria (Mason & Stark, 2004; Megginson & Weiss, 1991) since investment bankers and institutional investors are both considered to be boundedly rational decision makers who use simplified models of reality that are shaped by their experiences, values, and beliefs (Aggarwal & Rivoli, 1990; March & Simon, 1958; Park & Patel, 2015; Rötheli, 2010). The basic notion in the IPO literature is that both institutional investors and investment bankers can be influenced by IPO firms since they rely on cognitive shortcuts and easily accessible information—whether or not it is the most



-Wiley-

diagnostic—when assessing the potential value of IPO firms throughout the book-building and negotiation processes (Bradley et al., 2004; Certo, 2003). Despite this emphasis throughout the literature, researchers have largely studied these effects in isolation (e.g., Bradley et al., 2004; Jenkinson & Jones, 2009) and have yet to take a theoretical approach that more squarely examines how CEOs may influence both processes. Given this, our study draws upon two theories to explain the CEO's influence on IPO pricing decisions. Specifically, we draw on implicit leadership theory, which suggests that individuals categorize leaders like CEOs and create perceptions of them in relation to ideal types or representatives of a category (Lord & Maher, 1991), to examine the influence CEO personal attributes might have on institutional investors throughout the CEOs' presentations in the book-building process. In addition, we also draw from upper echelons theory, which suggests that CEOs' personal attributes affect their interpretation of strategic situations with important effects on firm behaviors (Hambrick & Mason, 1984), to examine the influence CEO personal attributes might have on the negotiation process that follows investment bankers' book-building efforts.

Our study extends this line of thinking to argue that IPO pricing decisions are strongly influenced by specific attributes of their CEO: namely, those that conjointly represent both the perceived effectiveness of the leader and influence their effectiveness in negotiations. We draw from previous research on CEO charisma and CEO humility that suggest both personal attributes generate distinct perceptions about the quality of the firm (Fanelli et al., 2009; Petrenko et al., 2019) and also influence their negotiation behaviors (Ou et al., 2014; Tangney, 2009). Specifically, we argue that both CEO charisma and CEO humility will influence the IPO process, yet the effect of these two personal characteristics will be different: firms led by more charismatic CEOs will attract more investment interest from institutional investors and also be more effective in negotiating for more favorable pricing decisions and firms lead by more humble CEOs will attract less investment interest from institutional investors and be less effective throughout the negotiation process. In doing so, we specifically argue that CEO charisma results in higher offer prices and smaller ranges in which the offer prices are set for their firms (i.e., higher offer prices, smaller offer price ranges) and that CEO humility results in lower offer prices and broader ranges in which the offer prices are set for their firms (i.e., higher offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their firms (i.e., lower offer prices are set for their

Our study makes two important contributions to entrepreneurship research. First, the primary aim of our study is to contribute to entrepreneurship research regarding how investment bankers make pricing decisions for firms undertaking an IPO (Baker & Gompers, 2003; Daily et al., 2005) by answering calls to address the "important question regarding what investment bankers rely on when making key IPO pricing decisions" (Daily et al., 2005, p. 106). While many empirical investigations have found mixed evidence regarding whether or not information about firms in IPO prospectuses (i.e., board characteristics; firm characteristics) influences the IPO pricing process (see Daily et al., 2005), we examine whether CEOs play a crucial role in determining their IPO firms' offer price and offer price range. Our study advances research on this topic by moving beyond an examination of the structural components of the firm that has been primarily emphasized in past studies (Baker & Gompers, 2003; Benveniste & Spindt, 1989; Certo et al., 2009; Daily et al., 2005) to show that the CEOs' personal attributes—specifically charisma and humility—influence the IPO pricing process. Our study presents a counterintuitive idea: that institutional investors and investment bankers rely as much on subjective information (i.e., CEO personal attributes) as objective information (i.e., firm characteristics; board characteristics) when making assessments about IPO firms. This finding answers calls within the literature (Daily et al., 2005) and opens a new avenue for future studies to examine how other CEO attributes may affect different components of the IPO process.

Second, our study contributes to methods in IPO research by utilizing a videometric approach (Gupta, Nadkarni, & Mariam, 2018; Petrenko, Aime, Ridge, & Hill, 2016) for measuring the personal attributes of CEOs in IPO firms. This video-based psychometric approach helps address both specific problems regarding self-report and proxy measures that have been considered an issue across entrepreneurship and strategic leadership research (Chatterjee & Hambrick, 2007; Yang, Zimmerman, & Jiang, 2011). Using investment bankers working in a Fortune 500 company, we validate the videometric approach (Petrenko et al., 2016) to measure the personal attributes of CEOs in IPO firms through a series of supplemental analyses. In doing so, our study details a platform for future IPO researchers to further examine how other personal attributes of CEOs may influence the success of firms undertaking an IPO.

# 193243, 3, 0. Downloaded from https://onlinetibury.wiley.com/doi/10.1002/sej 1451 by University Of Arkansas Library. Wiley Online Library on [01/02/2023]. See the Terms and Conditions (https://onlinetiburgw.wiley.com/doi/nos) on Wiley Online Library for rules of use; OA arkeles are governed by the applicable Creative Commons Liense

# 2 | THEORY AND HYPOTHESES

# 2.1 | CEO characteristics and organizational outcomes

For decades, strategic leadership researchers have shown that the characteristics of CEOs have considerable effects on organizational outcomes (e.g., Chatterjee & Hambrick, 2007; Hambrick, 2007; Hambrick & Mason, 1984). Two distinct streams of research have emerged throughout the strategic leadership literature (Hill, Recendes, & Ridge, 2019) that show CEO characteristics influence organizational outcomes by shaping both the strategic choices they make (Bantel & Jackson, 1989; Hambrick & Mason, 1984) and by shaping how others perceive the quality of the firm based on their views of the CEO as an effective organizational leader (Fanelli et al., 2009; Petrenko et al., 2019).

The first stream of research focuses on how the personal characteristics of CEOs influence organizational decisions (Hambrick, 2007; Hambrick & Mason, 1984). This stream of research is often guided by upper echelons theory, which builds on the premise of bounded rationality (Cyert & March, 1963) and traces a variety of organizational decisions back to the characteristics of their CEO (e.g., Chatterjee & Hambrick, 2007, 2011; Hayward & Hambrick, 1997). The underlying logic of this research stream is that executive characteristics significantly affect their interpretation of strategic situations with important effects on firm decisions and organizational performance (Hambrick & Mason, 1984). For instance, studies have shown that CEOs higher in both charisma and humility are highly influential in shaping the unique strategies of their firm (Ou, Waldman, & Peterson, 2018) and how firm strategies evolve over time (Wowak, Mannor, Arrfelt, & McNamara, 2016).

The second stream of research focuses on how the perceived characteristics of CEOs color the market expectations about organizational actions and expected performance (Fanelli et al., 2009). This stream of research is often guided by implicit leadership theory, which suggests that important market players like investors and financial analysts make subjective judgments about the quality of firms based on the CEOs' personal characteristics (Fanelli et al., 2009; Petrenko et al., 2019). These studies show that investors categorize CEOs based on stereotypes that stem from their characteristics (Finkelstein, Hambrick, & Cannella, 2009) and respond to them in relation to ideal types or stereotypes of a category (Fanelli et al., 2009; Lord & Maher, 1991). For example, studies have shown that financial analysts are more confident in an organization's future performance when their CEO is highly charismatic (Fanelli et al., 2009) but less confident when the CEO is more humble (Petrenko, 2020; Petrenko et al., 2019).

Despite the proliferation of research on CEO characteristics, almost no attention has been devoted to how the personal characteristics of CEOs influence IPO pricing decisions. Further, since most research on CEOs have utilized only one of these prevailing theoretical approaches in their studies (e.g., Chatterjee & Hambrick, 2007, 2011; Fanelli et al., 2009; Hayward & Hambrick, 1997), studies have recently called for research that takes a more holistic approach to account for how CEOs influence the outcomes of their organization through both their behaviors and perceptions as organizational leaders (see Hill et al., 2019). Given that IPO pricing decisions are dependent on both the perceived interest of institutional investors and the negotiations that that occur between investment bankers and IPO firms (Bradley et al., 2004; Jenkinson & Jones, 2009), it can be expected that certain CEO characteristics, like charisma and humility, may influence the IPO pricing process.

### 2.2 | Investment bankers and IPO pricing decisions

Investment bankers are responsible for managing the stock offering for the IPO firm and, more specifically, determining the offer price range and setting the offer price for organizations (Benveniste & Spindt, 1989; Cornelli & Goldreich, 2001). These bankers provide invaluable sources of guidance for IPO firm managers since most managers have very little or no experience with the inherently complex process of a taking a company public (Daily et al., 2005). Investment bankers must first determine the range of potential offer prices (i.e., offer price range) in the firms' preliminary prospectus and then set its actual offer price the day prior to the stock's offering (Daily et al., 2005; Smith, 1986). These decisions are crucial to the success of the IPO firms, as they determine the amount of funds the companies' owners can expect to raise as a function of the stock offering.

To make these pricing decisions, investment bankers commonly "build a book" before setting the price for an IPO firm's offering, which "formally begins with investor bankers announcing a price range" (Cornelli & Goldreich, 2001, p. 2337). Theoretically, the offer price range captures the investment bankers' confidence in an IPO firm at the beginning of the IPO process (Daily et al., 2005; Kirkulak & Davis, 2005). As studies note, investment bankers set the offer price range in line with their confidence in the IPO firm being successful in the future, such that lower price ranges reflect more confidence in the IPO firm's future performance while higher price ranges reflect less confidence (Daily et al., 2005). Institutional investors then use this information from investment bankers when considering whether or not to invest in a particular stock offering (Hanley, 1993; Kirkulak & Davis, 2005). For investment bankers, it is crucial that the offer price range is accurate from the onset of the IPO pricing process. While a broader offer price range gives investment bankers more flexibility in setting the final offer price, it serves as a signal to institutional investors that the investment bankers "lack confidence in pricing an issue" (Kirkulak & Davis, 2005, p. 462) since large price ranges are reflections of risky IPOs (Daily et al., 2005). Moreover, investment bankers must uphold their reputation as accurate pricing vehicles for IPO firms (Lewellen, 2006) and inflating or deflating price ranges would undermine their reputation as a credible pricing source since an investment banker that "fails to maintain his reputation for monitoring diligently will lose his regular investors and the future rents he could earn" (Benveniste & Spindt, 1989, p. 335).

After the initial price range announcement, investment bankers then arrange for the IPO firm's managers typically the CEO—to market the company to potential institutional investors via roadshows (Certo, 2003). Roadshows are presentations usually given by the CEO that describes the firm's operations, products or services, and management capabilities (Edy, 2000) and are aimed at gauging interest from institutional investors (Lashinsky, 1999). Following these presentations, investment bankers solicit interest from institutional investors (Certo, 2003) as such solicitations typically consist of a potential bid for the number of shares from each investor and a potential maximum price for the offering (Cornelli & Goldreich, 2001). While these solicitations do not represent a commitment from institutional investors since pricing decisions are "left to the discretion of the investment banker" (Cornelli & Goldreich, 2001, p. 2338), investment bankers use this highly reliable information to construct a demand curve for the IPO firm, which strongly influences the eventual offering price that they set for the IPO firm's public offering (Lashinsky, 1999).

Following the formal book-building process, investment bankers then engage with IPO firms to discuss the potential price set for the public offering during a negotiation and settlement period (Bradley et al., 2004; Leitterstorf & Rau, 2014).<sup>1</sup> While the potential range in which the offering price is set is largely shaped by roadshows (Cornelli & Goldreich, 2001), studies provide considerable evidence that substantial variance still exists for an IPO firms' CEO to negotiate a more suitable offer price (Bradley et al., 2004; Harris, 1991). For instance, research shows that a number of IPO firm characteristics, such as larger IPO firms (Bradley et al., 2004), are able to negotiate higher offer prices as "IPO firms have been allowed to price IPOs through negotiations with [investment bankers] after taking into account market conditions and firm-specific prospects" (Kao, Wu, & Yang, 2009, p. 64). In contrast, studies have also shown that some IPO firms, such as family-controlled IPO firms, negotiate lower offer prices to in order to sacrifice economic gains in order to preserve their noneconomic utility since "family firms [undertaking an IPO] are able to choose an offer price below the respective fair value of shares if this is in their interest" (Leitterstorf & Rau, 2014, p. 753). Following these negotiations with IPO firms, investment bankers then decide on the final offer price while considering both the interest from institutional investors and the negotiations that occur following the book-building effort (Bradley et al., 2004; Kao et al., 2009). Figure 1 provides a visual of the IPO pricing process.

Despite these insights, the literature has largely overlooked how the CEOs' personal attributes may shape the IPO pricing process. As such, we explore whether the IPO price setting process is affected by either charisma or humility in CEOs. We focus our theorizing on these two characteristics as they are the two CEO characteristics in

5



**FIGURE 1** Timeline of the initial public offering pricing process (It is important to note that investment bankers continually calculate and update the demand curve for an IPO throughout the book-building and roadshow process (Lashinsky, 1999). For the sake of parsimony, we present a visual of when the final demand curve has been calculated by investment bankers that take into account all the solicitation of bids from institutional investors following the roadshow presentations for an upcoming stock offering)

the strategic leadership literature that have been reliably found to influence their organizations through both an implicit leadership (Fanelli et al., 2009; Petrenko et al., 2019) and an upper echelons perspective (Ou et al., 2014; Wowak et al., 2016). Using these two theoretical perspectives, we expect that CEO charisma and CEO humility will affect both the investment interest of institutional investors throughout the roadshow presentations and the following negotiations with investment bankers.

# 2.3 | CEO charisma, CEO humility, and related constructs

Among the strategic leadership literature, CEO charisma and CEO humility are two distinct characteristics in CEOs and are the primary characteristics that have been studied from both an upper echelons theory (Ou et al., 2014; Wowak et al., 2016) and implicit leadership theory perspective (Fanelli et al., 2009; Petrenko et al., 2019). This focus throughout the literature stems in part because charisma and humility are unique traits in CEOs that affect both their behaviors and how observers view their potential to effectively lead their organizations.

Charisma is defined as a personal characteristic in individuals that reflects a leaders' "personal charm, attractiveness, and persuasive communication" (Judge, Piccolo, & Kosalka, 2009, p. 866) and is based on the feeling of oneness that a person has with another, the desire for that feeling, or to be like the other (Bass, 1988; Fiol, Harris, & House, 1999). Humility refers to a "self-view of accepting that something is greater than the self and manifests in self-awareness, openness to feedback, appreciation of others, low self-focus, and self-transcendent pursuit" (Ou et al., 2014, p. 38). As researchers have noted, charisma and humility are distinct traits in leaders that are typically inversely related (D'Errico, 2019; de Vries, 2012; Mayo, 2017) as charismatic leaders are not necessarily humble (or vice versa) nor does charisma encompass humility's dimensions of being self-aware, being open to feedback, or holding a low self-focus (Owens, Johnson, & Mitchell, 2013). This distinction between charisma and humility is perhaps most visible from researchers who find that effective leaders are expected to hold high levels of charisma (Den Hartog, House, Hanges, Ruis-Quintanilla, & Dorfman, 1999; Keller, 1999) and low levels of humility (Nielsen, Marrone, & Slay, 2010; Petrenko et al., 2019), but it is also visible among articles in the popular press recommending companies to "forget charisma, look for humility in a leader" (Hogan, 2018).

While researchers have long treated charisma and humility as two distinct traits in CEOs, it is important to differentiate these traits from other related constructs. Because of their potential similarities and their previous utilization in strategic leadership and IPO research, four main constructs are relevant for this comparison: narcissism, hubris, overconfidence, and prestige. Narcissism, defined as a consuming self-absorption or self-love (The American Heritage Dictionary, 2010), exhibits a level of positive self-regard and may be seen in CEOs with charisma or CEOs



WILEY-

7

lacking humility, but is strongly characterized by two needs that are not shared with charisma or humility: a need for acclaim and social approval (Chatterjee & Hambrick, 2007, 2011) and a need to dominate and control others (Chatterjee & Pollock, 2017). One implication of the difference between the constructs is that we would not expect the same predictions about narcissistic CEOs as we make for CEOs with charisma and humility. Following the mixed findings indicate that narcissistic individuals are both viewed as effective and ineffective leaders (e.g., De Hoogh, Den Hartog & Nevicka, 2015; Judge, Bono, Ilies, & Gerhardt, 2002; Judge, Scott, & Ilies, 2006) and make both better and worse negotiators (e.g., Chatterjee & Hambrick, 2011; Park, Ferrero, Colvin, & Carney, 2013), we would expect them to have no overall effect on the IPO pricing process. Instead, we would expect narcissistic CEOs to elicit credit or assign blame after the IPO event based on how the IPO's pricing process affected the initial stock opening.

Hubris, which is defined as "exaggerated pride of self-confidence" in individuals (Hayward & Hambrick, 1997, p. 106), is also conceptually different from charisma and humility in that hubris is conceptualized in the literature as a psychological construct produced by the combination of confidence-buoying external stimuli (like excellent firm performance) and arrogance (Hayward & Hambrick, 1997). While it is possible that hubristic CEOs are charismatic and lack humility, hubris only encompasses one's extreme pride and does not encompass the social dimensions that comprise charisma and humility. For instance, hubris does not include the dimensions of charisma to inspire devotion in others (Den Hartog et al., 1999) or the dimensions of humility to be others focused, to be open to feedback, and to appreciate other individuals (Ou et al., 2014). Similar to our expectations about CEO narcissism, we expect CEO hubris to have a lack of an effect on IPO pricing given the similar mixed findings in the literature regarding how hubristic leaders and perceived and their negotiation abilities (e.g., Hayward & Hambrick, 1997; Long, 2019).

Overconfidence, which "exists when the accuracy of prediction about a certain outcome is greater ex ante than it is ex post" (Haynes, Campbell, & Hitt, 2017, p. 561; emphasis in original), is also conceptually distinct from charisma and humility (Engelen, Neumann, & Schwens, 2015; Vera & Rodriguez-Lopez, 2004). Specifically, overconfidence diverges from the concept of charisma in that it does not capture the dimensions that reflect a compelling attractiveness or charm, nor does it capture humility's dimensions of appreciating others, holding a low self-focus, and pursuing self-transcendence. Furthermore, studies note that overconfidence exists "only on a post hoc basis" (Hiller & Hambrick, 2005, p. 298; emphasis in original) meaning that it occurs only after a specific event. Therefore, overconfidence is distinct from charisma and humility since it captures strictly an individual's behavioral overestimation of certainty about being correct in a specific task (Russo & Schoemaker, 1992) and does not overlap with the cognitive foundations of either trait. Consistent with the content of the construct, our predictions for overconfident CEOs would have been more related to the continuity of behaviors or perseverance in the face of disconfirming information throughout the IPO pricing process and not predictions regarding how such CEOs affect the variability of IPO pricing. Additionally, making predictions regarding overconfidence could be somewhat problematic as strategic leadership researchers recently concluded that overconfidence is "essentially synonymous" with hubris (Finkelstein et al., 2009, p. 82; Haynes et al., 2017) and that hubris is conceptually interchangeable with high levels of core selfevaluation in CEOs (see Hiller & Hambrick, 2005).

Lastly, prestige refers to widespread respect for someone on the basis of a perception of their achievements (Oxford English Dictionary, 2021). While it can be expected that charismatic leaders might be seen as prestigious as each trait reflects admiration for an individual, prestige is conceptually distinct from charisma in that the admiration stems from objective achievements while the admiration for charismatic individuals is subjective as it stems from their unique behaviors and personae.<sup>2</sup> Moreover, prestige does not conceptually overlap with the social dimensions of charisma or humility, such as charismatic individual's tendency to inspire devotion in others (Den Hartog et al., 1999) or humble individuals' tendency to be others focused, to be open to feedback, and to appreciate other individuals (Ou et al., 2014). As seen in CEOs that are considered to be either charismatic and humble by the popular press (Valentine, 2019), it is entirely possible that both more and less charismatic or humble CEOs can be considered prestigious based on their past accomplishments. Further, as evidence of this distinctiveness between the traits, we would also not make the same predictions about prestigious CEOs as we make for charismatic or humble CEOs. While prestigious CEOs might generate interest from institutional investors throughout the roadshow process due

to their past accomplishments (Pollock, Chen, Jackson, & Hambrick, 2010), its effect on negotiations with investment bankers would be ambiguous, as prestige has not been studied in the context of firm negotiations. This might be one explanation for why Daily et al. (2005) found that prestige does not affect offer prices or offer price ranges.

Beyond the differing predictions, we would make regarding these related CEO traits, we focus on theorizing about CEO charisma and CEO humility for several other reasons. First, we focus on the personal attributes of CEOs instead of the collective characteristics of top management teams since CEOs are the most visible leader for organizations (Fanelli et al., 2009) and the ultimate decision-maker for the firm (Hambrick, 2007). Given that investors use the CEO as a cue to gauge firm quality (Fanelli et al., 2009; Petrenko et al., 2019) and CEOs "hold ultimate authority for the final [firm] decisions" (Arendt, Priem, & Ndofor, 2005; Sniezek, 1999, p. 1), we focus on how CEOs' personal attributes influence the IPO pricing process as it can be expected to be a stronger predictor of IPO pricing decisions compared to top management team characteristics.

Second, we also decide to focus our theory on general CEOs compared to founder CEOs as we would not expect founder CEO status to impact the IPO pricing process. Studies throughout the literature have found mixed evidence regarding how founder CEOs are viewed by IPO investors (Bruton, Chahine, & Filatotchev, 2009; Certo, Covin, Daily, & Dalton, 2001; Daily et al., 2005; Nelson, 2003) suggesting that there may be mixed views on whether or not institutional investors would be more or less interested to invest in IPO firms led by founder CEOs. This might be an explanation for why Daily et al. (2005) found that founder CEOs do not affect offer prices or offer price ranges. Accordingly, we focus our theory on both founder and professional CEOs, which also provides generalizability to our theory.<sup>3</sup> Given this, we therefore examine the effects of CEO charisma and CEO humility on the two important decisions of investment bankers noted by Daily et al. (2005): determining a firms' offer price range and setting the firms' actual offer price.<sup>4</sup>

# 2.4 | CEO charisma and investment bankers

Researchers in management and psychology have shown considerable evidence that charisma in leaders affects both their perceptions (Bass, 1988; Den Hartog et al., 1999; Keller, 1999) and their negotiation behaviors (Bass, 1988; Mumford & Van Doorn, 2001). These studies show that charisma is a universally recognized leadership attribute that evokes perceptions of effective leadership (Lord, De Vader, & Alliger, 1986; Lord, Foti, & De Vader, 1984; Lord & Maher, 1991) and that a core characteristic of charismatic leaders is their ability to "persuade through negotiation" (Mumford & Van Doorn, 2001, p. 281). As such, a variety of studies have shown that charisma is universally seen as outstanding leadership that inspires devotion from others (Bass, 1988; Den Hartog et al., 1999) in part due to the leaders' abilities to negotiate and persuade others into providing them with personally favorable outcomes (Mumford & Van Doorn, 2001).

Drawing from upper echelons theory and implicit leadership categorizations of CEO charisma (Arrow, 1973; Bass, 1988; Den Hartog et al., 1999; Fanelli et al., 2009), we argue that charismatic CEOs will influence the IPO pricing process guided by investment bankers. Since charisma evokes perceptions of effective leadership in CEOs (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006; Bass, 1988; Den Hartog et al., 1999), it can be expected that investment bankers will initially evaluate firms with charismatic CEOs as having higher performance potential that will lead them to generate more interest from institutional investors throughout the book-building process. As such, we expect that IPO firms led by more charismatic CEOs will receive narrower ranges of potential offer prices from investment bankers as they begin the IPO pricing process as it is a direct reflection of the investment bankers' confidence in the IPO firm. Then, due to these favorable perceptions, it can also be expected that institutional investors will evaluate firms with charismatic CEOs as having higher performance potential there roadshow presentations and, in turn, solicit more interest to invest in such firms. More specifically, the perceptions of charismatic CEOs as effective organizational leaders (Fanelli et al., 2009; Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004) can be expected to influence institutional investors to solicit bids for more shares of stock in an IPO firm and to pitch higher potential maximum prices for the offering (Cornelli & Goldreich, 2001). As such, this increased interest from

⊥WILEY-



WILEY-

After the book-building process, we also expect that the negotiation abilities of charismatic leaders (Mumford & Van Doorn, 2001) will have an effect on the investment bankers final stock pricing during the negotiation period. Research has shown that charismatic leaders are often more aggressive in their negotiations and ultimately more persuasive (Mumford & Van Doorn, 2001) in part due to their desire to reinforce their image of an effective leader (Bass, 1988). Given this, we argue that IPO firms lead by more charismatic CEOs will be more aggressive in their final negotiations with investment bankers to price the stock offering high and, as a result of their persuasive abilities (Dewan, Humphreys, & Rubenson, 2014), will be more likely to influence a price increase for the IPO. Therefore, given the potential effects of CEO charisma on both institutional investors throughout the book-building process and negotiations with investment bankers, we argue that more charismatic CEOs will influence investment bankers to set narrower ranges of potential offer prices (i.e., offer price ranges) and higher actual offer prices for their IPO firms. Consistent with this logic, we hypothesize:

Hypothesis 1. There will be a negative relationship between CEO charisma and IPO offer price range.

Hypothesis 2. There will be a positive relationship between CEO charisma and IPO offer price.

### 2.5 | CEO humility and investment bankers

While it can be expected that charismatic CEOs will inspire confidence in IPO pricing decisions (e.g., Bass, 1988; Den Hartog et al., 1999), it can also be expected that humble CEOs will have a distinctly negative effect on the IPO pricing process. Previous studies have shown that humility is a trait that falls outside our implicit leadership theories (Emmons, 1998; Exline & Geyer, 2004; Hollander & Offermann, 1990; Weiss & Knight, 1980) since humble individuals are viewed as weak, lacking confidence or self-esteem, and inadequate for leadership roles (Emmons, 1998; Exline & Geyer, 2004). This perception stems in part due to their less aggressive and peace-seeking tendencies as organizational leaders (Ou et al., 2014; Summerell, Harmon-Jones, Denson, & Harmon-Jones, 2020; Tangney, 2009).

We argue that the distinct perceptions and peace-seeking behaviors of more humble CEOs will influence the IPO pricing process guided by investment bankers. Since humble CEOs often fall outside of our implicit leadership theories (Petrenko et al., 2019), it can be expected that investment bankers will initially view IPO firms led by more humble CEOs as having lower performance potential and to solicit less interest from institutional investors throughout the book-building process. As such, we expect that IPO firms lead by humble CEOs will receive broader price ranges from investment bankers as they begin the IPO pricing process. Then, due to these less favorable perceptions, it can also be expected that institutional investors will evaluate firms with more humble CEOs as having lower performance potential investors will evaluate firms with more humble CEOs as having lower performance potential throughout their roadshow presentations. This perception will likely generate less interest from institutional investors seek out investments in high performing firms (Certo, 2003), resulting in investment bankers receiving less bids for shares of stock in an IPO firm and lower pitches of maximum prices for the offering (Cornelli & Goldreich, 2001). As such, we expect that the decreased interest from institutional investment bankers due to the perceptions of humility in CEOs will facilitate a decrease in the demand curve calculated by investment bankers, resulting in lower offer prices of the stock offering (Lashinsky, 1999).

As IPO firms progress toward price negotiations following the book-building process (Cornelli & Goldreich, 2001), we also expect the less aggressive and peace-seeking behaviors of more humble leaders (Summerell et al., 2020; Tangney, 2009) to impact the negotiations between more humble CEOs and investment bankers. Previous studies have noted that more humble individuals perform worse in negotiations since individuals that are perceived to be nice, warm, and friendly are often pushed to accept worse offers and deals (Jeong, Minson,

Yeomans, & Gino, 2019). These worse offers to such individuals often come to fruition as humble individuals are less likely to advocate for better offers (Tangney, 2009). Given this, it can be expected that investment bankers will more aggressively push for worse deals in their negotiations with humble CEOs given their perceptions of being weak, lacking confidence or self-esteem, and inadequate for leadership roles (Emmons, 1998; Exline & Geyer, 2004) and the tendencies of humble CEOs to be less aggressive and peacekeeping will result in less counteroffers for a better stock price. Therefore, given their potential effects of CEO humility on both institutional investors throughout the bookbuilding process and negotiations with investment bankers, we argue that more humble CEOs will influence investment bankers to set broader ranges of potential offer prices (i.e., offer price ranges) and lower actual offer prices for their IPO firms. Consistent with this logic, we hypothesize:

Hypothesis 3. There will be a positive relationship between CEO humility and IPO offer price range.

Hypothesis 4. There will be a negative relationship between CEO humility and IPO offer price.

# 3 | METHODS

# 3.1 | Sample and data collection

To test our hypotheses, we employed an initial sample that included all firms that made initial public equity offers on U.S. stock exchanges between the years of 2012 and 2015 (Certo, 2003; Certo et al., 2001). We began by utilizing Thomson Reuters Financial Security Data Corporation (SDC) New Issues database to identify all firms that made IPOs in the U.S. market. Following previous IPO research (Bell, Filatotchev, & Aguilera, 2014; Filatotchev, Chahine, & Bruton, 2018; Nelson, 2003), we excluded remissions and transfers, corporate spin-offs, equity carve-outs, and stock listings resulting from mergers and acquisitions since these offerings are transformations in corporate form and not comparable to the typical entrepreneurial firms going public (Nelson, 2003). Then, we identified the CEO for each IPO firm and included the observations of our intended time frame. We excluded CEOs for whom adequate video data for the measurement of CEO charisma or CEO humility was not available. Our final sample includes 199 CEOs based on the available data for variables of each model.

We collected our data from a variety of sources. Our financial and performance data were collected from Thomson Reuters SDC Platinum database. Offer prices and offer price ranges were collected from firms' preliminary prospectus or appended prospectus. Our control variables with respect to CEOs and the board of directors were also collected from firm prospectuses. Lastly, CEO charisma and CEO humility were collected utilizing a videometric technique that used third-party observer survey ratings of CEOs from publicly accessible videos (Chandler, Petrenko, Hill, & Hayes, 2021; Petrenko et al., 2016; Petrenko et al., 2019).

### 3.2 | Independent variables

The current entrepreneurship and upper echelons research have demonstrated the difficulty of accurately measuring CEO personality traits, such as *CEO charisma* (Agle et al., 2006; Fanelli & Misangyi, 2006) and *CEO humility* (Ou et al., 2014, 2018). To surmount such obstacles, we employ a psychometrically validated "thin-slices" videometric approach to measure our CEO attributes (Gupta et al., 2018; Petrenko et al., 2016). Following this approach, we collected public videos of the CEOs in our sample and de-identified the videos so that the name of the company and executive is not observable to reduce coders' leniency biases. We then edited the videos to average 2.5 min in length as Petrenko et al. (2016) established that this time duration is the most efficient for measuring CEO characteristics and allows for reliable measures without causing rater fatigue. Further, Petrenko et al. (2016) found empirical

TRATEGIC <u>NTREPRENE</u>URSHI

evidence that ratings of CEO characteristics are largely consistent across video samples (i.e., media effects), which is consistent with findings in other videometric studies analyzing CEOs (Gupta & Misangyi, 2018; Recendes, Aime, Hill, & Petrenko, 2022). To help ensure that we were capturing accurate sources of the CEOs natural characteristics, we captured videos of CEOs during natural discussions such as question-and-answer sessions of interviews and therefore did not include videos of CEOs with any prepared remarks.

Following previous videometric studies (Gupta & Misangyi, 2018; Petrenko et al., 2016, 2019), we hired and trained Master of Business Administration (MBA) graduate business students with an expertise in Finance to watch the videos and rate the CEOs' level of charisma and humility. Previous videometric studies have relied on graduate business school students to assess CEO characteristics (Gupta & Misangyi, 2018) and students with an expertise in Finance are potentially more representative of the audience in our study (i.e., institutional investors; investment bankers) compared to general graduate business school students. We utilized the exact same training procedures set out by Petrenko et al. (2016). First, we hosted two training sessions for our graduate student raters. In these sessions, we informed the students about the focus of the study. Then, we logged the raters into a training video sample survey located in Qualtrics. Using this sample survey, we coded three video examples not included in our sample and the observations were discussed with researchers to ensure quality of their training. Lastly, the raters then selfcoded three different video samples on their own and any questions or concerns regarding the procedure were addressed at that time. Blinded to the hypotheses of our study, the raters then rated CEOs on the previously validated scale of CEO charisma (Agle et al., 2006). This measure demonstrated high reliability, indicated by a Cronbach alpha of .97 and also high interrater reliability (ICC = 0.729). The same student coders also rated CEOs on a previously validated scale to measure CEO humility. To measure CEO humility, the students used the humility items from the widely utilized and validated HEXACO-100 since it is the most prominently utilized measure of humility in psychology research (Ashton & Lee, 2018).<sup>5</sup> This measure also demonstrated high reliability, indicated by a Cronbach alpha of .95, as well as high interrater reliability (ICC = 0.865). We address possible sample selection bias stemming from the videometric technique in various ways, including adding an Inverse Mills Ratio (IMR) control in our models (Appendix S1). We also conducted multiple other robustness tests (Appendix S2).

# 3.3 | Dependent variables

An IPO firms' *offer price range* reflects the percentage of the range of the minimum and maximum potential value of the actual offer prices determined by the investment banker at the beginning of the IPO pricing process compared to its actual offer price at the time of the IPO. To operationalize *offer price range*, we follow previous studies and calculate the variable using the difference between the high and low values in the range of offer prices established by the investment bankers scaled by the actual offer price at the time of the IPO (maximum offer price – minimum offer price/offer price). For example, if an investment banker sets the minimum and maximum potential offer price for an IPO firm to \$5 per share and \$7 per share respectively and the IPO had an actual offer price of \$6 per share, the resulting *offer price range* would take a value of 0.333 since the offer price range (\$2) is 33.3% of the actual offer price (\$6).

The offer price set by an investment banker reflects an assessment of the valuation of an IPO firm and is used for the firms' stock offering (Carter & Manaster, 1990; Megginson & Weiss, 1991). We operationalize a firms' offer price calculated as the stock price at the time of IPO minus the firm's book value scaled by the stock price at the time of IPO (stock price – book value/stock price; Daily et al., 2005).

### 3.4 | Control variables

We included several different variables in our analysis to control for potential confounding factors. Since IPO firm valuations may be influenced by the CEOs' age (in years) and gender (Bigelow, Lundmark, McLean Parks, &

Wuebker, 2014), we controlled for *CEO age* in our models and included a dummy variable to control for *CEO gender* (Female CEO = 1). We also controlled for *CEO tenure* measured as the number of years as CEO with the firm (Fischer & Pollock, 2004) and *CEO duality* (Fischer & Pollock, 2004) by including a dummy variable if the CEO is also the chairman of the board of directors (CEO duality = 1). We also controlled for *founder CEOs* (Certo et al., 2001) by including a dummy variable indicating whether or not the CEO at the time of IPO was listed as a founder of the company (CEO founder = 1). Following Certo, Daily, Cannella, and Dalton (2003), we also controlled for *CEO ownership* as measured by the percentage of equity owned by the CEO before the offering and *CEO stock option compensation* (Lowry & Murphy, 2007) by indicating the presence of stock option compensation for the CEO (CEO stock options = 1).

We also included firm- and board-level control variables in our models. Since *firm size* and *firm age* may affect investor bankers' valuations (Mikkelson, Partch, & Shah, 1997), we included both variables in our analysis. We measured *firm size* as the natural logarithm of the firm's market capitalization at the offer price (Filatotchev et al., 2018) and *firm age* as the number of years elapsed between the firms' founding date and its IPO date (Chandler, Payne, Moore, & Brigham, 2019; Pollock & Rindova, 2003). We also controlled for *firm risk* by counting the number of risk factors obtained from the IPO prospectus (Carpenter, Pollock, & Leary, 2003; Payne, Trudell, Moore, Petrenko, & Hayes, 2022). Following previous studies, we also controlled for *firm performance* measured as the sales growth calculated as the difference between the annual sales in the IPO year and the annual sales in the year before the IPO (Chen, Hambrick, & Pollock, 2008). Due to missing values for this variable, we imputed missing data with mean values for this measure to maximize our sample. To further control for firm performance effects, we also controlled for *industry-adjusted performance* measured as the firm's return-on-assets (ROA) minus the industry-average ROA using 2-digit SIC codes. Following previous studies (Howton, Howton, & Olson, 2001), we also controlled for *board size* and *board independence* in our analyses. In addition, we also controlled for IPO firms that are backed by venture capitalists by including a venture-backed dummy variable if the IPO firm was funded by a venture capital firm before its IPO date (venture-backed = 1).

We also controlled for a variety of other controls seen in finance research. As the specific stock exchange might influence the pricing of IPOs, we follow previous research and control for the *stock exchange* by creating a dummy variable equal to 1 if the IPO was listed in the NASDAQ and 0 otherwise (Lowry, Officer, & Schwert, 2010). Following previous research (Willenborg, Wu, & Yang, 2015), we also control for *Big Four audit firm* by creating a dummy variable equal to 1 if the IPO firm used a Big Four audit firm and 0 otherwise. We also controlled for *corporate investor board members* or whether the IPO firm had a corporate investor on the board of directors (Nelson, 2003) and *venture capital equity* measured as the amount of equity held by venture capitalists at the time of IPO (Bouresli, Davidson, & Abdulsalam, 2002). Additionally, we also controlled for *market run-up* measured as the number of previous IPO firms that went public in the prior 3 months to the offering date of the IPO firm (Kutsuna, Smith, & Smith, 2009).

Finally, we controlled for a variety of other potential confounds seen in previous studies. As prestige may influence perceptions of the CEO, top management team (TMT), and the board of directors (Pollock et al., 2010), we controlled for CEO prestige, TMT prestige, board prestige, and underwriter prestige following the procedure established by Pollock et al. (2010). We controlled for industry differences by including a dummy variable for IPO firms operating in the high-tech industries (High-Tech = 1). We also included dummy variables to account for investment banker, year, and month effects. We do not report the results of the fixed-effects control variables to save space in our models, but the extended version of our models is available upon request.

# 3.5 | Model and estimations

Consistent with past IPO studies (Logue, Rogalski, Seward, & Foster-Johnson, 2002; Loughran & Ritter, 2002), we ran seemingly unrelated regression analysis to test our hypotheses. Seemingly unrelated regression is a



WILEY

generalization of a linear regression model that is comprised of several regression equations that can deal with multi-equation systems giving rise to correlated error terms (Bode, Wagner, Petersen, & Ellram, 2011; Greene, 2008). This analysis is particularly appropriate for our study as our outcomes of interest are inherently related since part of one dependent variable (offer price) is the embedded in the calculation of our other dependent variable (offer price range) as the denominator, which strongly correlates the error terms of our respective analyses. To empirically validate the use of this approach for our data, we found that the Breusch-Pagan test of independence rejected the null hypothesis and confirms the existence of correlated error terms between estimations ( $\chi^2 = 4.962$ ; p = .025).

# 4 | RESULTS

Descriptive statistics and correlations are shown in Table 1 while Table 2 reports the results from our empirical analyses. Specifically, Table 2 first includes CEO charisma and CEO humility to our sample models independently (Models 1-4) and then includes CEO charisma and CEO humility together in the same model (Models 5 and 6). Importantly, the addition of our CEO personality variables improves R-squared by 4.5% in the offer price models and by 3.69% in the offer price range models and improves model fit compared to the control models as assessed by the root mean square error (RMSE) reported in each table. To allow for comparisons between variables of interest, we also report the standardized beta coefficients in all our models. Due to space limitations, the control models for our sample are reported in the Online Appendix along with the control models reported for the full population of IPOs in our timeframe.

Table 2 provides results for our first four hypotheses. In Hypothesis 1, we predicted a negative relationship between CEO charisma and offer price ranges of IPO firms. Results reported in Table 2 Model 1 (b = -.016, std. error = .006, p = .004) provide support for this hypothesis without controlling for the effects of CEO humility and with controlling for the effects of CEO humility (b = -.016, std. error = .006, p = .005) as seen in our combined models in Table 2 Model 5. As such, Hypothesis 1 is supported. In Hypothesis 2, we predicted a positive relationship between CEO charisma and offer prices. Results reported in Table 2 Model 2 provide support for this hypothesis without controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .013) and with controlling for the effects of CEO humility (b = .067, std. error = .027, p = .020) as seen in our combined models in Table 2 Model 6. As such, Hypothesis 2 is supported.

In Hypothesis 3, we predicted a positive relationship between CEO humility and offer price ranges of IPO firms. Results reported in Table 2 Model 3 (b = .014, std. error = .005, p = .008) provide support for this hypothesis without controlling for the effects of CEO charisma and also with controlling for these effects (b = .013, std. error = .005, p = .012) as seen in Table 2 Model 5. As such, Hypothesis 3 is supported. In our Hypothesis 4, we predicted a negative relationship between CEO humility and offer prices. Results reported in Table 2 Model 4 (b = -.089, std. error = .026, p = .001) provide support for our hypothesis without controlling for the effects of CEO charisma and also with controlling for these effects (b = -.085, std. error = .025, p = .001) as seen in Table 2 Model 6. As such, Hypothesis 4 is supported. These results also hold important practical implications (Appendix S3). We also ran multiple additional checks to assess the robustness of our findings (Appendix S4).

# 5 | DISCUSSION

Our study shows that the personal attributes of CEOs—specifically charisma and humility—have substantial influence over two of the most impactful decisions of the IPO process: determining the IPO firms' offer price range and setting the IPO firms' actual offer price. Anchored in implicit leadership theory (Lord & Maher, 1991) and upper echelons theory (Hambrick & Mason, 1984), we argue and provide evidence that CEO charisma and CEO humility strongly influence both IPO firms' offer price and their offer price range. As "a visible CEO is now more essential than ever"

statistics
iptive
descr
and ו
relatior
Cor
-
BL

TAB	LE 1 Correlation	and desc	riptive	statisti	cs																		
	Variables	Σ	SD	(1)	(2)	(3)	(4)	(5)	(9)	) (2)	8)	.) (6	10)	11) (1	12) (	13) (:	14) (	15) (	16) (	17) (	18) (	(19)	(20)
7	Inverse Mills ratio	1.03	.21																				
7	Firm performance	0.01	.01	10																			
ო	Ind-adjusted ROA	-6.93	14.90	07	02																		
4	VC equity	0.01	.01	15	.38	01																	
5	NASDAQ dummy	0.60	.49	.11	.07	03	03																
9	Big 4 auditors	0.82	.38	12	.13	90.	.12	15															
Г	Market run up	395.78	60.59	22	11	.13	.01	08	.01														
8	Market cap (Log)	13.19	2.42	07	.05	.01	.28	27	.15	02													
6	Firm age	10.55	12.85	02	30	.03	04	01	06	.01	.01												
10	Risk factors	54.75	12.53	.01	.01	10	.01	20	.08	01	01	15											
11	Board size	7.52	1.90	.10	14	.01	.03	01	.07	.05	60.	.25	.05										
12	Board	0.81	.11	.06	06	07	.10	.20	.13	01	90.	.12	02	<u>4</u> .									
	independence																						
13	CEO gender	0.36	.24	.01	.02	08	.05	.11	90.	.02	.01	08	.06	90.	.10								
14	Founder CEO	0.36	.48	35	.12	05	.09	01	.01	02	.07	10 -	05	- 05	08	05							
15	CEO age	51.11	8.03	<u>4</u>	19	06	27	.07	01	.02	26	.11	08	.07	60.	- 04	17						
16	CEO duality	0.69	.46	.15	.10	01	.05	05	.05	25	.12	<u>8</u>	.05	- 90	14	10	.01	6					
17	CEO equity percent	10.94	17.19	08	.12	03	.01	.05	12	.01	09	- 08 -	- 04	24	41	09	.27	.01	.20				
18	CEO stock	0.54	.50	07	09	04	06	.18	.02	.01	.05	.05	.10	.08	.11	.06	. 40	02	01	21			
19	Underwriter prestige	0.25	.43	.01	.04	.05	.22	08	.17	04	.15	.01	- 10.	02	01	09	- 10.	06	.03	- 00	03		
20	VC backed	0.64	.48	28	.12	11	.20	.16	.26	04	.02	11	- 01	08	.17	.01	.18	26	11	17	.15	90.	
21	High tech firm	0.66	.47	08	.11	13	.09	.16	90.	90.	.01	08	07	15	60.	.04	.04	03	- 90	05	.15	.03	.55
22	Board prestige	3.60	1.87	28	.13	02	.29	02	.25	.07	.19	03	.11	.31	.25	.01	.18	19	- 90	11	.09	.11	.43
23	TMT prestige	2.38	1.94	43	.08	.05	.23	06	.21	.04	.14	07	.04	.01	- 03	01	.19	19	.03	04	.15	.12	.34
24	CEO prestige	0.43	.50	43	.10	04	.15	01	.10	.01	0.	11 -	01	02	.02	.08	.15 -	16	01	04	.11	.11	.30

(Continued)
-
щ
Z
A
- C

Var	iables	Σ	SD	(1)	(2)	(3)	(4)	(5) (	6) (	5	8)	) (6	10)	11) (	12) (	13) (	14) (	15) (	16) (;	17) (	18) (;	.) (61	20)
25 Coi	rp. board	0.61	.49	01	.11	09	.14	<u>.</u>	.19	20	.14	- 90	01	01	.12	.03	.02	23	.19	18	03	.02	34
26 Ché	arisma	5.01	.98	16	.07	.01	.08	03	.01	.08	.20	03	13	60.	90.	.08	.11	18	.01	.01	- 90.	.07	15
27 Hui	mility	3.85	1.15	10	10	01	06	.02	.11	02	04	01	06	.01	.02	03	.12	04	80.	.02	.02	.02	98 28
28 Off	er price	0.74	.41	08	.07	01	.06	.10	.01	.10	07	- 80.	11	.01	.02	.03	02	05	02	01	07	.01	21
29 Off	er price range	0.11	.09	.07	.01	04	02	03	.03	- 90'-	12	06	.17	04	.01	03	.01	.07	.03	.07	01	.09	33
	Variables		Σ		SD		(21)		(22)	J	23)	~	24)	Ŭ	25)	J	26)	0	27)	Ŭ	28)	0	29)
21	High tech firm	_	0.6	6	.47																		
22	Board prestige	0	3.6	0	1.87		.23																
23	TMT prestige		2.3	ω	1.94		.29		.49														
24	CEO prestige		0.4	e	.50	_	.18		.40		.55												
25	Corp. board		0.6	1	.49		.21		.10		.11		.08										
26	CEO charisma		5.0	1	.98	-	.08		.19		.17		.15		.12								
27	CEO humility		3.8	5	1.15		07		.08		.01		.02		.05		07						
28	Offer price		0.7	4	.41		.27		.15		90.		.04	·	01		.17	'	15				
29	Offer price rar	Jge	0.1	1	60.		6		.06	·	08	'	08		.14		23		.19	·	13		
Note: N = Abbreviati	199; Correlations ons: Corp., corpor	above   ate; Ma	0.14  ar rket cap	e statist , marke	tically si it capita	ignificar Ilization;	it at <i>p</i> < : VC, ve	.05. nture ca	pital.														

CHANDLER ET AL.

WILEY

	Model 1: c	offer range	Model 2: 6	offer price	Model 3: c	offer range	Model 4:	offer price	Model 5: 0	offer range	Model 6	offer price
Variables	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	p-value	β	p-value
Inverse Mills ratio	.012	[.168]	067	[.111]	.013	[.123]	071	[.083]	.012	[.177]	064	[.117]
	(.009)		(.042)		(600.)		(.041)		(.009)		(.041)	
Firm performance	.001	[888]	.077	[.072]	001	[.892]	.087	[.038]	.001	[.895]	.077	[.062]
	(.009)		(.043)		(600.)		(.042)		(.009)		(.041)	
Industry-adjusted performance	005	[.296]	.001	[.987]	004	[.291]	.001	[.977]	005	[.289]	.001	[.988]
	(:005)		(.022)		(:005)		(.022)		(:005)		(.022)	
VC Equity	.002	[.822]	.010	[.804]	.006	[.507]	009	[.824]	.004	[.655]	001	[.971]
	(.009)		(.041)		(600.)		(.040)		(.008)		(.040)	
NASDAQ	004	[.578]	.046	[.124]	003	[.668]	.042	[.154]	003	[609]	.044	[.132]
	(900)		(020)		(900')		(020)		(900:)		(.029)	
Big 4 auditor	005	[.580]	.069	[.092]	006	[.493]	.076	[.062]	006	[.507]	.074	[.062]
	(.009)		(.041)		(600.)		(.040)		(800)		(.040)	
Market run up	001	[.931]	070.	[.133]	005	[.569]	.083	[.061]	.001	[.923]	.059	[.195]
	(.010)		(.046)		(600.)		(.044)		(.010)		(.045)	
Market Cap (Log)	014	[.032]	024	[.468]	016	[.020]	022	[.486]	013	[.051]	033	[.307]
	(.007)		(.032)		(.007)		(.032)		(.007)		(.032)	
Firm age	.011	[.406]	.093	[.149]	.007	[.601]	.118	[.067]	.008	[.559]	.115	[.070]
	(.013)		(.065)		(.014)		(1064)		(.013)		(:063)	
Risk factors	.007	[.300]	029	[.368]	.011	[860]	050	[.121]	600.	[.197]	040	[.214]
	(.007)		(.033)		(.007)		(.032)		(.007)		(.032)	
Board size	007	[.382]	.094	[.010]	006	[.413]	.092	[.011]	006	[.405]	.092	[.010]
	(.008)		(.037)		(800.)		(980)		(.008)		(920)	
Board independence	008	[.284]	086	[.019]	010	[.194]	079	[020]	008	[.265]	085	[.018]
	(.008)		(.037)		(800)		(920)		(.008)		(920)	

TABLE 2 Seemingly unrelated regression predicting offer price and offer range

16 WILEY STRATEGIC POTEMAL

	Model 1: c	offer range	Model 2: 6	offer price	Model 3: o	offer range	Model 4:	offer price	Model 5: c	offer range	Model 6:	offer price
Variables	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value
CEO gender	.003	[.551]	041	[860.]	.001	[.984]	025	[.300]	.001	[.779]	030	[.207]
	(:005)		(.025)		(3005)		(.024)		(.005)		(.024)	
CEO founder	001	[.975]	034	[.217]	001	[.805]	025	[.355]	002	[.752]	024	[.377]
	(900.)		(.028)		(900:)		(.027)		(900:)		(.027)	
CEO duality	.008	[.217]	011	[.720]	900.	[.363]	.001	[.963]	900.	[.345]	.001	[.975]
	(900.)		(020)		(900:)		(.029)		(900:)		(.029)	
CEO equity percentage	.010	[.181]	059	[.119]	.010	[.194]	057	[.123]	.010	[.182]	058	[.116]
	(.008)		(.038)		(800.)		(.037)		(800)		(.037)	
CEO stock options	.001	[.833]	033	[.232]	002	[.684]	017	[.523]	.001	[.944]	028	[.300]
	(900.)		(.028)		(900')		(.027)		(900)		(.027)	
Underwriter prestige	041	[.144]	233	[.087]	032	[.259]	291	[.032]	032	[.258]	293	[.028]
	(.028)		(.136)		(.029)		(.136)		(.028)		(.134)	
Venture backed	011	[.193]	.041	[306]	014	[260]	.057	[.146]	013	[.122]	.053	[.176]
	(.008)		(.040)		(800.)		(039)		(800)		(.039)	
High tech	.003	[.732]	.062	[980]	.007	[.377]	.036	[.314]	900.	[.402]	.038	[.284]
	(.007)		(980)		(800.)		(980)		(800)		(920)	
Board prestige	.017	[.035]	011	[.773]	.013	[.113]	.010	[.786]	.015	[.064]	.003	[.943]
	(.008)		(.038)		(800.)		(.038)		(.008)		(.038)	
TMT prestige	007	[309]	031	[.321]	007	[305]	032	[.301]	006	[.341]	035	[.261]
	(.007)		(.032)		(200.)		(.031)		(900.)		(.031)	
CEO prestige	.001	[.920]	034	[.332]	.001	[.890]	034	[.316]	.001	[.937]	033	[.334]
	(.007)		(.035)		(200.)		(.034)		(2007)		(.034)	
Corporate board member	.017	[.004]	011	[.715]	.015	[.015]	.001	[.989]	.017	[:005]	008	[.769]
	(900')		(.029)		(900')		(.029)		(900:)		(.029)	
											)	Continues)

TABLE 2 (Continued)

WILEY

STRATEGIC ENTREPRENEURSHIP 17

$\sim$
B
ž
Ę.
G
Ŭ
-
$\sim$
0
E 2 (
LE 2 (
BLE 2
ABLE 2 (

	Model 1: 0	offer range	Model 2: (	offer price	Model 3: 0	offer range	Model 4:	offer price	Model 5:	offer range	Model 6:	offer price
Variables	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value	β	<i>p</i> -value
CEO charisma	016	[.004]	.067	[.013]					016	[:005]	.061	[.020]
	(900)		(.027)						(900:)		(.027)	
CEO humility					.014	[800.]	089	[.001]	.013	[.012]	085	[.001]
					(200.)		(.026)		(:005)		(.025)	
Constant	.102	[.031]	1.624	[.001]	.102	[.032]	1.592	[.001]	.115	[.014]	1.538	[.001]
	(.047)		(.229)		(.048)		(.226)		(.047)		(.224)	
Z	199		199		199		199		199		199	
RMSE	.061		.296		.061		.292		090.		.288	
<i>Note:</i> N = 199; Standardized coeffic	ients are re	oorted; standa	Ind errors in	parentheses;	exact <i>p</i> valu	es to the righ	t of coefficie	ents between	brackets. N	lonth, year, an	d investmei	nt banker

STRATEGIC ENTREPRENEURSH

> Abbreviation: RMSE, root mean square error. dummies are included in all models.

(Loo, 2020; Picker, 2019), we expect the effects CEOs have on IPO pricing decisions to become even more prominent in future IPOs.

STRATEGIC Entrepreneurship WILEY

19

This study has several implications for entrepreneurship research. First, in showing that the personal attributes of CEOs undertaking an IPO affect investment bankers' pricing decisions, we provide a needed shift away from the examinations of the structural components of the firm that has been emphasized in past studies. Researchers have found that a variety of firm and board characteristics influence the IPO pricing decisions of investment bankers (Beatty & Ritter, 1986; Lévesque, Joglekar, & Davies, 2012), however, there has a been a lack of understanding of how the personal attributes of the CEO might influence the IPO pricing process. We draw from research that indicates that CEO personal attributes create implications regarding their firms' performance potential (Chen & Meindl, 1991; Fanelli et al., 2009) and influence firm negotiations (Finkelstein et al., 1996; Hambrick et al., 1996) to show that CEO charisma and CEO humility play a crucial role in the IPO pricing process guided by investment bankers. In concert with previous research, our study presents a counterintuitive notion to the IPO literature: investment bankers rely as much on subjective information (i.e., CEO personal attributes) as objective information (i.e., firm characteristics; board characteristics) when making pricing decisions.

Another implication of our study is that we present a new theoretical perspective to IPO research. Previous research has applied diverse theoretical and methodological lenses to understand the underlying factors that drive the pricing decisions of investment bankers (Aggarwal, Prabhala, & Puri, 2002; Certo et al., 2001, 2009; Daily et al., 2005), including signaling theory (Spence, 1973), institutional theory (Scott, 1987), and the resource-based view of the firm (Barney, 1991). While previous theoretical perspectives have primarily emphasized the actions and characteristics of the firm (Benson, Brau, Cicon, & Ferris, 2015; Certo et al., 2009; Colombo, Meoli, & Vismara, 2019), we move beyond these theoretical perspectives to offer a more nuanced view of the pricing decisions of investment bankers based on the CEOs' personal attributes. We integrate implicit leadership theory and upper echelons theory to suggest that CEOs influence the IPO pricing process through their perceptions as effective organizational leaders and their abilities to influence firm negotiations. In doing so, our study also answers calls by Hill et al. (2019) to advance upper echelons research by taking a more holistic approach to how CEOs' personal attributes predict organizational outcomes through both their perceptions as an effective organizational leader and ability to influence firm behaviors.

Beyond our theoretical implications, our paper makes a novel methodological contribution to the measurement of CEO attributes that is needed in IPO and entrepreneurship research. The videometric approach utilized in this paper provides avenues that bypass the methodological limitations that are currently limiting the measurement approach of CEO personal attributes in entrepreneurship research (Yang et al., 2011). Through a series of supplementary analyses, our study finds considerable evidence that CEOs of firms undertaking an IPO can be accurately assessed utilizing video clips. This videometric approach can help resolve the variety of issues surrounding the measurement of CEO personality and provide researchers with a platform to advance entrepreneurship theory and research on IPO firms.

Despite significant contributions from the findings, our study also has several limitations that present opportunities for future research. First, as with any empirical study based on archival data, we cannot completely rule out the possibility of reverse causality (i.e., simultaneity) in our study. While we are empirically correct for this possibility in our models and find substantial evidence that this cause of endogeneity is not biasing our results, future research should re-examine our relationships of interest while directly addressing this concern by using experimental approaches that allow for manipulation of predictor variables, which is one of the most notable ways to address reverse causality (Hill, Johnson, Greco, O'Boyle, & Walter, 2021).

Second, our study is limited in that our sample is based solely on IPO firms listed on U.S. stock exchanges. While we chose this sampling criteria to minimize any sample selection bias stemming from our videometric technique since we expect this context to have the most CEO videos available online, our findings are nonetheless limited to IPOs listed on U.S. stock exchanges. Future research should improve upon our sample to ensure the generalizability of our findings by examining if these CEO characteristics influence the IPO process in the same manner for IPO firms listed on other prominent stock exchanges, such as the Shanghai Stock Exchange, Euronext, or the Japan Exchange Group.

Third, the use of the videometric technique to measure CEO characteristics also holds certain limitations. Our study is limited in that we rely on observer-report measures of CEOs' charisma and humility as perceived by MBA students in Finance instead of by institutional investors and investment bankers, which underlies our theorizing. Our study is also limited in that the videos of CEOs available online could be a biased representation of the CEO's true character. While these limitations are common across videometric studies (e.g., Gupta & Misangyi, 2018; Petrenko et al., 2019) and our robustness tests provide evidence they might not be prevalent in our study, our study is limited since we cannot rule out these potential issues completely. Future researchers with access to IPO events should improve upon our measures of CEO charisma and CEO humility by administering survey instruments to institutional investors and investors and investment bankers to provide further evidence of the effects proposed in our study.

Finally, our study is limited in that we cannot directly assess the IPO pricing process (e.g., roadshow presentations and negotiations with investment bankers), which give rise to the mechanisms of our theorizing. This limitation of our study is a common theme among IPO studies examining the pricing process (Daily et al., 2005) and among strategic leadership studies examining how CEO characteristics influence firm outcomes (Hambrick, 2007). We encourage future researchers with direct access to the IPO process to re-examine the proposed mechanisms of our theory. However, as Certo et al. (p. 108) note, "the challenge, of course, is gaining access" to these private events.

In conclusion, IPOs have dramatic implications for long-term organizational success (Benveniste & Spindt, 1989; Boulton, Smart, & Zutter, 2010; Bruton, Filatotchev, Chahine, & Wright, 2010; Golubov, Petmezas, & Travlos, 2012). Therefore, it is imperative we understand the factors that influence the important decisions made throughout the process. In this study, we show that the personal attributes of CEOs—specifically charisma and humility—have substantial influence over two of the most impactful decisions of the IPO process: determining the IPO firms' offer price range and setting the IPO firms' actual offer price. Our study advances research in entrepreneurship by highlighting the importance of the CEOs' personal attributes throughout the IPO process.

### ACKNOWLEDGEMENT

We thank Professor Timothy Folta and two anonymous reviewers for their thoughtful feedback and guidance throughout the review process.

### ORCID

Jeffrey A. Chandler <sup>D</sup> https://orcid.org/0000-0002-7687-0294 Oleg V. Petrenko <sup>D</sup> https://orcid.org/0000-0002-7037-7765 Nathan Hayes <sup>D</sup> https://orcid.org/0000-0002-3019-6265 Andrew B. Blake <sup>D</sup> https://orcid.org/0000-0002-2525-4328 Federico Aime <sup>D</sup> https://orcid.org/0000-0002-9436-1653

### ENDNOTES

- <sup>1</sup> As negotiations follow the book-building process, the negotiations between the IPO firm and the investment banker focus on the actual offer price as the offer price range is set either before or during the book building effort (Cornelli & Goldreich, 2001).
- <sup>2</sup> In our sample, we find a positive and significant correlation between CEO charisma and CEO prestige.
- <sup>3</sup> We empirically account for any effect that founder CEO status might have in our models.
- <sup>4</sup> In Daily et al. (2005) seminal study, the authors emphasized that the offer price spread (range) and setting the firms' offer price are the two most influential decisions made by investment bankers. Given this, we use this framework to theoretically argue the effects of CEO charisma and CEO humility and empirically test their effects using the exact operationalization used by Daily et al. (2005).
- <sup>5</sup> These items combine the modest and greed-avoidance facets of the Honesty-Humility component of the HEXACO-100 (Ashton & Lee, 2018).

⊥WILEY-

21

### REFERENCES

- Aggarwal, R., Prabhala, N. R., & Puri, M. (2002). Institutional allocation in initial public offerings: Empirical evidence. The Journal of Finance, 57(3), 1421–1442.
- Aggarwal, R., & Rivoli, P. (1990). Fads in the initial public offering market? Financial Management, 19(4), 45-57.
- Agle, B. R., Nagarajan, N. J., Sonnenfeld, J. A., & Srinivasan, D. (2006). Does CEO charisma matter? An empirical analysis of the relationships among organizational performance, environmental uncertainty, and top management team perceptions of CEO charisma. Academy of Management Journal, 49(1), 161–174.
- Arendt, L. A., Priem, R. L., & Ndofor, H. A. (2005). A CEO-adviser model of strategic decision making. Journal of Management, 31(5), 680–699.
- Arrow, K. (1973). Higher Education as a Filter. Journal of Public Economics, 2(3), 193-216.
- Ashton, M. C., & Lee, K. (2018). How well do Big Five measures capture HEXACO scale variance? Journal of Personality Assessment, 101, 567–573.
- Baker, M., & Gompers, P. A. (2003). The determinants of board structure at the initial public offering. *The Journal of Law and Economics*, 46(2), 569–598.
- Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10(51), 107–124.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99-120.
- Bass, B. M. (1988). Evolving perspectives on charismatic leadership, Charismatic leadership: The elusive factor in organizational effectiveness (pp. 40–77). San Francisco, CA: Jossey-Bass.
- Beatty, R. P., & Ritter, J. R. (1986). Investment banking, reputation, and the underpricing of initial public offerings. Journal of Financial Economics, 15(1), 213–232.
- Bell, R. G., Filatotchev, I., & Aguilera, R. V. (2014). Corporate governance and investors' perceptions of foreign IPO value: An institutional perspective. Academy of Management Journal, 57(1), 301–320.
- Benson, D. F., Brau, J. C., Cicon, J., & Ferris, S. P. (2015). Strategically camouflaged corporate governance in IPOs: Entrepreneurial masking and impression management. *Journal of Business Venturing*, 30(6), 839–864.
- Benveniste, L. M., & Spindt, P. A. (1989). How investment bankers determine the offer price and allocation of new issues. Journal of Financial Economics, 24(2), 343–361.
- Bigelow, L., Lundmark, L., McLean Parks, J., & Wuebker, R. (2014). Skirting the issues: Experimental evidence of gender bias in IPO prospectus evaluations. *Journal of Management*, 40(6), 1732–1759.
- Bode, C., Wagner, S. M., Petersen, K. J., & Ellram, L. M. (2011). Understanding responses to supply chain disruptions: Insights from information processing and resource dependence perspectives. Academy of Management Journal, 54(4), 833–856.
- Boulton, T. J., Smart, S. B., & Zutter, C. J. (2010). IPO underpricing and international corporate governance. Journal of International Business Studies, 41(2), 206–222.
- Bouresli, A. K., Davidson III, W. N., & Abdulsalam, F. A. (2002). Role of venture capitalists in IPO corporate governance and operating performance. Quarterly Journal of Business and Economics, 41, 71–82.
- Bradley, D. J., Cooney, J. W., Jordan, B. D., & Singh, A. K. (2004). Negotiation and the IPO offer price: A comparison of integer vs. non-integer IPOs. Journal of Financial and Quantitative Analysis, 39(3), 517–540.
- Bruton, G. D., Chahine, S., & Filatotchev, I. (2009). Founders, private equity investors, and underpricing in entrepreneurial IPOs. Entrepreneurship Theory and Practice, 33(4), 909–928.
- Bruton, G. D., Filatotchev, I., Chahine, S., & Wright, M. (2010). Governance, ownership structure, and performance of IPO firms: The impact of different types of private equity investors and institutional environments. *Strategic Management Journal*, 31(5), 491–509.
- Carpenter, M. A., Pollock, T. G., & Leary, M. M. (2003). Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal*, 24(9), 803–820.
- Carter, R., & Manaster, S. (1990). Initial public offerings and underwriter reputation. *The Journal of Finance*, 45(4), 1045–1067.
- Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. Academy of Management Review, 28(3), 432–446.
- Certo, S. T., Covin, J. G., Daily, C. M., & Dalton, D. R. (2001). Wealth and the effects of founder management among IPO-stage new ventures. *Strategic Management Journal*, 22(6–7), 641–658.
- Certo, S. T., Daily, C. M., Cannella, A. A., & Dalton, D. R. (2003). Giving money to get money: How CEO stock options and CEO equity enhance IPO valuations. *The Academy of Management Journal*, 46(5), 643–653.
- Certo, S. T., Holcomb, T. R., & Holmes, R. M. (2009). IPO research in management and entrepreneurship: Moving the agenda forward. Journal of Management, 35(6), 1340–1378.
- Chandler, J. A., Payne, G. T., Moore, C., & Brigham, K. H. (2019). Family involvement signals in initial public offerings. Journal of Family Business Strategy, 10(1), 8–16.

- Chandler, J. A., Petrenko, O. V., Hill, A. D., & Hayes, N. T. (2021). CEO Machiavellianism and strategic alliances in family firms. Family Business Review, 34(1), 93–115.
- Chatterjee, A., & Hambrick, D. C. (2007). It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. Administrative Science Quarterly, 52(3), 351–386.
- Chatterjee, A., & Hambrick, D. C. (2011). Executive personality, capability cues, and risk taking: How narcissistic CEOs react to their successes and stumbles. *Administrative Science Quarterly*, 56(2), 202–237.
- Chatterjee, A., & Pollock, T. G. (2017). Master of puppets: How narcissistic CEOs construct their professional worlds. Academy of Management Review, 42(4), 703–725.
- Chen, C. C., & Meindl, J. R. (1991). The construction of leadership images in the popular press: The case of Donald Burr and people express. Administrative Science Quarterly, 36(4), 521–551.
- Chen, G., Hambrick, D. C., & Pollock, T. G. (2008). Puttin'on the Ritz: Pre-IPO enlistment of prestigious affiliates as deadlineinduced remediation. Academy of Management Journal, 51(5), 954–975.
- Colombo, M. G., Meoli, M., & Vismara, S. (2019). Signaling in science-based IPOs: The combined effect of affiliation with prestigious universities, underwriters, and venture capitalists. *Journal of Business Venturing*, 34(1), 141–177.

Cornelli, F., & Goldreich, D. (2001). Bookbuilding and strategic allocation. The Journal of Finance, 56(6), 2337-2369.

- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. Armonk, NY: M.E. Sharpe.
- Daily, C. M., Certo, S. T., & Dalton, D. R. (2005). Investment bankers and IPO pricing: Does prospectus information matter? Journal of Business Venturing, 20(1), 93–111.
- de Vries, R. E. (2012). Personality predictors of leadership styles and the self-other agreement problem. *The Leadership Quarterly*, 23(5), 809–821.
- De Hoogh, A. H., Den Hartog, D. N., & Nevicka, B. (2015). Gender differences in the perceived effectiveness of narcissistic leaders. Applied Psychology, 64(3), 473–498.
- Den Hartog, D. N., House, R. J., Hanges, P. J., Ruis-Quintanilla, S. A., & Dorfman, P. W. (1999). Culture specific and crossculturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? The Leadership Quarterly, 10, 219–256.
- D'Errico, F. (2019). 'Too humble and sad': The effect of humility and emotional display when a politician talks about a moral issue. Social Science Information, 58(4), 660–680.
- Dewan, T., Humphreys, M., & Rubenson, D. (2014). The elements of political persuasion: Content, charisma and cue. The Economic Journal, 124(574), 257–292.
- Edy, B. C. (2000). Internet road shows: It's time to open the door for the retail investor. *Journal of Corporation Law*, 25, 867-890.
- Emmons, R. A. (1998). The psychology of ultimate concern: Personality, spirituality, and Intelligence [Unpublished manuscript]. Davis, CA: University of California.
- Engelen, A., Neumann, C., & Schwens, C. (2015). "Of course I can": The effect of CEO overconfidence on entrepreneurially oriented firms. Entrepreneurship Theory and Practice, 39(5), 1137–1160.
- Exline, J. J., & Geyer, A. L. (2004). Perceptions of humility: A preliminary study. Self and Identity, 3(2), 95–114.
- Fanelli, A., & Misangyi, V. F. (2006). Bringing out charisma: CEO Charisma and external stakeholders. Academy of Management Review, 31(4), 1049–1061.
- Fanelli, A., Misangyi, V. F., & Tosi, H. L. (2009). In Charisma we trust: The effects of CEO charismatic visions on securities analysts. Organization Science, 20(6), 1011–1033.
- Filatotchev, I., Chahine, S., & Bruton, G. D. (2018). Board interlocks and initial public offering performance in the United States and the United Kingdom: An institutional perspective. *Journal of Management*, 44(4), 1620–1650.
- Finkelstein, S., Hambrick, D., & Cannella, A. A. (1996). Strategic leadership. St. Paul, MN: West Educational Publishing.
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). Strategic leadership: Theory and research on executives, top management teams, and boards. New York, NY: Oxford University Press.
- Fiol, C. M., Harris, D., & House, R. (1999). Charismatic leadership: Strategies for effecting social change. The Leadership Quarterly, 10(3), 449–482.
- Fischer, H. M., & Pollock, T. G. (2004). Effects of social capital and power on surviving transformational change: The case of initial public offerings. Academy of Management Journal, 47(4), 463–481.
- Golubov, A., Petmezas, D., & Travlos, N. G. (2012). When it pays to pay your investment banker: New evidence on the role of financial advisors in M&As. The Journal of Finance, 67(1), 271–311.
- Green, T., DiLallo, M., & Feroldi, B. (2016). 3 Signs A Company Has An Amazing CEO. The Montley Fool. Retrieved from. https://www.fool.com/investing/general/2016/04/03/3-signs-a-company-has-an-amazing-ceo.aspx
- Greene, W. (2008). Functional forms for the negative binomial model for count data. *Economics Letters*, 99(3), 585–590.
- Gupta, A., & Misangyi, V. F. (2018). Follow the leader (or not): The influence of peer CEOs' characteristics on interorganizational imitation. Strategic Management Journal, 39(5), 1437–1472.



193243, 3, 0. Downloaded from https://onlinetibury.wiley.com/doi/10.1002/sej 1451 by University Of Arkansas Library. Wiley Online Library on [01/02/2023]. See the Terms and Conditions (https://onlinetiburgw.wiley.com/doi/nos) on Wiley Online Library for rules of use; OA arkeles are governed by the applicable Creative Commons Liense

- Gupta, A., Nadkarni, S., & Mariam, M. (2018). Dispositional sources of managerial discretion: CEO ideology, CEO personality, and firm strategies. Administrative Science Quarterly, 1, 1–39.
- Hambrick, D. C. (2007). Upper Echelons theory: An update. Academy of Management Review, 32(2), 334-343.
- Hambrick, D. C., Cho, T. S., & Chen, M. J. (1996). The influence of top management team heterogeneity on firms' competitive moves. Administrative Science Quarterly, 41(4), 659–684.
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The organization as a reflection of its top managers. Academy of Management Review, 9(2), 193–206.
- Hanley, K. W. (1993). The underpricing of initial public offerings and the partial adjustment phenomenon. *Journal of Financial Economics*, 34(2), 231–250.
- Harris, L. (1991). Stock price clustering and discreteness. The Review of Financial Studies, 4(3), 389-415.
- Haynes, T. K., Campbell, J. T., & Hitt, M. A. (2017). When more is not enough: Executive greed and its influence on shareholder wealth. *Journal of Management*, 43(2), 555–584.
- Hayward, M. L., & Hambrick, D. C. (1997). Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 42(1), 103–127.
- Hill, A. D., Johnson, S. G., Greco, L. M., O'Boyle, E. H., & Walter, S. L. (2021). Endogeneity: A review and agenda for the methodology-practice divide affecting micro and macro research. *Journal of Management*, 47(1), 105–143.
- Hill, A. D., Recendes, T., & Ridge, J. W. (2019). Second-order effects of CEO characteristics: How rivals' perceptions of CEOs as submissive and provocative precipitate competitive attacks. *Strategic Management Journal*, 40(5), 809–835.
- Hiller, N. J., & Hambrick, D. C. (2005). Conceptualizing executive hubris: The role of (hyper-) core self-evaluations in strategic decision-making. *Strategic Management Journal*, 26(4), 297–319.
- Hogan. (2018). Forget charisma, look for humility in a leader. Tulsa, OK. Retrieved from: Hogan Assessments. https://www. hoganassessments.com/blog/forget-charisma-look-for-humility-in-a-leader/
- Hollander, E. P., & Offermann, L. R. (1990). Power and leadership in organizations: Relationships in transition. American Psychologist, 45(2), 179–189.
- Howton, S. D., Howton, S. W., & Olson, G. T. (2001). Board ownership and IPO returns. Journal of Economics and Finance, 25(1), 100–114.
- Jenkinson, T., & Jones, H. (2009). IPO pricing and allocation: A survey of the views of institutional investors. The Review of Financial Studies, 22(4), 1477–1504.
- Jeong, M., Minson, J., Yeomans, M., & Gino, F. (2019). Communicating with warmth in distributive negotiations is surprisingly counterproductive. *Management Science*, 65(12), 1–25.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765–780.
- Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. The Leadership Quarterly, 20(6), 855–875.
- Judge, T. A., Scott, B. A., & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: test of a multilevel model. *Journal of Applied psychology*, 91(1), 126.
- Kao, J. L., Wu, D., & Yang, Z. (2009). Regulations, earnings management, and post-IPO performance: The Chinese evidence. Journal of Banking & Finance, 33(1), 63–76.
- Keller, T. (1999). Images of the familiar: Individual differences and implicit leadership theories. *The Leadership Quarterly*, 10(4), 589–607.
- Kirkulak, B., & Davis, C. (2005). Underwriter reputation and underpricing: Evidence from the Japanese IPO market. Pacific-Basin Finance Journal, 13(4), 451–470.
- Kotlar, J., Signori, A., De Massis, A., & Vismara, S. (2018). Financial wealth, socioemotional wealth, and IPO underpricing in family firms: A two-stage Gamble model. Academy of Management Journal, 61(3), 1–59.
- Kutsuna, K., Smith, J. K., & Smith, R. L. (2009). Public information, IPO price formation, and long-run returns: Japanese evidence. The Journal of Finance, 64(1), 505–546.
- Lashinsky, A. (1999). It's time to open up the road show. For tune, November, 8, 338.
- Leitterstorf, M. P., & Rau, S. B. (2014). Socioemotional wealth and IPO underpricing of family firms. *Strategic Management Journal*, 35(5), 751–760.
- Lévesque, M., Joglekar, N., & Davies, J. (2012). A comparison of revenue growth at recent-IPO and established firms: The influence of SG&A, R&D and COGS. Journal of Business Venturing, 27(1), 47–61.
- Lewellen, K. (2006). Risk, reputation, and IPO price support. The Journal of Finance, 61(2), 613-653.
- Logue, D. E. (1973). On the pricing of unseasoned equity issues: 1965–1969. Journal of Financial and Quantitative Analysis, 8(1), 91–103.
- Logue, D. E., & Lindvall, J. R. (1974). The behavior of investment bankers: An econometric investigation. *The Journal of Finance*, 29(1), 203-215.

- Logue, D. E., Rogalski, R. J., Seward, J. K., & Foster-Johnson, L. (2002). What is special about the roles of underwriter reputation and market activities in initial public offerings? *The Journal of Business*, 75(2), 213–243.
- Loo, B. (2020). A visible CEO is now more essential than ever. Milan, Italy. Retrieved from: Omnicom PR Group. https://www. omnicomprgroup.nl/thought-leadership/a-visible-ceo-is-now-more-essential-than-ever/
- Lord, R. G., De Vader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology*, 71(1), 402–410.
- Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance*, *34*(3), 343–378.
- Lord, R. G., & Maher, K. J. (1991). Cognitive theory in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 2, pp. 1–62). Washington, DC: APA.
- Loughran, T., & Ritter, J. R. (2002). Why don't issuers get upset about leaving money on the table in IPOs? The Review of Financial Studies, 15(2), 413–444.
- Lowry, M., & Murphy, K. J. (2007). Executive stock options and IPO underpricing. *Journal of Financial Economics*, 85(1), 39-65.
- Lowry, M., Officer, M. S., & Schwert, G. W. (2010). The variability of IPO initial returns. The Journal of Finance, 65(2), 425-465.
- March, J. G., & Simon, H. A. (1958). Organizations. Oxford, UK: Wiley.
- Mason, C., & Stark, M. (2004). What do investors look for in a business plan?: A comparison of the investment criteria of bankers, venture capitalists and business angels. *International Small Business Journal*, 22(3), 227–248.
- Mayo, M. (2017). If humble people make the best leaders, why do we fall for charismatic narcissists. *Harvard Business Review*, 4, 2–5.
- Megginson, W. L., & Weiss, K. A. (1991). Venture capitalist certification in initial public offerings. The Journal of Finance, 46(3), 879–903.
- Mikkelson, W. H., Partch, M. M., & Shah, K. (1997). Ownership and operating performance of companies that go public. Journal of Financial Economics, 44(3), 281–307.
- Mumford, M. D., & Van Doorn, J. R. (2001). The leadership of pragmatism: Reconsidering Franklin in the age of charisma. The Leadership Quarterly, 12(3), 279–309.
- Nelson, T. (2003). The persistence of founder influence: Management, ownership, and performance effects at initial public offering. Strategic Management Journal, 24(8), 707–724.
- Nielsen, R., Marrone, J. A., & Slay, H. S. (2010). A new look at humility: Exploring the humility concept and its role in socialized charismatic leadership. Journal of Leadership and Organizational Studies, 17(1), 33–43.
- Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Xiao, Z., & Song, L. J. (2014). Humble chief executive officers' connections to top management team integration and middle managers' responses. Administrative Science Quarterly, 59(1), 34–72.
- Ou, A. Y., Waldman, D. A., & Peterson, S. J. (2018). Do humble CEOs matter? An examination of CEO humility and firm outcomes. Journal of Management, 44(3), 1147–1173.
- Owens, B. P., Johnson, M. D., & Mitchell, T. R. (2013). Expressed humility in organizations: Implications for performance, teams, and leadership. Organization Science, 24(5), 1517–1538.
- Park, H. D., & Patel, P. C. (2015). How does ambiguity influence IPO underpricing? The role of the signaling environment. Journal of Management Studies, 52(6), 796–818.
- Park, S. W., Ferrero, J., Colvin, C. R., & Carney, D. R. (2013). Narcissism and negotiation: Economic gain and interpersonal loss. Basic and Applied Social Psychology, 35(6), 569–574.
- Payne, G. T., Trudell, L. T., Moore, C. B., Petrenko, O. V., & Hayes, N. T. (2022). Ambiguous signals and information asymmetry in the initial public offering process: Examining ownership concentration, process time, and underpricing. Group & Organization Management. https://doi.org/10.1177/10596011221090036
- Petrenko, O. V. (2020). CEOs: Another reason to value humble leaders. Harvard Business Review, 98(3), 28-29.
- Petrenko, O. V., Aime, F., Recendes, T., & Chandler, J. A. (2019). The case for humble expectations: CEO humility and market performance. *Strategic Management Journal*, 40(12), 1938–1964.
- Petrenko, O. V., Aime, F., Ridge, J., & Hill, A. (2016). Corporate social responsibility or CEO narcissism? CSR motivations and organizational performance. *Strategic Management Journal*, 37(2), 262–279.
- Picker, L. (2019). This year's red hot IPO market has seen more women CEOs than usual take companies public. *CNBC*. Retrieved from. https://www.cnbc.com/2019/07/05/more-women-ceos-than-usual-are-taking-companies-public-inipos.html
- Pollock, T. G., Chen, G., Jackson, E. M., & Hambrick, D. C. (2010). How much prestige is enough? Assessing the value of multiple types of high-status affiliates for young firms. *Journal of Business Venturing*, 25(1), 6–23.
- Pollock, T. G., & Rindova, V. P. (2003). Media legitimation effects in the market for initial public offerings. Academy of Management Journal, 46(5), 631–642.



193243, 3, 0. Downloaded from https://onlinetibury.wiley.com/doi/10.1002/sej 1451 by University Of Arkansas Library. Wiley Online Library on [01/02/2023]. See the Terms and Conditions (https://onlinetiburgw.wiley.com/doi/nos) on Wiley Online Library for rules of use; OA arkeles are governed by the applicable Creative Commons Liense

- Recendes, T., Aime, F., Hill, A. D., & Petrenko, O. V. (2022). Bargaining your way to success: The effect of Machiavellian chief executive officers on firm costs. *Strategic Management Journal*, 43, 2012–2041.
- Rötheli, T. F. (2010). Causes of the financial crisis: Risk misperception, policy mistakes, and banks' bounded rationality. The Journal of Socio-Economics, 39(2), 119–126.
- Russo, J. E., & Schoemaker, P. J. (1992). Managing overconfidence. Sloan Management Review, 33(2), 7–17.
- Scott, W. R. (1987). The adolescence of institutional theory. Administrative Science Quarterly, 32(4), 493-511.
- Smith, C. W. (1986). Investment banking and the capital acquisition process. Journal of Financial Economics, 15(1), 3-29.
- Sniezek, J. A. (1999). Judge advisor systems theory and research and applications to collaborative systems and technology. In Proceedings of the 32nd Hawaii International Conference on System Sciences.
- Spence, M. (1973). Job market signaling. Quarterly Journal of Economics, 87, 355-374.
- Summerell, E., Harmon-Jones, C., Denson, T. F., & Harmon-Jones, E. (2020). Humility is associated with less aggressive motivation. Personality and Individual Differences, 158(1), 1–10.
- Tangney, J. P. (2009). Humility. In S. J. Lopez & C. R. Snyder (Eds.), Oxford handbook of positive psychology. New York, NY: Oxford University Press.
- The American Heritage Dictionary. (2010). The American Heritage dictionary of the English language. Boston, MA: Houghton Mifflin.
- Tosi, H. L., Misangyi, V. F., Fanelli, A., Waldman, D. A., & Yammarino, F. J. (2004). CEO charisma, compensation, and firm performance. The Leadership Quarterly, 15(3), 405–420.
- Valentine, M. (2019). 8 Billionaires who are so humble they'll make you rethink your priorities (2019, January 18). *Goalcast*. Retrieved from. https://www.goalcast.com/billionaires-who-are-humble/
- Vera, D., & Rodriguez-Lopez, A. (2004). Strategic virtues: Humility as a source of competitive advantage. Organizational Dynamics, 33(4), 393–408.
- Weiss, H. M., & Knight, P. A. (1980). The utility of humility: Self-esteem, information search, and problem-solving efficiency. Organizational Behavior and Human Performance, 25(2), 216–223.
- Willenborg, M., Wu, B., & Yang, Y. S. (2015). Issuer operating performance and IPO price formation. Journal of Accounting Research, 53(5), 1109–1150.
- Wowak, A. J., Mannor, M. J., Arrfelt, M., & McNamara, G. (2016). Earthquake or glacier? How CEO charisma manifests in firm strategy over time. *Strategic Management Journal*, 37(3), 586–603.
- Yang, Q., Zimmerman, M., & Jiang, C. (2011). An empirical study of the impact of CEO characteristics on new firms' time to IPO\*. Journal of Small Business Management, 49(2), 163–184.

### SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Chandler, J. A., Petrenko, O. V., Hayes, N., Blake, A. B., & Aime, F. (2022). Do the personal attributes of CEOs matter in the IPO pricing process? An examination of charisma and humility. *Strategic Entrepreneurship Journal*, 1–25. https://doi.org/10.1002/sej.1451