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**CHIEF EXECUTIVE OFFICER PERSONALITY AND STAKEHOLDER
ENGAGEMENT**

Doctor of Philosophy

Management Department, School of Business Administration

University of Mississippi

Kaushik Mukherjee

August, 2022

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Abstract

The dissertation examines how the chief executive officer (CEO) personality traits have implications for the firm's strategy. The first chapter discusses the relationship between CEO Big Five personality traits and corporate social responsibility (CSR). The next chapter is on CEO Big Five and equity analyst forecasts. The final chapter deals with how CEO personality traits relate to corporate governance aspects such as board independence and board diversity.

List of Abbreviations or Symbols

CEO	Chief executive officer
CFO	Chief financial officer
CSR	Corporate social responsibility
EPS	Earnings per share
ESG	Environmental, Social, and Governance
GEE	Generalized estimating equations
IBES	Institutional Brokers' Estimate System
IMR	Inverse Mills Ratio
KLD	Kinder, Lydenberg, Domini & Co
MSCI	Morgan Stanley Capital International
NET	Net income
RE	Random effects
RE AR	Random effects autoregressive
ROE	Return on equity
ROA	Return on assets
SD	Standard deviation
TMT	Top management team
VIF	Variance inflation factor
χ^2	Chi-squared statistic

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I. INTRODUCTION

The chief executive officer (CEO) and top management team's values and cognitive base determine how they perceive their environment which has a bearing on organization strategy (Hambrick & Mason, 1984). The CEO in particular is responsible for strategic choices made by the firm (Hambrick, 2007).

Despite the CEO's substantial influence on firm strategy, there are few studies on their influence as an individual. It becomes pertinent to study the individual level influence of CEOs. CEOs subjectively view strategic choices available for their firms and decide on the course of action depending on their own psychological attributes (Chatterjee & Hambrick, 2007). Upper echelons theory posits a three step process to choose among strategic alternatives (Finkelstein, Hambrick & Cannella, 1996) which depends on psychological attributes such as personality. First, CEOs acquire or share information to form their field of vision. Second, CEOs selectively consider or ignore information from their field of vision. Finally, they interpret the selectively perceived information to evaluate and choose among strategic alternatives. Hence, it is relevant to study how CEO personality can impact the firm's strategic decisions (Peterson, Smith, Martorana & Owens, 2003).

Initial studies were on the relationship between discrete personality traits such as narcissism or hubris and firm's strategic outcomes aspects such as acquisitions (Chatterjee & Hambrick, 2007). Recent studies have started to consider broad personality traits such as the Big Five personality traits and their relationships with firm outcomes (Colbert, Barrick & Bradley, 2014). A linguistic measure using machine learning techniques finds positive effect of CEO

openness to experience and negative effect of agreeableness on strategic change (Harrison, Thurgood, Boivie & Pfarrer, 2019). Such measures have enabled studying personality traits among a firm's upper echelons where it was hitherto not feasible to measure personality. With personality measures at disposal and the increasing focus on examining how individual attributes in the firm's upper echelons relate to its strategic actions, this dissertation explores the relationship between firm's few strategic actions and individual level attributes in the upper echelons, especially in the CEO's case.

A brief review of personality research will facilitate better understanding of the basic concepts. It will also help to set the context for exploring the research questions in this dissertation.

Personality

Personality is an individual's characteristics which can predict his or her behavior (Roberts, 2006). It is abstract in nature, only identified through explicit or implicit individual behavior and relatively time invariant (McCrae & Costa, 1997).

The Big Five Model is a widely accepted theoretical basis for personality because the five dimensions capture most personality measures (Judge, Higgins, Thoresen & Barrick, 1999). The model is based on the factor analysis of personality ratings accumulated over 75 years (Hogan & Holland, 2003). The five factors are robust measures of personality traits because they are valid across various cultural contexts making them more generalizable and are consistent across multiple time periods which makes them relatively stable (Costa & McCrae, 1992).

The Big Five model consists of five dimensions of personality which are conscientiousness, extraversion, openness to experience, emotional stability and agreeableness (Goldberg, 1990). Conscientiousness pertains to hardworking nature, prudence, persistence and

methodical nature due to which individuals are perceived to be reliable and able to achieve results (Salgado, 1997). Emotional stability is the ability to deal with anxiety, hostility, depression and vulnerability and enables individuals to ensure their own well-being (Costa & McCrae, 1992). Extraversion is about being sociable, dominant and ambitious which drives individuals to take up leadership roles (Watson & Clark, 1997) and better communicate or verbally present their ideas (Chiaburu, Oh, Berry, Li & Gardner, 2011). Openness to experience relates to creativity, curiosity, variety and enables individuals to come up with ideas of constructive change in an organizational context (Judge et al., 1999). Agreeableness makes individuals cooperative, engage in quality social interactions and act as good team players (Chiaburu et al., 2011).

Personality and Job Performance

Among the Big Five dimensions, conscientiousness and emotional stability are the most relevant for predicting job performance (Hurtz & Donovan, 2000). The authors argue that conscientious individuals are relatively more diligent and reliable which makes them better performers at the workplace. They also show that emotionally stable individuals will show better job performance because individuals who are less nervous or anxious among others, have less constraints in performing at the workplace. Agreeableness and extraversion are relevant predictors for performance when the job involves interpersonal interaction, and openness to experience better predicts training proficiency because it endows an individual with curiosity and intelligence essential for learning (Barrick & Mount, 1991).

CEO Personality in Organizational Context

As I consider the relationship between an individual's personality traits and job performance, it would be pertinent to explore the impact of personality traits for key decision

makers in an organization such as the chief executive officer (CEO). In this study, I explore whether Big Five personality traits predict the CEOs' ability to manage stakeholders through their involvement in CSR. Next, I evaluate how CEOs' personality traits influence analysts' estimates about their respective firms. Finally, I also study whether Big Five traits influence how CEOs cope with mechanisms such as board independence that curtail their power or autonomy. Further, how do Big Five traits influence how they deal with ideas and individuals of different hues manifested in board diversity.

Through this empirical study, I contribute to our knowledge of how CEO personality traits impact the engagement with firm stakeholders in general. Next, I contribute to the study of how CEO personality traits relate to the engagement with an external monitoring mechanism (equity analysts) that primary serve the shareholders. In the final part, I add to our knowledge of how CEO personality impacts board structure and composition which are geared to monitor the agent (top management including the CEO) from within the firm and on behalf of the principal (shareholders).

The rest of the dissertation is structured as follows. The first chapter discusses the relationship between CEO personality traits and corporate social responsibility (CSR). The next chapter is on CEO personality traits and equity analyst forecasts. The final chapter is about how CEO personality traits relate to corporate governance aspects such as board independence and board diversity.

II. CHAPTER 1: HOW CEO PERSONALITY TRAITS RELATE TO CORPORATE SOCIAL RESPONSIBILITY

Introduction

The firm's strategic decisions bear the imprint of the CEO's values, cognitions and dispositions (Chatterjee & Hambrick, 2007). This is because personality traits influence how I habitually think, feel, and act (Saucier & Goldberg, 2001). CEOs' personality traits determine how they interpret the environment, what strategic choices they decide to roll out and eventually their overall impact on firm performance (Hambrick, 2007). Consequently, there is growing interest to know how CEO personality traits influence different aspects of firm strategy and outcomes (Chatterjee & Hambrick, 2011).

Empirical research shows that CEO personality traits play a role in the firm's strategic actions (Miller & Toulouse, 1986; Nadkarni & Herrmann, 2010). Among the strategic actions, stakeholder strategy is important for firms to deal with a multitude of stakeholders beyond their direct business interests or as required by law (McWilliams & Siegel, 2001). Corporate social responsibility (CSR) is a means to engage with those stakeholders who can influence firm outcomes (Freeman, 1984). Few studies within extant research consider CSR to have any meaningful relation with CEO personality. In fact, drivers internal to the firm such as personal characteristics of decision makers (Chin, Hambrick & Trevino, 2013) have received less focus. Rather, the emphasis has been on external drivers of CSR such as stakeholder activism (David, Bloom & Hillman, 2007) or institutional pressure (Matten & Moon, 2008). CSR is concerned with creating societal value due to which values deemed important by stakeholders or the

institutional environment become relevant and research tends to deal more with these external factors (Petrenko, Aime, Ridge & Hill, 2016). The lack of focus especially on CEO's broad personal attributes, is noteworthy considering how upper echelons research focuses on the relationship between executive's personality and firm's strategic decisions (Finkelstein, Hambrick & Cannella, 1996).

CSR engagement enables firms to differentiate themselves (McWilliams, Siegel & Wright, 2006). CSR helps to build competitive advantage for the firm and comes within the ambit of firm strategy (Hart, 1995). Since CEOs have authority to decide on discretionary activities such as CSR engagement, CEOs' personal attributes guide their CSR decisions (Tang, Qian, Chen & Shen, 2015). CEO personality traits relate to organizational effectiveness and performance (Colbert, Barrick & Bradley, 2014). To expand our knowledge of the relationship between CEO personality traits and firm's strategic actions, I explore how it relates to one particular aspect of strategy - CSR engagement.

Studies on CEO personality have considered distinct personality traits like narcissism (Chatterjee & Hambrick, 2007), locus of control (Miller & Toulouse, 1986). Recent studies have looked at CEO personality through a comprehensive framework such as the Big Five, possible largely due to a new linguistic measure of CEO personality (Harrison, Thurgood, Boivie & Pfarrer, 2019). The same study analyzes how CEO comprehensive personality traits relate to strategic change in the firm. I study whether Big Five traits predict the CEOs' ability to manage stakeholders. Accordingly, I explore how CEO's Big Five traits influence the firm's propensity for CSR with munificence as a contingent factor for this relationship.

I make two important theoretical contributions through this study. First, I link CEO broad personality traits with the firm's stakeholder engagement (McWilliams et al., 2006). Stakeholder

theory provides an ethical as well as business justification for CSR (Donaldson & Preston, 1995), and our approach enables me to expand the micro-foundations of this theory. Engaging with stakeholders is essential for the firm to uphold its responsibilities of creating value from its business and catering to the needs of society at large. The CEO in particular decides on the engagement with stakeholders. These decisions depend on the CEO's personality attributes similar to other strategic decisions. By relating CEO personality traits to CSR, I explore the individual level attributes that contribute to CSR strategy. Second, I contribute to upper echelons research by demonstrating how broad personality traits can influence firm strategy pertaining to stakeholders. The study is the first to explore the differential relationship between broad personality traits such as Big Five and CSR and the contingency mechanisms that bear on this relationship.

Theoretical Background

Firm activities reflect the values and cognitive base of their key decision makers (Hambrick & Mason, 1984). Among the key decision makers, CEO is influential in deciding firm strategy (Busenbark, Krause, Boivie & Graffin, 2016). CEOs, like any other individual, are constrained by cognitive capacity and simplify decision making through cognitive heuristics (Weber & Milliman, 1997). They perceive a part of the stimuli they are exposed to, with stimuli selection depending on their psychological attributes (Finkelstein, Hambrick & Cannella, 1996). Hence, CEOs' personality and other psychological characteristics therefore determine how they interpret situations and challenges faced by their firms (Finkelstein, Hambrick & Cannella, 2009). Based on their own interpretation, CEOs decide on strategic choices for their firms (Hambrick, 2007).

CSR has become an important component of firm strategy due to stakeholder salience for business to gain legitimacy (Carroll, 1979), firm's obligation to uphold business ethics (Freeman, 1994), and its contribution towards achieving the firm's economic objectives (McWilliams & Siegel, 2001). CSR is "context-specific organizational actions and policies that take into account stakeholder expectations and the triple bottom line of economic, social and environmental performance (Aguinis 2011, p. 855). Through CSR, firms fulfill their obligations towards internal as well as external stakeholders (Carroll, 1991). CSR activities target communities and environments beyond the ambit of a firm's core business responsibilities and facilitates trust between the firm and its stakeholders (Bansal & Roth, 2000).

CSR involves decisions that are intangible and outcomes that are not easily calculable, and managers exercise discretion to plan the firm's CSR involvement (Margolis & Walsh, 2003). These decisions depend more on the CEO characteristics such as their personality traits (Chatterjee & Hambrick, 2007).

Narcissism drives a CEO's need for attention and positive image building (Chatterjee & Hambrick, 2011). Since CSR initiatives portray firms to be doing beneficial work for the society, it enables CEOs to show that they are leading their firms to do morally desirable behaviors (Petrenko et al., 2016). Consequently, this study finds CSR to be positively related to CEO narcissism. Hubris leads CEOs to overestimate their own capabilities and downplay the risks involved in their decisions (Hiller & Hambrick, 2005). They also underestimate the firm's dependence for resources on external stakeholders (Malmendier & Tate, 2005). CSR is a hedge against negative fallout from the firm's risks and also enables the firm to engage with stakeholders for securing access to vital, external resources (Godfrey, 2005). But the overly positive self-assessment of hubristic CEOs drives them to see less merit in CSR leading to a

negative relationship between CEO hubris and CSR (Tang et al., 2015). Machiavellianism reflects a tendency for self-interest and cynical attitude towards others (Mudrack, 2007). An individual endowed with this trait perceives CSR to be fraudulent, hypocritical (Friedman, 1970) and is less inclined to pursue CSR. Extant research shows that specific CEO personality traits influence a firm's CSR activities. Some of these specific traits demonstrate a positive influence while others have a negative influence on a firm's CSR.

There are studies on the relationship between CEO's specific personality traits and CSR. But comprehensive personality traits are relatively less studied. They are relevant to understand how CEOs perceive CSR to benefit their firms and frame their strategy accordingly. Since CSR involves intangible decisions and uncertain outcomes, I expect CEO's personality traits to play a role in perceiving the benefits of CSR. The widely accepted and commonly used Big Five framework capture personality traits (Goldberg, 1990). The Big Five dimensions help me to know how CEOs perceive CSR. This enables me to explore how different personality dimensions for the CEO relate to the firm's CSR propensity.

Hypotheses Development

Instrumental Approach to CSR

Stakeholders are entities with legitimate interests associated with the firm and their interests are of intrinsic value to the firm (Donaldson & Preston, 1995). Firms have a fiduciary responsibility to these stakeholders such as customers, suppliers, community etc. which can be fulfilled through CSR (Freeman, 1984). CSR is a mechanism for a firm to discharge its economic, legal and ethical responsibilities (Carroll, 1991). In this regard, a firm's key decision makers including the CEO have to engage with a wide range of stakeholders, manage their often competing interests and meet societal expectations (Carroll, 1979).

Instrumental approach for CSR enables me to understand how CSR is beneficial to the firm (Garriga & Mele, 2004). The instrumental approach considers CSR as a source of competitive advantage which contributes to superior firm performance while taking care of societal interests (Porter & Kramer, 2006). Firms demonstrate socially responsible behavior to build their reputation and trust among stakeholders. It attracts ethical investors (Baron & Diermeier, 2007), socially conscious customers (Varadarajan & Menon, 1988) who start to transact with the firm. Business practices can be for improving socio-economic conditions of certain sections of society who gradually become customer segments and a source of competitive advantage for the firm (Prahalad & Hammond, 2002). Eventually, business grows through CSR engagement and creates more shareholder value (McWilliams & Siegel, 2011). Thus, CSR becomes an instrument to pursue long term shareholder maximization while also taking into account other stakeholder interests (Jensen, 2000).

The Big Five dimensions of conscientiousness can parse out the relationship between CEO personality and firm's CSR propensity. Conscientiousness drives CEOs to follow rules and norms for achieving goals (Peterson et al., 2003). In this regard, CEOs consider it their responsibility to create value for the firm. CSR being an instrument for value creation, I expect conscientiousness to be related to CSR engagement. CSR engagement provides avenues for new experience beyond firm level responsibilities (Garriga & Mele, 2004). Openness to experience drives CEOs to employ CSR and experiment with new ideas to maximize firm value. Extraversion motivates CEOs to communicate and interact with others to implement ideas that generate (O'Reilly, Caldwell, Chatman & Doerr, 2014). CSR provides such an opportunity especially with stakeholders. CSR also exposes CEOs to the conflicting demands of different stakeholder groups. I expect emotional stability to enable CEOs to maintain composure and work

towards reconciling conflicting expectations through CSR activities (Colbert et al., 2014). Agreeableness motivates CEOs to be helpful and willing to accommodate others (O'Reilly et al., 2014). Agreeable CEOs are inclined to engage in CSR to do good to the stakeholders and society at large. Since industry munificence enables more resources to be available to the firm (Castrogiovanni, 1991) and latitude to invest in non-market strategies (Goll & Rasheed, 2004), I consider munificence as a contingent factor for the relationship between CEO personality and firm's CSR activities. If I consider the expected relationships as mentioned above, it becomes pertinent to explore how the CEO's broad personality traits relate with the firm's CSR propensity.

Conscientiousness. Conscientiousness is the tendency to be achievement oriented and dependable (McCrae & Costa, 1997). Conscientious individuals are dependable because they follow rules and established norms, and are scrupulous while taking decisions (Costa & McCrae, 1992). Conscientious CEOs possess a strong urge to have control over their prevailing situations in order to achieve their goals (Judge & Bono, 2000). Conscientiousness positively relates to perceptions of strong leadership and positive team dynamics such as greater cooperation and cohesion (LePine & Van Dyne, 2001). Highly conscientious leaders also tend to exhibit high integrity, and foster work climates that are perceived as just (Goldberg, 1990). They demonstrate a tendency for upholding legal and ethical standards (Costa & McCrae, 1988).

A firm has multiple stakeholders whose interests are intertwined with that of the firm (Freeman, 1984). As per stakeholder theory, the firm has to consider the interests of multiple stakeholders because it can be instrumental in maximizing the firm's value creation (Waddock & Graves, 1997). CSR is a mechanism through which the firm can engage with multiple stakeholders and look after their interests (Carroll & Buchholtz, 2014). CSR also enables CEOs

to face less disruption while dealing with stakeholders and satisfy their need to control their business environment (Pearce & Manz, 2011).

Conscientious CEOs are more inclined to manage stakeholders because they want to ensure continuity and less disruption in their firms' business (Peterson et al., 2003). CSR enables such CEOs to maintain control of their environment by engaging with stakeholders (Thauer, 2014) and achieve their firm's business objectives. CSR improves firms' reputation as reliable and honest entities (McWilliams & Siegel, 2001) because it has the potential to improve the socio-economic conditions of stakeholders, thereby creating competitive advantage for firms (Prahalad & Hammond, 2002). CSR becomes an instrument to preempt disruption in the business environment and create value for their own firms (Gond, Akremi, Swaen & Babu, 2017). Conscientious CEOs tend to uphold norms that help to improve the firm's financial outcomes. CSR enables firms to take into account stakeholder concerns while maximizing shareholder value. Thus, conscientious CEOs prefer to adopt CSR.

H1: CEO conscientiousness is positively related to the firm's corporate social responsibility

Extraversion. Extraverted individuals are assertive, capable of effectively communicating their opinion and ideas, and able to exert influence over others (Costa & McCrae, 1996). When in leadership positions, they are willing to challenge the status quo because they enjoy being part of change (Bono & Judge, 2004). Extraversion enables business leaders to persuade other decision makers in their firms and concur on value creating strategies (Peterson et al., 2003). Extraverted CEOs develop extensive networks within and outside the firm by virtue of their ability to form relationships in social settings (McDonald & Westphal, 2003).

Extraversion captures individuals' ambition and salience of gain outcomes (Judge & Cable, 1997). Extraverted CEOs are more inclined to challenge the status quo and initiate new strategic initiatives that contribute to better financial outcomes (Benischke, Martin & Glaser, 2019). It takes the form of CSR engagement when dealing with stakeholders. Stakeholder theory implies that firms fulfill their responsibility towards stakeholders by attempting to bring about positive change for them (Carroll, 1999). CSR not only caters to stakeholders but also becomes an important component of firm strategy to avail new opportunities or build competitive advantage (Porter & Kramer, 2006).

CSR as an instrument of change provides extraverted CEOs an opportunity to communicate with and influence others to garner support for their strategic initiatives (Gupta, Nadkarni & Mariam, 2019). The ability to build networks within and outside their firms enables extraverted CEOs to involve others and reduce resistance towards their initiatives (Nadkarni & Hermann, 2010). Therefore, extraverted CEOs have a propensity for CSR engagement in order to take care of stakeholders as well as their own firms.

H2: CEO extraversion is positively related to the firm's corporate social responsibility

Emotional Stability. Emotionally stable CEOs are endowed with higher levels of self-confidence and more capability for emotional adjustment (Nadkarni & Hermann, 2010). As individuals in leadership positions, they are less prone to anxiety and insecurity (Giberson et al., 2009). They are creative and motivated enough to manage strategic initiatives (Judge, Erez & Bono, 1998) so that their subordinate teams work towards the firm's benefit (Peterson et al., 2003).

CEOs have to manage multiple stakeholders especially outside their firms because firms gain legitimacy when they fulfill stakeholder expectations (Carroll, 1979). Stakeholders

increasingly hold firms accountable for their actions and expect them to be socially responsible (Garriga & Mele, 2004). For firms, CSR becomes a mechanism to integrate stakeholders with their business so that it benefits both of them (Orlitzky, 2013). Since CSR has expanded to include wider range of issues and firms have gradually coupled CSR with their business, it has made both CSR and business strategy more complex and demanding to manage (Carroll, 2008).

Emotionally stable CEOs are able to handle strategies that involve a multitude of options including product choice, R&D, production planning, marketing plan and more (Miller & Toulouse, 1986). They are adaptable and are more likely to remain composed when faced with new scenarios (McCrae & Costa, 1997) that strategic initiatives such as CSR engagement may entail. They have the confidence to foster activities and behaviors essential to fulfill the firm's business objectives (Colbert, Barrick & Bradley, 2014). They take into account stakeholder as well as business concerns to fulfill the firms' social and economic responsibility (Carroll, 1991). The ability to balance priorities and coordinate enables emotionally stable CEOs to better integrate stakeholders with their firms' strategic decisions and secure the firm's legitimacy.

H3: CEO emotional stability is positively related to the firm's corporate social responsibility

Openness to experience. Individuals endowed with openness to experience are imaginative, receptive to new ideas and challenge existing beliefs and traditions (McCrae & Costa, 1987). They seek out change by gathering new information and coming up with novel solutions to tackle problems (Goldberg, 1990). As CEOs, they encourage their subordinates to question established, taken for granted practices and come up with new ideas to innovate (Benischke et al., 2019).

Firms need to be accountable to the stakeholders in association with whom they are operating (Carroll, 1999). Thus, CEOs engage with their firms' stakeholders to respond to their

concerns because it can eventually improve firm outcomes such as profitability, reputation and more (Garriga & Mele, 2004). Firms fulfill their obligation to stakeholders by providing new interventions and improving their wellbeing through CSR (Donaldson & Dunfee, 1999).

CSR provides an opportunity to develop new interventions to address stakeholders' demands (McWilliams & Siegel, 2001). CEOs high on openness to experience are adaptive and less risk averse when it comes to rolling out new initiatives (Giberson et al., 2009). They are able to foster innovative and creative solutions (Colbert, Barrick & Bradley, 2014). CSR improves the firm's legitimacy and accrues competitive advantage to the firm (Porter & Kramer, 2006). CSR acts as an insurance against reputation loss due to socially irresponsible action (Flammer, 2013). Since CSR provides legitimacy to potentially make up for deviance in future, it positively influences managerial risk taking (Ayadi et al., 2015). Therefore, CEOs endowed with openness to experience view CSR as a medium to devise novel methods and serve their firm's stakeholders.

H4: CEO openness to experience is positively related to the firm's corporate social responsibility

Agreeableness. Agreeable CEOs demonstrate tendencies of altruism, empathy and kindness (Hermann & Nadkarni, 2014). They engender a culture of cooperation and trust within their firms (Judge & Bono, 2000). They prefer to share power in order to decentralize decision making (Giberson et al., 2009). They are able to build good relationships with others in the top management and also facilitate good relationships among them (Peterson et al., 2003). They prefer a collaborative to a combative work environment so that team members don't feel left behind and contribute more effectively to their firms (Bono & Judge, 2004).

CEOs have to determine their firms' strategic course while keeping in mind the stakeholders' interests so that they can also benefit from the firms (Freeman, 1994). Stakeholder theory implies that the main driver to consider stakeholders is their interests being legitimate and deserving attention (Donaldson & Preston, 1995). CEOs employ CSR to fulfill fiduciary responsibility towards stakeholders and ensure that firms act in ways that eventually benefit the society (Freeman, 1984).

CSR enables the CEOs to demonstrate their concern towards others (Rupp & Mallory, 2015). CSR is a medium to express concern for the environment and the society (Gond et al., 2017). CSR caters to their higher order needs to do something benevolent for the society (Glavas, 2016). Agreeable CEOs being concerned about their relationships with others (Hogan & Hogan, 1995), see merit in employing CSR to engage with stakeholders and contribute to their wellbeing.

H5: CEO agreeableness is positively related to the firm's corporate social responsibility

Moderation effect

Environmental munificence. Environmental munificence makes more resources available to the firm (Castrogiovanni, 1991). It ensures more opportunities for the firm to grow within the business environment (Aldrich, 1979). When more resources are available, firms not only focus on their core business activities but also allocate resources to activities like CSR which are less proximal to their core business functions (Goll & Rasheed, 2004). Managers also have more discretion about their actions due to which their preferences for investment will be on display when the environment permits more latitude for action (Shen & Cho, 2005)

More investment in CSR benefits stakeholders more and further enhances the firms' legitimacy among the stakeholders (Orlitzky, 2013). In a munificent environment, CEOs have

the latitude to allocate more resources to CSR and accrue more benefits to their firms (Goll & Rasheed, 1997). There is less motivation to conserve resources in a munificent environment, rather there would be more propensity to allocate to CSR (Staw & Swajkowski, 1975).

Investments in CSR is discretionary but contributes to superior financial outcomes such as reduced cost of capital (Sharfman & Fernando, 2008). Conscientious CEOs are motivated to achieve their firms' business goals and adhere to norms that enable them to do so (Peterson et al., 2003). With access to more resources in a munificent environment, conscientious CEOs are more inclined to invest in CSR to benefit stakeholders and eventually their own firms.

Extraverted CEOs are ambitious to succeed in managing their firms and want to roll out new initiatives to realize their goals (Gow et al., 2017). CSR is an instrument for new ways to engage with stakeholders and maximize value for shareholders (McWilliams & Siegel, 2011). A munificent environment provides more discretion to invest in CSR activities (Goll & Rasheed, 2004). Extraverted CEOs utilize this opportunity to invest more in CSR to benefit both stakeholders and firms.

Emotionally stable CEOs adapt to new situations or handle complexities better (Benischke et al., 2019). CSR is a source of competitive advantage for shareholder value creation (Jensen, 2000) even though it involves engaging more with stakeholders and balancing their interests. Emotionally stable CEOs are able to better deal with such demands and willing to deploy more readily available resources in a munificent environment towards CSR.

Firms get involved in CSR to cater to stakeholder interests while accruing favorable outcomes for their business (McWilliams & Siegel, 2001). It includes access to ethical investors (Baron & Diermeier, 2007) or socially conscious customers (Varadarajan & Menon, 1988) that influences firm performance positively. Openness to experience enables CEOs to better deal with

all these stakeholders because they understand and adapt better to other's perspectives (Colbert et al., 2014). Such CEOs will invest more in CSR when munificent environment provides them the latitude and create a win-win situation.

CSR involvement projects a sense of trust, collaboration and moral stature about the firm (Shea & Hawn, 2019). Agreeable CEOs foster cooperative culture within their firms to take everyone along due to their sense of empathy and kindness (Herrmann & Nadkarni, 2014). CSR becomes an instrument to extend their sense of altruism when engaging with stakeholders (Gond et al., 2017). In a munificent environment with ample discretionary resources, agreeable CEOs invest them in CSR to fulfill their sense of responsibility towards stakeholders.

The individual level drivers of CSR propensity such as the CEO's personality would be more pronounced with more resources at disposal. Therefore, CEO's broad personality traits such as Big Five would have a stronger association with the firm's CSR.

H6a: Environmental munificence moderates the relation between CEO conscientiousness and firm's corporate social responsibility with higher levels of munificence strengthening the positive relationship between them.

H6b: Environmental munificence moderates the relation between CEO extraversion and firm's corporate social responsibility with higher levels of munificence strengthening the positive relationship between them.

H6c: Environmental munificence moderates the relation between CEO emotional stability and firm's corporate social responsibility with higher levels of munificence strengthening the positive relationship between them.

H6d: Environmental munificence moderates the relation between CEO openness to experience and firm's corporate social responsibility with higher levels of munificence strengthening the positive relationship between them.

H6e: Environmental munificence moderates the relation between CEO agreeableness and firm's corporate social responsibility with higher levels of munificence strengthening the positive relationship between them.

Methods

Sample and Data Collection

The sample for this study covers CEOs of S&P 500 firms. A novel linguistic tool analyzes transcripts of quarterly earnings calls to measure CEO personality traits (Harrison et al., 2019). The period covered in the study is from 2000 to 2017. CSR data is from Kinder, Lydenberg, Domini & Co (KLD) ratings in the MSCI ESG database. It provides comprehensive firm level CSR measures and is commonly used in CSR research (Waddock & Graves, 1997). Financial data is mainly in the form of firm level control variables and is available in the COMPUSTAT database. CEO level control variables are based on CEO level data from the Execucomp database.

Independent Variables

CEO Personality. I measure CEO personality using the Open Language Chief Executive Personality Tool (OLCPT) (Harrison et al., 2019). The linguistic tool relies on CEO's spoken language during quarterly earnings calls. There are other measurement techniques for personality traits. They are based on samples of undergraduate students and are not easily generalizable to diverse populations such as CEOs which makes this tool relevant (Harrison et al., 2020). The linguistic tool analyzes CEOs' responses to unscripted questions posed by analysts during the

question and answer (Q&A) section of quarterly earnings calls. CEOs' responses during this section are in their own words and are not scripted making them a good source of information about CEO personality (Malhotra, Reus, Zhu & Roelofsen, 2018).

The measures pertain to the Big Five traits of conscientiousness, extraversion, emotional stability, openness to experience and agreeableness. They are based on the observed personality traits and are on a 7-point scale (Harrison et al., 2019).

Environmental munificence. Environmental munificence is the moderator in this model. It is the ability of a business environment to support an organization's growth (Aldrich, 1979). I operationalize this variable as the growth rate in five year trailing sales and measure it as the regression coefficient of sales on time during the same period (Dess & Beard, 1984).

Firm specific financial information required to calculate environmental munificence is available from COMPUSTAT database.

Dependent Variable

CSR. I use KLD ratings as a measure for firm level corporate social responsibility. KLD data is widely used in CSR research because it has good empirical reliability, has less subjectivity and is more representative of firm level CSR (Choi & Wang, 2009). The data is based on ratings by independent analysts on CSR categories such as community, diversity, environment, human rights, corporate governance, employee relations and product quality (Hillman & Keim, 2001).

I follow the commonly used approach in literature and operationalize CSR as the aggregate score of strengths and concerns on the seven dimensions in year (t+1) (Graves & Waddock, 1994). KLD ratings are available in the MSCI ESG database. The aggregate of net CSR scores ensures parsimony during analysis and is in line with the use of composite CSR

scores in practice (Chatterji, Durand, Levine & Touboul, 2016). KLD data are less problematic and less subjective than other available metrics (Wong, Ormiston, and Tetlock, 2011). Empirical tests on reliability and validity of KLD ratings have been generally yielded supportive results (Sharfman, 1996). KLD ratings are used extensively by institutional and individual social investors which corroborates their perceived meaningfulness (Chin, Hambrick & Trevino, 2013).

Control Variables

I control for possible confounding effects at the CEO, firm and industry levels.

CEO level. I control for *CEO age* and *CEO gender* (coded as 1 if female, 0 if male) as CSR propensity varies with them (Gupta, Briscoe & Hambrick, 2017). I consider CEO's power within the boardroom (Shen & Cannella, 2002) which might influence the CEO's ability to invest in CSR. *CEO duality* coded as 1 if CEO is also the board chair, 0 otherwise (Petrenko et al., 2016). The model also includes *CEO compensation* as the total compensation (Serfling, 2014). The relevant information to calculate the CEO level control variables are included in the Execucomp and COMPUSTAT databases.

Firm level. Firm specific conditions influence CSR propensity. I control for *Firm performance* in year (t-1) as the return on assets (RoA) and *Firm size* as the natural log of employee count all of which may relate to the firm's ability to invest in CSR (Bushee & Miller, 2012). Financial information relevant for firm level variables is in the COMPUSTAT database. I account for the differences in firms' operating strategy through *R&D intensity* as R&D expenses by sales, and *Capex intensity* as capital expenditure by sales (Hubbard, Christensen & Graffin, 2017). I calculate the ratios with firm level financial data from COMPUSTAT database.

Industry level. I control for industry effects in the model through an industry level dummy for two digit SIC codes (Tang et al., 2015). Firms in dynamic industry are subject to

more potential risks or returns which may influence their CSR engagement (Goll & Rasheed, 2004). The model also includes industry dynamism as the standard error of regression coefficient of sales on time by the industry mean for the period 2001-2017 (Dess & Beard, 1984). Industry level control variables require firm level financial information which is present in the COMPUSTAT database.

Model and Estimation

Model analysis utilizes generalized estimating equations (GEE) in line with previous research on relatively stable personality traits such as narcissism (Chatterjee & Hambrick, 2007). GEE derives maximum likelihood estimates and accommodates non-independent observations which makes it suitable when using panel data (Liang and Zeger, 1986). I do not use a fixed-effects model because it is not appropriate when models include time invariant variables (such as CEO personality). I use the *xtgee* command in Stata 14.0 to fit general linear models for the panel data (StataCorp, 2009). Inclusion of robust variance estimator in the model ensures heteroscedasticity-robust estimation method (White, 1980).

Results

Table 2.1 is for correlations of all variables which are part of the regression model for CSR. I check for any potential multicollinearity issues in the model. The mean variance inflation factor (VIF) of the model is 1.33 with no VIF for individual variables exceeding 3.0. Thus, results show that the model does not have any substantial issues of multicollinearity.

Table 2.1. Summary statistics

Variables	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) CSR	0.40	2.58	1.00															
(2) Conscientiousness	5.15	0.52	0.05	1.00														
(3) Extraversion	4.75	0.78	0.12	0.23	1.00													
(4) Agreeableness	4.07	0.74	0.14	0.40	0.30	1.00												
(5) Neuroticism	3.33	0.64	-0.09	-0.31	-0.50	-0.45	1.00											
(6) Openness	4.68	0.57	0.14	0.55	0.47	0.65	-0.53	1.00										
(7) Environmental Munificence	31489.41	58203.24	0.06	0.04	-0.02	-0.11	0.03	-0.03	1.00									
(8) CEO age	55.46	7.17	0.00	-0.03	-0.06	-0.11	0.03	-0.11	0.01	1.00								
(9) CEO gender	0.03	0.18	0.11	0.09	0.02	0.08	-0.06	0.09	-0.03	-0.05	1.00							
(10) CEO duality	0.54	0.50	0.02	0.01	0.03	-0.06	0.00	-0.05	0.00	0.27	-0.06	1.00						
(11) CEO compensation	5502.70	10060.44	0.14	0.00	0.04	0.03	-0.01	0.04	0.03	0.03	0.00	0.09	1.00					
(12) Firm size	8.31	2.00	0.22	0.06	0.16	0.01	-0.08	0.00	-0.07	0.10	0.02	0.20	0.23	1.00				
(13) Firm performance	0.03	0.34	0.06	0.04	0.03	0.03	-0.02	0.03	-0.07	0.02	0.01	0.03	0.04	0.08	1.00			
(14) R&D Intensity	0.12	4.03	-0.01	0.01	0.01	0.06	-0.05	0.03	0.01	0.01	0.00	-0.03	-0.01	-0.07	-0.09	1.00		
(15) Capex Intensity	2.01	56.78	-0.01	0.00	-0.04	-0.02	0.02	-0.01	0.03	0.00	0.00	-0.02	-0.01	-0.08	-0.03	0.17	1.00	
(16) Industry Dynamism	0.01	0.02	-0.05	-0.02	0.01	-0.03	0.01	-0.05	-0.14	-0.03	0.00	0.01	0.00	0.06	0.02	-0.01	-0.02	1.00

Table 2.2 includes the results of panel data regression for CSR with CEO personality traits. I initiate the analysis by introducing the control variables in Model 1. Next, I add the independent variables in Model 2. I use this model to interpret the main effects of CEO personality traits. Hypotheses predict all five CEO personality traits to positively influence the firm's CSR. Results confirm the positive relationship with CSR for emotional stability ($\beta = 1.01$, $p < 0.05$), agreeableness ($\beta = 1.30$, $p < 0.05$). In Figure 2.1a, CSR changes from nearly zero but slightly negative to positive increasing by almost 8 units as emotional stability increases from lower values (1 SD below mean) to higher values (1 SD above mean). In this regard, negative CSR means the firm has CSR constraints exceeding its CSR strengths. I observe a similar graphical profile in Figure 2.1b with an increase of almost 1 unit for the relationship between CEO agreeableness and firm's CSR which lends support for H3 and H5.

However, conscientiousness does not have any significant relationship with CSR (H1). Extraversion (H2) and openness to experience (H4) have significant negative influence contrary to predictions. Hence, I do not find support for these hypotheses.

I include the interaction terms in Model 3 to examine the moderation effects of environmental munificence. Hypotheses predict that environmental munificence strengthens the relationship between CEO personality factors and CSR. The moderation effect is not significant for any of the five personality traits. Thus, I do not find support for the five hypotheses (H6a-H6e) on moderation.

Table 2.2. GEE panel data regression

Variables	(1) CSR	(2) CSR	(3) CSR
Conscientiousness		-0.15 (0.52)	-0.22 (0.56)
Extraversion		-1.27** (0.50)	-0.96** (0.45)
Agreeableness		1.30** (0.51)	1.10* (0.60)
Emotional stability		1.01** (0.49)	1.17** (0.56)
Openness to experience		-0.50 (0.39)	-0.41 (0.44)
Environmental munificence		0.00*** (0.00)	0.00* (0.00)
Conscientiousness X Environmental munificence			-0.00 (0.00)
Extraversion X Environmental munificence			-0.00 (0.00)
Agreeableness X Environmental munificence			0.00 (0.00)
Emotional stability X Environmental munificence			0.00 (0.00)
Openness X Environmental munificence			-0.00 (0.00)
CEO age	0.09*** (0.02)	0.08*** (0.02)	0.08*** (0.02)
CEO gender	0.90*** (0.33)	0.64* (0.34)	0.68** (0.32)
CEO duality (1=yes; 0=no)	-0.25*** (0.09)	-0.19** (0.09)	-0.19** (0.09)
CEO compensation	0.00 (0.00)	0.00* (0.00)	0.00** (0.00)
Firm size	0.24*** (0.03)	0.25*** (0.03)	0.25*** (0.03)
Firm performance	0.04 (0.25)	0.10 (0.26)	0.10 (0.26)
R&D intensity	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.01)
Capex intensity	-0.00** (0.00)	-0.00* (0.00)	-0.00* (0.00)
Industry dynamism	-7.73*** (2.21)	-7.14*** (2.17)	-6.98*** (2.13)
Inverse Mills Ratio	-12.31*** (3.64)	-11.31*** (3.77)	-11.13*** (3.81)
Constant	-5.57*** (0.88)	-5.35*** (1.73)	-6.68*** (1.86)
Observations	15,105	15,105	15,105
χ^2 -statistic for model	178.9	203.4	227

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 2.1a. Main effect for CSR (GEE model)

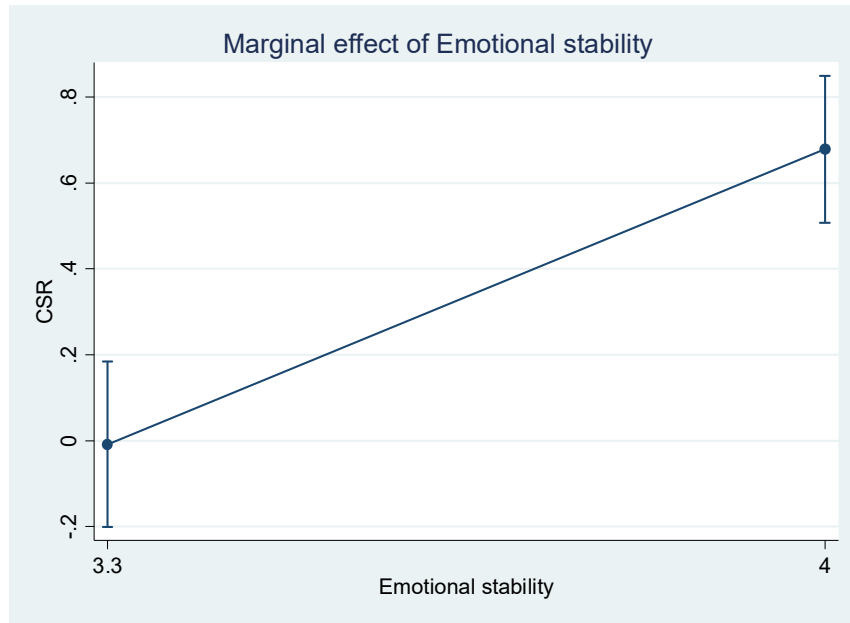
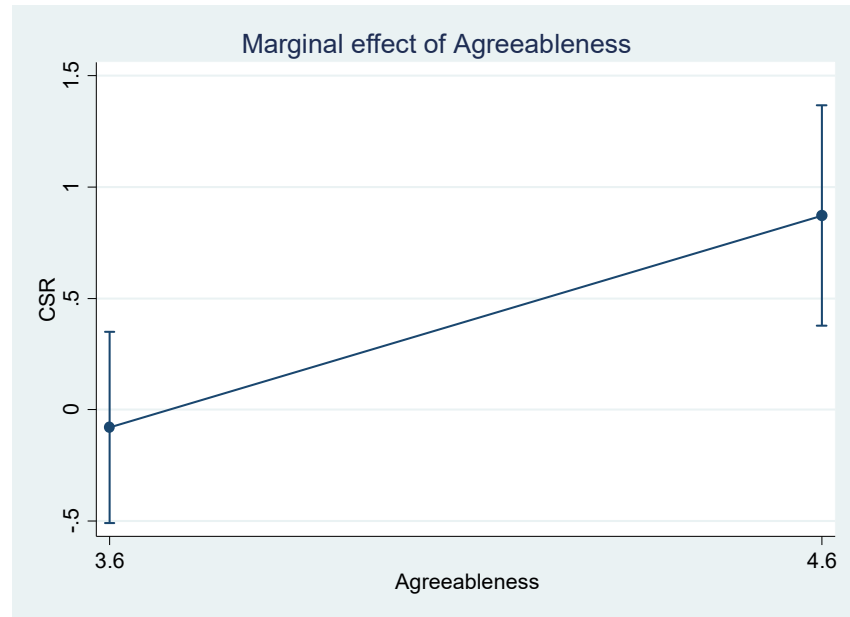


Figure 2.1b. Main effect for CSR (GEE model)



Robustness Tests

I also employ an alternate method, random effects model for panel data regression. The model employs CSR data for firms spanning consecutive years which requires considering serial correlation in the error terms. The results are again consistent with significant main effect for emotional stability and agreeableness only, and no substantial interaction effects for any of the personality traits. Regression results are available in Table 2.3.

Table 2.3. Random Effects Auto-Regressive panel data regression

Variables	(1) CSR	(2) CSR	(3) CSR
Conscientiousness		0.08 (0.28)	0.22 (0.31)
Extraversion		-0.83** (0.40)	-0.89** (0.44)
Agreeableness		0.95** (0.46)	0.95* (0.51)
Emotional stability		0.98*** (0.23)	0.96*** (0.27)
Openness to experience		-0.43*** (0.17)	-0.39** (0.19)
Environmental munificence		0.00*** (0.00)	0.00 (0.00)
Conscientiousness X Environmental munificence			-0.00 (0.00)
Extraversion X Environmental munificence			0.00 (0.00)
Agreeableness X Environmental munificence			-0.00 (0.00)
Emotional stability X Environmental munificence			0.00 (0.00)
Openness X Environmental munificence			-0.00 (0.00)
CEO age	0.06*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
CEO gender	0.86*** (0.17)	0.67*** (0.18)	0.66*** (0.18)
CEO duality (1=yes; 0=no)	-0.16*** (0.05)	-0.11** (0.05)	-0.11** (0.05)
CEO compensation	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm size	0.19*** (0.02)	0.20*** (0.02)	0.20*** (0.02)
Firm performance	-0.09 (0.18)	0.01 (0.18)	0.00 (0.18)
R&D intensity	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)
Capex intensity	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Industry dynamism	-1.97 (1.24)	-1.60 (1.24)	-1.63 (1.24)
Inverse Mills Ratio	-8.39*** (2.40)	-6.47** (2.51)	-6.60*** (2.52)
Constant	-3.73*** (0.58)	-5.50*** (1.01)	-6.06*** (1.13)
Observations	15,105	15,105	15,105
χ^2 -statistic for model	189.3	260.6	265.6

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Figure 2.1c. Main effect for CSR (RE AR model)

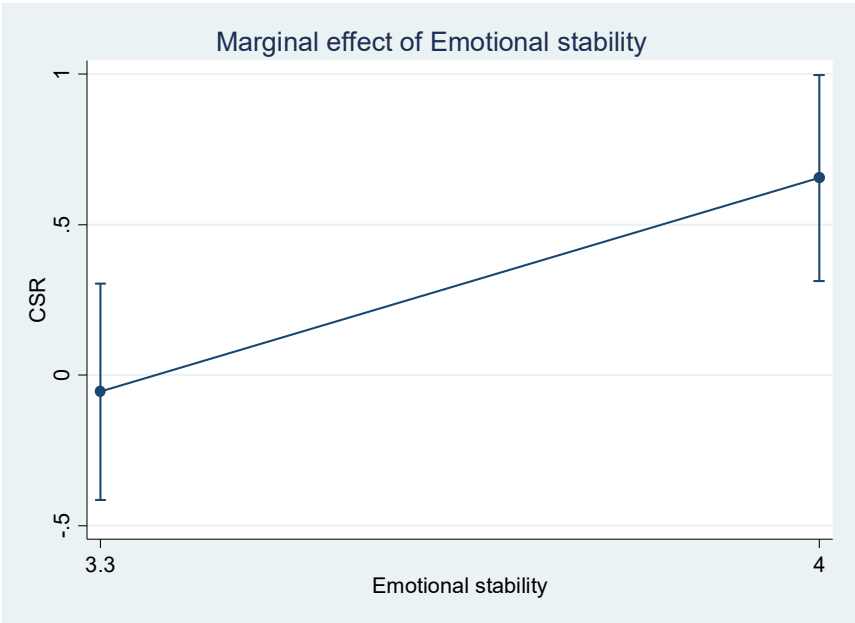
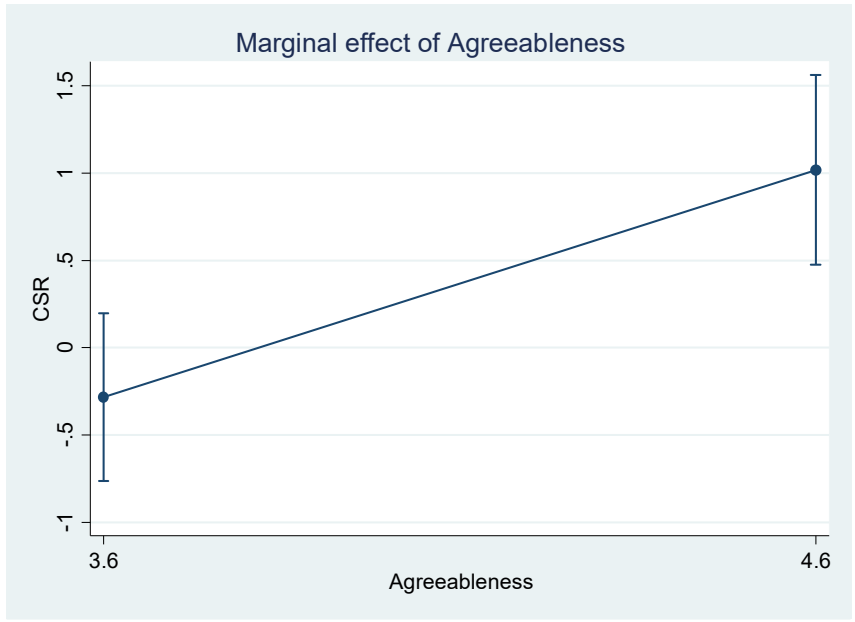


Figure 2.1d. Main effect for CSR (RE AR model)



Sample selection bias

I have included only such CEOs in our sample who did not leave their respective firms during the period of observation. The inclusion of CEOs with relatively longer tenure can bias our sample for not being random and representative of the CEO universe (Kashmiri, Gala & Nicol, 2019). Our sample may be prone to sample selection bias.

I address this potential problem through the two-stage Heckman method. First, I estimate a binary dependent variable which is 0 if the CEO experiences turnover during the period of observation (2000-2017) and 1 otherwise. I run a probit regression model on the panel data with all control variables from the original model (Table 2.4). I also include an additional variable *Slack* as the ratio of debt to equity in this model. I calculate the Inverse Mills Ratio (IMR) from the first stage model.

Then, I include IMR as a control variable in the original panel data regression model. IMR has a negative, significant relationship with CSR in each of Model 2 ($\beta = -11.31, p < 0.01$) and Model 3 ($\beta = -11.13, p < 0.01$). Hence, factors which lead to longer tenure CEOs being part of the sample decreases the firm's engagement in CSR activities.

Endogeneity concern

Unaccounted factors may influence CEO's agreeableness and emotional stability to be more inclined towards CSR engagement. This may lead to endogeneity concerns in our sample. I address this potential issue through the two-stage *xtgee* method involving instrumental variables (Wooldridge, 2010).

I use average CEO personality trait at the 2-digit SIC level as instrumental variable for respective personality traits along with the CEO's other four personality traits. I also include control variables from the original model along with instrumental variables to estimate each

CEO personality traits in the first stage (Table 2.5). In the second stage (Tables 1.2, 1.3), I use fitted values of CEO personality traits as the independent variables in the original panel data regression model.

Table 2.4. Panel data regression for Inverse Mills Ratio (IMR) (RE probit model)

Variables	(1) IMR-CSR
CEO age	-0.03*** (0.00)
CEO gender	0.04 (0.10)
CEO duality (1=yes;0=no)	0.05 (0.04)
CEO compensation	0.00 (0.00)
Firm size	-0.02** (0.01)
Firm performance	0.29*** (0.08)
Slack	0.00 (0.00)
Industry dynamism	0.19 (0.74)
Environmental munificence	0.00* (0.00)
CEO tenure	0.00 (0.00)
Constant	3.69*** (0.17)
Observations	21,933
χ^2 -statistic for model	173.6

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2.5. First stage panel data regression with Instrumental Variables

Variables	(1) Consc.	(2) Extra.	(3) Agree.	(4) Emo. St.	(5) Openn.
Conscientiousness		-0.01 (0.01)	0.07*** (0.01)	-0.07*** (0.01)	0.36*** (0.01)
Extraversion	-0.00 (0.00)		0.01 (0.01)	0.15*** (0.01)	0.17*** (0.00)
Agreeableness	0.04*** (0.01)	0.01 (0.01)		0.19*** (0.01)	0.26*** (0.00)
Emotional stability	-0.04*** (0.01)	0.23*** (0.01)	0.19*** (0.01)		0.07*** (0.00)
Openness to experience	0.49*** (0.01)	0.54*** (0.01)	0.57*** (0.01)	0.15*** (0.01)	
Environmental munificence	0.00*** (0.00)	0.00 (0.00)	-0.00** (0.00)	0.00* (0.00)	-0.00 (0.00)
CEO age	0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	0.00*** (0.00)	-0.00* (0.00)
CEO gender	0.00 (0.01)	-0.12*** (0.02)	0.02 (0.02)	0.08*** (0.02)	0.08*** (0.01)
CEO duality (1=yes;0=no)	-0.01*** (0.00)	0.02*** (0.00)	-0.01*** (0.00)	-0.00 (0.00)	0.01*** (0.00)
CEO compensation	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Firm size	0.00** (0.00)	0.00** (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Firm performance	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
R&D intensity	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Capex intensity	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Industry dynamism	0.02 (0.04)	0.02 (0.06)	-0.01 (0.05)	0.03 (0.05)	-0.03 (0.03)
Conscientiousness (Ind. avg.)	0.34*** (0.01)				
Extraversion (Ind. avg.)		0.31*** (0.01)			
Agreeableness (Ind. avg.)			0.27*** (0.01)		
Emotional stability (Ind. avg.)				0.39*** (0.01)	
Openness (Ind. avg.)					0.21*** (0.01)
Constant	1.05*** (0.07)	0.05 (0.08)	-0.46*** (0.07)	0.32*** (0.07)	-0.20*** (0.05)
Observations	23,497	23,497	23,497	23,497	23,497
χ^2 -statistic for model	10498	7960	12545	5863	25557

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Discussion

This study integrates concepts of stakeholder theory and personality traits to explore the relationship between CEO personality and the firm's CSR. Agreeableness enables CEO to build consensus and take along different stakeholders. Emotional stability helps to deal with conflicting demands of often competing stakeholders and address them optimally. These traits are relevant when it comes to stakeholder engagement through CSR. Hence, they are positively related to CSR as per theoretical predictions.

Conscientiousness drives CEO to lead the firm towards achieving its strategic goals. CEO focuses on more an important aspect - superior financial performance to create value for shareholders – which takes precedence over stakeholder engagement. This precedence drives extraverted CEO to focus on building connections that have more direct impact on the firm's financial performance. Openness enables CEO to explore new ideas but those which are more aligned with the firm's pursuit of financial goals and not stakeholder engagement. This could be the plausible rationale for other three traits not having a positive relationship with CSR.

The interaction effect of environmental munificence does not yield any substantial findings. Munificence endows the firm with sufficient resources to engage in discretionary activities such as CSR. It drives CSR engagement so strongly that the influence of personality traits is not discernible in this context. The contingency mechanism associated with personality traits maybe more marked in the presence of a different predictor.

Theoretical Implications

Our study has some important implications for theoretical research. CEO's personality traits influence the firm's strategic actions (Miller & Toulouse, 1986). Since CEO is one of the key decision makers for the firm's strategy (Busenbark et al., 2016), it becomes imperative to

explore the relationship between CEO personality traits and CSR which is one of the firm's CSR strategic actions. This way, I contribute to the extant domain of research by analyzing the individual level factors that contribute to the firm's CSR. I parse out the micro foundations of the firm's strategy especially in the context of stakeholder management.

Second, I expand upper echelons research with more detailed understanding of individual level characteristics and implications for firm strategy (Hambrick & Mason, 1984). Research has considered demographic characteristics such as CEO gender, education, political affiliations and more. I contribute by extending the scope to include psychological characteristics and CEO personality traits in particular to study its influence on the firm's CSR.

Practical Implications

CEO personality provides valuable insights to the board about the CEO's proclivity to engage in CSR while leading the firm. Boards can consider personality traits while hiring an individual for the CEO's position. This will enable the board to recruit a CEO who will be more likely to implement the CSR mandate as the firm desires.

Second, CSR engagement is gradually becoming a crucial criterion for investors to hold equity stake in a firm. CEO personality can be a relevant tool for investors to gauge the extent to which the CEO will be inclined to engage the firm in CSR activities.

Limitations and Future Research Agenda

The study has some limitations which is characteristic of any empirical research. However, it also opens up new frontiers for further research. First, the unscripted part of earnings call with analysts is the basis for personality measures. During this part of earnings call, CEOs cannot give prepared responses and conceal their true personality traits. Their responses are more unscripted in nature and better able to capture their authentic personality while reducing validity

concerns for the measures. But there is a possibility of CEOs being coached by teams in their firms beforehand so that they can handle as many analyst queries as feasible (Harrison et al., 2020). Hence, future research can construct alternate personality measures that take into account such concerns. I can tally the findings of the proposed measures with that of our personality measures and ascertain the robustness of our findings. It will eventually lend more empirical support for this type of research.

Second, CEO is the firm's top decision maker. But other members of the top management team (TMT) especially chief financial officer (CFO) has considerable influence on the firm's strategy. Extant research deals more with the CEO's influence but studies less about other team members' influence. Future research can study how other TMT members influence firm strategy in association with the CEO's influence. This approach will help me to know about individual factors influencing firm strategy in the context of TMT as a whole and not just a specific TMT member.

Third, I have conducted the empirical analysis in the US business settings. I can prove the reliability of our personality measures if the study produces similar results in other developed nations as well as emerging markets. It will also open up a new avenue for research. If findings from outside the US do not match with those from the US, I can further explore the contingency or causal mechanisms which lead to varying results in different national contexts.

III. CHAPTER 2: THE RELATIONSHIP BETWEEN CEO PERSONALITY TRAITS AND ANALYSTS FORECASTS

Introduction

The chief executive officer (CEO)'s personality traits shape the firm's strategic choices (Nadkarni & Hermann, 2010). Research has also started to explore how CEO's personality affects the way external observers perceive risks associated with the firm. For instance, Harrison, Thurgood, Boivie & Pfarrer (2020) show how observable CEO personality traits influence market perceptions of firm risks and shareholder returns thus indicating external observers' perceptions of CEO personality matter. The chief executive officer (CEO) also represents the firm to another important group of external observers – equity analysts (Busenbark, Krause, Boivie & Graffin, 2016).

Analysts employ both financial and non-financial information to evaluate firms (Schipper, 1991). We know analysts incorporate financial information through elaborate estimation models, but extant research has not been able to properly parse how analysts take into consideration non-financial information (Bradshaw, 2011). Communication with top management especially the CEO is a good source of non-financial information that helps with the forecasts (Brown, Call, Clement & Sharp, 2015). CEOs engage with analysts to explain the favorable prospects under their leadership and elicit positive forecasts for their firms (Westphal & Clement, 2008). During these interactions, the way others (analysts) perceive the individual (CEO) depends on the CEO's personality traits (Funder, 2012). Yet, we know little about how CEO personality influences the perception of equity analysts. Equity analysts are of a firm (Fama

& Jensen, 1983). Therefore, the lack of knowledge matters if the CEO personality affects analysts' forecasts on future prospects or risks associated with the firm.

Insights from non-financial sources such as CEO's interaction with analysts are important because perceptions about the CEO have implications for the firm (Vergne, Wernicke & Brenner, 2018). The way analysts perceive an incumbent CEO influences their assessment of the firm's potential during the focal CEO's tenure (Kaplan, Klebanov & Sorenson, 2012). The perception is based on how CEOs interact with analysts (Westphal & Graebner, 2010). The way individuals interact with others depend on their personality (Schneider & Smith, 2004). I apply this rationale and examine the role personality traits play in analysts developing their perceptions about CEOs and subsequently, forecasts for the firms.

Some studies have looked at CEO personality through a comprehensive framework like the Big Five. The study of comprehensive personality traits has become even more feasible with the development of a linguistic measure of CEO personality (Harrison, Thurgood, Boivie & Pfarrer, 2019). For instance, CEOs of public listed firms frequently interact with analysts due to which analysts perceive stocks of firms led by conscientious CEOs to be less risky and those of firms led by extraverted CEOs to be riskier (Harrison, Thurgood, Boivie & Pfarrer, 2020). In this study I analyze CEOs' communication with analysts to evaluate their personality traits and how they influence analysts' estimates about their respective firms. Factors like CEO reputation (Boivie, Graffin & Gentry, 2016) or firm's past track record in meeting analyst forecasts (Gentry & Shen, 2013) can determine the strength of association between CEO personality traits and analysts' forecasts.

I make two important theoretical contributions through this study. First, I integrate comprehensive personality framework such as CEO Big Five traits (Costa & McCrae, 1985) with

the agency theory perspective on the monitoring role of analysts (Fama & Jensen, 1983). Agency theory deals with principal-agent conflict and how analysts mitigate it for owners (principal) and managers (agent) of a firm by acting as external monitoring agents. Our study provides new insights into how individual level attributes especially CEO personality traits influence their analysis. This analysis is the basis for external monitoring mechanisms. I parse out the individual level antecedents of a mechanism to reduce the principal-agent problem. This way I contribute to the theoretical micro-foundations of corporate governance mechanisms. Next, I respond to calls for exploring how analysts deal with non-financial information (Bradshaw, 2011). Next, I respond to calls for exploring how analysts deal with non-financial information (Bradshaw, 2011). In this regard, the study explores salient antecedents pertaining to analysis of non-financial information. The findings show how analysts develop perceptions about the CEO's ability to lead the firm and hence its prospects future. This enables us to better understand how analysts discharge their monitoring role by incorporating non-financial information into their analysis.

Theoretical Background

Scholars across disciplines such as accounting, finance and management have studied the role of equity analysts. An analyst particularly the sell-side analyst specializes in securities analysis and focuses on specific industries (Zhang & Gimeno, 2010). Analysts collect information and evaluate a firm's strategy, management quality and industry position (Brauer & Wiersema, 2018). They issue research reports on firms with target share prices, earnings forecasts and stock recommendations (Pollock & Rindova, 2003). By sharing their forecasts, analysts provide managers especially the CEO with external cues on performance targets that create value for shareholders (Wiersema & Zhang, 2011). This helps to mitigate principal-agent

problem between shareholders and managers, particularly the CEO (Jensen & Meckling, 1976). Market participants value this information due to the analysts' expertise, independence and ability to widely disseminate the information (Brauer & Wiersema, 2018).

Through their research reports and stock recommendations (strong buy, buy, hold, underperform or sell), analysts play the role of information intermediaries for investors in capital markets (Zuckerman, 2000). They provide assessments independent of the firm that acts as an external monitoring mechanism for the firm's activities (Wiersema & Zhang, 2011). Analysts have detailed knowledge of firms. Their estimates of a firm's future prospects guide investor behavior and impacts stock market valuation through changes in stock prices and trading volumes (Womack, 1996). The changes in market valuation can influence the firm's ability to raise capital, top management's compensation, business strategy or reputation in general (Hayward & Boeker, 1998). Their analysis and information dissemination help to decrease agency costs arising from the separation of ownership and control (Jensen & Meckling, 1976).

Analysts utilize financial data to arrive at their estimates and also look for non-financial information to validate the same (Schipper, 1991). They process financial information through elaborate estimation models and corroborate their financial analysis with non-financial or qualitative information to improve their predictive accuracy (Becker, Medjedovic & Merkle, 2019). Communication with the top management is an important source of non-financial information with conference calls, management presentation for earnings forecast and company visits, road shows for stock recommendations (Brown et al., 2015). Analysts can even gauge how optimistic or realistic the firm's prospects are based on non-verbal cues during their communication with the top management including the CEO (Mayew & Venkatachalam, 2012). CEOs try to impress analysts especially if they are star analysts or associated with large broking

houses (Westphal & Clement, 2008). The study shows that CEOs utilize their own professional network, knowledge or experience and help analysts to obtain information crucial for forecasts or to know more about the industry. CEOs expect a favorable evaluation in return because negative forecasts by analysts can jeopardize their career (Bhojraj & Sengupta, 2003).

Based on these interactions, analysts develop perceptions about the CEOs which can influence their forecasts. CEO personality traits have a role in how CEOs interact with analysts and build their own perceptions among analysts. Personality traits manifest through words and actions visible to the external agents and enable the latter to make judgements about individuals (Blickle & Hogan, 2016). The CEO draws the attention of external entities as the firm's public face (Harrison et al., 2020). The external entities such as analysts form opinions based on the CEO's characteristics and extend that to the firm (Bednar, Boivie & Prince, 2013). Thus, CEO personality traits become important to understand how CEOs can influence analysts' perceptions and their estimates for the firm.

Extant research has found that CEO personality characteristics relates to the firm's organizational culture (O'Reilly, Caldwell, Chatman & Doerr, 2014), investment activities (Malmendier & Tate, 2005), propensity for M&A deals (Chatterjee & Hambrick, 2007) and strategic flexibility (Nadkarni & Hermann, 2010) among others. I extend this stream of research by examining the relationship between CEO personality traits and analyst forecasts.

In particular, I examine two important aspects of analysts – estimates' dispersion and positive coverage. Dispersion reflects the extent of information asymmetry between managers and analysts which can impact the quality of analyst research (Kothari, Li & Short, 2009). Positive coverage indicates the ease of information collection and higher chances of favorable evaluations (Brauer & Weirsema, 2018).

Hypotheses Development

Analyst estimates' dispersion

Analysts' estimates diverge more when there is difference of opinion among the analysts (Diether, Malloy & Scherbina, 2002). Lack of sufficient information about the firm causes information asymmetry and leads to the difference of opinion among analysts (Kothari et al., 2009). As more information is available, it helps to reduce the information asymmetry between a firm's external monitoring agents such as analysts and internal constituents such as the CEO or the top management (Amihud & Mendelson, 1986). There is more consensus among the analysts tracking a firm (Bowen, Davis & Matsumoto, 2002). Therefore, the dispersion in analysts' forecasts decreases (Lang & Lundholm, 1996).

External agents such as analysts consider different information to draw inferences and publish their forecasts (Johnson, 2004). Information can be available from financial disclosures or from non-financial sources such as company communication or interaction with the CEO (Becker et al., 2019). CEO personality is an important consideration during interaction with analysts. In this regard, I expect two of the Big Five personality traits – conscientiousness and extraversion to be salient for CEOs. Conscientious CEOs are dependable and achievement oriented (Benischke, Martin & Glaser, 2019). Extraverted CEOs communicate effectively and are able to exert influence on stakeholders (Colbert, Barrick & Bradley, 2014) to convince them of the firms' potential. Accordingly, analysts get more consistent, non-financial cues about the firm's future prospects in addition to their own financial analysis. Therefore, I examine whether CEO personality traits enable information to be more readily available to analysts so that their estimates converge to a greater degree. CEO reputation is a valid indicator of past performance or future potential (Deephouse, 2000). Analysts take this into account as an input for their

analysis (Boivie, Graffin & Gentry, 2016) along with other subjective information such as personality traits. Hence, I investigate how CEO reputation moderates the relationship between CEO personality traits and analysts forecasts dispersion.

Conscientiousness. Conscientious CEOs employ a more deliberative and calculated approach to decision making (Peterson et al., 2003). Such individuals are dependable, responsible and have a tendency to follow rules and norms (Costa & McCrae, 1992). They employ a logical approach to analysis or decision making and have an attention for details (O'Reilly, Caldwell, Chatman & Doerr, 2014). They want to be in control of their situations in order to avoid facing ambiguity (Judge & Bono, 2000).

CEOs have to frequently interact with external stakeholders such as banks and analysts (Westphal & Deephouse, 2011) wherein their detail orientation and methodical nature also reflects in their stakeholder interactions. Among external constituents, analysts are market intermediaries who act as monitoring agents to ensure that CEOs and top managers are aligned with shareholders' interests and reduce the principal-agent conflict (Jensen & Meckling, 1976). Conscientious CEOs with their structured approach and control over the environment (Miller & Toulouse, 1986) want to project a clear sense of being in charge. They are more prepared when interacting with analysts, and convey a sense of being capable and dependable in managing their firms (Harrison et al. 2019b). They appear to have a sense of focus and performance motivation (Bono & Judge, 2004). They are not desperate to take risks, rather have a controlled and measured approach to managing their firms (Gow, Kaplan, Larcker & Zakolyukina, 2017) due to which they project a sense of stability when interacting with intermediaries.

Analysts take positive cues from their interactions with CEOs to infer that the latter are able to manage their respective firms well (Westphal & Graebner, 2010). Through their

communication clarity, conscientious CEOs reduce ambiguity in the information they share with intermediaries including analysts. Less ambiguity and more clarity in information available to the analysts reduces information uncertainty and hence the dispersion in analysts forecast (Zhang, 2006). This leads to the hypothesis,

H1: CEO conscientiousness is negatively related to analyst estimates' dispersion

Extraversion. Extraversion enables CEOs to be energetic and impactful in their communication (Judge et al., 2002). Such CEOs convey a sense of optimism (Judge & Cable, 1997). They are more inclined to engage in interactions with others and are able to win over others by exerting social influence (Colbert et al., 2014). Extraversion CEOs also conveys a sense of effective leadership (Grant, Gino & Hoffman, 2011).

Analysts reduce the information uncertainty about the firms' future prospects among investors with the dissemination of their analysis (Hilary & Hsu, 2013). If firms fall short of forecasts, employment risks increase for the top management or investors penalize the firm's share price (Bartov, Givoly & Hayn, 2002). As firm's external stakeholders, analysts help to reduce principal-agent conflict by monitoring whether CEOs are acting in self-interest or are aligned with shareholder interests (Fama & Jensen, 1983). Analysts look for cues about the firms' growth story in interactions with CEOs (Khurana, 2002). They prefer a convincing and consistent account of the firm's prospects to be certain that the CEO is working towards shareholders' interests (Fanelli, Misangyi & Tosi, 2009).

Extraverted CEOs have the ability to adapt to challenging situations and effect change as the situation demands (Nadkarni & Hermann, 2010). They are growth oriented and ready to challenge the status quo in order to achieve the growth objectives (Malhotra et al., 2018). Their effective communication enables them to win over cynics who doubt their ambitious growth

targets and also motivate their firm employees to work towards the goals (Hermann & Nadkarni, 2014). They communicate clearly to project a consistent account about their firms which leads to less ambiguity among the analysts (Fanelli & Misangyi, 2006). Due to their ability to communicate and influence others, they impress upon analysts with the information about their firms' prospects (Becker et al., 2019). Such clear and convincing communication about the firms helps to reduce information uncertainty among the analysts (Zhang, 2006) and consequently, analysts differ to a less extent in their projections. This leads to the hypothesis,

H2: CEO extraversion is negatively related to analyst estimates' dispersion

CEO reputation. If CEOs have high reputation, they are expected to perform better in future and any discordant information will be seen as an exception to the norm (Wade, Porac, Pollock & Graffin, 2006). New, negative developments would have comparatively less downside impact on the positive coverage by an analyst (Boivie, Graffin & Gentry, 2016).

Conscientious CEOs are perceived to be dependable and to follow a methodical approach to realize their firm's goals (Nadkarni & Hermann, 2010). If CEOs have high reputation, it is mainly based on their ability to deliver high levels of performance (Graffin, Pfarrer & Hill, 2012). Conscientious CEOs provide a consistent overview about their firm and reduce ambiguity about the firm's future prospects (Harrison et al., 2020). CEO reputation also helps to reduce uncertainty about the firm's prospects as it is an indicator of how competent the CEO is in leading the firm (Wade et al., 2006).

Extraverted CEOs are better able to convince analysts with information that they share with analysts about their firms (Becker et al., 2019). CEOs with high reputation are perceived to be competent and able to deliver high firm performance in future (Wade et al., 2006). Thus, CEO

extraversion helps to reduce ambiguity while CEO reputation makes them more convinced analysts about the firm's prospects.

As more analysts concur on their forecasts, the dispersion in their estimates also decreases. CEO personality traits which help to reduce the dispersion in analyst estimates now have a stronger impact as CEO's high reputation further attenuates the information uncertainty. This leads to the hypothesis,

H3a: CEO reputation moderates the relationship between CEO conscientiousness and dispersion in analyst estimates such that higher CEO reputation accentuates the negative relationship between CEO conscientiousness and analyst estimates' dispersion.

H3a: CEO reputation moderates the relationship between CEO extraversion and dispersion in analyst estimates such that higher CEO reputation accentuates the negative relationship between CEO extraversion and analyst estimates' dispersion.

Analyst coverage

Analyst coverage includes analysis of available information on a firm and future recommendations for its equity stock (Wiersema & Zhang, 2011). This has significant influence on investor decisions and the firm's stock price (Frankel, Kothari & Weber, 2006). Analyst coverage indicates that the firm discloses information properly for consideration by external stakeholders (Chang, Dasgupta & Hillary, 2006).

Analysts tend to issue positive coverage for a firm when it becomes easier for them to collect and analyze data (Brauer & Weirsema, 2018). In addition to publicly disclosed data, interactions with the top management especially the CEO is a valuable source of information for analysts (McNichols & O'Brien, 1997). Personality drives CEOs' communication during such

interactions and to what extent they can convince analysts about the firm's future prospects (Harrison et al., 2020).

In this regard, I expect three of the Big Five personality traits – emotional stability, openness to experience and agreeableness to be salient for CEOs. Openness to experience allows them to be imaginative and risk taking (McCrae & Costa, 1987). Emotional stability is essential to adapt and respond to challenging situations (McCrae & Costa, 1997). Agreeableness helps them to build trust and cohesiveness within organizations to achieve business goals (Nadkarni & Hermann, 2010). These traits determine whether CEOs can be creative, responsive to challenges and able to build teams that deliver results. Analysts look for such non-financial cues to be assured of the firm's future prospects. Therefore, I examine how these CEO personality traits can influence positive analyst coverage. When firms miss previous analyst forecasts, analysts are likely to weigh more on unfavorable, objective financial information rather subjective traits to issue positive coverage. I expect missing analysts forecasts to negatively moderate the relationship between personality traits and analyst coverage.

Emotional stability. CEOs high on emotional stability are less prone to stress, anxiety and insecurity (Peterson et al., 2003). Such individuals are flexible and are able to respond to dynamic business scenarios that their firms face (McCrae & Costa, 1997). Due to their composure even in trying situations, emotionally stable individuals are less impulsive and less irrational in their decision making (Costa & McCrae, 1995). Their behavior being less erratic, they are less likely to take decisions detrimental to the interests of their firms or shareholders (Benischke, Martin & Glaser, 2019).

Emotionally stable CEOs create an enabling environment for employees and shield them from discord caused by stressful situations (Nadkarni & Hermann, 2010). They are more adept at

creating a collaborative working environment where employees benefit from one another (O'Reilly et al., 2014). When interacting with external stakeholders, they are more composed and project a perception of being capable of delivering good firm performance (Harrison et al., 2020).

Analysts are external stakeholders who monitor the potential agency problem between shareholders and managers including the CEOs (Shleifer & Vishny, 1997). During CEO interactions, analysts sometimes ask questions which may be unsettling for CEOs, yet the responses determine how the analysts would evaluate the firms' prospects (Malhotra et al., 2018). Emotionally stable individuals handle challenging interactions deftly (Judge et al., 2002). Analysts look for non-financial cues to supplement their financial analysis (Schipper, 1991). Interaction with emotionally stable CEOs assures analysts that such CEOs are more likely to lead their firms to growth. This convinces analysts about the ability of emotionally stable CEOs to lead their firms and they develop positive outlook about the firms.

H4: CEO emotional stability is positively related to analyst coverage for the firm

Openness to experience. Openness to experience is an attribute of effective leadership (Judge et al., 2002). CEOs endowed with this quality encourage innovation, have higher risk appetite and are able to deal with change (McCrae & Costa, 1987). They enable their subordinates to think about unconventional, new approaches and challenge the status quo (Judge & Bono, 2000). They are also able to convince internal stakeholders about their bold vision for their firms (Bono & Judge, 2004).

Openness to experience exposes CEOs to a wider range of ideas and equips them to better estimate the upside of strategic decisions (Lauriola & Levin, 2001). With their better foresight, CEOs are at an advantage when it comes to more shareholder wealth creation in the

long term (Benischke et al., 2019). With better knowledge and higher risk taking appetite, their firms can invest in projects with distant but higher return (Gentry & Shen, 2013).

CEOs endowed with openness to experience come out as thoughtful and able to cope with changes (Gow et al., 2017). Analysts judge such CEOs to be not risk averse and working for their short term self-interests, rather for shareholders by taking risks and ensuring success (Jensen & Meckling, 1976). Hence, analysts develop a positive outlook and favorable coverage for the firm.

H5: CEO openness to experience is positively related to analyst coverage for the firm

Agreeableness. Agreeable CEOs foster a more cooperative firm culture rather than a competitive culture within their firms (Peterson et al., 2003). This reduces conflict within their firms but delays decision making as CEOs keep deferring to several constituents (Colbert et al., 2014). Agreeableness does not relate to leader effectiveness nor contributes to the success of a leader (Judge et al., 2002). Agreeableness makes CEOs appear modest, a trait generally not associated with effective leadership (Goldberg, 1990). They tend to be risk averse and hence have less propensity for riskier investments with higher payoffs in the long term (Gow et al., 2017).

CEOs with better execution skills rather than interpersonal skills ensure better firm performance in the context of investors such as venture capital or private equity firms (Kaplan, Klebanov & Sorenson, 2012). In some other scenarios, CEOs low on agreeableness relate to higher firm performance (Lepine & Dyne, 2001). Less agreeable CEOs are more competitive, more achievement oriented and lead their firms to better performance (O'Reilly et al., 2014).

Their modesty and agreeable nature reflect in their interaction with analysts. Analysts interpret these cues as CEOs not being capable enough to exercise control and lead their firms

(Westphal & Graebner, 2010). They do not perceive such CEOs as able to protect firms' long term interests and create value for shareholders (Fama & Jensen, 1983). Therefore, analysts covering the firms do not associate such CEOs with potential to deliver superior performance in future.

H6: CEO agreeableness is negatively related to analyst coverage for the firm

Missing analyst forecasts. External monitoring agents such as analysts can reduce the information asymmetry between shareholders and managers (Jensen & Meckling, 1976). Their forecasts act as short-term performance targets for firms which managers including CEOs try to meet so as to show that they are working for shareholder interests (Gentry & Shen, 2013). Investors therefore value firms more when they meet analyst forecasts (Bartov et al., 2002). Firms' ability to meet analyst forecasts becomes more important to convince that CEOs are not working to the detriment of shareholders (Wiersema & Zhang, 2011).

CEOs' openness to experience enables them to be imaginative and risk-takers in order to lead their firms to growth (Colbert et al., 2014). When firms miss the forecasts, analysts' predictions turn out to be inaccurate and damage the latter's reputation (Jensen, 2004). Hence, analysts will perceive the CEOs' risk taking unfavorably and to be detrimental to firms. They are less likely to continue or initiate positive coverage for the firms.

CEOs' emotional stability is conducive for taking decisions that benefits their firms (Nadkarni & Hermann, 2010). However, when they fall short of or miss analyst forecasts, they are under more pressure to meet the forecasts (Kasznik & McNichols, 2002). In that scenario, analysts give more weightage to tangible information such as missing of forecasts than subjective information such as CEO personality traits. Unfavorable financial information makes them less likely to issue positive coverage for the firm.

Agreeable CEOs are able to take along individuals and build a culture of cooperation and trust to achieve their firm's goals (Hermann & Nadkarni, 2014). When they fall short of forecasts, analysts evaluate their firms more based on financial metrics and evaluate financial viability in the short term to ensure more accurate forecasts (Washburn & Bromiley, 2014). Based on available financial information, they tend to issue less positive coverage. They tend to give less importance to subjective personality traits that look favorable for the firms.

When firms miss forecasts, CEO's personality factors become less important component of analyst coverage. Therefore, an analyst would evaluate a firm based more on its ability to meet forecasts than any other parameters.

H7a: Missing analysts forecast in prior years moderates the relation between CEO personality and positive analyst coverage of the firm such that when a firm misses analyst forecasts by a higher margin, the positive relationship between CEO emotional stability and positive analyst coverage is weaker.

H7b: Missing analysts forecast in prior years moderates the relation between CEO personality and positive analyst coverage of the firm such that when a firm misses analyst forecasts by a higher margin, the positive relationship between CEO openness to experience and positive analyst coverage is weaker.

H7c: Missing analysts forecast in prior years moderates the relation between CEO personality and positive analyst coverage of the firm such that when a firm misses analyst forecasts by a higher margin, the negative relationship between CEO agreeableness and positive analyst coverage is stronger.

Methods

Sample and Data Collection

The sample data pertains to CEOs of S&P 1500 firms. A machine learning based linguistic tool analyzes the transcripts of quarterly earnings call and measures CEO personality traits (Harrison et al., 2019a). The study covers the time period of 2000 to 2017. I use S&P 1500 firms in the sample because they represent the more prominent firms and are more likely to be tracked by analysts. Analysts are able to interact with CEOs of such firms more frequently during which the latter's personality traits can be salient. Also, analysts base their forecasts on publicly available data which is available for firm listed on the stock market.

Analysts forecasts are available from Institutional Brokerage Estimate Systems (IBES). Analysts provide their analysis and recommendations on a firm's stock through reports which are recorded in IBES (Fanelli et al., 2009). Financial data is mostly as firm level control variables and is available from the COMPUSTAT database. CEO level data from the Execucomp database is the basis for CEO level control variables.

Independent Variables

CEO Personality. I use Open Language Chief Executive Personality Tool (OLCPT) to measure CEO's Big Five personality traits of conscientiousness, extraversion, emotional stability, openness to experience and agreeableness on a 7-point scale personality traits (Harrison et al., 2019).

This tool analyzes CEO's spoken language for responding to questions from analysts during the questions and answers (Q&A) section of the earnings calls (Harrison et al., 2020). The advantage of earnings calls over other sources such as letters to shareholders is that CEO's

responses to such questions are mostly unscripted, are more likely their own and hence provide good information about CEO personality (Malhotra et al., 2018).

CEO Reputation. CEO reputation is based on the firm's performance relative to the industry average at the two-digit SIC level (Milbourn, 2003). It is the average monthly return on equity (RoE) for the firm less the average monthly RoE for an equally weighted portfolio at industry SIC code divided by the standard deviation of average monthly industry returns. The relevant data on firm performance is available from the COMPUSTAT database.

Dependent Variable

Analysts Forecasts. While analysts forecast different aspects of firm performance such as sales, profit, the widely used forecasts in empirical research are for earnings per share and net profit (Gentry & Shen, 2013). Analyst forecast is the average of all analysts' forecasts for a firm's earnings per share and net profit. The data is available in the IBES database.

Analyst Coverage. Analyst coverage is the recommendation for the firm's stock measured on a scale ranging from Strong buy (5), Buy (4), Hold (3), Underperform (2) to Sell (1) (Harrison, Boivie, Sharp & Gentry, 2018). The measure is the average of all analyst recommendations for a firm in a year. The higher is the average, the more positive is analyst coverage. The data is available in IBES database.

Control Variables

I take into account possible confounding effects through control variables at the CEO, firm and industry levels.

CEO Level. I control for *CEO age* and *CEO incentives* (ratio of restricted stock, stock options and long term incentives to the total compensation) (Benischke et al., 2019). *CEO tenure* as the number of years CEO has worked with the firm, *CEO duality* (coded as 1 if CEO is also

the board chair, 0 otherwise), and *Board independence* as percentage of independent directors on the board (Boivie et al. 2016). These variables represent the degree to which CEO can influence firm outcomes and hence, can influence analysts forecasts about the firm (Harrison et al., 2020). The data is available from Execucomp and COMPUSTAT databases.

Firm Level. I control for *Firm size* as the natural log of employees and *Firm performance* in year (t-1) as the return on assets (RoA) which can influence analysts' perceptions about the firm's potential (Yermack, 2006). I consider *Diversification* as the firm's entropy scores because analysts can predict less accurately about diversified firms (Boivie et al., 2016). The data is available from firm level metrics in COMPUSTAT database.

Industry Level. I control for industry level dynamism since firms in dynamic industries are subject to potentially higher risk or returns which influences analysts' evaluation of the firm (Harrison et al., 2019b). *Industry dynamism* is the standard error of regression coefficient of sales on time divided by the industry mean for the period 2001-2017 (Dess & Beard, 1984). The control variable is based on information from COMPUSTAT database.

Model and Estimation

Model analysis is based on random effects regression of panel-data following previous research on personality traits (Harrison et al., 2020). Since measures of the independent variable (personality traits) are time invariant, fixed effects model is not suitable here (Certo, Withers & Semadeni, 2017). The model employs financial market data such as share price in its constituent variables. This requires considering serial correlation in the error terms. I use *xtregar* command in Stata which provides a correction for serial correlation (Bromiley, Rau & Zhang, 2017). The model incorporates robust variance estimator to ensures that the estimation method is robust in terms of heteroscedasticity (White, 1980).

Results

Table 3.1 is for correlations of all variables included in the models for studying analyst estimates' dispersion and analyst coverage respectively. I checked for any potential multicollinearity issues with the models. For analyst estimates' dispersion, the mean variance inflation factor (VIF) of the model is 1.43 with no VIF for individual variables exceeding 3.0. The mean VIF in the model for analyst coverage is 1.36. VIF for none of the variables individually exceed 3.0. Thus, the models do not indicate to have any multicollinearity issues.

Table 3.1. Summary statistics

Variables	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) Forecast dispersion	0.86	33.81	1.00															
(2) Analyst coverage	3.62	0.56	0.04	1.00														
(3) Forecast missed	0.36	0.48	0.02	-0.04	1.00													
(4) Conscientiousness	5.15	0.53	-0.08	0.00	0.01	1.00												
(5) Extraversion	4.76	0.80	-0.06	0.04	-0.04	0.33	1.00											
(6) Agreeableness	4.07	0.75	-0.02	0.02	-0.05	0.50	0.38	1.00										
(7) Neuroticism	3.34	0.65	-0.03	-0.02	0.03	-0.16	-0.40	-0.39	1.00									
(8) Openness	4.67	0.59	0.00	-0.01	-0.02	0.62	0.46	0.68	-0.46	1.00								
(9) CEO Reputation	0.08	0.61	0.03	0.00	-0.02	-0.01	-0.01	0.01	-0.01	0.01	1.00							
(10) CEO age	55.69	7.14	0.01	-0.03	-0.01	0.00	-0.04	-0.08	0.03	-0.07	-0.01	1.00						
(11) CEO compensation	5726.62	9739.21	-0.01	0.01	-0.02	0.03	0.05	0.11	-0.03	0.06	0.05	0.04	1.00					
(12) CEO duality	0.53	0.50	-0.01	0.00	-0.02	0.06	0.09	0.02	0.00	0.00	0.02	0.27	0.12	1.00				
(13) Firm size	8.39	1.90	0.02	-0.04	-0.04	0.06	0.21	0.04	-0.13	0.02	0.09	0.11	0.41	0.13	1.00			
(14) Firm performance	0.04	0.13	0.01	0.03	-0.07	0.06	0.09	0.05	-0.08	0.07	0.26	0.02	0.06	0.09	0.16	1.00		
(15) Diversification	0.48	0.48	0.00	0.02	-0.03	-0.07	0.11	-0.07	0.01	-0.12	0.00	0.01	0.19	0.02	0.33	0.00	1.00	
(16) Industry dynamism	0.01	0.01	-0.02	-0.02	0.01	-0.02	0.02	-0.07	0.05	-0.07	0.00	0.00	-0.02	-0.01	0.03	0.01	0.07	1.00

Table 3.2a provides the results of panel data regression for estimates dispersion. I consider the analyst estimates for earnings per share (EPS), a financial metric which analysts commonly track. I initiate the regression analysis for analysts' estimates dispersion by introducing the control variables in Model 1. I add the independent variables in Model 2. I use this model to interpret significant main effects of CEO personality traits. Hypotheses predict CEO conscientiousness negatively influences analysts' forecasts dispersion (H1) and similar relationship for CEO extraversion (H2). Results corroborate that conscientiousness has a negative and significant relationship ($\beta = -6.48, p < 0.01$) and so does extraversion ($\beta = -3.33, p < 0.01$). Increasing conscientiousness and extraversion from 1 SD below mean to 1 SD above mean changes the forecasts' dispersion more than 100% in each case, as shown in Figure 3.1a and 3.1c. Therefore, I find support for H1 and H2.

I include the interaction terms in Model 3 to examine the moderation effects of CEO reputation. Hypotheses predict that CEO reputation accentuates or negatively moderates the relationship of CEO conscientiousness (H3a) or CEO extraversion (H3b) with estimates' dispersion. I observe from regression results that CEO reputation has negative moderating effect on both conscientiousness ($\beta = -24.73, p < 0.01$) and extraversion ($\beta = -8.23, p < 0.01$). In Figure 3.1b and 3.1d, CEO reputation reverses the relationship of both CEO conscientiousness and extraversion with estimates' dispersion. The relationship changes from positive at lower values of CEO reputation (1 SD below mean) to negative at higher values (1 SD above mean). Thus, I find support for H3a and H3b.

Table 3.2b pertains to results of panel data regression for analyst coverage. I include the control variables in Model 1 to initiate the analysis. Then, I add the independent variables in Model 2. I use the results from Model 2 to check for any significant main effects of CEO

personality traits. Contrary to hypotheses, openness to experience (H5) negatively relates to analyst coverage whereas agreeableness (H6) has a positive relationship. The regression coefficient for the other personality trait is not significant. Therefore, results do not provide support for any of the main effects.

Next, I include the interaction terms in Model 3 and examine the moderation effects of missing analyst forecasts. I consider the commonly tracked metric, EPS for analyst forecasts. Hypotheses predict that missing analyst forecasts weakens the positive relationship of emotional stability (H7a) and openness to experience (H7b) with analyst coverage while accentuating the corresponding negative relationship of CEO agreeableness (H7c). I do not find significant results for the moderation effect on agreeableness or neuroticism. But missing analyst forecasts negatively moderates the influence of openness to experience ($\beta = -0.04$, $p < 0.05$) and find support for H7b. The results pertaining to H7a and H7c are not significant and do not lend support to these hypotheses.

Table 3.2a. Regression analysis for estimates' dispersion (EPS)

Variables	(1) Frct. Disp.	(2) Frct. Disp.	(3) Frct. Disp.	(4) Frct. Disp.
Conscientiousness		-9.06*** (1.71)	-6.48*** (1.73)	-4.22** (1.76)
Extraversion		-4.45*** (1.28)	-3.33** (1.31)	-2.12 (1.31)
Agreeableness		-2.51 (1.67)	-1.08 (1.67)	0.09 (1.69)
Emotional stability		2.44* (1.43)	0.99 (1.44)	-0.01 (1.48)
Openness to experience		8.46*** (2.17)	6.93*** (2.17)	3.78* (2.24)
CEO Reputation		0.91* (0.49)	96.90*** (11.11)	66.61*** (12.21)
Conscientiousness X CEO Reputation			-13.90*** (2.08)	-24.73*** (2.80)
Extraversion X CEO Reputation			-5.12*** (1.60)	-8.23*** (1.77)
Agreeableness X CEO Reputation				-5.94** (2.75)
Emotional stability X CEO Reputation				7.02*** (2.28)
Openness X CEO Reputation				21.21*** (3.47)
CEO age	-0.00 (0.13)	-0.00 (0.13)	0.02 (0.13)	0.03 (0.13)
CEO compensation	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
CEO duality (1=yes; 0=no)	-0.60 (0.95)	-0.03 (0.96)	-0.31 (0.96)	-0.45 (0.96)
Firm size	0.17 (0.25)	0.37 (0.26)	0.37 (0.26)	0.29 (0.26)
Firm performance	2.55 (5.23)	3.25 (5.29)	1.95 (5.28)	0.66 (5.27)
Diversification	0.02 (0.66)	0.15 (0.69)	0.24 (0.68)	0.52 (0.68)
Industry dynamism	18.53 (41.37)	45.73 (41.75)	42.89 (41.39)	34.67 (41.16)
Inverse Mills Ratio	-1.38 (6.41)	-3.27 (6.49)	-2.12 (6.48)	-1.03 (6.47)
Constant	2.55 (21.97)	34.09 (22.98)	18.52 (22.98)	12.32 (23.00)
Observations	3,242	3,242	3,242	3,242
χ^2 -statistic for model	3.885	56.88	131.5	190

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Figure 3.1a. Main effect for estimates' dispersion (EPS)

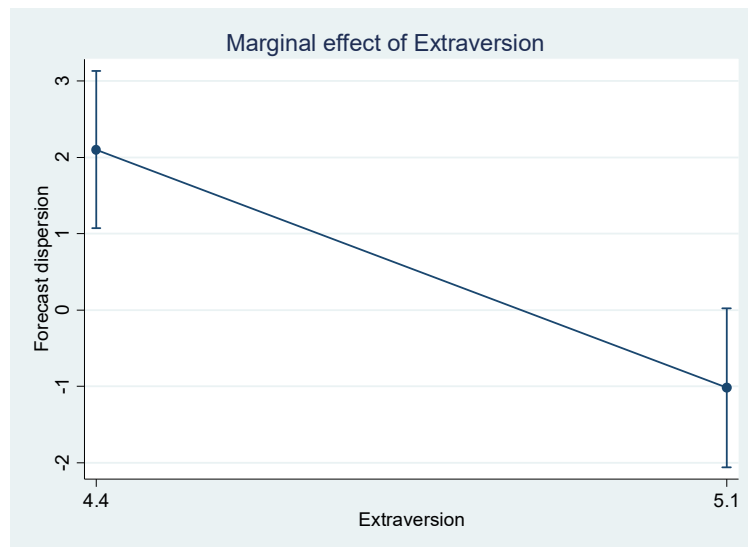
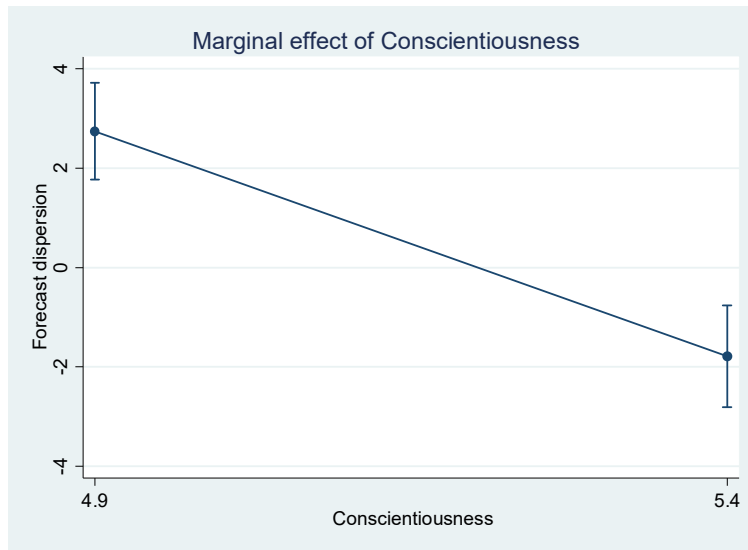


Figure 3.1b. Interaction effect for estimates' dispersion (EPS)

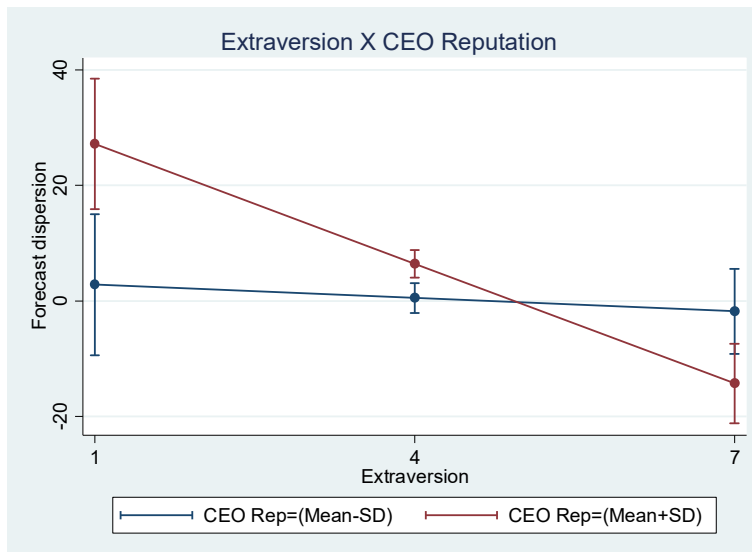
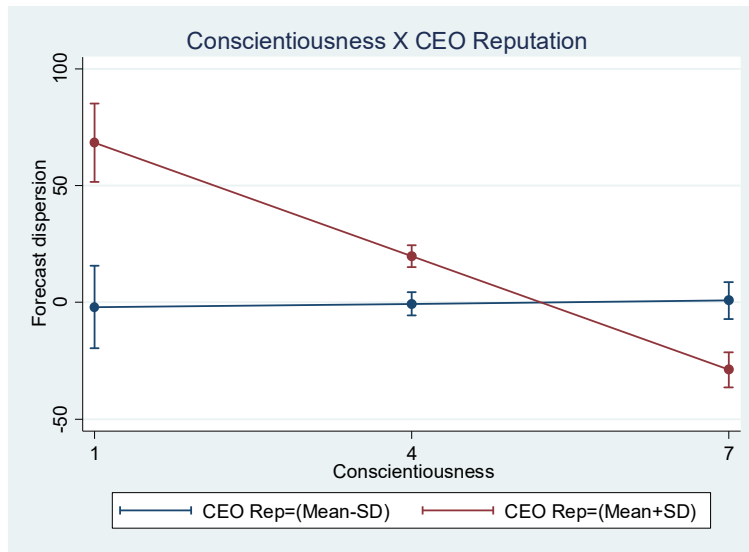


Table 3.2b. Regression analysis for analyst coverage (EPS)

Variables	(1) Coverage	(2) Coverage	(3) Coverage	(4) Coverage
Conscientiousness		-0.02 (0.07)	-0.03 (0.07)	-0.02 (0.09)
Extraversion		0.12** (0.05)	0.12** (0.05)	0.15** (0.06)
Agreeableness		0.15** (0.07)	0.14* (0.08)	0.13* (0.08)
Emotional stability		0.00 (0.06)	-0.02 (0.07)	-0.04 (0.07)
Openness to experience		-0.21** (0.09)	-0.18* (0.10)	-0.19* (0.10)
Forecast missed (1=yes; 0=no)		-0.03 (0.02)	0.06 (0.38)	0.27 (0.49)
Conscientiousness X Forecast missed				-0.01 (0.12)
Extraversion X Forecast missed				-0.12 (0.09)
Agreeableness X Forecast missed			0.04 (0.12)	0.08 (0.12)
Emotional stability X Forecast missed			0.08 (0.09)	0.13 (0.10)
Openness X Forecast missed			-0.12 (0.13)	-0.10 (0.15)
CEO age	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
CEO compensation	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
CEO duality	-0.03 (0.04)	-0.03 (0.04)	-0.03 (0.04)	-0.03 (0.04)
Firm size	-0.00 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Firm performance	-0.26 (0.21)	-0.21 (0.21)	-0.20 (0.21)	-0.20 (0.21)
Industry dynamism	-3.70** (1.55)	-3.66** (1.56)	-3.61** (1.57)	-3.59** (1.57)
Inverse Mills Ratio	0.35 (0.26)	0.26 (0.26)	0.26 (0.26)	0.26 (0.26)
Constant	2.54*** (0.88)	2.86*** (0.94)	2.86*** (0.95)	2.77*** (0.96)
Observations	3,136	3,136	3,136	3,136
χ^2 -statistic for model	10.49	27.03	28.44	30.52

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Robustness Tests

I also incorporate an alternate financial metric commonly tracked by analyst, net profit (NET) in lieu of EPS. I rerun the regression models with this new financial metric. I find that hypotheses pertaining to main effect and interaction effect on analyst estimates' dispersion are all valid. The regression results are available in Table 3.3a.

I also employ an alternate method to test our empirical findings. I employ between effects regression for the panel data on estimates' dispersion. I construct the panel based on CEO and financial year. This way I can study the influence of personality factors between different incumbents to the CEO post. The results are again consistent for both earnings per share and net profit. Regression results are available in Table 3.3b and Table 3.3c.

Post-hoc Analysis

Next, I consider all five personality traits in the regression analysis for estimates' dispersion. Our hypotheses pertain to conscientiousness and extraversion because I think analysts would identify these two traits more easily and attribute firm forecasts to these traits to varying degrees. This association in turn will produce variation in the analysts' estimates. I extend the model by including the interaction effects of all the Big Five personality traits to understand their potential influence on estimates' dispersion. The results of the original two traits are robust even in the extended model. Neither of the remaining three traits has a significant main effect. The interaction effect of agreeableness ($\beta = -5.94$, $p < 0.05$) is negative, significant while that of emotional stability ($\beta = 7.02$, $p < 0.01$) and openness to experience ($\beta = 21.21$, $p < 0.01$) are positive, significant.

Table 3.3a. Robustness test - Regression analysis for estimates' dispersion (NET)

Variables	(1) Frcst. Disp.	(2) Frcst. Disp.	(3) Frcst. Disp.	(4) Frcst. Disp.
Conscientiousness		-2,192.61*** (482.59)	-1,763.29*** (482.55)	-1,298.26*** (483.56)
Extraversion		-1,108.56*** (356.94)	-908.07** (360.81)	-664.84* (358.75)
Agreeableness		-384.33 (446.58)	-119.66 (442.83)	170.45 (444.56)
Emotional stability		491.21 (395.60)	186.45 (393.45)	36.47 (403.71)
Openness to experience		1,913.41*** (599.61)	1,686.06*** (593.98)	967.09 (607.08)
CEO Reputation		153.38 (118.43)	17,256.44*** (2,730.85)	13,123.40*** (3,040.11)
Conscientiousness X CEO Reputation			-2,389.61*** (512.68)	-4,819.66*** (690.80)
Extraversion X CEO Reputation			-1,002.75** (433.32)	-1,582.27*** (455.11)
Agreeableness X CEO Reputation				-984.97 (651.05)
Emotional stability X CEO Reputation				906.23 (567.05)
Openness X CEO Reputation				4,296.69*** (850.75)
CEO age	-4.70 (44.49)	-4.80 (44.81)	1.29 (44.22)	3.68 (43.66)
CEO incentives	0.00 (0.02)	0.00 (0.02)	-0.00 (0.02)	-0.00 (0.02)
CEO duality	-161.24 (281.05)	-26.35 (283.04)	-84.33 (279.51)	-114.22 (276.16)
Firm size	35.03 (88.51)	82.03 (91.47)	85.29 (90.34)	69.98 (89.18)
Firm performance	977.82 (1,605.63)	1,269.92 (1,623.86)	1,103.27 (1,604.96)	861.05 (1,587.25)
Diversification	42.19 (202.64)	87.18 (209.38)	103.68 (206.55)	152.28 (203.92)
Industry dynamism	7,678.98 (10,380.05)	13,493.99 (10,464.40)	13,481.04 (10,385.87)	12,241.66 (10,309.78)
Inverse Mills Ratio	-490.39 (2,119.27)	-991.57 (2,144.52)	-720.02 (2,116.14)	-517.27 (2,089.07)
Constant	1,125.79 (7,462.46)	9,089.64 (7,729.68)	6,085.77 (7,642.35)	4,817.12 (7,551.76)
Observations	3,197	3,197	3,197	3,197
χ^2 -statistic for model	4.984	41.45	82.35	122.4

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3.3b. Robustness test - Between effects regression for estimates' dispersion (EPS)

Variables	(1) Frct. Disp.	(2) Frct. Disp.	(3) Frct. Disp.	(4) Frct. Disp.
Conscientiousness		-7.04*** (1.39)	-4.76*** (1.38)	-3.05** (1.36)
Extraversion		-4.01*** (1.00)	-2.72*** (1.02)	-1.07 (1.01)
Agreeableness		-3.59** (1.43)	-1.97 (1.40)	-0.88 (1.38)
Emotional stability		2.20* (1.16)	0.91 (1.13)	-1.02 (1.15)
Openness to experience		7.96*** (1.80)	6.20*** (1.75)	3.87** (1.77)
CEO Reputation		0.64 (0.50)	100.23*** (11.80)	78.17*** (11.95)
Conscientiousness X CEO Reputation			-13.10*** (2.06)	-22.51*** (2.47)
Extraversion X CEO Reputation			-6.65*** (1.67)	-12.93*** (1.88)
Agreeableness X CEO Reputation				-2.10 (2.75)
Emotional stability X CEO Reputation				12.90*** (2.36)
Openness X CEO Reputation				13.11*** (3.26)
CEO age	0.02 (0.10)	0.03 (0.10)	0.03 (0.10)	0.07 (0.09)
CEO compensation	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
CEO duality (1=yes; 0=no)	-0.45 (0.72)	-0.05 (0.71)	-0.20 (0.68)	-0.52 (0.66)
Firm size	0.22 (0.21)	0.40* (0.21)	0.37* (0.20)	0.31 (0.20)
Firm performance	-0.50 (4.33)	-0.73 (4.28)	-1.39 (4.14)	-2.77 (4.01)
Diversification	-0.17 (0.51)	-0.13 (0.51)	-0.08 (0.49)	0.20 (0.47)
Industry dynamism	-10.38 (38.81)	20.45 (38.34)	8.66 (37.04)	-5.33 (35.81)
Inverse Mills Ratio	0.24 (4.89)	-0.09 (4.81)	0.27 (4.65)	2.12 (4.51)
Industry dummy	Included	Included	Included	Included
Constant	-2.52 (17.55)	22.22 (18.05)	9.60 (17.52)	1.67 (17.02)
Observations	3,140	3,140	3,140	3,140
F-statistic for model	0.383	3.020	5.834	8.148

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3.3c. Robustness test - Between effects regression for estimates' dispersion (NET)

Variables	(1) Frcst. Disp.	(2) Frcst. Disp.	(3) Frcst. Disp.	(4) Frcst. Disp.
Conscientiousness		-2,206.82*** (352.10)	-1,501.68*** (344.29)	-1,006.91*** (336.55)
Extraversion		-1,195.30*** (254.77)	-805.69*** (256.19)	-330.81 (250.58)
Agreeableness		-666.93* (358.84)	-151.20 (345.35)	272.64 (337.22)
Emotional stability		491.93* (292.87)	77.47 (281.43)	-452.73 (285.66)
Openness to experience		2,175.74*** (452.08)	1,654.21*** (433.27)	842.51* (435.24)
CEO Reputation		158.61 (117.10)	30,010.79*** (2,943.71)	23,485.18*** (2,933.44)
Conscientiousness X CEO Reputation			-3,888.30*** (506.23)	-6,712.38*** (598.75)
Extraversion X CEO Reputation			-2,030.40*** (422.74)	-3,587.07*** (458.58)
Agreeableness X CEO Reputation				-624.04 (666.26)
Emotional Stability X CEO Rep.				3,315.04*** (578.02)
Openness X CEO Reputation				4,024.02*** (813.64)
CEO age	1.57 (31.00)	4.38 (30.12)	9.76 (28.67)	21.13 (27.44)
CEO compensation	-0.01 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02* (0.01)
CEO duality	-173.14 (196.98)	-47.86 (191.40)	-108.36 (182.23)	-200.28 (174.76)
Firm size	88.38 (65.08)	147.47** (64.90)	134.06** (61.94)	118.54** (59.44)
Firm performance	381.63 (1,222.67)	444.62 (1,197.25)	218.34 (1,138.31)	-191.83 (1,089.60)
Diversification	-30.98 (141.42)	2.66 (140.11)	22.31 (133.22)	100.05 (127.31)
Industry dynamism	-5,449.54 (10,343.44)	7,128.13 (10,208.77)	5,566.31 (9,714.79)	-1,479.23 (9,296.59)
Inverse Mills Ratio	-72.65 (1,471.06)	-280.10 (1,432.64)	-45.68 (1,363.00)	508.19 (1,304.71)
Industry dummy	Included	Included	Included	Included
Constant	-452.06 (5,361.84)	7,411.85 (5,395.30)	3,013.85 (5,152.99)	654.07 (4,942.43)
Observations	3,101	3,101	3,101	3,101
F-statistic for model	0.730	4.092	8.290	11.59

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 3.1c. Main effect for estimates' dispersion (NET)

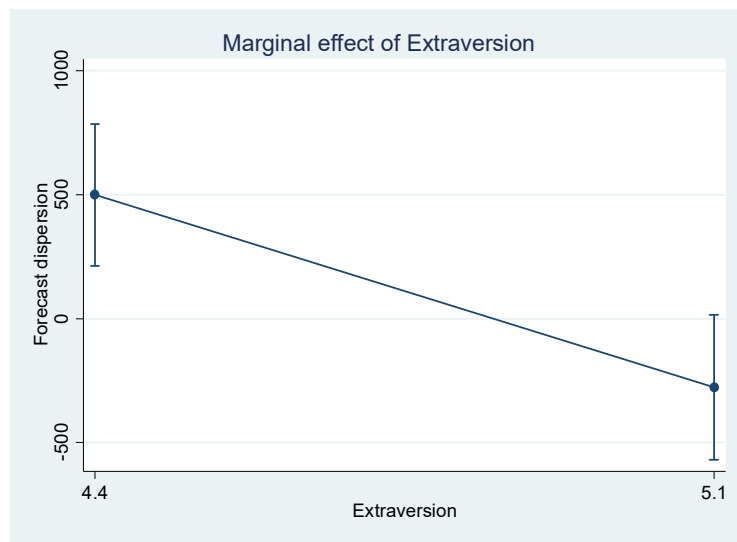
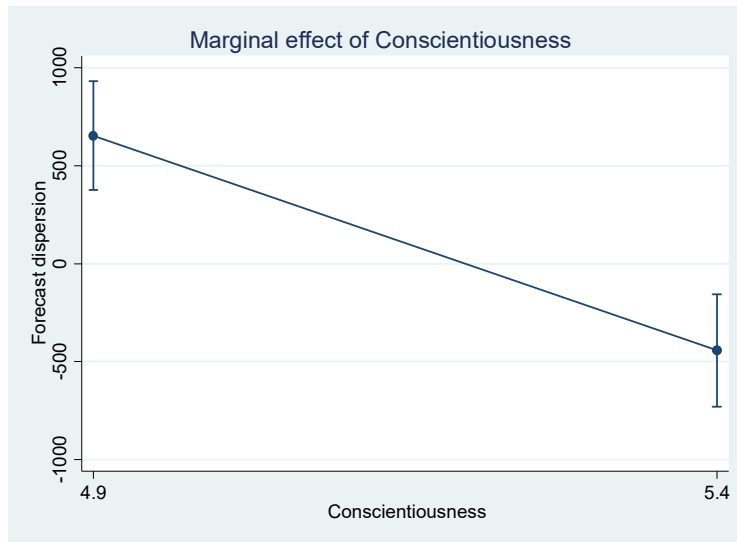
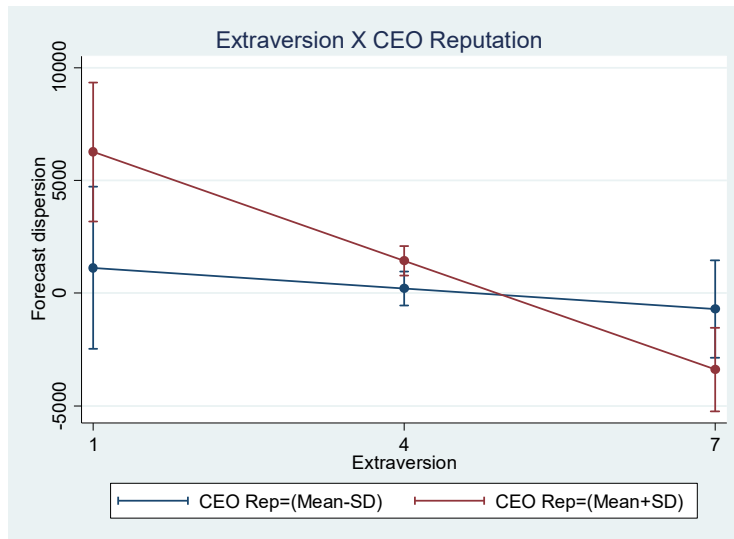
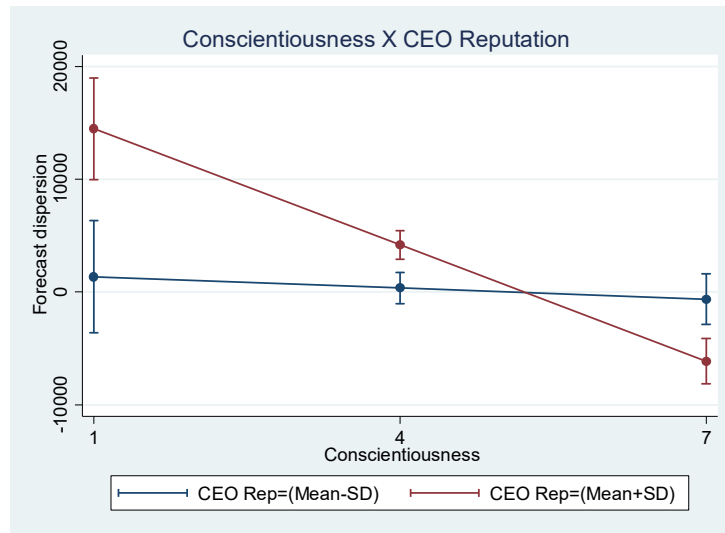


Figure 3.1d. Interaction effect for estimates' dispersion (NET)



Sample selection bias

Our sample has CEOs who stay with their respective firms through period of analysis. This criteria for inclusion can bias our sample for not being random and representative of the CEO universe (Kashmiri, Gala & Nicol, 2019).

I resolve this problem of potential sample selection bias with the Heckman two-stage method. First, I create a binary dependent variable. It is 0 if the CEO experiences turnover during the period of analysis and 1 otherwise. I run a probit regression model on the panel data with all control variables from the original model (Table 3.4) along with an additional variable *CEO tenure*, the number of years CEO has worked for the firm. I compute the Inverse Mills Ratio (IMR) from the probit model.

Then, I include IMR as a control variable in the original panel data regression model. IMR has no significant relationship with either forecast dispersion or analyst coverage. Hence, factors which lead to longer tenure CEOs being included in the sample do not influence the dependent variables.

Endogeneity concern

I resolve potential endogeneity concerns through the two-stage *xtregar* model involving instrumental variables in line with previous research (Wooldridge, 2010).

I use average CEO personality traits at the 2-digit SIC level as instrumental variable for respective CEO personality traits. I also include control variables from the original model along with instrumental variables to estimate each CEO personality traits in the first stage (Table 3.5a, 2.5b). In the second stage, I use fitted values of CEO personality traits as the independent variables in the panel data regression model (Tables 2.2, 2.3). The results discussed above thus include corrections for both sample selection bias and endogeneity.

Table 3.4. Panel data regression for Inverse Mills Ratio (IMR)

Variables	(1) IMR-EPS	(2) IMR-NET
CEO age	0.03*** (0.01)	0.03*** (0.01)
CEO compensation	-0.00 (0.00)	-0.00 (0.00)
CEO duality	-0.10 (0.09)	-0.10 (0.09)
Firm size	0.03 (0.03)	0.04 (0.03)
Firm performance	-0.76** (0.34)	-0.76** (0.34)
Diversification	-0.05 (0.09)	-0.06 (0.09)
Industry dynamism	-2.60 (5.94)	-1.17 (6.13)
CEO Tenure	-0.01 (0.01)	-0.01 (0.01)
Constant	-3.26*** (0.49)	-3.37*** (0.50)
Observations	3,475	3,485
χ^2 -statistic for model	17.61	17.53

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3.5a. First stage panel data regression with Instrumental Variables (EPS)

Variables	(1) Consc.	(2) Extra.	(3) Agree.	(4) Emo. St.	(5) Openn.
Conscientiousness Ind. Avg.	0.60*** (0.02)				
Extraversion Ind. Avg.		0.55*** (0.02)			
Agreeableness Ind. Avg.			0.60*** (0.02)		
Emotional stability Ind. Avg.				0.59*** (0.02)	
Openness to experience Ind. Avg.					0.60*** (0.02)
CEO age	0.00 (0.00)	0.00 (0.00)	-0.01*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
CEO compensation	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
CEO duality (1=yes; 0=no)	0.00 (0.01)	0.02* (0.01)	0.05*** (0.01)	-0.00 (0.01)	0.01 (0.01)
Firm size	0.00 (0.00)	0.03*** (0.01)	0.01 (0.01)	0.01*** (0.00)	0.00 (0.00)
Firm performance	0.04 (0.03)	0.02 (0.03)	-0.06** (0.03)	-0.02 (0.03)	-0.01 (0.02)
Diversification	-0.02 (0.01)	0.00 (0.02)	-0.01 (0.02)	0.01 (0.01)	-0.02 (0.01)
Industry dynamism	0.05 (0.32)	0.20 (0.39)	-0.13 (0.38)	-0.37 (0.33)	0.17 (0.31)
Constant	2.03*** (0.11)	1.82*** (0.11)	2.03*** (0.10)	1.61*** (0.09)	2.06*** (0.10)
Observations	4,341	4,341	4,341	4,341	4,341
χ^2 -statistic for model	1193	1129	1500	1254	1387

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 3.5b. First stage panel data regression with Instrumental Variables (NET)

Variables	(1) Consc.	(2) Extra.	(3) Agree.	(4) Emo. St.	(5) Openn.
Conscientiousness Ind. Avg.	0.59*** (0.02)				
Extraversion Ind. Avg.		0.54*** (0.02)			
Agreeableness Ind. Avg.			0.59*** (0.02)		
Emotional stability Ind. Avg.				0.58*** (0.02)	
Openness to experience Ind. Avg.					0.59*** (0.02)
CEO age	0.00 (0.00)	0.00 (0.00)	-0.01*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
CEO compensation	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
CEO duality	0.01 (0.01)	0.02* (0.01)	0.05*** (0.01)	-0.00 (0.01)	0.01 (0.01)
Firm size	0.00 (0.00)	0.03*** (0.01)	0.01** (0.01)	0.01*** (0.00)	0.00 (0.00)
Firm performance	0.03 (0.02)	0.01 (0.03)	-0.06** (0.03)	-0.01 (0.03)	-0.01 (0.02)
Diversification	-0.02 (0.01)	0.00 (0.02)	-0.01 (0.02)	0.01 (0.02)	-0.02 (0.01)
Industry dynamism	0.13 (0.32)	0.36 (0.40)	-0.14 (0.38)	-0.35 (0.34)	0.18 (0.32)
Constant	2.07*** (0.11)	1.89*** (0.11)	2.04*** (0.11)	1.64*** (0.09)	2.09*** (0.10)
Observations	4,346	4,346	4,346	4,346	4,346
χ^2 -statistic for model	1182	1095	1502	1234	1386

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Discussion

This study combines concepts from agency theory and personality to explore the relationship between personality traits and analyst forecasts for firms. CEOs' interaction with analysts is predicated on their personality traits and provide important cues to analysts in addition to publicly available financial information. Analysts incorporate their opinion based on such interactions in preparing their projections about the future prospect of firms.

I find that conscientiousness and extraversion negatively relate to analyst estimates' dispersion. Conscientious CEOs are perceived as committed, mature individuals at helm of firms. Extraversion enables CEOs to effectively communicate with analysts about how they are leading their firms. Analysts have more consensus about the firms' potential under their leadership. If the CEO reputation is higher, it further strengthens analysts' favorable opinion about CEOs' ability to lead their firms. This helps to further reduce the variation or dispersion in their estimates. From the extended model, I find that higher CEO reputation similarly weakens the influence of agreeableness and emotional stability on estimates' dispersion. However, analysts may perceive openness to experience as endowing CEOs to be either exploring new avenues for growth or undue risk takers. Contrarian opinions increase the dispersion in their estimates which explains the positive main effect of this personality trait. If CEO reputation is higher, analysts perceive that CEOs can prevail over others to be more growth focused or more undue risk takers. Hence, CEO reputation has a positive moderation effect for openness to experience.

For analyst coverage, I did not find any substantial results in support. Rather some results were contrary to hypotheses. Analysts think of agreeable CEOs as being able to build consensus, take along all constituents and eventually help their firms grow. They are more inclined to

provide positive coverage. Openness to experience as a trait which either makes CEOs growth focused or undue risk takers. They may accordingly provide positive or negative coverage for firms. Hence, the main effect is not significant. When firms miss forecasts, it reinforces analysts' opinion of CEOs being undue risk takers. They are more inclined to provide negative coverage.

Theoretical Implications

CEO is a crucial decision maker for the firm's strategy (Busenbark et al., 2016). CEOs engage with external monitoring agents such as analysts to reassure that they are working in the best interests of shareholders and mitigating principal-agent problems (Fama & Jensen, 1983). Analysts consider CEO characteristics as a component of non-financial information to develop their perceptions about the firm's future prospects (Bradshaw, 2011). Our study shows that CEO's personality traits become important for analysts in this regard. I contribute to this research domain by analyzing the individual level factors of CEO that influence analyst recommendations for the firm. This way I parse out the micro foundations of the firm's corporate governance mechanism and analyst recommendations in particular.

Second, I expand upper echelons research with more detailed understanding of individual level characteristics in the context of firm (Hambrick & Mason, 1984). Extant research has explored demographic characteristics such as CEO gender, education and more. I contribute to the scope of upper echelons research by including psychological characteristics especially CEO personality traits and study its association with a corporate governance mechanism.

Practical Implications

CEO personality gives some indication of how analysts will perceive the CEO in future. Their perception has implications for the firm's prospects in the capital markets. A board can

consider personality traits while recruiting the CEO. Boards will then have a better idea of how their selected CEO can influence the prospects of the firm's shares.

Second, corporate governance enablers such as analyst recommendations are emerging as one of the crucial determinants for investors' decisions to associate with the firm. CEO personality can be a useful measure of analyst perceptions about the firm's prospects. It can help investors to decide whether to invest in the firm's shares.

Limitations and Future Research Agenda

The study has some limitations which is typical of any empirical research. This also helps to open new avenues for research. First, the personality measures use the unscripted part of earnings call with analysts. There is far less scope for CEOs to give prepared responses which may mask their true personality traits. Rather responses are more on the fly and better reflect CEO personality. This approach helps to mitigate validity concerns regarding personality measures whether they can capture the actual personality traits. However, I cannot ascertain whether CEOs receive broad inputs from their own teams before the earnings call so that they can provide suitable responses to analyst queries (Harrison et al., 2020). In such a scenario, future research can come up with other personality measures that take into account the potential concerns. Comparing the results from such measures with this personality measures can help to prove the robustness of findings and lend more empirical support for this type of research.

Second, CEO is the most important decision maker in a firm. However, there are other members of top management team (TMT) such as chief financial officer (CFO) who have a substantial say in the firm's strategy. Current research focuses on the CEO and precludes the influence of other top executives in the firm. Future research can explore the influence of other members of top management team individually as well as in association with that of CEO's

influence. This approach will improve our understanding of individual factors influence the firm's strategic aspects at the TMT level at large and not just for an individual TMT member.

Third, the research is limited to the US context. The personality measures will have better reliability if I can show that the study applies similarly to other markets in developed economies of Europe or the emerging economies of Asia. Thus, it opens a new avenue for research. Any deviation in findings outside the US relative to the American context can also have potential for new research. Studies can explore the contingency or causal mechanisms which could be the basis of divergent findings in different national contexts. All in all, extending the context of this study can potentially lead to avenues for further empirical research.

IV. CHAPTER 3: HOW CEO PERSONALITY TRAITS RELATE TO BOARD STRUCTURE AND BOARD DIVERSITY

Introduction

The chief executive officer (CEO) is responsible for decisions on the firm's strategic plans and leading them to fruition (Hermann & Nadkarni, 2014). The strategic decisions bear the imprint of the CEO's values, cognitions and dispositions (Chatterjee & Hambrick, 2011). Hence, their personalities influence their strategic decisions (Carpenter, Geletkanycz & Sanders, 2004). This takes place because CEOs' personality traits determine how they interpret and react to environmental conditions (Hiller & Hambrick, 2005).

Empirical research shows that CEO personality traits play a role in firm strategy (Nadkarni & Hermann, 2010). Stakeholders such as the board of directors play an important role in shaping the CEO's strategic decisions (Westphal, 1999). The board monitors the CEO as well as advises the CEO on decision making (Jensen & Meckling, 1976). Extant research has explored the influence of individual characteristics of board members on the CEO's strategic actions. For instance, independent, outside board members are able to provide better oversight over the CEO (Westphal, 1998). Boards with more diversity in demographics and functional expertise ensure access to critical, external resources which enables the CEO to formulate effective strategy (Hillman, Shropshire & Canella, 2007). However, the influence of CEO's individual characteristics on the board is relatively less explored. Research has assumed that there is no differential influence of CEO's individual traits on the board.

It is important to study how CEO individual traits influences board from the perspective of firm strategy. CEOs try to structure the board in a way to reduce uncertainty when dealing with board members (Westphal & Zajac, 1995). CEOs can then find it easier to obtain the boards' concurrence for their strategic decisions (Zhu & Chen, 2015). The strategic decisions reflect the CEO's values, cognitions and dispositions (Chatterjee & Hambrick, 2011) which in turn depend on the CEO's personality traits (Chatterjee & Hambrick, 2007). Therefore, I explore how CEO personality relates to board structure. It helps to improve our understanding of how CEOs manage their association with boards for strategy formulation or implementation.

Studies on CEO personality have considered distinct personality traits like narcissism (Chatterjee & Hambrick, 2007), locus of control (Miller & Toulouse, 1986). Some studies have looked at CEO personality through a comprehensive framework like the Big Five (Harrison, Thurgood, Boivie & Pfarrer, 2020). The study of comprehensive personality traits is now even more feasible with the development of a linguistic measure of CEO personality (Harrison, Thurgood, Boivie & Pfarrer, 2019). I study whether Big Five traits relate to board structure which is a monitoring mechanism to align CEOs with shareholder interests (Fama & Jensen, 1983). I also study how personality traits influence CEOs' ability to work with diverse individuals (Judge & Cable, 1997) when they seek the boards' counsel to run their firms. To explore these research questions, I analyze whether CEO personality traits relate to board independence and board diversity respectively. Industry munificence reduces the need for monitoring by independent boards and enable responsive decision making to capitalize on opportunities (Gedajlovic, Lubatkin & Schulze, 2004). Industry competitiveness determines the firm's urgency to acquire resources (Boone, Olffen, Witteloostuijn & Brabander, 2004) which board diversity can facilitate (Hillman et al., 2007). These industry level factors act as

moderators to the relationship between CEO personality and board structure or board diversity respectively. The next section deals with the relationship between CEO personality traits one aspect of board structure - board independence. The subsequent section deals with a similar relationship with CEO duality. The final section looks at how CEO personality relates to board diversity.

I make two important theoretical contributions through this study. First, I link CEO broad personality traits with the firm's board composition (Westphal & Zajac, 1995). This approach enables me to explore the micro-foundations of corporate governance mechanisms in a firm. Agency theory (Fama & Jensen, 1983) deals with misalignment of interests between principal (shareholders) and agent (managers), and how boards act as monitoring agents to align their interests. Board structure in terms of degree of independence or separation of CEO and board chair, determine its monitoring capacity. Similarly, resource dependence theory posits about boards providing access to resources and advising the CEO on managing their firms (Hillman, Withers & Collins, 2009). Board diversity in terms of gender or ethnic diversity increases access to a wider pool of knowledge and resources. CEO being the top decision maker and generally a board member, has a say in the board structure or board diversity. How the CEO can influence these aspects depends on psychological attributes such as personality traits. Hence, this study explores how the CEO's personality traits influence their involvement in board composition or board diversity. Second, I contribute to upper echelons research by demonstrating how individual level attributes like broad personality traits influence the firm's ability to secure resources and information critical for successful strategic decisions. In this regard, the study is the first to explore the relationship between CEO's broad personality traits such as Big Five and board composition and contingency mechanisms that act upon this relationship.

Theoretical Background

The relationship between the CEO and the board is important from the perspective of corporate governance. One of the board's functions is to monitor the CEO's activities (Johnson, Daily & Ellstrand, 1996). Board oversight curbs the CEOs' tendency for managerial opportunism and CEOs perform their managerial responsibilities in the interests of shareholders (Shen, 2003). Boards can perform their monitoring function more effectively when they are independent from the firm's management (Eisenhardt, 1989). Thus, independent boards help to protect shareholder interests and keep managerial opportunism under control (Zahra & Pearce, 1989).

Boards also have a significant role in resource provision for the firm. Board helps to reduce a firm's dependence and uncertainty in procuring critical resources from external entities (Pfeffer, 1972). In this regard, the board advises the CEO and the top management, enhances the firm's legitimacy, and enables preferential commitments from entities outside the firm (Pfeffer & Salancik, 1978). Boards require substantial interaction with the CEO or the top management to discharge their resource provisioning duties (Hillman & Dalziel, 2003).

Shareholders, regulators and media exert pressure on firms to ensure demographic diversity on their boards (Carter, Simkins & Simpson, 2003). Stakeholders believe that board diversity accrues four main advantages to the firm (Robinson & Dechant, 1997). First, the study posits that board diversity improves knowledge of the market. Directors reduce uncertainty by connecting the firm to its external environment and sharing information critical for its business (Hillman, Canella & Paetzold, 2000). Second, it fosters creativity and innovation. When the board is demographically diverse, its human capital is more extensive because the board members possess different views (Miller & Triana, 2009). The diverse board members produce a broad spectrum of ideas by virtue of their larger collective body of knowledge and explore new,

innovative opportunities (Gao & Zhang, 2006). Third, it promotes effective problem solving. Diverse board members have faced a multitude of experience and have better understanding of the different scenarios that the firm encounters (Joshi & Roh, 2009). They are equipped to consider different alternatives and arrive at a more optimal solution (Hong & Page, 2004). Finally, it enhances the effectiveness of firm leadership. The firm builds or strengthens its network with suppliers, customers and other value chain partners through its diverse board members (Beckman & Haunschild, 2002). The firm is in a better position to understand its environment and respond to competitive challenges that emerge therein (Boyd, 1990).

Another important aspect of corporate governance is CEO duality. It means that a single individual serves as the CEO as well as the board chair (Dalton, Hitt, Certo & Dalton, 2007). CEO duality leads to less monitoring by the board and more power to the CEO whereas separate board leadership allows for more board monitoring and reduces the CEO's power (Finkelstein, Hambrick & Cannella, 2009). While a CEO prefers duality to ensure unified command, it also impinges on the board's ability to check managerial self-interests at the expense of shareholders (Krause, Semadeni & Cannella, 2014).

Not all CEOs want powerful boards that curtail their own influence, rather they want to take decisions without facing much board scrutiny (Adams, Almeida & Ferreira, 2005). CEOs may also perceive board diversity to be creating more conflict and less cohesion which slows down the decision making process (Hsu & Wu, 2014). Hence, CEOs play a substantial role in appointing directors to the board (Lorsch & MacIver, 1989). CEOs try to induct those individuals into the board with whom they can build collaborative working relationships and leverage their expertise (Westphal, 1999). CEOs co-opt such members on the board for longer tenures (Coles, Daniel & Naveen, 2014). This way CEOs can have likeminded individuals who are more likely

to engage in groupthink and agree with the CEOs' decisions (Bernile, Bhagwat & Yonker, 2018).

CEOs get involved in board selection to maintain their influence or manage diversity within the board, and even prefer to be the board chair. These strategic decisions or preferences are a function of their cognition and individual characteristics as is the case with the top management (Hambrick & Mason, 1984). CEO cognition in turn relates to their personality traits (Peterson, Walumbwa, Byron & Myrowitz, 2009). I extend research on the relationship between CEO characteristics and board structure by exploring how CEO's broad personality traits relate to aspects of board structure as board independence and CEO duality and board diversity.

Hypotheses Development

CEO Personality Traits and Board Independence

Research shows that CEOs' individual level characteristics determine their preferences about the board. For instance, narcissistic tendency among CEOs leads to selection of board members with similar tendencies or with experience of working with narcissistic CEOs (Zhu & Chen, 2015). CEOs are able to get around board monitoring because such board members are less independent and more likely to acquiesce to the CEOs' strategic decisions (Westphal & Zajac, 1995).

In this study, I consider broad personality traits such as Big Five to explore the relationship with board independence. Board independence is expressed in terms of the share of independent directors on the board. In particular, conscientious CEOs want to have more control on prevailing situations (Peterson et al., 2003). Extraverted CEOs prefer to dominate and guide others to pursue their goals (Hermann & Nadkarni, 2014). Emotional stability enables CEOs to cope with challenging situations deftly (Benischke, Martin & Glaser, 2019). Independent boards

curtail CEOs' ability to be dominant or take control of situations as per their choice. Independent boards monitor CEOs more and can create challenging situations for them while deciding on firm strategy. Overall, it impacts the way CEOs can discharge their duties. Therefore, it is pertinent to study how the three personality dimensions influence the incumbents' preference for independent boards after they have become CEO. Environmental munificence provides CEOs with more discretion in decision making while independent boards tend to restrain them. This provides a rationale to also explore how CEO's broad personality traits relate to board independence under the moderation effect of environmental munificence.

Conscientiousness. Conscientious CEOs are cautious and are averse to dealing with ambiguity (Costa & McCrae, 1996). Conscientious CEOs are more focused on achieving tasks (McCrae & Costa, 1987). They want to centralize decision making to a greater extent to exert their authority (Costa & McCrae, 1988). They have a greater tendency to seek control of their environment (Peterson et al., 2003). Towards that objective, they try to ensure structure in their operating environment (Miller & Toulouse, 1986).

CEO works as agent for shareholders who are the firm's principals. Their mutual interests may not always be aligned due to which boards of directors monitor CEOs to reduce the principal-agent problem (Fama & Jensen, 1983). Independent boards by virtue of their formal authority over the firm's management, tend to exert influence on the CEOs and can prevail over the CEOs in case of a disagreement or conflict (Zajac & Westphal, 1996). The CEOs prefer directors who are more conciliatory to ensure predictability in dealing with them (Westphal & Zajac, 1995). The fewer are the independent board members, the more are CEOs able to influence the board to acquiesce to their demands (Fama & Jensen, 1983). CEOs are better able

to establish their authority and boards are less effective in holding them accountable with fewer independent board members (Finkelstein & D'Aevni, 1994).

Independent boards increase the board's oversight and restrain the CEO's power (Westphal, 1998). However, conscientious CEOs prefer to be in control and avoid uncertainties while working (Judge & Bono, 2000). Since, fewer independent board members would ensure more compatibility between boards and CEOs, conscientious CEOs would prefer such a board structure. They will try to induct fewer independent members on the board after they assume the role of CEO.

H1: CEO conscientiousness is negatively related to board independence

Extraversion. Extraverted CEOs are articulate and are able to influence others in order to win them over (Bono & Judge, 2004). They are ambitious, seek out challenges and have an urgency to fulfill their goals (Hermann & Nadkarni, 2014). They are more effective when they can dominate over others in order to accomplish their work (Barrick, Stewart & Pietrowski, 2002). They have high opinion about their own abilities and expect less resistance from individuals who work with them (Gow, Kaplan, Larcker & Zakolyukina, 2017). They view any scrutiny or dissent against them as a potential threat (Grant, Gino & Hoffman, 2011).

Extraverted CEOs tend to pursue aggressive strategies and are less likely to be amenable to feedback from others (Judge, Piccolo & Kosalko, 2009). On the other hand, independent board members have a fiduciary responsibility to protect shareholder interests by questioning the CEOs' actions and opposing moves which do not have valid justification (Weisbach, 1988). To preempt such scenarios, CEOs would prefer to be among those who reinforce their positions and support their decisions (Zhu & Chen, 2015). Therefore, extraverted CEOs would prefer insiders

as board members and will try to ensure include fewer independent, outside members on the board after they become the CEO.

H2: CEO extraversion is negatively related to board independence

Emotional Stability. Emotionally stable CEOs handle demanding situations well because they are able to remain calm and balanced even when faced with unfavorable conditions (McCrae & Costa, 1997). They build cohesion and reduce conflict among individuals associated with their firms (Peterson et al., 2003). They deal with conflicts or disagreements more effectively while staying focused on their goals and targets (Barrick, Stewart, Neubert & Mount, 1998). They possess better information processing ability, are more proactive in dealing with situations encountered by the firm and are not averse to take risks (Judge et al., 2002).

Boards on the other hand, reduce the conflict of interests between shareholders and managers especially the CEO through their oversight functions (Hermalin & Weisbach, 2001). Boards with more independent members are more engaged in overseeing CEOs and other managers (Pearce & Zahra, 1991). Increased involvement of independent boards means that board members exercise more vigilance, CEOs are subject to more scrutiny and CEOs are more answerable to the boards for their decisions (Westphal, 1999). Emotionally stable CEOs are less intimidated by such external influence which could lead to stressful scenarios, rather they handle such situations deftly (Colbert, Barrick, & Bradley, 2014). Their ability to adapt enables them to be responsive to the demands of such situations (Nadkarni & Hermann, 2010). Hence, emotionally stable CEOs are more open to working with independent board members to run the firm's business. They will not be averse to induct independent, outside members on the board and board independence will increase after they assume the role of CEO.

H3: CEO emotional stability is positively related to board independence

Environmental Munificence. Resource scarcity and uncertainty are characteristics of low munificence environment where firms have to be more agile and responsive in decision making (Goll & Rasheed, 2004). This type of board structure enables CEOs to take prompt decisions and capitalize on limited opportunities in a low munificence environment because the situation demands a strong and decisive CEO at the helm (Boyd, 1995).

Conscientious CEOs prefer to be in control of their environment and pursue their goals tenaciously (O'Reilly, Caldwell, Chatman & Doerr, 2014). In a low munificence environment, there are fewer resources or opportunities and more uncertainty (Boyd, 1995). They find it more difficult to be in control and achieve their business goals. Since independent boards further restrict their decision making, they prefer to induct even fewer independent members on the board.

Extraverted CEOs want to lead others and challenge the status quo by pursuing new ideas (Nadkarni & Hermann, 2010). A low munificence environment provides them with less resources (Goll & Rasheed, 2004) which hinders their ability to try new initiatives. Independent boards restrict them to take decisions on their own. Hence, they want to include even fewer independent members on the board under low munificence.

Emotional stability helps CEOs to deal with stressful and challenging situations (Gow et al., 2017). In a less munificent environment, emotionally stable CEOs can better cope with uncertainty when they face less constraints. Fewer independent members make the boards less vigilant and confront the CEOs less (Finkelstein & D'Aveni, 1994). CEOs prefer fewer independent members on the board as a result.

In this scenario, CEO personality traits that relate negatively to independent board members will influence further aversion to outsider dominated board structures. Traits that relate positively to independent board structures will have weaker preference.

When environment munificence increases, the business scenarios open up myriad opportunities (Gedajlovic, Lubatkin & Schulze, 2004). Proper governance mechanisms are essential to protect the shareholders' interests as well as enable the firm to exploit growth opportunities (Zahra & Filatotchev, 2004). Personality traits which prefer outsider dominated boards will influence stronger preference whereas traits with aversion to the same will have weaker aversion.

H4a: Environmental munificence moderates the relationship between CEO conscientiousness and board independence such that higher levels of munificence weaken the negative relationship

H4b: Environmental munificence moderates the relationship between CEO extraversion and board independence such that higher lower levels of munificence weaken the negative relationship

H4c: Environmental munificence moderates the relationship between CEO emotional stability and board independence such that higher levels of munificence strengthen the positive relationship

CEO Personality Traits and Board Diversity

Diverse board members endow the board with skills and abilities to provide counsel as well as monitor the CEO's actions (Bear, Rahman & Post, 2010). The board has access to specialized knowledge such as law, accounting or business management, and has experience in dealing with community relations (Hillman, Cannella & Harris, 2002). The more is the collective expertise of the board, the better it is able to monitor and protect shareholder interests (Carpenter

& Westphal, 2001). But CEOs may also perceive diverse boards to be prone to more conflict and less cohesion which constrains strategic decision making (Hsu & Wu, 2014).

Firm level decisions such as board diversity is a function of the psychological attributes of the top management especially the CEO (Chatterjee & Hambrick, 2007). CEOs' personality traits determine how they acquire information from their environment, select the relevant information and process the information to formulate firm strategy (Hambrick & Mason, 1984). In this regard, I explore agreeableness and openness to experience among the Big Five personality traits and for board diversity, I consider gender and ethnic diversity. Agreeable CEOs want to facilitate trust and a collaborative working environment (Hermann & Nadkarni, 2010). Openness to experience enables CEOs to challenge the status quo and foster innovation and change (O'Reilly et al., 2014). Members of different gender or ethnic backgrounds expand the knowledge base and expose the CEOs to new information or experience. More diverse boards also entail different working environments than more homogenous boards. Hence, the two traits become pertinent when CEOs deal with diversity in their boards. It motivates the study of the relationship between CEO personality traits and board diversity. When competition is more intense, boards ensure access to knowledge or resources that help firms to respond to challenges (Hillman et al., 2000). More diverse boards can have access to a wider array of resources. Hence, I examine the moderation effect of competitive intensity on this relationship between CEO personality traits and board diversity.

Agreeableness. As social entities, firms tend to gravitate towards homogeneity (Pfeffer, 1997). They tend to have more of likeminded individuals and prefer fewer of those individuals who stand out as different (Schneider, 1987). But firms need demographic diversity especially

within their top decision-making teams, to broaden their information processing capabilities and cope with the challenges of a complex business environment (Boone et al., 2004).

Boards possess resources that are valuable for the firm's business (Hillman & Dalziel, 2003). It is possible due to board members' professional expertise and interlocking ties with other firms in the industry (Haynes & Hillman, 2010). The directors provide access to valuable resources through their advice and counsel, especially to the CEOs (Pfeffer & Salancik, 1978). The more diverse is the board, the better is its ability to provide resources required by the firm (Bear, Rahman & Post, 2010).

Agreeable CEOs prefer a culture of cooperation and try to be acceptable among those associated with their firms (Hogan & Hogan, 1995). They promote a more cohesive and team-oriented culture within their firms (Judge & Cable, 1997). Once they become the CEO, they foster a culture where board members from diverse backgrounds can come together to take decisions collectively and efficiently while reduce delay in consensus building.

H5: CEO agreeableness is positively related to board diversity

Openness to Experience. Openness to experience allows CEOs to be receptive and to value opinions of others (McCrae & Costa, 1987). Their willingness to experiment with new ideas enables them to challenge traditional notions or lead to something novel (Judge & Cable, 1997). They are more open to change and are able to take into account multiple perspectives while taking decisions (Nadkarni & Hermann, 2010).

They facilitate germination of new concepts and are open to diverse set of ideas (Benishchke, Martin & Glaser, 2019). Diverse boards provide multitude of perspectives in terms of industry insider knowledge, management skills, experience in community relations among others (Hillman et al., 2000). The more heterogenous are boards, the more extensive are their

knowledge base, innovativeness and problem-solving abilities (Finkelstein & Hambrick, 1996). A diverse board being endowed with a wider range of resources have better capabilities which ultimately increases shareholder value (Carpenter & Westphal, 2001).

CEOs with openness to experience are better able to grasp diverse opinions (Gow et al., 2017). Thus, CEOs high on this personality trait would ensure more board diversity once they have become the CEOs as they would be able to work with boards having high diversity.

H6: CEO openness to experience is positively related to board diversity

Competitive Intensity. Competitive intensity in the firm's industry increases the need to acquire resources (Boone et al., 2004). Firms can benefit from access to valuable resources and counsel by virtue of the knowledge and skills of board members (Gomez-Mejia & Wiseman, 1997). Diverse boards are able to share a wide range of resources such as industry insider knowledge, management skills, experience in community relations among others with the firm (Hillman et al., 2000). Diversity requires CEOs to integrate the members together to utilize their expanded knowledge base else diversity may constrain productivity (Carter et al., 2003). Agreeable CEOs ensure a conducive working environment wherein individuals can trust and collaborate with each other (Nadkarni & Hermann, 2010).

Board members from diverse backgrounds provide valuable counsel to CEOs by virtue of their skills and expertise (Haynes & Hillman, 2010). The more is the demographic diversity of the board, the more is it able to ensure access to such critical resources (Hillman, Shropshire & Cannella, 2007). CEOs with openness to experience are able to value the counsel better and are less resistant to accept new information (O'Reilly et al. 2014).

When faced with increased competition in the industry, CEO personality traits that have preference for board diversity would have even more impact. CEOs who are able to provide a

conducive environment for diverse board members to function and also accept the information they provide, will incorporate the same in their decisions and respond effectively to competitive challenges. Thus, such traits drive CEOs to ensure more diversity and make the firm more competitive.

H7a: Industry level competitive intensity moderates the relation between CEO agreeableness and board diversity such that higher levels of competitive intensity strengthen the relationship

H7b: Industry level competitive intensity moderates the relation between CEO openness to experience and board diversity such that higher levels of competitive intensity strengthen the relationship

Methods

Sample and Data Collection

The sample data deals with CEOs of S&P 500 firms. A machine learning based linguistic tool analyzes the transcripts of quarterly earnings call to evaluate CEO personality traits (Harrison et al., 2019). The sample is for the time period of 2000-2017. Information on board composition as well as director level information is available from the Investor Responsibility Research Center (IRRC) database (Miller & Triana, 2009). Financial data from the COMPUSTAT database is mostly for firm level control variables. CEO level data from the Execucomp database is for CEO level control variables.

Independent Variables

CEO Personality. Open Language Chief Executive Personality Tool (OLCPT) measure a CEO's Big Five personality traits of conscientiousness, extraversion, emotional stability, openness to experience and agreeableness on a 7-point scale (Harrison et al., 2019).

This tool analyzes CEO's spoken language for response to unscripted questions from analysts during the questions and answers (Q&A) section of the earnings calls (Harrison et al., 2020). The advantage is that CEO's responses are not prepared beforehand, are more likely their own and hence are a genuine source of information about CEO personality (Malhotra et al., 2018).

Environmental Munificence. Environmental munificence is the moderator for the models involving CEO duality and board independence. It is the extent to which a business environment supports an organization's growth (Goll & Rasheed, 2004). The growth rate in five year trailing sales captures munificence and is the regression coefficient of such sales on time for the same period (Dess & Beard, 1984).

Competitive Intensity. Competitive intensity is the moderator for the model involving board diversity. I measure competitive intensity similar to Ang's (2008) method. First, I obtain market size in terms of total sales for the business in which a firm operates. Then I get the average competition faced by a firm as the total market size by the total number of competitors. Competitive intensity is the log of the average competition. Relevant data on firm level metrics is available from the COMPUSTAT database.

Dependent Variable

Board Diversity. *Board gender diversity* and *Board national diversity* are the degree of heterogeneity in the firm's board with respect to gender and nationality. the proportion of women and foreign nationals (non-American) directors in each board respectively (Miller & Triana, 2009). The data is available in the BoardEx database.

Board Structure. *Board independence* as number of independent directors on the board (Finkelstein et al., 2009). The measures are available from the BoardEx database. I count those

directors who were appointed during the tenure of the CEO to mitigate concerns about reverse causality. I prefer count of independent directors to their ratio because ratio measures provide less accurate parameter estimates (Certo, Busenbark, Kalm & LePine, 2020).

Control Variables

I take into account possible confounding effects through control variables at the CEO, firm and industry levels.

CEO Level. I control for *CEO age* and *CEO incentives* (ratio of restricted stock, stock options and long term incentives to the total compensation) (Benischke et al., 2019). These variables account for the CEO's influence on the firm's strategic decisions to some extent (Harrison et al., 2020). The data is available from Execucomp and COMPUSTAT databases.

Firm Level. I control for *Firm size* as the natural log of employees, *Firm performance* in year (t-1) as the return on assets (RoA), *Debt-to-equity ratio* and *Diversification* as the firm's entropy scores which can account for CEO's influence on board composition (Zhu & Chen, 2015). The data is available from firm level metrics in COMPUSTAT database.

Industry Level. I control for industry level dynamism since firms in dynamic industries can be more responsive by reducing board oversight and concentrating more power with the CEO (Boyd, 1995). *Industry dynamism* is the standard error of regression coefficient of five year trailing sales on time divided by the industry mean sales during the same period (Dess & Beard, 1984).

Model and Estimation

Model analysis for board independence is with negative binomial model for panel data because the dependent variable, independent directors, has integer count (Woolridge, 2015). Analysis for board diversity is based on random effects regression of panel-data following

previous research on personality traits (Harrison et al., 2020). Since measures of the independent variable (personality traits) are time invariant, fixed effects model is not suitable here (Certo, Withers & Semadeni, 2017). The model employs board composition data for firms spanning consecutive years which are highly stable from one year to the next. This requires considering serial correlation in the error terms. I use *xtregar* command in Stata which provides a correction for serial correlation (Bromiley, Rau & Zhang, 2017).

Results

Table 4.1 includes the summary statistics and correlations of all variables which are part of the regression models for board independence as well as board diversity. I examine for potential issues of multicollinearity in the models. The mean variance inflation factor (VIF) of the board independence model is 1.36 with no VIF for individual variables exceeding 3.0. Thus, the results indicate that the model does not have any substantial issues of multicollinearity. Mean variance inflation factor (VIF) of the gender diversity and national diversity models independence model are both 1.38 with no VIF for individual variables exceeding 3.0. These models also do not have problems as per results from multicollinearity analysis.

Table 4.1. Summary statistics

Variables	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) CEO duality	0.54	0.50	1.00																
(2) Board independence	2.50	2.63	0.25	1.00															
(3) Gender diversity	0.12	0.10	0.09	0.06	1.00														
(4) National diversity	0.09	0.16	0.01	0.03	0.05	1.00													
(5) Conscientiousness	5.15	0.52	0.01	0.00	0.20	-0.04	1.00												
(6) Extraversion	4.75	0.78	0.04	0.02	0.07	0.04	0.24	1.00											
(7) Agreeableness	4.07	0.74	0.05	0.02	0.07	0.06	0.39	0.32	1.00										
(8) Emotional stability	3.67	0.64	0.00	0.01	0.09	0.08	0.32	0.51	0.46	1.00									
(9) Openness to experience	4.68	0.57	0.04	0.00	0.12	0.04	0.55	0.48	0.66	0.56	1.00								
(10) Environmental Munificence	118305.90	91085.03	0.03	0.03	0.00	0.00	0.01	0.09	0.01	0.05	0.00	1.00							
(11) Competition Intensity	7.35	1.21	0.09	0.08	0.18	0.04	0.04	0.05	0.10	-0.03	-0.08	0.23	1.00						
(12) CEO age	55.46	7.17	0.26	0.27	0.03	-0.01	-0.03	-0.06	0.12	-0.03	-0.11	0.00	0.08	1.00					
(13) CEO gender	0.03	0.18	0.06	0.04	0.25	0.01	0.11	0.01	0.07	0.06	0.09	0.02	0.02	0.06	1.00				
(14) CEO compensation	5502.70	10060.44	0.11	0.08	0.11	0.09	0.01	0.04	0.04	0.00	0.04	0.04	0.15	0.03	0.00	1.00			
(15) Firm size	8.31	2.00	0.19	0.08	0.28	0.13	0.06	0.16	0.00	0.07	0.00	0.02	0.39	0.10	0.03	0.27	1.00		
(16) Firm performance	0.03	0.34	0.04	0.02	0.06	-0.01	0.03	0.00	0.01	-0.02	0.00	0.05	0.07	0.02	0.01	0.05	0.11	1.00	
(17) Industry Dynamism	0.00	0.01	0.03	0.01	0.01	-0.04	0.01	-0.05	0.09	-0.03	-0.06	0.38	0.07	0.01	0.00	-0.01	0.14	0.04	1.00

Table 4.2 has the results of panel data regression for board independence with CEO personality traits. First, I introduce the control variables in Model 1 and subsequently add the independent variables in Model 2. I interpret the main effects of CEO personality traits with this model. Hypotheses predict that conscientiousness and extraversion negatively influence board independence whereas emotional stability has a positive influence. Results are significant but all contrary to predictions. Conscientiousness ($\beta = 0.52, p < 0.01$), extraversion ($\beta = 0.78, p < 0.01$) and emotional stability ($\beta = -0.64, p < 0.01$) provide no support H1-H3.

Next, I introduce the interaction terms of these three personality traits with environmental munificence. Higher levels of munificence will weaken the negative relationship of conscientiousness or extraversion and strengthen the positive relationship of emotional stability. Results provide no support for moderation hypotheses H4a-H4c. Rather, munificence strengthens the positive relationship of first two traits in question though not significant for extraversion, and the negative relationship of emotional stability. I also include the interaction terms of other two traits in Model 4 to test the robustness of our findings. Munificence still strengthens the positive relationship of first two traits and the negative relationship of emotional stability.

Table 4.2. Panel data regression for board independence (negative binomial model)

Variables	(1) Board Ind.	(2) Board Ind.	(3) Board Ind.	(4) Board Ind.
Conscientiousness		0.52*** (0.11)	-0.05 (0.15)	-0.24 (0.16)
Extraversion		0.78*** (0.09)	0.73*** (0.11)	0.61*** (0.11)
Emotional stability		-0.64*** (0.09)	-0.29** (0.11)	-0.42*** (0.12)
Agreeableness		0.08 (0.10)	0.21** (0.11)	0.24* (0.14)
Openness to experience		-0.39*** (0.15)	-0.54*** (0.15)	-0.14 (0.20)
Environmental Munificence		-0.00 (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
Conscientiousness X Environmental Munificence			0.00*** (0.00)	0.00*** (0.00)
Extraversion X Environmental Munificence			0.00 (0.00)	0.00*** (0.00)
Emotional stability X Environmental Munificence			-0.00*** (0.00)	-0.00*** (0.00)
Agreeableness X Environmental Munificence				-0.00 (0.00)
Openness X Environmental Munificence				-0.00*** (0.00)
CEO age	0.20*** (0.00)	0.20*** (0.00)	0.21*** (0.00)	0.21*** (0.00)
CEO gender	0.58*** (0.05)	0.67*** (0.05)	0.69*** (0.05)	0.70*** (0.05)
CEO duality (1=yes;0=no)	-0.75*** (0.02)	-0.74*** (0.02)	-0.74*** (0.02)	-0.74*** (0.02)
CEO compensation	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
Firm size	0.25*** (0.01)	0.24*** (0.01)	0.24*** (0.01)	0.24*** (0.01)
Firm performance	-2.52*** (0.06)	-2.51*** (0.06)	-2.52*** (0.06)	-2.52*** (0.06)
Industry Dynamism	9.63*** (1.46)	10.48*** (1.47)	10.30*** (1.47)	10.19*** (1.48)
Inverse Mills Ratio	9.04*** (0.17)	9.02*** (0.17)	9.02*** (0.17)	9.01*** (0.17)
Constant	-29.37*** (0.58)	-31.81*** (0.76)	-29.87*** (0.89)	-29.74*** (0.90)
Observations	21,444	21,444	21,444	21,444
χ^2 -statistic for model	6497	6631	6699	6713

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4.3 has the results of analysis of agreeableness and openness to experience with board gender diversity. Model 1 has only the control variables to start the panel data regression. Model 2 adds the independent variables to study the main effects of CEO personality traits. Agreeableness ($\beta = 0.03$, $p < 0.05$) has a positive influence on gender diversity which supports H5. Increasing agreeableness from 1 SD below mean to 1 SD above mean increases the proportion of female directors by 10%, as shown in Figure 4.1a. But openness does not have any significant relationship and hence, no support for H6.

Model 3 includes the interaction terms of two personality traits with competition intensity. Neither trait has any significant interaction with the moderator to support H7a, H7b. I also include the interaction terms of other three traits in Model 4 to ascertain the robustness of our findings. I still do not find support for the two hypotheses as the interaction terms are still not significant.

Table 4.3. Panel data regression for board gender diversity (RE autoregressive model)

Variables	(1) Gender Diversity	(2) Gender Diversity	(3) Gender Diversity	(4) Gender Diversity
Conscientiousness		0.10*** (0.01)	0.10*** (0.01)	0.27*** (0.07)
Extraversion		-0.05*** (0.01)	-0.05*** (0.01)	-0.07 (0.05)
Emotional stability		0.02* (0.01)	0.02* (0.01)	-0.06 (0.06)
Agreeableness		0.03** (0.01)	0.04 (0.06)	0.12* (0.06)
Openness to experience		-0.01 (0.02)	-0.06 (0.07)	-0.15* (0.08)
Competition Intensity		0.02*** (0.00)	-0.00 (0.03)	0.04 (0.04)
Conscientiousness X Competition Intensity				-0.02*** (0.01)
Extraversion X Competition Intensity				0.00 (0.01)
Emotional stability X Competition Intensity				0.01 (0.01)
Agreeableness X Competition Intensity			-0.00 (0.01)	-0.01 (0.01)
Openness X Competition Intensity			0.01 (0.01)	0.02* (0.01)
CEO age	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)
CEO gender	0.08*** (0.01)	0.07*** (0.01)	0.07*** (0.01)	0.07*** (0.01)
CEO duality (1=yes;0=no)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Board independence	0.00** (0.00)	0.00* (0.00)	0.00* (0.00)	0.00* (0.00)
CEO compensation	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm size	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)
Firm performance	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Industry Dynamism	-0.08 (0.12)	-0.02 (0.12)	-0.02 (0.12)	-0.03 (0.12)
Inverse Mills Ratio	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
Constant	0.02 (0.04)	-0.50*** (0.07)	-0.32 (0.21)	-0.66** (0.30)
Observations	17,853	17,851	17,851	17,851
χ^2 -statistic for model	445.7	854.7	856	871.4

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 4.1a. Main effect for board gender diversity

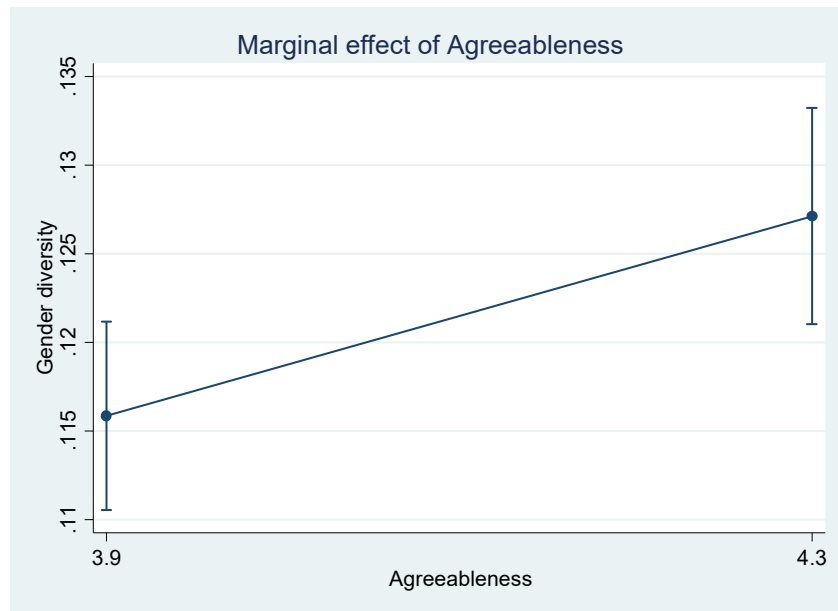


Table 4.4 deals with the regression analysis of agreeableness and openness to experience with board national diversity and starts with only control variables in Model 1. Model 2 also includes the independent variables to examine the main effects. Agreeableness ($\beta = 0.05$, $p < 0.01$) positive relates to national diversity and supports H5. Increasing agreeableness from 1 SD below mean to 1 SD above mean increases the proportion of foreign national directors by 25%, as shown in Figure 4.1b. But openness does not have any significant relationship which does not support H6.

Model 3 has the interaction terms of agreeableness and openness with competition intensity. Interaction term pertaining to agreeableness is not significant and does not support H7a. But interaction term for openness ($\beta = 0.02$, $p < 0.1$) provides partial support for H7b. In Figure 4.1c, competition intensity changes the relationship of openness with board national diversity. The relationship changes from negative at lower values of competition intensity (1 SD below mean) to positive at higher values (1 SD above mean). I introduce interaction terms for the

remaining three personality traits in Model 4 and examine the robustness of our findings. I similarly find no significant results to H7a but support for H7b ($\beta = 0.03$, $p < 0.05$).

In summary, results do not support the hypotheses for conscientiousness, extraversion or emotional stability with board independence as well as for the moderation effects. Results show that agreeableness positively relates to board gender diversity. But there is no full support for the hypothesis on openness to experience as well as the moderation effects of these two traits. The results are similar for board national diversity.

Table 4.4. Panel data regression for board national diversity (RE autoregressive model)

Variables	(1) National Diversity	(2) National Diversity	(3) National Diversity	(4) National Diversity
Conscientiousness		-0.08*** (0.02)	-0.08*** (0.02)	0.02 (0.10)
Extraversion		-0.01 (0.01)	-0.01 (0.01)	0.02 (0.08)
Emotional stability		0.00 (0.02)	0.00 (0.02)	0.02 (0.08)
Agreeableness		0.05*** (0.02)	0.14* (0.08)	0.13 (0.09)
Openness to experience		0.04 (0.03)	-0.13 (0.11)	-0.21* (0.12)
Competition Intensity		0.01*** (0.00)	-0.04 (0.04)	0.01 (0.06)
Conscientiousness X Competition Intensity				-0.01 (0.01)
Extraversion X Competition Intensity				-0.00 (0.01)
Emotional stability X Competition Intensity				-0.00 (0.01)
Agreeableness X Competition Intensity			-0.01 (0.01)	-0.01 (0.01)
Openness X Competition Intensity			0.02* (0.01)	0.03** (0.02)
CEO age	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
CEO gender	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
CEO duality (1=yes;0=no)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Board independence	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
CEO compensation	0.00* (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm size	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)
Firm performance	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
Industry Dynamism	-0.23 (0.17)	-0.17 (0.17)	-0.17 (0.17)	-0.17 (0.17)
Inverse Mills Ratio	-0.02 (0.02)	-0.03 (0.02)	-0.02 (0.02)	-0.02 (0.02)
Constant	0.12** (0.06)	0.17 (0.11)	0.59* (0.32)	0.21 (0.44)
Observations	17,627	17,625	17,625	17,625
χ^2 -statistic for model	38.62	85.68	88.55	90.18

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Figure 4.1b. Main effect for board nationality diversity

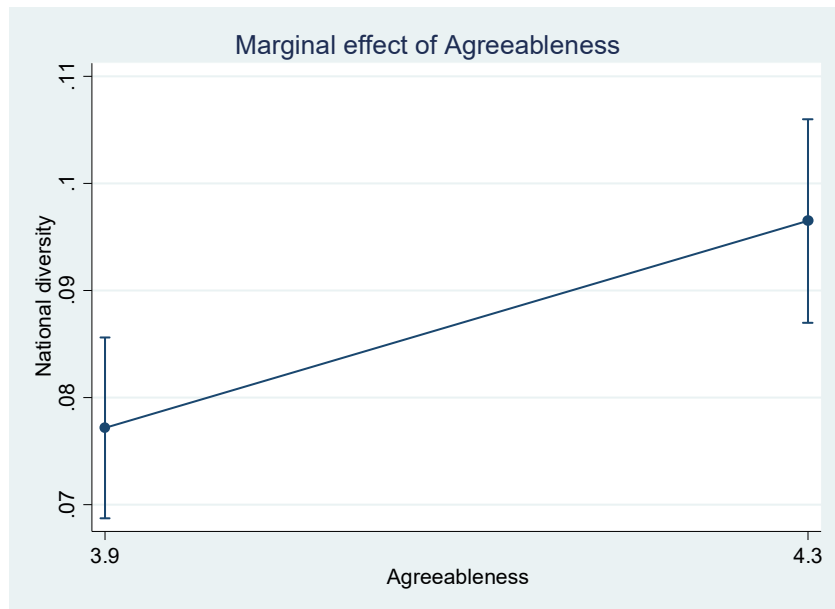
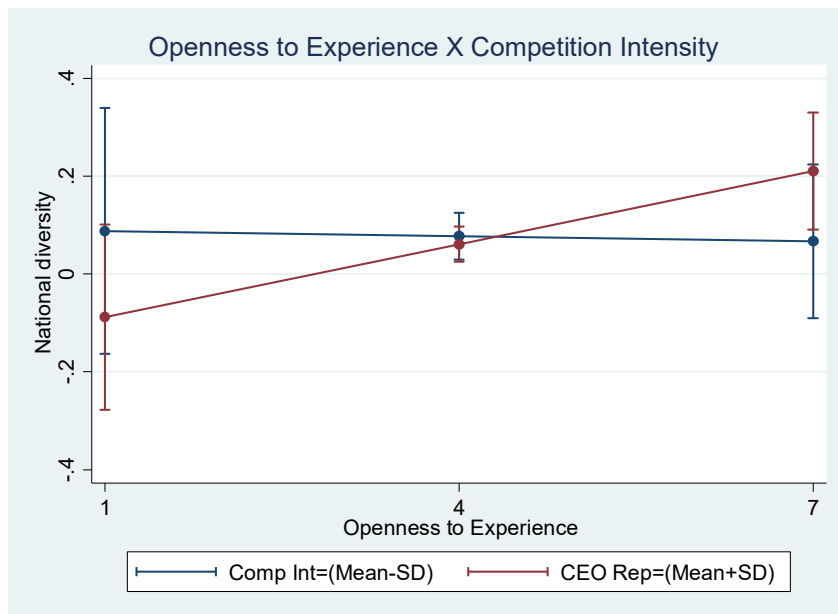


Figure 4.1c. Interaction effect for board nationality diversity



Sample selection bias

Our sample consists of CEOs who stay with their respective firms through period of analysis. The inclusion of CEOs with relatively longer tenure can bias our sample for not being random and representative of the CEO universe (Kashmiri, Gala & Nicol, 2019). Our sample may be prone to sample selection bias.

I resolve the problem of sample selection bias with the Heckman two-stage method. First, I create a binary dependent variable which is 0 if the CEO experiences turnover during the period when I do analysis with the sample and 1 otherwise. I run a probit regression model on the panel data with all control variables from the original model (Table 4.5). I include additional variables. *Slack* is the ratio of debt to equity in this model. *CEO tenure* is the number of years CEO has worked with the firm. I compute the Inverse Mills Ratio (IMR) from this probit model in the first stage.

Then, I include IMR as a control variable in the original panel data regression model. IMR has a positive, significant relationship with board independence in each of Model 2 ($\beta = 9.02, p < 0.01$) and Model 3 ($\beta = 9.02, p < 0.01$). Hence, factors which lead to longer tenure CEOs being part of the sample influences more independent boards.

However, IMR does not have any significant relationship with board gender diversity as well as with board nationality diversity. Factors which lead to longer tenure CEOs being part of the sample do not influence different aspects of diversity within boards.

Endogeneity concern

I resolve potential endogeneity concerns through the two-stage *xtregar* model involving instrumental variables in line with previous research (Wooldridge, 2010).

I use average CEO personality traits at the 2-digit SIC level as instrumental variable for respective CEO personality traits. I also include control variables from the original model along with instrumental variables to estimate each CEO personality traits in the first stage (Table 4.6). In the second stage, I use fitted values of CEO personality traits as the independent variables in the panel data regression model (Tables 3.2-3.4). The results explained above incorporate treatment for both sample selection bias and endogeneity.

Table 4.5. Panel data regression for Inverse Mills Ratio (IMR) (RE probit model)

Variables	(1) IMR-Board	(2) IMR-Diversity
CEO age	0.02*** (0.00)	0.02*** (0.00)
CEO gender	0.06 (0.09)	0.05 (0.09)
CEO duality (1=yes; 0=no)	-0.11*** (0.03)	-0.11*** (0.03)
Board independence		0.03*** (0.01)
CEO compensation	-0.00 (0.00)	-0.00 (0.00)
Firm size	0.03*** (0.01)	0.02** (0.01)
Firm performance	-0.32*** (0.08)	-0.32*** (0.08)
Slack	-0.00 (0.00)	-0.00 (0.00)
Industry dynamism	2.39 (1.84)	2.70 (1.84)
CEO tenure	-0.01*** (0.00)	-0.02*** (0.00)
Constant	-3.24*** (0.15)	-3.22*** (0.15)
Observations	21,933	21,933
χ^2 -statistic for model	129.5	152.6

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4.6. First stage panel data regression with Instrumental Variables

Variables	(1) Consc.	(2) Extra.	(3) Agree.	(4) Emo. St.	(5) Openn
Conscientiousness (Ind. avg.)	0.50*** (0.01)				
Extraversion (Ind. avg.)		0.45*** (0.01)			
Agreeableness (Ind. avg.)			0.46*** (0.01)		
Emotional stability (Ind. avg.)				0.48*** (0.01)	
Openness (Ind. avg.)					0.47*** (0.01)
Firm performance	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Industry dynamism	-0.01 (0.18)	-0.38 (0.28)	-0.04 (0.24)	-0.02 (0.21)	-0.13 (0.19)
Constant	2.61*** (0.08)	2.76*** (0.08)	2.55*** (0.07)	1.89*** (0.06)	2.59*** (0.07)
Observations	23,769	23,769	23,769	23,769	23,769
χ^2 -statistic for model	1164	1015	1308	1224	1335

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Discussion

This study integrates concepts of agency theory and personality to explore the relationship between CEO personality traits and board independence and board diversity. CEOs try to structure the board in a way that facilitates their strategic decision making. Board structure especially in terms of independent directors becomes important in this regard. CEOs have different preference for board structure based on their personality traits.

I find that conscientiousness and extraversion have positive association with board independence. But emotional stability has a negative association. Results are contrary to hypothesized predictions. Conscientious CEOs perceive more independent boards to be working towards the firms' interests. They are committed to further the firms' interests as sincere, hardworking individuals and are ready to work with more independent boards. Extraversion

influences the CEO to look for more engagement and boards with more independent members offer an avenue to do so. Thus, extraversion influences the CEO to work with more independent boards. However, independent board members are more likely than insider board members to disagree or push back against CEOs. Emotional stability enables CEOs to deal with stressful, uncertain scenarios. But CEOs prefer to avoid stressful scenarios and retain their emotional stability to pursue superior firm performance. Hence, emotional stability influences a CEO to be less inclined to work with independent board members.

When environmental munificence is high, conscientious CEOs look for more enabling mechanisms on how to utilize the opportunities available in the business environment. More opportunities provide scope for CEOs to increase their own engagement. Independent board members share their expertise to help CEOs capitalize on business opportunities and as outsiders, provide new forms of engagement for CEOs. Therefore, CEO conscientiousness and extraversion will have more influence in constituting independent boards in the context of a more munificent environment. At the same time, CEOs are even less inclined to engage with independent board members in a munificent environment in order to retain emotional stability. Availability of more resources allows them to take decisions on their own and work towards shareholder interests.

Gender or nationality diversity in boards has positive relationship with agreeableness. Agreeable CEOs are more adept in building consensus among board members with diverse abilities and viewpoints. However, with increase in competition intensity, CEO needs to be more decisive in responding to challenges in the business environment rather than building consensus to leverage board members' abilities and then taking decisions. Hence, agreeableness does not influence board diversity in the context of competitive intensity. Openness to experience enables

CEO to be receptive towards new or diverse viewpoints. When competition intensity increases, this trait enables the CEO to better appreciate board members' diverse counsel and incorporate them into strategic decisions. Thus, openness influences board diversity strongly in the context of increased competitive intensity.

Theoretical Implications

CEO is a crucial decision maker for the firm's strategy (Busenbark et al., 2016). CEO engages with the board to address their mandate to reduce principal-agent problems and uphold shareholder interests (Fama & Jensen, 1983). Also, CEO seeks the board's counsel to gain access to resources critical for the firm (Hillman et al., 2009). In this regard, CEO attempts to structure the board's independence and board's diversity respectively so as to enable CEO to implement firm strategy. CEO's personality traits are influential when it comes to the firm's strategic actions (Miller & Toulouse, 1986). Hence, it is relevant to analyze how CEO personality traits relate to board structure in the pursuit of firm strategy. I contribute to the extant domain of research by analyzing the individual level factors that contribute to the firm's board structure. I parse out the micro foundations of the firm's corporate governance mechanism and board structure in particular.

Second, I expand upper echelons research with more detailed understanding of individual level characteristics in the context of firm (Hambrick & Mason, 1984). Extant research has focused on demographic characteristics such as CEO gender, education and more. I contribute by extending the scope of research with psychological characteristics especially CEO personality traits and study its influence on a corporate governance mechanism.

Practical Implications

Boards can consider personality traits while headhunting for CEO. CEO personality provides pointers to the board about how the CEO will structure the board while leading the firm. This will enable the board to appoint a CEO who will be more likely to influence the structure in a way as the firm desires.

Second, corporate governance mechanisms are increasingly becoming deciding factors for entities to invest in a firm. CEO personality can be a relevant indicator for investors to foretell the kind of mechanisms CEO will champion while leading the firm.

Limitations and Future Research Agenda

The study has some limitations as in any empirical research. This also opens up new avenues for future research. First, the personality measures are based on the transcripts of the unscripted part of earnings call with analysts. There is less likelihood of CEOs giving prepared answers. Rather their answers are more on the fly and help to manifest their true personality traits. This approach addresses validity concerns about personality measures being able to capture the actual personality traits. But I cannot rule out CEOs receiving broad inputs from within their firms before the earnings call which enables them to suitably respond to analysts (Harrison et al., 2020). In such a scenario, future research can develop other personality measures that take into account such concerns. I can compare the findings from such measures with that the personality measures used in our study. This way I examine the robustness of our findings and have more empirical support for this type of research.

Second, CEO is the firm's most important decision maker. There are other members of the top management team (TMT) such as chief financial officer (CFO) influence the firm's strategy in a big way. Current research has more focus on the CEO while not considering the influence of other TMT members. Future research can explore the influence of other TMT

members on a standalone basis as well as in conjunction with the CEO's influence. This approach will enhance our knowledge of individual factors influencing the firm's strategic aspects for the TMT as a whole and not just for individual member within the TMT.

Third, I have done the research in the US context. I can show that the personality measures have better reliability if the study holds good in other national contexts across developed and emerging markets. It will also open up a new avenue for research. If findings outside the US do not conform to that in the American context, I can further explore the contingency or causal mechanisms which lead to different findings across national contexts.

LIST OF REFERENCES

I. Introduction

Barrick, M. R., & Mount, M. K. (1991). the Big Five Personality Dimensions and Job

Performance: a Meta-Analysis. *Personnel Psychology*, 44, 1–26.

<https://doi.org/10.1111/j.1744-6570.1991.tb00688.x>

Chatterjee, A., & Hambrick, D. C. (2007). Narcissistic CEO's. *Administrative Science Quarterly*, 52(3), 351–386.

Chiaburu, D. S., Oh, I. S., Berry, C. M., Li, N., & Gardner, R. G. (2011). The five-factor model of personality traits and organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 96(6), 1140–1166. <https://doi.org/10.1037/a0024004>

Colbert, A. E., Barrick, M. R., & Bradley, B. H. (2014). Personality and leadership composition in top management teams: Implications for organizational effectiveness. *Personnel Psychology*, 67, 351–387. <https://doi.org/10.1111/peps.12036>

Costa, P. T., & McCrae, R. R. (1992). Four Ways Five factors are basic. *Personality and Individual Differences*, 13(6), 653–665.

Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (1996). *Strategic Leadership*. St. Paul, MN: West Educational Publishing.

Goldberg, L. R. (1990). An Alternative “Description of Personality”: The Big-Five Factor Structure. *Journal of Personality and Social Psychology*, 59(6), 1216–1229.

Hambrick, D. C. (2007). Upper Echelons Theory: An update. *Academy of Management Review*, 32(2), 334–343.

- 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.
- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2019). Measuring CEO personality: Developing, validating, and testing a linguistic tool. *Strategic Management Journal*, 40(8), 1316–1330. <https://doi.org/10.1002/smj.3023>
- Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, 88(1), 100–112. <https://doi.org/10.1037/0021-9010.88.1.100>
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The big five revisited. *Journal of Applied Psychology*, 85(6), 869–879. <https://doi.org/10.1037/0021-9010.85.6.869>
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52(3), 621–652. <https://doi.org/10.1111/j.1744-6570.1999.tb00174.x>
- Peterson, R. S., Smith, D. B., Martorana, P. V., & Owens, P. D. (2003). The Impact of Chief Executive Officer Personality on Top Management Team Dynamics: One Mechanism by Which Leadership Affects Organizational Performance. *Journal of Applied Psychology*, 88(5), 795–808. <https://doi.org/10.1037/0021-9010.88.5.795>
- Roberts, B. W. (2006). Personality Development and Organizational Behavior. *Research in Organizational Behavior*, 27, 1–40. [https://doi.org/10.1016/S0191-3085\(06\)27001-1](https://doi.org/10.1016/S0191-3085(06)27001-1)
- Salgado, J. E. (1997). The Five Factor Model of Personality and Job Performance in the European Community. 82(I), 30–43.

Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In *Handbook of personality psychology* (pp. 767–793). Academic Press.

II. Chapter 1

Aguinis, H. (2011). Organizational responsibility: Doing good and doing well. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology, Vol. 3. Maintaining, expanding, and contracting the organization* (pp. 855–879). American Psychological Association.

Ayadi, M., Kusy, M. I., Pyo, M., & Trabelsi, S. (2015). Corporate Social Responsibility, Corporate Governance, and Managerial Risk-Taking. *Corporate Governance, and Managerial Risk-Taking*, 50–114. <https://doi.org/10.2139/ssrn.2547576>

Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43(4), 717–736.

Baron, D. P., & Diermeier, D. (2007). Strategic Activism and Nonmarket Strategy. *Journal of Economics & Management Strategy*, 16(3), 599–634.

Benischke, M. H., Martin, G. P., & Glaser, L. (2019). CEO equity risk bearing and strategic risk taking: The moderating effect of CEO personality. *Strategic Management Journal*, 40(1), 153–177. <https://doi.org/10.1002/smj.2974>

Bono, J. E., & Judge, T. A. (2004, October). Personality and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Applied Psychology*, Vol. 89, pp. 901–910. <https://doi.org/10.1037/0021-9010.89.5.901>

- Busenbark, J. R., Krause, R., Boivie, S., & Graffin, S. D. (2016). Toward a Configurational Perspective on the CEO: A Review and Synthesis of the Management Literature. *Journal of Management*, 42(1), 234–268. <https://doi.org/10.1177/0149206315618448>
- Bushee, B. J., & Miller, G. S. (2012). Investor relations, firm visibility, and investor following. *Accounting Review*, 87(3), 867–897. <https://doi.org/10.2308/accr-10211>
- Carroll, A. B., & Buchholtz, A. K. (2014). *Business and society: Ethics, sustainability, and stakeholder management*. Cengage Learning.
- Carroll, A. B. (1991). The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38(3), 268–295. <https://doi.org/10.1177/000765039903800303>
- Carroll, A. B. (2008). A History of Corporate Social Responsibility: Concepts and Practices. In *The Oxford Handbook of Corporate Social Responsibility* (pp. 1–20). <https://doi.org/10.1093/oxfordhb/9780199211593.003.0002>
- Carroll, & Archie B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Castrogiovanni, G. J. (1991). Environmental Munificence : A Theoretical Assessment. *Academy of Management Review*, 16(3), 542–565.
- Chatterjee, A., & Hambrick, D. C. (2007). Narcissistic CEO's. *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. <https://doi.org/10.1177/0001839211427534>

- Chatterji, A. K., Durand, R., Levine, D. I., & Touboul, S. (2016). Do Ratings of Firms Converge? Implications for Managers, Investors and Strategy Researchers. *Strategic Management Journal*, 37, 1597–1614. <https://doi.org/10.1002/smj.2407>
- Chin, M. K., Hambrick, D. C., & Treviño, L. K. (2013). Political Ideologies of CEOs: The Influence of Executives' Values on Corporate Social Responsibility. *Administrative Science Quarterly*, 58(2), 197–232. <https://doi.org/10.1177/0001839213486984>
- Choi, J., & Wang, H. (2009). The Effect of Firm Compensation Structures on the Mobility and Entrepreneurship of Extreme Performers. *Strategic Management Journal*, 30, 895–907. <https://doi.org/10.1002/smj.759>
- Colbert, A. E., Barrick, M. R., & Bradley, B. H. (2014). Personality and leadership composition in top management teams: Implications for organizational effectiveness. *Personnel Psychology*, 67, 351–387. <https://doi.org/10.1111/peps.12036>
- Costa, P. T., & McCrae, R. R. (1992). Four Ways Five factors are basic. *Personality and Individual Differences*, 13(6), 653–665.
- Costa, P. T., & McCrae, R. R. (1988). Personality Processes and Individual Differences. From Catalog to Classification : Murray's Needs and the Five-Factor Model. *Journal of Personality and Social Psychology*, 55(2), 258–265.
- David, P., Bloom, M., & Hillman, A. J. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28(1), 91–100. <https://doi.org/10.1002/smj.571>
- Dess, G. G., & Beard, D. W. (1984). Dimensions of Organizational Task Environments. *Administrative Science Quarterly*, 29(1), 52–73.

- Donaldson, T., & Dunfee, T. W. (1999). When ethics travel: The promise and peril of global business ethics. *California Management Review*, 41(4), 45–63.
<https://doi.org/10.2307/41166009>
- Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *Academy of Management Review*, 20(1), 65–91.
- 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.
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (1996). *Strategic Leadership*. St. Paul, MN: West Educational Publishing.
- Flammer, C. (2013). Corporate social responsibility and shareholder reaction the environmental awareness of investors. *Academy of Management Journal*, 56(3), 758–781.
- Flammer, C. (2015). Does Product Market Competition Foster Corporate Social Responsibility? Evidence from Trade Liberalization. *Strategic Management Journal*, 36, 1469–1485.
<https://doi.org/10.1002/smj>
- Freeman, R. E. (1994). The Politics of Stakeholder Theory: Some Future Directions. *Business Ethics Quarterly*, 4(4), 409–421.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Marshfield, MA: Pittman Publishing.
- Friedman, M. (1970). A Theoretical Framework for Monetary Analysis. *Journal of Political Economy*, 78(2), 193–238. Retrieved from <https://www.jstor.org/stable/1830684>
- Garriga, E., & Mele, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics*, 53, 51–71.

- Giberson, T. R., Resick, C. J., Dickson, M. W., Mitchelson, J. K., Randall, K. R., & Clark, M. A. (2009). Leadership and organizational culture: Linking CEO characteristics to cultural values. *Journal of Business and Psychology, 24*(2), 123–137.
<https://doi.org/10.1007/s10869-009-9109-1>
- Glavas, A. (2016). Corporate social responsibility and employee engagement: Enabling employees to employ more of their whole selves at work. *Frontiers in Psychology, 7*, 1–10.
<https://doi.org/10.3389/fpsyg.2016.00796>
- Godfrey, P. C. (2005). The Relationship between Corporate Philanthropy and Shareholder Wealth: A Risk Management Perspective. *Academy of Management Review, 30*(4), 777–798. Retrieved from <https://www.jstor.org/stable/20159168?seq=1&cid=pdf->
- Goldberg, L. R. (1990). An Alternative “Description of Personality”: The Big-Five Factor Structure. *Journal of Personality and Social Psychology, 59*(6), 1216–1229.
- Goll, I., & Rasheed, A. A. (2004). The moderating effect of environmental munificence and dynamism on the relationship between discretionary social responsibility and firm performance. *Journal of Business Ethics, 49*(1), 41–54.
<https://doi.org/10.1023/B:BUSI.0000013862.14941.4e>
- Goll, I., & Rasheed, A. M. A. (1997). Rational decision-making and firm performance: The moderating role of environment. *Strategic Management Journal, 18*(7), 583–591.
- Gond, J. P., El Akremi, A., Swaen, V., & Babu, N. (2017). The psychological microfoundations of corporate social responsibility: A person-centric systematic review. *Journal of Organizational Behavior, 38*(2), 225–246. <https://doi.org/10.1002/job.2170>
- Graves, S. B., & Waddock, S. A. (1994). Institutional Owners and Corporate Social Performance. *Academy of Management Journal, 37*(4), 1034–1046.

- Gupta, A., Forrest, B., & Hambrick, D. (2017). The Effect of Firm Compensation Structures on the Mobility and Entrepreneurship of Extreme Performers. *Strategic Management Journal*, 38, 1018–1040. <https://doi.org/10.1002/smj.2550>
- Gupta, A., Nadkarni, S., & Mariam, M. (2019). Dispositional Sources of Managerial Discretion: CEO Ideology, CEO Personality, and Firm Strategies. *Administrative Science Quarterly*, 64(4), 855–893. <https://doi.org/10.1177/0001839218793128>
- Hambrick, D. C. (2007). Upper Echelons Theory: An update. *Academy of Management Review*, 32(2), 334–343.
- 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.
- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2019). Measuring CEO personality: Developing, validating, and testing a linguistic tool. *Strategic Management Journal*, 40(8), 1316–1330. <https://doi.org/10.1002/smj.3023>
- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2020). Perception is reality: How CEOs' observed personality influences market perceptions of firm risk and shareholder returns. *Academy of Management Journal*, 63(4), 1166–1195. <https://doi.org/10.5465/AMJ.2018.0626>
- Hart, & Stuart L. (1995). A Natural-resource-based View of the Firm. *Academy of Management Review*, 20(4), 986–1014.
- Herrmann, P., & Nadkarni, S. (2014). Managing strategic change: The duality of CEO personality. *Strategic Management Journal*, 35(9), 1318–1342. <https://doi.org/10.1002/smj.2156>

- 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. <https://doi.org/10.1002/smj.455>
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22(2), 125–139.
- Hogan, R., & Hogan, J. (1995). *The Hogan Personality Inventory manual*. Tulsa, OK: Hogan Assessment Systems.
- Hubbard, T. D., Christensen, D. M., & Graffin, S. D. (2017). Higher Highs and Lower Lows: The Role of Corporate Social Responsibility in CEO Dismissal. *Strategic Management Journal*, 38, 2255–2265. <https://doi.org/10.1002/smj.2646>
- Jensen, M. C. (2000). Value Maximization, Stakeholder Theory and Corporate Objective Function. In M. Beer & N. Nohria (Eds.), *Breaking the Code of Change*. Harvard Business School Press.
- Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, Vol. 11, pp. 167–187.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85(5), 751–765. <https://doi.org/10.1037/0021-9010.85.5.751>
- Judge, T. A., & Cable, D. M. (1997). Applicant Personality, Organizational Culture, and Organization Attraction. *Personnel Psychology*, 50(2), 359–394. <https://doi.org/10.1111/j.1744-6570.1997.tb00912.x>

- Kassinis, G., & Vafeas, N. (2006). Stakeholder pressures and environmental performance. *Academy of Management Journal*, 49(1), 145–159.
<https://doi.org/10.5465/AMJ.2006.20785799>
- LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology*, 86(2), 326–336.
- Liang, K.-Y., & Zeger, S. L. (1986). Longitudinal Data Analysis Using Generalized Linear Models. *Biometrika*, 73(1), 13–22.
- Malhotra, S., Reus, T. H., Zhu, P. C., & Roelofsen, E. M. (2018). The Acquisitive Nature of Extraverted CEOs. *Administrative Science Quarterly*, 63(2), 370–408.
<https://doi.org/10.1177/0001839217712240>
- Malmendier, U., & Tate, G. (2005). CEO Overconfidence and Corporate Investment. *Journal of Finance*, 60(6), 2661–2699. Retrieved from <https://about.jstor.org/terms>
- Margolis, J. D., & Walsh, J. P. (2003). Misery Loves Companies: Rethinking Social Initiatives by Business. *Administrative Science Quarterly*, 48(2), 268–305.
- Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility. *Academy of Management Review*, 33(2), 404–424.
- McCrae, R. R., & Costa, P. T. (1996). Toward a New Generation of Personality Theories: Theoretical Contexts for the Five-Factor Model. In J. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 51–87). New York, NY: Guilford Press.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality Across Instruments and Observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.

- McCrae, R. R., & Costa, P. T. (1997). Personality Trait Structure as a Human Universal. *American Psychologist*, 52(5), 509–516.
- McDonald, M., & Westphal, J. D. (2003). Getting by with the advice of their friends: CEOs' advice networks and firms' strategic responses to poor performance. *Administrative Science Quarterly*, 48, 1–32.
- McWilliams, A., & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management Review*, 26(1), 117–127.
- McWilliams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495. <https://doi.org/10.1177/0149206310385696>
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1–18. <https://doi.org/10.1111/j.1467-6486.2006.00580.x>
- Miller, D., & Toulouse, J.-M. (1986). Chief Executive Personality and Corporate Strategy and Structure in Small Firms. *Management Science*, 32(11), 1389–1409. Retrieved from <http://www.jstor.org/stable/2631499>
- Mudrack, P. (2007). Individual personality factors that affect normative beliefs about the rightness of corporate social responsibility. *Business and Society*, 46(1), 33–62. <https://doi.org/10.1177/0007650306290312>
- Nadkarni, S., & Herrmann, P. (2010). CEO personality, strategic flexibility, and firm performance: The case of the Indian business process outsourcing industry. *Academy of Management Journal*, 53(5), 1050–1073. <https://doi.org/10.5465/amj.2010.54533196>

- O'Reilly, C. A., Caldwell, D. F., Chatman, J. A., & Doerr, B. (2014). The Promise and Problems of Organizational Culture: CEO Personality, Culture, and Firm Performance. *Group and Organization Management*, 39(6), 595–625. <https://doi.org/10.1177/1059601114550713>
- Orlitzky, M. (2013). Corporate social responsibility, noise, and stock market volatility. *Academy of Management Perspectives*, 27(3), 238–254. <https://doi.org/10.5465/amp.2012.0097>
- Pearce, C. L., & Manz, C. C. (2011). Leadership Centrality and Corporate Social Ir-Responsibility (CSIR): The Potential Ameliorating Effects of Self and Shared Leadership on CSIR. *Journal of Business Ethics*, 102(4), 563–579. <https://doi.org/10.1007/s10551-011-0828-7>
- Peterson, R. S., Smith, D. B., Martorana, P. V., & Owens, P. D. (2003). The Impact of Chief Executive Officer Personality on Top Management Team Dynamics: One Mechanism by Which Leadership Affects Organizational Performance. *Journal of Applied Psychology*, 88(5), 795–808. <https://doi.org/10.1037/0021-9010.88.5.795>
- 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, 262–279. <https://doi.org/10.1002/smj.2348>
- Porter, M. E., & Kramer, M. R. (2006). Strategy & Society - The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, Dec 2006, 78–93.
- Prahalad, C. K., & Hammond, A. (2002). Serving the World's Poor, Profitably. *Harvard Business Review*, Sep 2002, 48–57.

- Prahalad, C. K., & Hamel, G. (1994). Strategy as a field of study: Why search for a new paradigm? *Strategic Management Journal*, *15*, 5–16.
<https://doi.org/10.1002/smj.4250151002>
- Rupp, D. E., & Mallory, D. B. (2015). Corporate Social Responsibility: Psychological, Person-Centric, and Progressing. *Annual Review of Organizational Psychology and Organizational Behavior*, *2*, 211–236. <https://doi.org/10.1146/annurev-orgpsych-032414-111505>
- Saucier, G., & Goldberg, L. R. (2001). Lexical studies of indigenous personality factors: Premises, products, and prospects. *Journal of Personality*, *69*(6), 847–879.
<https://doi.org/10.1111/1467-6494.696167>
- Serfling, M. A. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance*, *25*, 251–273. <https://doi.org/10.1016/j.jcorpfin.2013.12.013>
- Sharfman, M. (1996). The construct validity of the Kinder, Lydenberg & Domini social performance ratings data. *Journal of Business Ethics*, *15*(3), 287–296.
<https://doi.org/10.1007/BF00382954>
- Sharfman, M. P., & Fernando, C. S. (2008). Environmental Risk Management and the Cost of Capital. *Strategic Management Journal*, *29*, 569–592. <https://doi.org/10.1002/smj678>
- Shen, W., & Cannella, A. A. (2002). Revisiting the performance consequences of CEO succession: The impacts of successor type, post succession senior executive turnover, and departing CEO tenure. *Academy of Management Journal*, *45*(4), 717–733.
<https://doi.org/10.2307/3069306>
- Staw, B. M., & Sz wajkowski, E. (1975). The Scarcity- Munificence Component of Organizational Environments and the Commission of Illegal Acts. *Administrative Science Quarterly*, *20*, 345–354.

- Tang, Y., Qian, C., Chen, G., & Shen, R. (2015). How CEO hubris affects corporate social (ir)responsibility. *Strategic Management Journal*, 36(9), 1338–1357.
<https://doi.org/10.1002/smj.2286>
- Thauer, C. R. (2014). Goodness Comes from Within: Intra-organizational Dynamics of Corporate Social Responsibility. *Business and Society*, 53(4), 483–516.
<https://doi.org/10.1177/0007650313475770>
- Varadarajan, P. R., & Menon. A. (1988). Cause-Related Marketing: A Coalignment of Marketing Strategy and Corporate Philanthropy. *Journal of Marketing*, 52(3), 58–74.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance - financial performance link. *Strategic Management Journal*, 18(4), 303–319.
- Weber, E. U., & Milliman, R. A. (1997). Perceived risk attitudes: Relating risk perception to risky choice. *Management Science*, 43(2).
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: Journal of the Econometric Society*, 817–838.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.
- III. Chapter 2**
- Amihud, Y., & Mendelson, H. (1986). Asset Pricing and the Bid-Ask Spread. *Journal of Financial Economics*, 17, 223–249.
- Bartov, E., Givoly, D., & Hayn, C. (2002). The rewards to meeting or beating earnings expectations. *Journal of Accounting and Economics*, 33, 173–204.
- Becker, J., Medjedovic, J., & Merkle, C. (2019). The Effect of CEO Extraversion on Analyst Forecasts: Stereotypes and Similarity Bias. *Financial Review*, 54, 133–164.

- Bednar, M. K., Boivie, S., & Prince, N. R. (2013). Burr under the saddle: How media coverage influences strategic change. *Organization Science*, 24(3), 910–925.
<https://doi.org/10.1287/orsc.1120.0770>
- Benischke, M. H., Martin, G. P., & Glaser, L. (2019). CEO equity risk bearing and strategic risk taking: The moderating effect of CEO personality. *Strategic Management Journal*, 40(1), 153–177. <https://doi.org/10.1002/smj.2974>
- Bhojraj, S., & Sengupta, P. (2003). Effect of Corporate Governance on Bond Ratings and Yields: The Role of Institutional Investors and Outside Directors. *Journal of Business*, 76(3), 455–475. <https://doi.org/10.1086/344114>
- Blickle, G., & Hogan, R. (2020). Socioanalytic perspective. In V. Ziegler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of personality and individual differences*. Meteor Springer.
- Boivie, S., Graffin, S. D., & Gentry, R. J. (2016). Understanding the direction, magnitude, and joint effects of reputation when multiple actors' reputations collide. *Academy of Management Journal*, 59(1), 188–206. <https://doi.org/10.5465/amj.2014.0521>
- Bono, J. E., & Judge, T. A. (2004). Personality and Transformational and Transactional Leadership: A Meta-Analysis. In *Journal of Applied Psychology* (Vol. 89, Issue 5, pp. 901–910). <https://doi.org/10.1037/0021-9010.89.5.901>
- Bowen, R. M., Davis, A. K., Matsumoto, D. A., Thank, W., Burgstahler, D., Bushee, B., Ducharme, L., Hutton, A., Johnson, M., Jorgenson, B., Kennedy, J., Miller, G., Myers, J., Myers, L., Noe, C., Rajgopal, S., & Schlinger, J. (2002). Do Conference Calls Affect Analysts' Forecasts? *Accounting Review*, 77(2), 285–316.

- Bradshaw, M. T. (2011). Analysts' Forecasts: What Do We Know After Decades of Work? *SSRN*, 1880339, Article 1880339.
<http://ssrn.com/abstract=1880339><http://ssrn.com/abstract=1880339>
- Brauer, M., & Wiersema, M. (2018). Analyzing Analyst Research: A Review of Past Coverage and Recommendations for Future Research. *Journal of Management*, 44(1), 218–248.
<https://doi.org/10.1177/0149206317734900>
- Bromiley, P., Rau, D., & Zhang, Y. (2017). Is R&D risky? *Strategic Management Journal*, 38(4), 876–891. <https://doi.org/10.1002/smj.2520>
- Brown, L. D., Call, A. C., Clement, M. B., & Sharp, N. Y. (2015). Inside the “Black Box” of sell-side financial analysts. *Journal of Accounting Research*, 53(1), 1–47.
<https://doi.org/10.1111/1475-679X.12067>
- Busenbark, J. R., Krause, R., Boivie, S., & Graffin, S. D. (2016). Toward a Configurational Perspective on the CEO: A Review and Synthesis of the Management Literature. *Journal of Management*, 42(1), 234–268. <https://doi.org/10.1177/0149206315618448>
- Certo, S. T., Withers, M. C., & Semadeni, M. (2017). A tale of two effects: Using longitudinal data to compare within- and between-firm effects. *Strategic Management Journal*, 38(7), 1536–1556. <https://doi.org/10.1002/smj.2586>
- Chang, X., Dasgupta, S., & Hilary, G. (2006). Analyst Coverage and Financing Decisions. *Journal of Finance*, 61(6), 3009–3048.
- 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, 351–386.

- Colbert, A. E., Barrick, M. R., & Bradley, B. H. (2014). Personality and leadership composition in top management teams: Implications for organizational effectiveness. *Personnel Psychology, 67*(2), 351–387. <https://doi.org/10.1111/peps.12036>
- Costa, P. T., & McCrae, R. R. (1985). Hypochondriasis, Neuroticism, and Aging. When Are Somatic Complaints Unfounded? *American Psychologist, 40*(1), 19–28. <https://doi.org/10.1037/0003-066X.40.1.19>
- Costa, P. T., & McCrae, R. R. (1992). FOUR WAYS FIVE FACTORS ARE BASIC. *Personality and Individual Differences, 13*(6), 653–665.
- Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment, 64*(1), 21–50.
- Deephouse, D. L. (2000). Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories. *Journal of Management, 26*(6), 1091–1112.
- Dess, G. G., & Beard, D. W. (1984). Dimensions of Organizational Task Environments. *Administrative Science Quarterly, 29*(1), 52–73.
- Diether, K. B., Malloy, C. J., & Scherbina, A. (2002). Differences of Opinion and the Cross Section of Stock Returns. *Journal of Finance, 57*(5), 2113–2141. <http://www.jstor.org>URL:<http://www.jstor.org/stable/3094506>
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *Journal of Law & Economics, 26*(2), 26. <https://heinonline.org/HOL/License>
- Fanelli, A., & Misangyi, V. F. (2006). Bringing out Charisma: CEO Charisma and External Stakeholders. *Academy of Management Review, 31*(4), 1049–1061. <https://www.jstor.org/stable/20159265>

- Frankel, R., Kothari, S. P., & Weber, J. (2006). Determinants of the informativeness of analyst research. *Journal of Accounting and Economics*, *41*, 29–54.
<https://doi.org/10.1016/j.jacceco.2005.10.004>
- Gentry, R. J., & Shen, W. (2013). The impacts of performance relative to analyst forecasts and analyst coverage on firm R&D intensity. In *Strategic Management Journal* (Vol. 34, Issue 1, pp. 121–130). <https://doi.org/10.1002/smj.1997>
- Goldberg, L. R. (1990). An Alternative “Description of Personality”: The Big-Five Factor Structure. *Journal of Personality and Social Psychology*, *59*(6), 1216–1229.
- Gow, I. D., Kaplan, S. N., Larcker, D. F., & Zakolyukina, A. A. (2016). *NBER Working Paper Series: CEO Personality and Firm Policies* (No. 22345).
<http://www.nber.org/papers/w22435>
- Graffin, S., Pfarrer, M., & Hill, M. (2012). Untangling Executive Reputation and Corporate Reputation: Who Made Who? In T. Pollock & M. Barnett (Eds.), *The Oxford Handbook of Corporate Reputation*.
- Grant, A. M., Gino, F., & Hofmann, D. A. (2011). Reversing the Extraverted Leadership Advantage: The Role of Employee Proactivity. *Academy of Management Journal*, *54*(3), 528–550.
- Harrison, J. S., Boivie, S., Sharp, N. Y., & Gentry, R. J. (2018). Saving face: How exit in response to negative press and star analyst downgrades reflects reputation maintenance by directors. *Academy of Management Journal*, *61*(3), 1131–1157.
<https://doi.org/10.5465/amj.2016.0471>

- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2019). Measuring CEO personality: Developing, validating, and testing a linguistic tool. *Strategic Management Journal, 40*(8), 1316–1330. <https://doi.org/10.1002/smj.3023>
- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2020). Perception is reality: How CEOs' observed personality influences market perceptions of firm risk and shareholder returns. *Academy of Management Journal, 63*(4), 1166–1195. <https://doi.org/10.5465/AMJ.2018.0626>
- Herrmann, P., & Nadkarni, S. (2014). Managing strategic change: The duality of CEO personality. *Strategic Management Journal, 35*(9), 1318–1342. <https://doi.org/10.1002/smj.2156>
- Hilary, G., & Hsu, C. (2013). Analyst Forecast Consistency. *Journal of Finance, 58*(1).
- Jensen, M. (2004). Who Gets Wall Street's Attention? How Alliance Announcements and Alliance Density Affect Analyst Coverage. *Strategic Organization, 2*(3), 293–312. <https://doi.org/10.1177/1476127004045254>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics, 3*, 305–360.
- Johnson, T. C. (2004). Forecast Dispersion and the Cross Section of Expected Returns. *Journal of Finance, 59*(5), 1957–1978.
- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology, 85*(5), 751–765. <https://doi.org/10.1037/0021-9010.85.5.751>

- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*(4), 765–780.
<https://doi.org/10.1037/0021-9010.87.4.765>
- Judge, T. A., & Cable, D. M. (1997). Applicant Personality, Organizational Culture, and Organizational Attraction. *Personnel Psychology, 50*.
- Kaplan, S. N., Klebanov, M. M., Sorensen, M., Altman, D., Baker, M., Frydman, C., Harvey, C., Graham, J., Jensen, M., Pratch, L., Robinson, D., Yermack, D., Da, X., Garger, S., Iftimie, C., Tang, I., Tse, P., & Yamada, J. (2012). Which CEO Characteristics and Abilities Matter? *Journal of Finance, 57*(3), 973–1007.
- Kaszniak, R., & McNichols, M. F. (2002). Does Meeting Earnings Expectations Matter? Evidence from Analyst Forecast Revisions and Share Prices. *Journal of Accounting Research, 40*(3).
- Khurana, R. (2002). *Searching for a Corporate Savior: The Irrational Quest for Charismatic CEOs*. Princeton University Press.
- Kothari, S. P., Li, X., & Short, J. E. (2009). The effect of disclosures by management, analysts, and business press on cost of capital, return volatility, and analyst forecasts: A study using content analysis. *Accounting Review, 84*(5), 1639–1670.
<https://doi.org/10.2308/accr.2009.84.5.1639>
- Lauriola, M., & Levin, I. P. (2001). Personality traits and risky decision-making in a controlled experimental task: an exploratory study. *Personality and Individual Differences, 31*, 215–226. www.elsevier.com/locate/paid
- LePine, J. A., & van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology, 86*(2), 326–336.

- Malhotra, S., Reus, T. H., Zhu, P. C., & Roelofsen, E. M. (2018). The Acquisitive Nature of Extraverted CEOs. *Administrative Science Quarterly*, 63(2), 370–408.
<https://doi.org/10.1177/0001839217712240>
- Malmendier, U., & Tate, G. (2005). CEO Overconfidence and Corporate Investment. *Journal of Finance*, 60(6), 2661–2699. <https://about.jstor.org/terms>
- Mark, L. H., & Lundholm, R. J. (1996). Corporate Disclosure Policy and Analyst Behavior. *Accounting Review*, 71(4), 467–492.
- Mayew, W. J., & Venkatachalam, M. (2012). The Power of Voice: Managerial Affective States and Future Firm Performance. *Journal of Finance*, 67(1), 1–43.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality Across Instruments and Observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- McCrae, R. R., & Costa, P. T. (1997). Personality Trait Structure as a Human Universal. *American Psychologist*, 52(5), 509–516.
- McNichols, M., & O'Brien, P. C. (1997). Self-Selection and Analyst Coverage. *Journal of Accounting Research*, 35, 167–199.
- Milbourn, T. T. (2003). CEO reputation and stock-based compensation. *Journal of Financial Economics*, 68(2), 233–262. [https://doi.org/10.1016/S0304-405X\(03\)00066-7](https://doi.org/10.1016/S0304-405X(03)00066-7)
- Miller, D., & Toulouse, J.-M. (1986). Chief Executive Personality and Corporate Strategy and Structure in Small Firms. *Management Science*, 32(11), 1389–1409.
<https://www.jstor.org/stable/2631499>
- Nadkarni, S., & Herrmann, P. (2010). CEO Personality, Strategic Flexibility, and Firm Performance: The Case of the Indian Business Process Outsourcing Industry. *Academy of Management Journal*, 53(5), 1050–1073.

- O'Reilly, C. A., Caldwell, D. F., Chatman, J. A., & Doerr, B. (2014). The Promise and Problems of Organizational Culture: CEO Personality, Culture, and Firm Performance. *Group and Organization Management*, 39(6), 595–625. <https://doi.org/10.1177/1059601114550713>
- Peterson, R. S., Smith, D. B., Martorana, P. v., & Owens, P. D. (2003). The Impact of Chief Executive Officer Personality on Top Management Team Dynamics: One Mechanism by Which Leadership Affects Organizational Performance. *Journal of Applied Psychology*, 88(5), 795–808. <https://doi.org/10.1037/0021-9010.88.5.795>
- 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.
- Schipper, K. (1991). Commentary on Analysts' Forecasts. *Accounting Horizons*, 5(4).
- Schneider, B., & Smith, D. B. (2004). *Personality and organizations*. Psychology Press.
- Vergne, J. P., Wernicke, G., & Brenner, S. (2018). Signal incongruence and its consequences: A study of media disapproval and CEO overcompensation. *Organization Science*, 29(5), 796–817. <https://doi.org/10.1287/orsc.2018.1209>
- Wade, J. B., Porac, J. F., Pollock, T. G., & Graffin, S. D. (2006). The Burden of Celebrity: The Impact of CEO Certification Contests on CEO Pay and Performance. *Academy of Management Journal*, 49(4), 643–660. <https://www.jstor.org/stable/20159790>
- Washburn, M., & Bromiley, P. (2014). Managers and analysts: An examination of mutual influence. *Academy of Management Journal*, 57(3), 849–868. <https://doi.org/10.5465/amj.2011.0420>
- Westphal, J. D., & Clement, M. B. (2008). Sociopolitical Dynamics in Relations between Top Managers and Security Analysts: Favor Rendering, Reciprocity, and Analyst Stock Recommendations. *Academy of Management Journal*, 51(5), 873–897.

- Westphal, J. D., & Deephouse, D. L. (2011). Avoiding bad press: Interpersonal influence in relations between CEOs and journalists and the consequences for press reporting about firms and their leadership. *Organization Science*, 22(4), 1061–1086.
<https://doi.org/10.1287/orsc.1100.0563>
- Westphal, J. D., & Graebner, M. E. (2010). A Matter of Appearances: How Corporate Leaders Manage the Impressions of Financial Analysts about the Conduct of their Boards. *Academy of Management Journal*, 53(1), 15–43.
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: Journal of the Econometric Society*, 817–838.
- Wiersema, M. F., & Zhang, Y. (2011). CEO Dismissal: The role of investment analysts. *Strategic Management Journal*, 32(11), 1161–1182. <https://doi.org/10.1002/smj.932>
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press
- Womack, K. L. (1996). Do Brokerage Analysts' Recommendations Have Investment Value? *Journal of Finance*, 51(1), 137–167.
- Yermack, D. (2006). Flights of fancy: Corporate jets, CEO perquisites, and inferior shareholder returns. *Journal of Financial Economics*, 80(1), 211–242.
<https://doi.org/10.1016/j.jfineco.2005.05.002>
- Zhang, X. F. (2006). Information Uncertainty and Analyst Forecast Behavior*. *Contemporary Accounting Research*, 23(2), 565–590.
- Zhang, Y. U., & Gimeno, J. (2010). Earnings Pressure and Competitive Behavior: Evidence from the US Electricity Industry. *Academy of Management Journal*, 53(4), 743–768.
- Zuckerman, E. (2000). Focusing the corporate product: Securities analysts and de-diversification. *Administrative Science Quarterly*, 45(3), 591–619.

IV. Chapter 3

- Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *Review of Financial Studies*, 18(4), 1403–1432.
<https://doi.org/10.1093/rfs/hhi030>
- Aldrich, H. (1979). *Organizations and Environments*. Englewood Cliffs, NJ: Prentice Hall.
- Ang, S. H. (2008). Competitive intensity and collaboration: Impact on firm growth across technological environments. *Strategic Management Journal*, 29(10), 1057–1075.
<https://doi.org/10.1002/smj.695>
- Barrick, M. R., Neubert, M. J., Mount, M. K., & Stewart, G. L. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied Psychology*, 83(3), 377–391. <https://doi.org/10.1037/0021-9010.83.3.377>
- Barrick, M. R., Stewart, G. L., & Piotrowski, M. (2002). Personality and job performance: Test of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology*, 87(1), 43–51. <https://doi.org/10.1037/0021-9010.87.1.43>
- Bear, S., Rahman, N., & Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics*, 97(2), 207–221. <https://doi.org/10.1007/s10551-010-0505-2>
- Beckman, C. M., & Haunschild, P. R. (2002). The Network Learning : Effects of Partners ' of Heterogeneity on Experience Acquisitions Corporate. *Administrative Science Quarterly*, 47(1), 92–124.
- Benischke, M. H., Martin, G. P., & Glaser, L. (2019). CEO equity risk bearing and strategic risk taking: The moderating effect of CEO personality. *Strategic Management Journal*, 40(1), 153–177. <https://doi.org/10.1002/smj.2974>

- Bernile, G., Bhagwat, V., & Yonker, S. (2018). Board diversity, firm risk, and corporate policies. *Journal of Financial Economics*, 127(3), 588–612.
<https://doi.org/10.1016/j.jfineco.2017.12.009>
- Bono, J. E., & Judge, T. A. (2004, October). Personality and Transformational and Transactional Leadership: A Meta-Analysis. *Journal of Applied Psychology*, Vol. 89, pp. 901–910.
<https://doi.org/10.1037/0021-9010.89.5.901>
- Boone, C., Van Olfen, W., Van Witteloostuijn, A., & De Brabander, B. (2004). The Genesis Of Top Management Team Diversity. *Academy of Management Journal*, 47(5), 633–656.
- Boyd, B. K. (1995). CEO Duality and Firm Performance: A Contingency Model. *Strategic Management Journal*, 16(4), 301–312.
- Bromiley, P., Rau, D., & Zhang, Y. (2017). Is R&D risky? *Strategic Management Journal*, 38(4), 876–891. <https://doi.org/10.1002/smj.2520>
- Carpenter, M. A., Geletkancz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6), 749–778. <https://doi.org/10.1016/j.jm.2004.06.001>
- Carpenter, M. A., & Westphal, J. D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management Journal*, 44(4), 639–660.
<https://doi.org/10.2307/3069408>
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), 33–53. <https://doi.org/10.1111/1540-6288.00034>

- Certo, S. T., Busenbark, J. R., Kalm, M., & LePine, J. A. (2020). Divided we fall: How ratios undermine research in strategic management. *Organizational research methods*, 23(2), 211-237
- Chatterjee, A., & Hambrick, D. C. (2007). Narcissistic CEO's. *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. <https://doi.org/10.1177/0001839211427534>
- Colbert, A. E., Barrick, M. R., & Bradley, B. H. (2014). Personality and leadership composition in top management teams: Implications for organizational effectiveness. *Personnel Psychology*, 67(2), 351–387. <https://doi.org/10.1111/peps.12036>
- Coles, J. L., Daniel, N. D., & Naveen, L. (2014). Co-opted boards. *Review of Financial Studies*, 27(6), 1751–1796. <https://doi.org/10.1093/rfs/hhu011>
- Costa, P. T., & McCrae, R. R. (1996). Mood and personality in adulthood. In *Handbook of emotion, adult development, and aging* (pp. 369–383). Academic Press.
- Costa, P. T., & McCrae, R. R. (1988). Personality Processes and Individual Differences. From Catalog to Classification : Murray's Needs and the Five-Factor Model. *Journal of Personality and Social Psychology*, 55(2), 258–265.
- Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. (2007). The Fundamental Agency Problem and Its Mitigation. *Academy of Management Annals*, 1(1), 1–64. <https://doi.org/10.5465/078559806>
- Dess, G. G., & Beard, D. W. (1984). Dimensions of Organizational Task Environments. *Administrative Science Quarterly*, 29(1), 52–73.

- Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32(3), 543–576.
<https://doi.org/10.1017/CBO9780511618925.006>
- Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 88(2), 288–307.
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *Journal of Law & Economics*, 26(2), 26. Retrieved from <https://heinonline.org/HOL/License>
- 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.
- Finkelstein, S., & D'Aveni, R. (1994). CEO Duality as a Double-Edged Sword: How Boards of Directors Balance Entrenchment Avoidance and Unity of Command. *Academy of Management Journal*, 37(5), 1079–1108.
- Gao, S. S., & Zhang, J. J. (2006). Stakeholder engagement, social auditing and corporate sustainability. *Business Process Management Journal*, 12(6), 722–740.
<https://doi.org/10.1108/14637150610710891>
- Gedajlovic, E., Lubatkin, M. H., & Schulze, W. S. (2004). Crossing the threshold from founder management to professional management: A governance perspective. *Journal of Management Studies*, 41(5), 899–912. <https://doi.org/10.1111/j.1467-6486.2004.00459.x>
- Goll, I., & Rasheed, A. A. (2004). The moderating effect of environmental munificence and dynamism on the relationship between discretionary social responsibility and firm performance. *Journal of Business Ethics*, 49(1), 41–54.
<https://doi.org/10.1023/B:BUSI.0000013862.14941.4e>

- Gomez-Mejia, L., & Wiseman, R. M. (1997). Reframing executive compensation: An assessment and outlook. In *Journal of Management* (Vol. 23).
<https://doi.org/10.1177/014920639702300304>
- Gow, I. D., Kaplan, S. N., Larcker, D. F., & Zakolyukina, A. A. (2016). *NBER Working Paper Series: CEO Personality and Firm Policies* (No. 22345). Retrieved from
<http://www.nber.org/papers/w22435>
- Grant, A. M., Gino, F., & Hofmann, D. A. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy of Management Journal*, 54(3), 528–550. <https://doi.org/10.5465/AMJ.2011.61968043>
- Gulati, R., & Westphal, J. D. (1999). Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. *Administrative Science Quarterly*, 44(3), 473–506. <https://doi.org/10.2307/2666959>
- 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.
- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2020). Perception is reality: How CEOs' observed personality influences market perceptions of firm risk and shareholder returns. *Academy of Management Journal*, 63(4), 1166–1195.
<https://doi.org/10.5465/AMJ.2018.0626>
- Harrison, J. S., Thurgood, G. R., Boivie, S., & Pfarrer, M. D. (2019). Measuring CEO personality: Developing, validating, and testing a linguistic tool. *Strategic Management Journal*, 40(8), 1316–1330. <https://doi.org/10.1002/smj.3023>

- Haynes, K. T., & Hillman, A. (2010). The Effect of Firm Compensation Structures on the Mobility and Entrepreneurship of Extreme Performers. *Strategic Management Journal*, 31, 1145–1163. <https://doi.org/10.1002/smj.859>
- Hermalin, B. E., & Weisbach, M. S. (2001). Boards of Directors as an Endogenously Determined Institution: A review of the Economic Literature. *National Bureau of Economic Research*, 3, 41.
- Hermalin, B., & Weisbach, M. (1991). The Effects of Board Composition and Direct Incentives on Firm Performance. *Financial Management*, 20(4), 101–112.
- Herrmann, P., & Nadkarni, S. (2014). Managing strategic change: The duality of CEO personality. *Strategic Management Journal*, 35(9), 1318–1342. <https://doi.org/10.1002/smj.2156>
- 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. <https://doi.org/10.1002/smj.455>
- Hillman, A. J., Cannella, A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ? *Journal of Management*, 28(6), 747–763. [https://doi.org/10.1016/S0149-2063\(02\)00192-7](https://doi.org/10.1016/S0149-2063(02)00192-7)
- Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235–256. <https://doi.org/10.1111/1467-6486.00179>

- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396. <https://doi.org/10.5465/AMR.2003.10196729>
- Hillman, A. J., Shropshire, C., & Cannella, A. A. (2007). Organizational predictors of women on corporate boards. *Academy of Management Journal*, 50(4), 941–952. <https://doi.org/10.5465/AMJ.2007.26279222>
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404–1427. <https://doi.org/10.1177/0149206309343469>
- Hogan, R., & Hogan, J. (1995). *The Hogan Personality Inventory manual*. Tulsa, OK: Hogan Assessment Systems.
- Hong, L., & Page, S. E. (2004). Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proceedings of the National Academy of Sciences of the United States of America*, 101(46), 16385–16389. <https://doi.org/10.1073/pnas.0403723101>
- Hsu, H. H., & Wu, C. Y. H. (2014). Board composition, grey directors and corporate failure in the UK. *British Accounting Review*, 46(3), 215–227. <https://doi.org/10.1016/j.bar.2013.12.002>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305–360.
- Johnson, J., Daily, C., & Ellstrand, A. (1996). Boards of directors: A review and research agenda. *Journal of Management*, 22(3), 409–438.
- Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: A meta-analytic review. *Academy of Management Journal*, 52(3), 599–627. <https://doi.org/10.5465/AMJ.2009.41331491>

- Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology, 85*(5), 751–765. <https://doi.org/10.1037/0021-9010.85.5.751>
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*(4), 765–780. <https://doi.org/10.1037/0021-9010.87.4.765>
- 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. *Leadership Quarterly, 20*(6), 855–875. <https://doi.org/10.1016/j.leaqua.2009.09.004>
- Judge, T. A., & Cable, D. M. (1997). Applicant Personality, Organizational Culture, and Organizational Attraction. *Personnel Psychology, 50*.
- Kashmiri, S., Gala, P., & Nicol, C. D. (2019). Seeking pleasure or avoiding pain: Influence of CEO regulatory focus on firms' advertising, R&D, and marketing controversies. *Journal of Business Research, 105*, 227–242. <https://doi.org/10.1016/j.jbusres.2019.08.022>
- Krause, R., Semadeni, M., & Cannella, A. A. (2014). CEO Duality: A Review and Research Agenda. In *Journal of Management* (Vol. 40). <https://doi.org/10.1177/0149206313503013>
- Liang, K.-Y., & Zeger, S. L. (1986). Longitudinal Data Analysis Using Generalized Linear Models. *Biometrika, 73*(1), 13–22.
- Lorsch, J., & MacIver, E. (1989). *The reality of America's corporate board*. Cambridge, MA: Harvard Business School Press.
- Malhotra, S., Reus, T. H., Zhu, P. C., & Roelofsen, E. M. (2018). The Acquisitive Nature of Extraverted CEOs. *Administrative Science Quarterly, 63*(2), 370–408. <https://doi.org/10.1177/0001839217712240>

- Malmendier, U., & Tate, G. (2005). CEO Overconfidence and Corporate Investment. *Journal of Finance*, 60(6), 2661–2699. Retrieved from <https://about.jstor.org/terms>
- McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality Across Instruments and Observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- Miller, D., & Toulouse, J.-M. (1986). Chief Executive Personality and Corporate Strategy and Structure in Small Firms. *Management Science*, 32(11), 1389–1409. Retrieved from <https://www.jstor.org/stable/2631499>
- Miller, T., & Triana, M. del C. (2009). Demographic Diversity in the Boardroom : Mediators of the Board Diversity – Firm Performance Relationship. *Journal of Management Studies*, 46(5), 755–786.
- Nadkarni, S., & Herrmann, P. (2010). CEO Personality, Strategic Flexibility, and Firm Performance: The Case of the Indian Business Process Outsourcing Industry. *Academy of Management Journal*, 53(5), 1050–1073.
- O'Reilly, C. A., Caldwell, D. F., Chatman, J. A., & Doerr, B. (2014). The Promise and Problems of Organizational Culture: CEO Personality, Culture, and Firm Performance. *Group and Organization Management*, 39(6), 595–625. <https://doi.org/10.1177/1059601114550713>
- Pearce, J. A., & Zahra, S. A. (1991). The relative power of CEOs and boards of directors: Associations with corporate performance. *Strategic Management Journal*, 12(1991), 135–153.
- Peterson, R. S., Smith, D. B., Martorana, P. V., & Owens, P. D. (2003). The Impact of Chief Executive Officer Personality on Top Management Team Dynamics: One Mechanism by Which Leadership Affects Organizational Performance. *Journal of Applied Psychology*, 88(5), 795–808. <https://doi.org/10.1037/0021-9010.88.5.795>

- Peterson, S. J., Walumbwa, F. O., Byron, K., & Myrowitz, J. (2009). CEO positive psychological traits, transformational leadership, and firm performance in high-technology start-up and established firms. *Journal of Management*, 35(2), 348–368.
<https://doi.org/10.1177/0149206307312512>
- Pfeffer, J. (1997). The Development and Scope of Organization Studies. In *New directions for organization theory: Problems and prospects* (pp. 3–24).
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 218–228.
- Pfeffer, J., & Salancik, G. R. (1978). The External Control of Organizations: A Resource Dependence Perspective. In *Harper and Row*.
- Robinson, G., & Dechant, K. (1997). Building a business case for diversity. *Academy of Management Executive*, 11(3), 21–31. <https://doi.org/10.5465/ame.1997.9709231661>
- Schneider, B. (1987). The People Make the Place. *Personnel Psychology*, 40(3), 437–453.
<https://doi.org/10.1111/j.1744-6570.1987.tb00609.x>
- Shen, W. (2003). The Dynamics of the CEO-Board Relationship : An Evolutionary Perspective. *Academy of Management Review*, 28(3), 466–476.
- Shleifer, A., & Vishny, R. W. . (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(2), 737–783.
- Weisbach, M. (1988). Outside Directors and CEO Turnover. *Journal of Financial Economics*, 20, 431–460.
- Westphal, J. D. (1999). Collaboration in the Boardroom: Behavioral and Performance Consequences of CEO-Board Social Ties. *Academy of Management Journal*, 42(1), 7–24.
<https://doi.org/10.5465/256871>

- Westphal, J. D. (1998). Board games: How CEOs adapt to increases in structural board independence from management. *Administrative Science Quarterly*, 43(3), 511–537.
<https://doi.org/10.2307/2393674>
- Westphal, J. D., & Zajac, E. J. (1995). Who Shall Govern? CEO/Board Power, Demographic Similarity, and New Director Selection. *Administrative Science Quarterly*, 40(1), 60–83.
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: Journal of the Econometric Society*, 817–838.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press
- Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Cengage learning
- Zahra, S. A., & Filatotchev, I. (2004). Governance of the entrepreneurial threshold firm: A knowledge-based perspective. *Journal of Management Studies*, 41(5), 885–897.
<https://doi.org/10.1111/j.1467-6486.2004.00458.x>
- Zahra, S. A., & Pearce, J. A. (1989). Boards of Directors and Corporate Financial Performance: A Review and Integrative Model. *Journal of Management*, 15(2), 291–334.
<https://doi.org/10.1177/014920638901500208>
- Zajac, E. J., & Westphal, J. D. (1996). Who Shall Succeed? How CEO/Board Preferences and Power Affect the Choice of New CEOs. *Academy of Management Journal*, 39(1), 64–90.
<https://doi.org/10.5465/256631>
- Zhu, D. H., & Chen, G. (2015). Narcissism, Director Selection, and Risk-Taking Spending. *Strategic Management Journal*, 36, 2075–2098. <https://doi.org/10.1002/smj>

VITA

Academic Background

Ph.D. University of Mississippi, University, MS, Major: Management (emphasis on Strategy), Minor: Applied Statistics, August 2022 (Expected).

M.B.A. Post Graduate Diploma in Business Management (equivalent to MBA), XLRI, Jamshedpur, India, Finance and Operations, 2011.

B.S. Bachelor of Chemical Engineering, Jadavpur University, Kolkata, India, Chemical Engineering, 2004.

Refereed Paper

Woo, H.; Berns, J.; Mukherjee, K.; & Kim, J. (2021). When Increased Foreign Competition Motivates Domestic Firms to Do Good: An Examination of Foreign Entry Mode and Domestic CSR Response. *Journal of Strategy and Management*. <https://doi.org/10.1108/JSMA-05-2021-0118>

Paper under Review

Swab, G.; Markin, E.; Nicol, D.; Gigliotti, R.; Mukherjee, K.; & Jia, Y. (2021). Benchmarking Strategic Orientation and Firm Performance: An Analysis of the Dimensions of Entrepreneurial Orientation. Initial submission to *Entrepreneurship Research Journal*.

Working Papers

Mukherjee, K.; & Gentry, R. (2021). How CEO Personality relates to firm's Corporate Social Responsibility. Data analysis in progress, targeted for *Journal of Business Ethics*.

Mukherjee, K.; & Gentry, R. (2021). Influence of CEO Personality on Equity Analysts' estimates. Data collection in progress, targeted for *Journal of Business Research*.

Mukherjee, K.; & Gentry, R. (2021). Relationship between CEO Personality and firm's Corporate Governance. Data collection in progress, targeted for *Journal of Business Research*.

Mukherjee, K.; Jia, Y.; & Gentry, R. (2021). Corporate Governance and Strategic Human Resource Management. Initial draft in progress, targeted for *Journal of Strategy and Management*.

Refereed Cases

Mukherjee, K.; Chandler, B.; Gentry, R.J. (2021). McDonald's USA – A Restaurant Icon's Potential to Thrive in a Global Pandemic. *Sage Business Cases*.

Mukherjee, K.; Hicks, G.; & Gentry, R. J. (2020). GE Power – General Electric's Sputtering Engine. *Sage Business Cases*.

Mukherjee, K.; Kowalczyk, D.; & Gentry, R.J. (2018). Achoo! The Acclarent, Inc. Revolution. *Sage Business Cases*.

Academic Experience

Graduate Research Assistant, Department of Management, University of Mississippi (August, 2017 – Present), University, MS

Graduate Instructor, Department of Management, University of Mississippi (June, 2018 – Present), University, MS

Conference Presentations

Refereed Papers

Mukherjee, K.; Woo, H.; Berns, J.; & Kim, J. (2021). How Increased Foreign Competition Motivates Domestic Firms to Do Good: An Examination of Foreign Entry Mode and Domestic CSR Response. *Academy of Management*.

Mukherjee, K.; Woo, H.; Berns, J.; & Kim, J. (2021). How Increased Foreign Competition Motivates Domestic Firms to Do Good: An Examination of Foreign Entry Mode and Domestic CSR Response. *Eastern Academy of Management*.

Mukherjee, K.; Jia, Y.; Markin, E.; & Swab, G.; (2021). Benchmarking Strategic Orientation and Firm Performance: An Analysis of the Dimensions of Entrepreneurial Orientation. *Eastern Academy of Management*.

Mukherjee, K.; Woo, H.; Berns, J.; & Kim, J. (2020). How Increased Foreign Competition Motivates Domestic Firms to Do Good: An Examination of Foreign Entry Mode and Domestic CSR Response. *Southern Management Association*.

Mukherjee, K.; Jia, Y.; Swab, G.; Markin, E.; Nicol, D.; & White, J. (2019). Benchmarking Strategic Orientation and Firm Performance: An Analysis of the Dimensions of Entrepreneurial Orientation. *Southern Management Association, Norfolk, Virginia*.

Israel, D.; Mukherjee, K.; Kundu, N.; Dharmarajan, M.; & Sinha, R. (2010). Impact of Spirituality on Ethical Perceptions of Managers. *Yale-Great Lakes 5th International Research Conference, Chennai, India*.

Israel, D.; Mukherjee, K.; Kundu, N.; Dharmarajan, M.; & Sinha, R. (2010). Impact of Spirituality on Job Performance. *Indian Institute of Management Indore International Conference cum Colloquium, Indore, India*.

Refereed Abstracts

Israel, D.; Mukherjee, K.; Kundu, N.; & Dharmarajan, M. (2011). Impact of Life Orientation on Motivation Levels of Juvenile Labor-Cause for CSR. *Association of Indian Management Scholars' 8th International Conference on Management, Ahmedabad, India*.

Research Awards and Scholarships

Awards

2021: Best Empirical Paper, Eastern Academy of Management, CSR/Ethics Track

2021: Finalist, Best Student Paper, Academy of Management, SIM division

2021: Best Reviewer, Southern Management Association, Careers/Social Issues/Diversity/Ethics Track

2017 – Present: Research Assistantship, University of Mississippi

2017 – Present: Graduate Assistantship, University of Mississippi

Scholarships

2020: Late Stage Doctoral Consortium, Southern Management Association

2018: Early Stage Doctoral Consortium, Southern Management Association

University Assignments

Course Instructor

Summer 2022: MGMT 371 – Principles of Management

Spring 2022: MGMT 493 – Management of Strategic Planning, Rating (4.09/5.0)

Fall 2021: MGMT 383 – Human Resource Management, Rating (4.12/5.0)

Summer 2021: MGMT 493 – Management of Strategic Planning (distance learning) Rating (4.22/5.0)

Summer 2020: MGMT 493 – Management of Strategic Planning (online), Rating (3.89/5.0)

Summer 2018: MGMT 383 – Human Resource Management, Rating (3.0/5.0)

Teaching Assistant

Summer 2022: GB 490 – General Business Topics Review
Spring 2022: GB 490 – General Business Topics Review
Fall 2021: GB 490 – General Business Topics Review
Fall 2020: GB 490 – General Business Topics Review
Spring 2020: GB 490 – General Business Topics Review
Fall 2019: GB 490 – General Business Topics Review
Summer 2019: ENT 476 – Entrepreneurial Leadership
Spring 2018: ENT 476 – Entrepreneurial Leadership

Service to Profession

Reviewer: Conference Paper

2019-22: Academy of Management Annual Meeting
2019-22: Southern Management Association Annual Meeting
2021-22: Eastern Academy of Management Annual Meeting

Volunteer: Conference

2020: Strategic Management Society Annual Meeting (Virtual)

Professional Experience

Banking

Vice President, YES Bank (April, 2016 – July, 2017), Mumbai, India. Marketing of trade finance, wholesale payments and corporate banking products
Assistant Vice President, YES Bank (October, 2015 – March, 2016), Mumbai, India. Marketing of trade finance, wholesale payments and corporate banking products
Assistant Vice President, YES Bank (April, 2014 – September, 2015), Mumbai, India. Business policy formulation for a national chamber of industry in India
Senior Manager, YES Bank (April, 2013 – March, 2014), Mumbai, India. Business policy formulation for a national chamber of industry in India
Senior Manager, YES Bank (May, 2011 – March, 2013), Mumbai, India. Credit analysis and appraisal of mid-size corporate clients

Technology

Programmer Analyst, Infosys Technologies (April, 2008 – May, 2009), Bengaluru, India. Application support for wholesale banking payment system of a leading global bank
Software Engineer, Infosys Technologies (September, 2004 – March, 2008), Bengaluru, India. Application support for wholesale banking payment system, trade finance system of a leading global bank

Professional Association

Membership

2018 – Present: Academy of Management
2021 – Present: Eastern Academy of Management
2018 – Present: Southern of Management Association

Certification

2010-12: CFA Level I, II. Chartered Financial Analyst (CFA) Institute, USA

2010-11: FRM Level I, II (Charter holder). Global Association of Risk Professionals (GARP), USA

Skills

Languages

Bengali: Native proficiency

English: Professional proficiency

French: Elementary proficiency

Hindi: Native proficiency

Computer Technology

Software: MS Office Suite, Stata

Languages: C, COBOL, FORTRAN, R