

# CEO social status and corporate decision making



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## Declaration

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## **Abstract**

**Yulia Plaksina**

### **CEO social status and corporate decision making**

This thesis investigates the role of CEO social status in corporate decision making and explores the associated firm value consequences. Building on insights from sociology, I distinguish between ascribed (inherited) and achieved (earned) social status in order to distinguish the varying influence of status origin and provide a richer picture of the mechanisms through which social status can affect CEO behaviour. Utilising a large sample of S&P 500 executives, I find evidence of statistically and economically significant relationships between the level and the nature of CEO social status and firm-level outcomes, establishing the importance of CEO social status in strategic decision-making. My overall findings are consistent with a hypothesis that executives value their social status position and associated membership within elite social groups, leading to strategic decisions that reflect a desire to preserve their social standing. In particular, I find that both high ascribed and elevated achieved social status are associated with reduced M&A activity, but only high achieved social status results in significant value destruction around deal announcements. In addition, both types of CEO status are positively related to the firms' corporate social responsibility (CSR) performance, although the specific strategies are different between executives with high ascribed and high achieved social status. These CSR influences based on social status are shown to neither harm nor benefit the firm. This research opens a new strand of literature on social status in corporate finance, and suggests that we need to look deeper into behavioural concepts that we adapt from other disciplines.

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## CHAPTER 1

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# Introduction

## 1.1 Background and motivation

In trying to understand why organisations act in certain ways, traditional theories have centred explanations of organisational behaviour on economic and technological factors. From this perspective, firms base their strategic decisions on the available information regarding relevant contextual conditions, such as market signals, competitive environment and available technologies, with the role of management largely omitted from the strategic process (Augier and Teece, 2009; Teece and Winter, 1984). In addition, the effect of company leaders on organisational outcomes has been argued to be minimal as managers are greatly constrained by the industry pressures and the powerful influences of the broader environment (DiMaggio and Powell, 1983; Lieberman and O'Connor, 1972).

Loosening this perspective through the introduction of agency theory allows that managers of publicly-held corporation can inject their personal preferences into the strategic process, potentially resulting in organisational outcomes that have negative implications for shareholder value (Jensen, 1986; Jensen and Meckling, 1976). Agency theory is premised on the presence of a separation of ownership and control in publicly-held corporations, with the key argument that managers can choose decisions that maximise their own utility rather than act in the best interest of shareholders. The agency literature identifies various reasons that can lead to a conflict between the goals of managers and owners (such as risk attitudes and time horizons), and provides evidence of common tendencies among corporate managers serving their personal interests but not those of the company shareholders (such as empire building and shirking) (Harford, 1999; Jensen, 1986, 1993). These practices give rise to the challenge for owners to employ internal and external governance mechanisms that can effectively constrain predictable managerial misbehaviour (Eisenhardt, 1989; Jensen and Meckling, 1976). Under the logic of agency theory, therefore, variation in organisational policies and outcomes can be traced to differences in monitoring arrangements and incentive schemes (Rediker and Seth, 1995).

Similar to the agency view, upper echelons theory argues that corporate managers have a significant role in strategic decision-making and can have a substantial

influence on organisational outcomes (Hambrick, 2007; Hambrick and Mason, 1984). However, agency theory assumes that managers are universally driven towards common self-benefiting practices that are based on rational decisions to maximize their personal utility. In contrast, upper echelons theory acknowledges the role of managers' bounded rationality in the process of strategic choice, arguing that complex decisions associated with determining corporate policies are likely to be influenced by personalised behavioural factors (Hambrick and Mason, 1984). As a result, the upper echelons perspective suggests that organisational outcomes can vary depending on managerial characteristics, and strategic decisions can be largely explained by experiences, values and perceptions of company executives.

The seminal work of Hambrick and Mason (1984) was followed by a stream of studies examining the influence of CEO personal characteristics on firm risk taking, strategy and outcomes. This research has diverged into multiple directions, providing considerable support to the argument proposed by upper echelons theory. In particular, studies on observable demographic CEO characteristics show that factors such as age (Serfling, 2014), tenure (Simsek, 2007) and gender (Huang and Kisgen, 2013) are significantly related to organisational strategy and outcomes. Another stream of literature finds evidence of a link between corporate policies and CEO psychological attributes, such as overconfidence (Malmendier and Tate, 2008), narcissism (Chatterjee and Hambrick, 2007) and envy (Goel and Thakor, 2010). In addition, research examining the influence of CEO past experiences shows how early-life exposure to fatal disasters (Bernile et al., 2017) and military service (Benmelech and Frydman, 2015) can shape CEOs' attitude to risk and manifest across various aspect of corporate strategy. Further studies also find evidence of a significant role of executives' values, showing how cultural beliefs (Frijns et al., 2013) and political ideologies (Chin et al., 2013) can affect organisational outcomes.

Among the multitude of examined CEO characteristics, one of the factors that has received little research consideration is executive social status, despite the evidence of a profound status influence on individuals' behaviour in the fields of sociology, psychology and organisational behaviour (Côté, 2011; Fiske and Markus, 2012; Liu et al., 2004; Piazza and Castellucci, 2014). In addition, the limited existing literature examining CEO status in finance often employs a singular concept

of 'social status', lacking clarity regarding the varying influence of social status depending on its origin. For example, Palmer and Barber (2001) regard CEO social status as a dimension of the class system to which executives are born and which remains constant. In contrast, Shemesh (2017) considers CEO social status to be related to executives' reputation relative to their peers, implying a quality which can vary throughout CEO career. While individually informative, these studies produce evidence of CEO social status influence whose understanding can be improved by addressing the meaningful differences in status effects depending on its source.

Social status is a complex construct which can originate from different sources. Two distinguishing sources are ascribed status which is assigned to individuals at birth and does not depend on their innate abilities, and achieved social status which is attained throughout the life of an individual and is based on personal effort and exercise of volition (Foladare, 1969). Due to different underlying characteristics, ascribed and achieved social status types are likely to influence CEO decision making through separate processes, and the two routes to status have long been differentiated in sociological research, and acknowledged in management theory (Foladare, 1969; Lin, 1999; Linton, 1936; Piazza and Castellucci, 2014).

To address the existing conceptual gap in finance research, I distinguish throughout this work between ascribed and achieved social status, and consider the various mechanisms through which these two routes to status can influence CEO decision making. To my knowledge, the only similar examination of differentiated ascribed and achieved status in a finance context was in Lucey et al. (2013) who analysed acquisitiveness of CEOs of large UK companies, which was published out of my initial research in this topic. This thesis is a significant advance on that initial research, particularly through incorporating a broader review of the ways in which social status can affect CEO behaviour, developing a model of status influence, and analysing status influence on several aspects of corporate policy as well as performance implications of decisions made by CEOs with varying social status characteristics. In addition, I investigate a much larger dataset with comprehensive controls, and address the unique methodological concerns related to the measurement of status influence. My analysis, therefore, provides a rich understanding of the role of CEO social status in corporate decision making.



## 1.2 The persistent influence of ascribed status

I define ascribed status as individuals' relative position within the economic hierarchy at the time of their birth. As such, individuals' ascribed status is assigned based on the socioeconomic standing of the families into which they are born, and it reflects differences in environmental conditions and access to material resources during the early periods of a person's life (Côté, 2011; Linton, 1936). Ascribed status is generally viewed as an irreversible characteristic which remains constant even if an individual experienced a subsequent movement into a different social class during adulthood.

Despite early assignment, research indicates the enduring influence of individuals' social class origins across various aspects of their life. For example, research in biology suggests that ascribed status continues to have a significant effect on individuals' health even in cases where they experienced a movement into higher social class during adulthood (Kittleson et al., 2006; Marin et al., 2008). Miller et al. (2009) argue that early-life social experiences reflected in the varying ascribed status characteristics can have a long-term influence on individuals' biological programming. This perspective and the related findings suggest that ascribed status might leave a 'biological residue' that can endure despite a subsequent change in environment (Miller et al., 2009).

Similar to the persistent biological effects of ascribed status, it can also leave an enduring 'cognitive residue' (Côté, 2011). Research in social psychology argues that individuals adopt cognitive and behavioural patterns by processing cues from their environment, and childhood experiences play a particularly important role in shaping people's perception of the world (Stephens et al., 2014). In line with this perspective, the theory of imprinting suggests that individuals develop personal characteristics that "reflect prominent features of the environment" during susceptible periods in their lives (such as childhood and periods of significant transitions), and such characteristics will persist despite future changes in environmental conditions (Marquis and Tilcsik, 2013, p.199). Therefore, ascribed status has the potential to have a lasting effect on individuals' mental models of decision making, and the varying environmental conditions associated with different ascribed status can assist in

explaining the variation in executives' approach to the complex process of strategic choice.

A particular channel through which ascribed status can leave a 'cognitive residue' is its affect on individuals' risk perception and preferences. Upper class background is characterised by a superior perceived position in society, which has been shown to be related to higher levels of optimism and self-esteem, as well as increased perception of control (Kraus et al., 2012; Twenge and Campbell, 2002). Upper social class is also associated with an abundance of material resources, resulting in greater feelings of economic and psychological security among high status individuals compared to those from lower class background (Fiske and Markus, 2012). Such favourable early life environmental conditions can shape individuals' attitude to risk, and direct their attention towards opportunity rather than threat in times of uncertainty.

In line with the argument that ascribed status can have an enduring influence on individuals' risk preferences, Kish-Gephart and Campbell (2015) find evidence of a higher level of strategic risk taking among CEOs from upper social class background. The authors base their measure of risk taking on the level of R&D expenditure, capital expenditure and the value of the long-term debt, and argue that upper class upbringing is likely to affect CEO risk-taking through increased confidence, similar to the effects of CEO optimism and overconfidence (Malmendier and Tate, 2005).

However, while the influence of CEO overconfidence on risk taking tends to be consistent across different corporate strategies and appears to be persistent in different market environments (Hsieh et al., 2014; Malmendier and Tate, 2005, 2008), the effect of ascribed status are likely to be more context-specific. For example, Côté (2011) argues that relationship between upper class background and the amount of risk taking is dependent on the favourableness of the external conditions. In favourable conditions, higher self-esteem and optimism among individuals with upper class upbringing will be associated with greater willingness to take risks. However, in the face of adversity, higher class individuals are likely to reduce their risk taking and make safer decisions, compared to individuals with lower status background (Goldman and Smith, 2002; Griskevicius et al., 2011). This perspective suggests that the effect of CEO ascribed status on strategic risk taking might, at least,

be different in times when the economy is strong and during periods of economic adversity such as financial crises.

In addition to being dependent on economic conditions, the effect of CEO ascribed status is likely to vary across different corporate policies because upper class upbringing has implications not only for individuals' attitude to risk, but also for their social group identity. Research suggests that firms and their managers can engage in certain activities for social rather than economic reasons, supporting the idea that economic behaviour is socially embedded at individual and organisational levels (Granovetter, 1985; Haunschild, 1992; Palmer and Barber, 2001). A particular implication of upper class upbringing for corporate executives is that such elite background provides membership within the "inner circle" of corporate elite (Useem, 1984). This prestigious network differs from the rest of the corporate elite with respect to social and educational characteristics of its members, and the existence of this social stratification is generally recognised by corporate managers themselves (Domhoff, 2002; Useem, 1984; Useem and Karabel, 1986). Membership within the inner circle can yield multiple personal and professional benefits, such as superior access to information and scarce resources, as well as personal and strategic support from members of the network (Galaskiewicz, 1985; McDonald and Westphal, 2010, 2011). In addition, CEO and director embeddedness within the core elite is often viewed as an intangible firm asset, providing members of the inner circle with more power with their organisations and protecting them from dismissal (D'Aveni, 1990; Flickinger et al., 2016; Piazza and Castellucci, 2014). However, as with any social group, the inner circle is governed by a set of norms and can exercise social pressures for members to conform (Kang and Kroll, 2014; Sauerwald et al., 2016). Companies with strong links to the inner circle collectively own the social and reputational capital of this elite network, and reputation of individual members of the network can have a spillover effect on the associated firms, both in positive and negative directions (Kang, 2008; Pollock et al., 2009; Sauerwald et al., 2016). In addition, members of the network are expected to share a sense of social solidarity and follow the norms of reciprocity, as well as refrain from elite-threatening actions (Sandefur and Laumann, 1998; Westphal and Khanna, 2003).

High ascribed status executives are argued therefore to be constrained by the

normative expectations of belonging to the inner circle and have little incentive to pursue risky strategies that might harm their reputation and jeopardise their identification with the elite social group. Lower status CEOs, on the other hand, have the flexibility of deviating from accepted business practice and are more motivated to take chances: they can attain status if their strategy is successful but have little reputational concerns in case of failure (Espeland and Hirsch, 1990; Stearns and Allan, 1996). Indeed, director and CEO membership within the inner circle of the corporate elite has been shown to influence corporate practices and strategies, including board structure decisions (Westphal and Khanna, 2003) and acquisition behaviour (Palmer and Barber, 2001).

Throughout this thesis I adopt this perspective, at least as a testable hypothesis, of high ascribed status executives being reluctant to pursue risky strategies that might harm their reputation and being conscious of the norms of their social group. Thus in my first set of studies I argue this acts as a constraint on merger and acquisition behaviour, while in the second I link the social attractiveness of CSR investment to hypothesise higher levels of CSR investment by high ascribed status CEOs.

### **1.3 The contest for achieved status**

I define achieved social status as the level of individuals' reputation relative to their peers. In contrast to ascribed social status, achieved status is earned on the basis of personal merit, and it reflects individuals' skills and effort (Linton, 1936). Therefore, individuals have a level of control over their achieved social status and can experience positive and negative shifts in this personal attribute over time and depending on relative performance.

While most models in a financial setting define achieved social status based on individuals' relative wealth (see, for example Hong et al., 2014; Roussanov, 2010), recent research indicates that relative reputation can be an important source of status among corporate executives, and reputational shifts can be useful in explaining the variation in executives' risk attitudes, corporate policies and associated firm outcomes (Ammann et al., 2016; Koh, 2011; Raff and Siming, 2017; Shemesh, 2017; Siming, 2016).

Among existing studies, there are two main contrasting perspectives regarding the specific influence of CEO reputation on corporate behaviour. One stream of literature argues that superior managerial reputation, often indicated through media attention or prestigious business awards, leads to CEO entrenchment and opportunistic CEO behaviour, resulting in generally negative firm outcomes, such as poorer quality of financial reporting, engagement in rent extraction activities and financial underperformance (Ammann et al., 2016; Francis et al., 2008; Malmendier and Tate, 2009; Wade et al., 2006). Another strand of literature posits that increases in CEO reputation are likely to better align their interests with those of other firm stakeholders due to CEO desire to preserve their elevated status position, leading to beneficial firm outcomes, such as lower incidence of earnings management, more conservative accounting practices and a decrease in firm-specific risk (Koh, 2011; Shemesh, 2017).

Among the first studies to use prestigious awards as an indication of CEO reputation, Wade et al. (1997, 2006) investigate the impact of CEO celebrity status on firm performance and executives' compensation. The authors find that while abnormal firm returns are positive in the days following the award conferral, the longer-term impact of such certifications on firm performance is generally negative. At the same time, executives tend to extract higher compensation around the time of the award, although they subsequently experience greater pay-performance sensitivity (Wade et al., 2006)<sup>1</sup>.

While the analysis in Wade et al. (1997, 2006) employs results from a single certification contest (Financial World's 'CEO of the year'), Malmendier and Tate (2009) expand the proxy for CEO reputation to include a range of prestigious business rewards. The authors report a similar pattern of general underperformance among celebrity CEOs following the award conferral, and suggest several channels for this trend. First, higher reputation can increase executives' power within the organisation, leading to reduced supervision and giving CEOs more freedom to shape corporate policies to their advantage (Fracassi and Tate, 2012; Gong and Guo, 2014; Muttakin et al., 2016). In addition, Malmendier and Tate (2009) find that award-

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<sup>1</sup>Greater pay-performance sensitivity among highly reputable CEOs remains evident when other proxies of CEO reputation are used, including CEO tenure, the number of CEO-related articles, outside-firm appointments and firm performance during CEO tenure (Milbourn, 2003).

winning CEOs increasingly engage in private activities (such as writing books) that have little firm value and distract executives from their core corporate responsibilities. Finally, consistent with the evidence of higher expectations and greater pay-performance sensitivity among highly-reputed CEOs (Milbourn, 2003; Wade et al., 2006), Malmendier and Tate (2009) suggest that in order to preserve their position of power and use their superior status to extract rents, award-winning executives will try to meet optimistic analyst forecasts by engaging in detrimental earnings management activities.

Another mechanism through which CEO reputation might have an adverse effect on corporate outcomes is its potential impact on CEO hubris. Kubick and Lockhart (2017) argue that prestigious recognition associated with winning an award can cultivate overconfidence among executives, leading them to underestimate the risks of their actions and overestimate their ability to control the outcome. In line with prior evidence of riskier corporate policies among overconfident executives (Hirshleifer et al., 2012; Malmendier and Tate, 2005, 2008), the authors find that award-winning CEOs exhibit greater tax aggressiveness after the award conferral, providing some support to the argument that positive shocks to CEO reputation might be related to hubris.

In contrast, Shemesh (2017) argues that CEO social status, indicated by reputation relative to peers, will be negatively associated with risk-taking. The author posits that CEOs obtain utility from their social status relative to others, and executives who experience a positive status shift will make business decisions aimed at preserving their elevated position. Since firm performance can have a pronounced impact on CEO reputation (Milbourn, 2003), executives with higher social status are expected to hedge against future status uncertainty by decreasing firm-specific risk and increasing the correlation with the systematic industry risk. In line with his predictions, Shemesh (2017) finds that CEOs with high social status significantly reduce their R&D expenditure, while increasing investment in fixed assets.

In a similar logic, Koh (2011) argues that executives that experience an increase in their reputation will be motivated to preserve their elevated status and engage in corporate behaviour consistent with this objective. However, rather than limiting CEO reputational concerns to their link with firm performance, Koh (2011) takes

a broader perspective and argues that highly-reputed executives will generally seek to align their actions with the interests of firm's stakeholders. In support of this idea, Koh (2011) finds that award-winning CEOs improve the quality of financial reporting by engaging in more timely loss recognition and refraining from earnings management activities in the several years following the award conferral. In addition, the author finds that firm performance improves in the years following the increase in CEO reputation, and this trend is consistent for accounting performance measures as well as abnormal market returns.

Koh (2011) and Shemesh (2017) take a different approach to examining the influence of CEO reputation-based status on corporate behaviour, but both studies argue that executives value their social status position and will try to preserve their superior social standing. The idea that CEO status has intrinsic value is also supported by research in social psychology (Huberman et al., 2004), and is consistent with recent evidence showing that honorary awards conferred to corporate executives can act as a substitute for monetary compensation (Siming, 2016). If executives indeed value their relative social status, they are likely to become more risk averse and refrain from actions that jeopardise their positive state (Isen and Geva, 1987). My key research questions related to achieved social status take this perspective as a starting point in developing hypotheses, and this is expanded upon in more detail in the following section.

## **1.4 Objectives and methodology**

The existing literature provides contrasting theoretical and empirical evidence regarding the influence of CEO social status characteristics on risk taking and the focus of corporate policies. Ascribed status has the potential to shape CEO values, risk preferences and behavioural patterns due to the lingering effect of childhood environment (Côté, 2011; Fiske and Markus, 2012; Kish-Gephart and Campbell, 2015). In addition, varying social group identity associated with different ascribed status has implications for social bases of corporate policies, and can influence executives' motivation to conform to the normative expectations within the core corporate elite (Haunschild, 1992, 1993; Palmer and Barber, 2001; Stearns and Allan, 1996). These channels can provide conflicting predictions regarding ascribed status influence on

certain aspects of corporate policy, and the dominant effect remains unclear.

Similarly, the research on CEO reputation suggests several mechanisms through which achieved social status might influence CEO behaviour and attitude to risk, with different perspectives often leading to conflicting outcomes. For example, the literature that links CEO reputation to power and overconfidence generally predicts greater risk taking and higher incidence of opportunistic behaviour among higher status executives (Kubick and Lockhart, 2017; Malmendier and Tate, 2009). In contrast, research focusing on the intrinsic and long-term value of achieved status suggests that executives who earned superior social standing will make safer decisions, and preserve their reputation by aligning their interests with those of other firm stakeholders (Koh, 2011; Shemesh, 2017).

In addition to conflicting predictions regarding the influence of CEO social status characteristics on strategic decisions, there is also mixed evidence related to firm-level performance implications of CEO status. Stronger identification with the core corporate elite among executives with high ascribed status can be a source of firm value, as their external social ties can provide access to scarce resources, information, and strategic help, ultimately enhancing firm performance (Galaskiewicz, 1985; McDonald et al., 2008; McDonald and Westphal, 2010). However, the degree to which organisational strategy reflects conformity to social influences of external ties can have varying implications for firm performance, and strategic decisions motivated by social concerns are not universally advantageous (Geletkanycz and Hambrick, 1997).

There is also a continuing debate on whether CEO achieved reputational status should be viewed as an asset or a liability to the firm. Superior executive reputation can increase organisational legitimacy and provide signalling benefits (D’Aveni, 1990; Pollock et al., 2009). In addition, high status CEOs have been shown to make strategic decisions consistent with higher alignment of their interests with those of firm shareholders, resulting in higher average firm performance (Koh, 2011). However, there is evidence of opportunistic behaviour among highly-reputed CEOs which has been shown to diminish firm value (Malmendier and Tate, 2009; Wade et al., 2006).

The existing mixed findings regarding strategic and performance implications of CEO status characteristics suggest that social status is a complex construct, and



indicate a need for further analysis of this personal attribute within the corporate finance setting. To put prior evidence in context, Table 1.1 provides a summary of the geographical origins and time frames within related empirical research. The vast majority of prior studies investigate status influence within the United States, and almost all data originates from one of the Anglo-Saxon countries, suggesting that the conflicting predictions regarding the influence of social status on corporate behaviour are unlikely to be a result of cultural differences. In addition, the time frame in most related studies includes some period in the 1990s and/or several years from the early 2000s, overlapping with my sample period.

Table 1.1: Related empirical research on the influence of social status on corporate strategy and outcomes

Author (year)	Related status dimension	Data origin	Data time frame
Kubick and Lockhart (2017)	Achieved	United States	1994 - 2011
Raff and Siming (2017)	Achieved	New Zealand	1997 - 2011
Shemesh (2017)	Achieved	United States	1992 - 2003
Ammann et al. (2016)	Achieved	United States	1992 - 2008
Cho et al. (2016)	Achieved	United States	1988 - 2000
Flickinger et al. (2016)	Ascribed	Germany	2002 - 2011
Siming (2016)	Achieved	Sweden	1972 - 1977
Kish-Gephart and Campbell (2015)	Ascribed	United States	2002 - 2011
2013 Lucey et al. (2013)	Ascribed, achieved	United Kingdom	2001 - 2010
Koh (2011)	Achieved	United States	1987 - 2003
McDonald and Westphal (2011)	Ascribed	United States	1998 - 2006
McDonald and Westphal (2010)	Ascribed	United States	2002 - 2004
Pfarrer et al. (2010)	Achieved	United States	1991 - 2005
Malmendier and Tate (2009)	Achieved	United States	1975 - 2002
Francis et al. (2008)	Achieved	United States	1992 - 2001
Wade et al. (2006)	Achieved	United States	1992 - 1996
Milbourn (2003)	Achieved	United States	1993 - 1998
Westphal and Khanna (2003)	Ascribed	United States	1999 - 2001
Palmer and Barber (2001)	Ascribed	United States	1963 - 1968
Wade et al. (1997)	Achieved	United States	1990 - 1994

In order to advance the understanding of the role of social status within organisations, I investigate the influence of the level and the nature of CEO status on two aspects of corporate strategy, both of which provide unique opportunities for unravelling the conflicting mechanisms through which CEO social status can affect strategic decision-making. In addition, I examine the value implications of decisions made by executives with varying social status characteristics, contributing to the ex-

isting debate on whether high CEO status is beneficial or detrimental to shareholder wealth.

First, I analyse how the level of CEO ascribed and achieved social status influences the propensity to engage in merger and acquisition deals, and investigate the value created through M&A investments by high status executives. Acquisitions are different to regular firm activities in the extent of unknown potentials. Particularly, acquisitions have highly uncertain outcomes that are frequently negative (Moeller et al., 2005), and can involve negative perceptions of CEO behaviour due to the likelihood of, for example, job losses post-acquisition (Conyon et al., 2001). In addition, major acquisition failures tend to be highly visible and can endanger CEOs' position despite their power and status within the organisation (Lehn and Zhao, 2006). However, engaging in mergers and acquisitions can also provide executives with substantial personal gains, including superior status, higher compensation and more diverse future career opportunities (Brown and Sarma, 2007; Harford, 1999; Jensen, 1986, 1988).

If superior CEO ascribed social status is associated with higher overconfidence, as suggested by the research of Kish-Gephart and Campbell (2015), I would expect to see a higher level of acquisitiveness among high ascribed status executives, as CEO overconfidence has been shown to be positively related to engagement in M&A activities (Liu and Taffler, 2008; Malmendier and Tate, 2008). However, if high ascribed status executives value their standing within the core elite, the extent of uncertainty regarding the potential financial and reputational outcomes of acquisitions is likely to decrease their incentives to engage in M&A activities, consistent with prior findings of lower acquisitiveness among CEOs with upper class origins during the 1960s (Palmer and Barber, 2001).

Similarly, if increases in CEO achieved status cultivate overconfidence, as predicted by Kubick and Lockhart (2017), or if executives with superior status use their power to engage in opportunistic behaviours (Malmendier and Tate, 2009), I would expect to see a higher level of acquisitiveness among CEO with elevated achieved social status. In contrast, if executives value their high status position and desire to protect their reputational capital, they are likely to decrease their engagement in risky M&A activities (Koh, 2011; Shemesh, 2017).

To develop hypotheses related to this, I rely on a model developed in Chapter 2 based on the prior evidence. This model suggests that social status concerns over unsuccessful acquisitions should outweigh the potential for personal gains from acquisitions, and therefore high social status of either type should reduce acquisitiveness. The model also develops the claim that possessing both types of social status simultaneously should reduce acquisitiveness more than just possessing one type of social status. I am therefore guided by this in my hypothesis development, but reflect after testing on the appropriateness of the model and the hypotheses.

Second, I investigate the role of the level and the nature of CEO social status in determining firm's investments in corporate social responsibility (CSR), and also examine the value created through such investments. CSR can be both a significant cost to the firm and a significant use of time for top management, yet finance researchers do not frequently focus on CSR despite these investment aspects. Investment in CSR is considered a risky strategy due to its long-term pay-off nature and a high level of outcome uncertainty (Mahapatra, 1984; Oh et al., 2016; Orlitzky et al., 2003). However, acting in a socially responsible manner is an important way of addressing diverse stakeholder demands and building a responsible corporate image (Creyer, 1997; Du et al., 2007; McGuire et al., 2003). Disengagement from CSR activities can therefore have an adverse effect on companies' relationship with stakeholders, and involves negative implications for firms' reputational and moral capital (Godfrey, 2005; Lin-Hi and Blumberg, 2016). Since CEOs have been shown to have a significant influence in shaping firm's CSR strategy (Bonini and Chênevert, 2008; Muttakin et al., 2016; Werbel and Carter, 2002), decision regarding the level of firm's investment in socially responsible behaviours can reflect executives' preferences and priorities regarding financial and reputational risks.

If superior CEO social status (ascribed or achieved) is related to overconfidence, I would expect a generally lower level of social performance among high status executives. Overconfident CEOs tend to overestimate their abilities (Hayward and Hambrick, 1997) and are likely to underestimate the resources required for strategic initiatives (Malmendier and Tate, 2005). As a result, hubristic executives will underestimate their dependence on firm stakeholders and are less likely to devote resources to improving social performance. Indeed, Tang et al. (2015) finds evidence of

significant negative relationship between CEO overconfidence and firm engagement in CSR.

If, on the other hand, executives with high social status value their elevated position (primarily relevant for achieved status dimension) or standing within prestigious social groups (primarily relevant for ascribed status dimension), they are likely to take advantage of the reputational benefits associated with engagement in social initiatives, and are more likely to pay attention to insurance-like benefits of acting in a socially responsible manner (Du et al., 2007; Godfrey et al., 2009; Koh et al., 2014; Schnietz and Epstein, 2005). Therefore, I would expect a higher level of CSR investment among CEOs with high ascribed or high achieved social status.

The complexity of investments in corporate social responsibility provides an opportunity to gain further insight into the motivations and objectives of corporate executives. Existing research examining the financial, strategic and reputational outcomes from firm's engagement in socially responsible activities suggests that investments in CSR can have varying implications for organisational outcomes depending on the specific strategies adopted by companies. For example, investments in responsible behaviours have been shown to have a more pronounced positive impact on firm performance compared to preventing irresponsible behaviours (Servaes and Tamayo, 2013). In addition, social activities related to companies' primary stakeholders, such as employees, customers and suppliers, tend to improve shareholder value, while CSR investments targeting society at large reduce shareholder wealth (Hillman and Keim, 2001). However, a focus on social strengths and issues related to primary stakeholders can be perceived as a benefit-seeking behaviour rather than a genuine attempt to increase the social good. Therefore, concentrating on preventing irresponsible behaviour as well as investing in social issues that benefit a wider community can have greater reputational benefits and provide firms with a moral capital to withstand the consequences of future crises (Bermiss et al., 2013; Godfrey et al., 2009; Lin-Hi and Blumberg, 2016; Lin-Hi and Müller, 2013).

The balance between financial and reputational benefits from various CSR strategies is particularly interesting in investigating the effect of CEO achieved social status. If executives view the level of financial performance as the dominant factor in maintaining their reputational status (as suggested by Shemesh, 2017), they are

likely to focus their CSR strategy on improving social strengths and engaging in social activities targeting primary company stakeholders. If, on the other hand, CEOs with superior status preserve their reputation by aligning their actions with company stakeholders (as suggested by Koh, 2011), they are more likely to invest in social issues that address a more diverse range of stakeholder demands, yielding higher long-term reputational benefits. This balancing act is what is investigated in the sections of this thesis related to CSR.

I explore the role of CEO social status characteristics using a sample of S&P 500 firms' executives between 1992 and 2012. This sample provides an opportunity to understand the influence of social class origins (ascribed status) and varying reputational achievements (achieved status) among a group of individuals that share a similar current position within the societal hierarchy and have significant attained status with regards to their occupational prestige. In addition, the 1990s correspond to the longest documented period of growth in the United States (Hall et al., 2001), and the period between 2001 and 2012 includes two of the most recent recessions<sup>2</sup>. Thus, my dataset includes periods of significant economic growth as well as periods with a more adverse financial environment, allowing to further the understanding of social status influence under different economic conditions (Côté, 2011).

I use the level of educational prestige to indicate CEO ascribed status because elite educational background is viewed as a primary criteria for social categorisation and is likely to be indicative of upper-class upbringing (Domhoff, 1970; Karabel and Astin, 1975; Palmer and Barber, 2001). Specifically, a CEO is defined as having high ascribed status if he or she received a bachelor degree from one of the Ivy League universities as attendance in these institutions has been historically associated with social elitism and selectivity<sup>3</sup> (Domhoff, 1970; Mullen, 2009; Useem and Karabel, 1986).

Using attendance at one of the Ivy League schools to proxy ascribed social status has a limitation in that it assumes that an elite undergraduate degree is indicative

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<sup>2</sup>The list of business cycle expansions and contractions in the United States is available via the National Bureau of Economic Research at [www.nber.org/cycles/](http://www.nber.org/cycles/).

<sup>3</sup>The vast majority of CEOs in my sample received their education in the United States, making Ivy League universities an ideal choice for indicating social elitism. The United Kingdom is the second most popular source of bachelor degrees in my sample and the Russell Group is considered to encompass the most elite institutions within the UK. Therefore, I verify that my findings are robust to considering attendance at one of the Russell Group universities as also being indicative of high ascribed status.

of upper class background even though places in these universities can also be attained through educational achievement. However, research in intergenerational mobility and educational stratification within the United States indicates that there is a strong link between upper class background and attendance at highly selective institutions such as Ivy League schools.

First, differences in values and expectations experienced by individuals from different economic backgrounds lead to high status individuals being more likely to apply to top universities, compared to those with lower class origins (Kingston and Lewis, 1991; McDonough, 1997; Mullen, 2009). Second, since the most selective universities tend to have the highest tuition costs, upper class individuals are more likely to be able to afford prestigious education (Davies and Guppy, 1997). Third, individuals from high status families tend to attend elite high schools which increase students' chances of admission at prestigious undergraduate institutions through rigorous academic training and likely long-standing relationships with elite colleges (Cookson and Persell, 1985; Karabel, 2005). Prestigious private high schools provide an additional advantage to upper class individuals by supplying them with a form of socialization that helps them prepare for being in a top-tier university (Cookson and Persell, 1985; Mullen, 2009).

As a result, individuals from higher socioeconomic background tend to be over-represented in the most selective U.S. universities, such as Ivy League schools, while students from lower class background (even those possessing exceptional academic credentials) are considerably less likely to attend a university from this elite group (Kingston and Lewis, 1991; McDonough, 1997; Mullen, 2009; Roksa et al., 2007). This pattern appears to endure through time, contributing to the persistence of relatively low intergenerational educational and economic mobility within the United States (Andrade and Thomsen, 2018; Chetty et al., 2014; Corak, 2013). Specifically, 72% of students enrolled at Ivy League universities between 2001-2002 remain from the highest family income quintile, while only 5% of students come from the lowest income quintile (Winston and Hill, 2005).

Building on these arguments, I consider an undergraduate degree from one of the Ivy League universities to be an acceptable proxy for CEO ascribed social status,

similar to the approach in several related studies<sup>4</sup> (see, for example, Westphal and Khanna, 2003; Westphal and Stern, 2006). My sample includes firms that are associated with a single level of CEO ascribed status during the tested period, as well as companies that were run by both high and lower ascribed status executives. This allows me to estimate the effect of ascribed status across firms, and also analyse the influence of this type of CEO status on the within-firm variation in strategic initiatives.

Within the achieved status dimension, I build on the recent research examining the effects of CEO status attainment on different areas of financial decision making (Cho et al., 2016; Malmendier and Tate, 2009; Shemesh, 2017), and use a range of prestigious business awards to indicate positive shifts in CEO achieved social status. I then examine the within-firm changes in investment practices and associated outcomes before and after executives experience a significant status increase. To address the concern that firms with award-winning CEOs might be systematically different from other companies (Malmendier and Tate, 2009), I compare the within-firm changes among award winners to those in similar firms whose executives did not win an award, allowing an isolation of status influence from the selection effects.

Using these measures, I identified 150 CEOs with high ascribed social status, accounting for approximately 15% of firm-year observations within my dataset; and 172 award-winning executives who, between them, received 299 nationally recognised prestigious business awards during the sample period. Among these CEOs, a total of 37 have been, at some point, associated with high social status within both ascribed and achieved status dimensions, leaving 113 executives that had only high ascribed social status (and not achieved), and 135 CEOs that had only high achieved social status (and not ascribed).

In my analysis of CEO status influence on acquisitiveness, I consider both the frequency and the relative size of M&A transactions. The main tests follow the common approach of considering only deals worth more than 5% of acquirer’s value (Malmendier and Tate, 2008; Morck et al., 1990), both this is verified as being robust to alternative specifications, particularly because there is no evidence in prior

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<sup>4</sup>While using elite secondary education would likely provide a more precise indicator of ascribed status, this approach suffers from significant incomplete data availability.

literature that 5% is a valid cut-off for acquisitions that receive board attention. In addition, the testing of the market response to acquisitions by executives with varying social status characteristics includes alternative specifications for measuring abnormal returns, and verifies the results using several event windows.

I use data from *MSCI ESG Stats* (formerly known as *Kinder, Lydenberg, Domini and Company* or *KLD*) to construct measures that reflect firms' engagement in socially responsible initiatives. The dataset provided by *KLD* has been widely used in recent scholarly research (Adhikari, 2016; Cahan et al., 2017; Harjoto and Laksmana, 2016; Petrenko et al., 2016), and has become accepted as the standard for measurement of corporate social actions (see, for example, Chatterji et al., 2009; Mattingly and Berman, 2006). In line with the observed evolution in research on corporate social responsibility (Attig et al., 2016; Dupire and M'Zali, 2016; Wang et al., 2016), I supplement the analysis related to the aggregate measure of CSR with investigations of specific elements of social activities, such as examining the relative importance of CSR investments towards primary versus peripheral stakeholders, and considering the differences in firms' decisions regarding the improvement of social strengths compared to the reduction in social weaknesses.

## 1.5 Findings and contribution

Overall, my findings show that the level and the nature of CEO social status have significant implications for corporate policy, and can affect firm value. The results suggest that executives value their social status position and associated membership within the core elite, leading to strategic decisions that reflect a desire to preserve their social standing. An important distinction emerging from the findings is that the influence of ascribed status is constant while the impact of achieved social status follows changes in the status position and the effect is limited to several years.

In particular, higher ascribed and achieved CEO social status is significantly associated with reduced M&A activity, consistent with a motivation on the part of CEOs with high social status to avoid taking risks that can endanger their social status position. Possessing high ascribed status results in a 30% lower level of M&A activity compared to marginal status CEOs. Within the achieved status dimension, executives with higher status are approximately two to four times less acquisitive



compared to lower status CEOs in the several years following a positive status shift. In addition, the influence of status is strongest among executives who possess both status types simultaneously.

Investigations on the value consequences of acquisitions made by executives with varying social status characteristics reveal that ascribed status has no significant impact on immediate announcement returns. However, the stock price reaction to M&A announcements is particularly negative for CEOs with recently elevated achieved social status, perhaps reflecting the existing 'burden of celebrity' among award-winning executives who are faced with heightened performance expectations following prestigious awards (Wade et al., 2006).

The analysis of CEO status influence on the firm's engagement in CSR shows that both high ascribed and high achieved CEO social status are associated with superior overall social performance. This suggests that, unlike overconfident executives, CEOs with higher social status understand the risks associated with failing to address social demands of company's stakeholders, and realise the reputational benefits related to engagement in social initiatives. In particular, having an executive with high ascribed status results in approximately 45% higher social performance compared to the average level of CSR among companies with lower ascribed status CEOs. Within the achieved status dimension, the overall social performance increases by approximately 57% between one year before and one year after the positive status shift.

Further investigations of the specific CSR strategies adopted by CEOs with varying status characteristics show that high achieved status executives improve their social performance primarily through a reduction in irresponsible behaviours related to firms' primary stakeholders. High ascribed status CEOs, on the other hand, display a different approach. These executives tend to invest in proactive responsible activities associated with the primary company stakeholders, while somewhat reducing irresponsible behaviours related to society at large. While the effect of ascribed and achieved CEO status on the focus of CSR strategy is different, both types of status appear to be related to finding a balance between increasing firm financial value and strengthening the company's moral capital and responsible image (Bermiss et al., 2013; Godfrey et al., 2009; Hillman and Keim, 2001; Servaes and Tamayo,

2013).

I find no evidence of a negative (or a positive) moderating status influence on the link between social and financial firm performance, despite the fact that the motivation for higher CSR among high status executives is likely to be, at least partially, driven by their personal interests. This suggests that, with regards to the firm's CSR, personal motivations of high status executives do not necessarily misalign their interests with those of other stakeholders, and the adopted balanced CSR strategy can be advantageous to the CEO as well as the firm. These findings lend some support to the argument that strategic or opportunistic use of CSR does not necessarily lead to poorer organisational outcomes (Petrovits, 2006).

The core contribution of this thesis is to the growing body of literature that highlights the importance of CEO personal characteristics for corporate policies (Baxamusa and Jalal, 2016; Benmelech and Frydman, 2015) and firm value (Chen et al., 2014; Levi et al., 2014). My analysis determines the particular importance of social status influence on behaviour. Social status is a unique characteristic in that it is bestowed upon the decision maker by others and its maintenance is subject to hard-to-gauge social group approval, making it distinct from prior studies which have primarily concentrated on personal traits. Social status is also one of the few CEO characteristics studied that can reduce CEO risk-taking and lead to strategic decisions that are in line with the interests of organisational stakeholders. This thesis therefore represents an evolution of our understanding of the influence of CEO characteristics on their behaviour.

A key conceptual contribution of this thesis is theorising how dual social status paths can individually and in combination distort CEO behaviour, thus showing the benefit of building detailed behavioural hypotheses from the source literature. My findings reveal the complexity of social status influence and show that status concerns can manifest through more nuanced mechanisms than financial risk preferences. In particular, executives with recently elevated achieved social status tend to follow strategies that are beneficial to their reputational capital. High ascribed status CEOs, on the other hand, are likely to be concerned with the external social group approval of their strategic choices. As a result, status concerns are not universally reflected in differences in financial risk taking, and achieved and ascribed

social status can have varying implications for corporate policy. This research opens a new strand of literature on social status in corporate finance, and suggests that we need to look deeper into behavioural concepts adapted from other disciplines - the distinction between ascribed and achieved status is trivial in sociology, but novel in finance.

This thesis also yields significant empirical contributions within several strands of literature. First, my findings contribute to the research on the causes of corporate acquisitions (Bernile et al., 2017; Elnahas and Kim, 2017) by providing evidence of a significantly lower level of M&A activity among executives with high ascribed or high achieved social status. In addition, this thesis adds to the literature examining the value consequences of acquisitions (Cho et al., 2016; Levi et al., 2014) by showing a significantly more negative market response to deals made by CEOs with recently elevated achieved social status.

Furthermore, the findings in this thesis add to research on the determinants of firms' engagement in CSR (Moussu and Ohana, 2016; Shaukat et al., 2016) by providing evidence of a significantly positive relationship between CEO status and investments in socially responsible behaviours, and further examining the specific elements of CSR (similar to Attig et al., 2016; Bouslah et al., 2013; Dupire and M'Zali, 2016) that have a more pronounced link with CEO social status characteristics. In addition, this thesis contributes to the literature on the value consequences of CSR engagement (Harjoto and Laksmana, 2016; Servaes and Tamayo, 2013) by showing that, in contrast to the impact of other CEO characteristics (Petrenko et al., 2016), CSR activities initiated by high status executives do not diminish the positive impact of such investments on firm value.

## 1.6 Thesis structure

This remainder of this thesis is structured in the form of four studies that investigate the influence of the level and the nature of CEO social status on corporate policies and associated value outcomes.

**Chapter 2** explores the role of CEO ascribed and achieved social status in determining the level of M&A activity. This chapter introduces the status measurement methodology used throughout the thesis, and develops a utility-based model of sta-

tus influence on CEO acquisitiveness. The results of this analysis show that CEO social status has a significant impact on firm's M&A activities.

**Chapter 3** examines the value consequences from acquisition deals announced by executives with various status levels. This chapter implements an event-study methodology to evaluate the abnormal returns from 1,612 M&A announcements, and finds that social status has implications for the value created through corporate acquisitions.

**Chapter 4** analyses the influence of CEO ascribed and achieved social status on firms' engagement in CSR, and determines the specific CSR strategies followed by executives with varying status characteristics. This chapter provides a detailed analysis of the outcomes associated with various aspects of investments in corporate social responsibility and relates these outcomes to CEO social status.

Drawing on the findings from Chapter 4, the last study in this thesis in **Chapter 5** investigates the financial performance implications of the CSR strategies adopted by executives with high ascribed and high achieved social status. The findings suggest that CSR initiatives by high status executives do not diminish (or improve) firm value.

Finally, **Chapter 6** concludes the analysis of the role of CEO social status characteristics in corporate decision making and organisational outcomes. In his chapter, I review the key insights emerging from my empirical investigations, discuss the limitations in my research, and suggest potential avenues for future research that can further enrich our understanding of social status influence in a corporate finance setting.

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## CHAPTER 2

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# CEO social status and M&A investments

## 2.1 Introduction

The behavioural finance literature has provided new explanations for takeovers that focus on the personal characteristics of company executives, including overconfidence (Malmendier and Tate, 2008), envy (Goel and Thakor, 2010), early life experiences (Bernile et al., 2017), cultural beliefs (Frijns et al., 2013) and political beliefs (Elnahas and Kim, 2017), as well as demographic characteristics such as age (Yim, 2013) and gender (Huang and Kisgen, 2013). This research is important as it can help explain why firms might engage in the types of acquisitions that have been shown to destroy firm value (Moeller et al., 2005). This study demonstrates that incentives to pursue acquisitions can also vary depending on CEO social status. I show that both the level and the nature of social status have implications for the propensity to engage in M&A deals as well as for the value created through these investments. My overall hypothesis is that CEOs with elevated social status will be keen to reduce risky acquisitions so as not to endanger their social status position.

I am motivated in this study by findings in sociology and related fields showing that individuals' behaviour can vary depending on their social status position (Fiske and Markus, 2012; Kraus et al., 2012; Piazza and Castellucci, 2014; Stephens et al., 2014). Despite this, examinations of status influence in a corporate finance setting are scarce. Palmer and Barber (2001) provide some initial evidence of a lower level of diversifying acquisitions among higher status executives in the 1960s. There have also been findings of higher financial risk taking among lower status individuals (DeMarzo et al., 2004; Hong et al., 2014) in their general financial decision making. Other research shows a significant impact on CEO financial behaviour following winning awards which involve a boost to social status (Kubick and Lockhart, 2017; Malmendier and Tate, 2009; Shemesh, 2017), although this is largely linked in the prior literature to the propensity for overconfidence of award winners rather than instilling social status. As a wider perspective, some recent research finds that belonging to social groups built around religiosity and civic norms influences corporate behaviour (Dyreng et al., 2012; Hasan et al., 2017), supporting the idea that membership of social groups matter. Thus there is preliminary evidence of a potential link between social status and CEO propensity to engage in M&As, and it is within

this potential that my research is situated.

Social status can be usefully contrasted with overconfidence, with the latter being the most widely-studied CEO trait investigated to date across a wide range of financial behaviours (Banerjee et al., 2017; Hsieh et al., 2014; Humphery-Jenner et al., 2016; Malmendier and Tate, 2008). While the overconfidence literature generally argues that overconfidence acts as an impetus for risk-taking, my social status argument goes in the opposite direction for the domain of acquisitions. Holding elevated social status might lead to increased confidence in outcomes and therefore risk-taking due to having experienced a background where risks usually turned out positively or were minimized (Kish-Gephart and Campbell, 2015), but acquisitions are different to regular firm activities in the extent of unknown potentials. Particularly, acquisitions have highly uncertain outcomes that are frequently negative (Moeller et al., 2005), and can involve negative perceptions of CEO behaviour due to the likelihood of, for example, job losses post-acquisition (Conyon et al., 2001). The model developed in the next section therefore contrasts the potential gains from such an uncertain activity with the risk of status loss following failure, and hypothesises a decreased incentive to engage in acquisitions.

One issue I particularly focus on in this study is that existing financial research addressing social status tends to employ a singular concept of 'social status' without distinguishing between different types of this personal attribute. However, social status is a complex construct which can originate from different sources. Two distinguishing sources are ascribed status which is assigned to individuals at birth and does not depend on their innate abilities, and achieved social status which is attained throughout the life of an individual and is based on personal effort and exercise of volition (Foladare, 1969; Linton, 1936). Due to different underlying characteristics, ascribed and achieved social status types are likely to influence decision making through separate processes and the two routes to status are, therefore, commonly differentiated in sociological and management research (Kish-Gephart and Campbell, 2015; Lin, 1999; Piazza and Castellucci, 2014).

In order to capture the precise nature of social status influence this study therefore is one of the first studies to distinguish between ascribed and achieved social status. The only similar examination of differentiated ascribed and achieved sta-

tus in a finance context was in Lucey et al. (2013) who analysed acquisitiveness of CEOs of large UK companies. Compared to this study, my analysis offers a number of improvements, particularly by developing a model of status influence, applying nearest neighbour matching to identify suitable comparison firms, testing a much larger dataset with comprehensive controls, and investigating the market impact of acquisition announcements dependent on status. I thus arrive at a more conclusive answer as to whether social status influences CEO acquisition decision making.

I explore the influence of both status types on CEO acquisitiveness separately and further consider the combined impact of possessing high inherited as well as high attained status simultaneously. The developed hypotheses are tested using CEOs from S&P 500 companies between 1992 and 2012. Since receiving an elite education is often argued to be indicative of an upper-class origin (see, for example, Karabel and Astin, 1975; Palmer and Barber, 2001), the level of university prestige is used to measure CEO ascribed social status. Building on the works of Malmendier and Tate (2009) and Cho et al. (2016) in different areas of financial decision making, prestigious business awards are used to proxy achieved social status, and I follow the nearest-neighbour matching approach adapted from (Abadie and Imbens, 2011) to isolate status influence from the selection effects.

The results show that higher social status is significantly associated with reduced M&A activity, consistent with a motivation on the part of CEOs with high social status to avoid taking risks that can harm that status. An important distinction emerging from the findings is that the influence of ascribed status is constant while the impact of achieved social status follows changes in the status position and the effect is limited to several years. In particular, possessing high ascribed status results in a 30% lower level of M&A activity compared to marginal status CEOs. Within the achieved status dimension, executives with higher status are approximately two to four times less acquisitive compared to lower status CEOs in the several years following elevation in status. Finally, the influence of status is strongest among executives who possess both status types simultaneously, and the effect of higher achieved social status appears to be stronger and more consistently robust across various model specifications compared to the influence of ascribed status. This pattern is in line with the argument that achieved social status is a more important



factor in determining individuals' ultimate attained status (Blau and Duncan, 1967; Lin, 1999), leading to a more pronounced observable impact on decision-making.

This study contributes firstly to the growing literature highlighting the importance of CEO personal characteristics for corporate policies (Baxamusa and Jalal, 2016; Benmelech and Frydman, 2015) by providing novel empirical evidence that shows how the dual social status paths can individually and in combination distort CEO behaviour with regards to their M&A strategy. Social status is a unique characteristic in that it is bestowed upon the decision maker by others, and it is also one of the few CEO traits studied that reduces CEO risk-taking. This analysis therefore provides important insights that contribute to our understanding of the influence of CEO characteristics on their behaviour.

## **2.2 Modelling social status**

Due to contrasting characteristics, ascribed social status is likely to influence decision making through different underlying processes compared to achieved status. Ascribed status is assigned at birth independently of individual's personal qualities and remains constant. Achieved social status, on the other hand, can change depending on personal merit and volition and is accumulated throughout the life of an individual (Linton, 1936; Piazza and Castellucci, 2014). The influence of ascribed status on M&A decision making is, therefore, likely to be constant while the impact of achieved social status should follow changes in the status position.

Acquisitions generally provide strong financial incentives since CEO compensation tends to increase with firm size (Grinstein and Hribar, 2004), and executives are often rewarded more for good performance than they are penalized for poor market returns (Garvey and Milbourn, 2006). Recent research directly shows the compensation benefits of acquisitions for CEOs (Feito-Ruiz and Renneboog, 2017). Apart from monetary benefits, CEOs can be motivated to pursue acquisitions due to the status these activities can generate. Social status has been shown to be an intrinsically valued resource that provides powerful motivation to perform and generates direct utility independently of financial consequences (Fiske and Markus, 2012; Huberman et al., 2004).

Assuming executives with high and lower social status (within both ascribed

and achieved dimensions) face similar monetary costs and benefits associated with M&A<sup>1</sup>, the difference in acquisitiveness between these two groups can be analysed through the utility derived from social status consequences of M&A. The utility from pursuing an acquisition for a CEO with ascribed status  $i$  and achieved status  $j$  is given by the difference in the social benefits it provides and its social costs:

$$U_{i,j} = u_{i,j}(a) - c_{i,j}(a) \quad (2.1)$$

Where  $i=L$  for a CEO with lower ascribed status and  $i=H$  for a CEO with high ascribed status, and similarly,  $j=L$  for a CEO with lower achieved status and  $j=H$  for a CEO with high achieved social status. Social costs,  $c_{i,j}(a)$ , are associated with normative expectations surrounding acceptable M&A behavior within the business community, while social benefits from pursuing acquisitions,  $u_{i,j}(a)$ , come in the form of a potential positive shift in achieved status.

Pursuing acquisitions can provide an increase or a decrease in CEO achieved social status, both directly and through their impact on company performance. The direct impact is mainly dependent on whether the deal is successful, increasing CEO status in case of acquisition completion and decreasing it when negotiations fail. The indirect influence is a function of the perceived acquisition quality that is evident from the company's stock performance around a specific deal. Acquisition quality incorporates the market's reaction to deal characteristics, such as payment type and attitude as well as the anticipated future success of the merger. If a company underperforms following an acquisition, its CEO is less likely to experience an award-based status increase in the following period since winners of several prominent awarding publications are at least partially based on company's past performance. Social benefits from pursuing acquisitions,  $u_{i,j}(a)$ , can, therefore, be expressed as follows:

$$u_{i,j}(a) = u_{i,j}(G(a))pq - u_{i,j}(L(a))(1-p)q \quad (2.2)$$

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<sup>1</sup>It is possible that high status CEOs can extract higher financial benefits from acquisitions. High status, in particular achieved, can provide CEOs with more power within their companies which is likely to increase their influence on decisions regarding M&A bonuses (Grinstein and Hribar, 2004). However, I assume that status concerns dominate marginal differences between high and lower status executives in terms of monetary incentives.

Where  $p$  is the probability that the deal is completed and  $q$  is the quality of an acquisition.  $G(a)$  is the achieved status gain in case of deal completion and  $L(a)$  is the status loss in case negotiations fail and the acquisition does not proceed.

The marginal utility from pursuing an acquisition is given by:

$$\frac{\partial U_{i,j}}{\partial a} = u'_{i,j}(a) - c'_{i,j}(a) \quad (2.3)$$

Or:

$$\frac{\partial U_{i,j}}{\partial a} = u'_{i,j}(G(a))pq - u'_{i,j}(L(a))(1-p)q - c'_{i,j}(a) \quad (2.4)$$

First, I consider the difference in social incentives faced by CEOs with low and high ascribed social status. CEOs with high ascribed social status are individuals who are born into elite families and are brought up surrounded by the normative expectations of possessing an upper class origin. Their high social class combined with a position of the highest company's officer provides membership within the inner circle of the corporate elite. As any social group, the inner circle has a specific established cultural model and a system of norms that dictate what behaviour is acceptable for members. Engaging in acquisitions can conflict with accepted business practice, and pursuing this risky strategy might jeopardise CEOs' identification with the elite social group. Executives with lower ascribed status, on the other hand, have the flexibility of deviating from accepted business practice and are more motivated to take chances: they can attain status if their strategy is successful but have little reputational concerns in case of failure (Espeland and Hirsch, 1990; Palmer and Barber, 2001; Stearns and Allan, 1996). Therefore, the marginal social cost of pursuing acquisitions is always higher for upper class CEOs, giving  $c'_{H,j}(a) > c'_{L,j}(a)$ .

In addition, executives with high ascribed social status are likely to place less value on a potential achieved status increase since they already occupy a high status position within the ascribed dimension. As a result, their utility function,  $u_{H,j}(a)$ , is flatter than  $u_{L,j}(a)$  and their marginal benefit from pursuing acquisitions is always lower, giving  $u'_{H,j}(a) < u'_{L,j}(a)$ . Since  $c'_{H,j}(a) > c'_{L,j}(a)$  and  $u'_{H,j}(a) < u'_{L,j}(a)$ , the marginal net utility from pursuing an acquisition is lower for CEOs with high

ascribed social status:

$$\frac{\partial U_{H,j}}{\partial a} < \frac{\partial U_{L,j}}{\partial a} \quad (2.5)$$

**Hypothesis 1:** *CEOs with high ascribed social status have a lower level of acquisitiveness compared to CEOs with lower ascribed status.*

Within the achieved status dimension, executives with low and high achieved social status are assumed to have similar normative costs associated with deviating from acceptable M&A behaviour,  $c_{i,j}(a)$ , so that  $c_{i,L}(a) = c_{i,H}(a)$ . Therefore, their net utility from pursuing an acquisition is given by the potential achieved status gain or loss:

$$U_{i,j} = u_{i,j}(a) = u_{i,j}(G(a))pq - u_{i,j}(L(a))(1-p)q \quad (2.6)$$

Where the marginal utility is given by:

$$\frac{\partial U_{i,j}}{\partial a} = u'_{i,j}(G(a))pq - u'_{i,j}(L(a))(1-p)q \quad (2.7)$$

Similar to the traditional wealth utility function, I assume that  $u_{i,j}$  is increasing and concave in  $a$ . Therefore, a positive shift in achieved social status decreases the marginal benefit of additional status attainment and increases the marginal cost of potential status loss. So,  $u'_{i,H}(G(a)) < u'_{i,L}(G(a))$  and  $u'_{i,H}(L(a)) > u'_{i,L}(L(a))$ . As a result, an increase in CEO achieved social status reduces the marginal net utility from pursuing acquisitions:

$$\frac{\partial U_{i,H}}{\partial a} < \frac{\partial U_{i,L}}{\partial a} \quad (2.8)$$

A similar pattern of behaviour can also be predicted based on tournament incentives. Assuming CEOs value status and are competitive, the US business arena can be considered to involve an underlying tournament-like behaviour with payoff in terms of social status. In a laboratory experiment of risk taking behaviour in a two person tournament setting, Nieken and Sliwka (2010) find that trailing contestants tend to make riskier choices, while leading players tend to favour a safer strategy when the outcomes of available strategies are uncorrelated. As a result, following

a positive status shift, high status CEOs can be expected to reduce risky M&A activities relative to lower status executives who have higher incentives to pursue acquisitions.

**Hypothesis 2:** *A positive shift in CEO achieved social status results in reduced acquisitiveness compared to CEOs with no status change.*

Finally, I consider the difference in acquisitiveness between CEOs who possess high ascribed and high achieved social status simultaneously and all other executives. Given the relationship between the marginal net utility of CEOs with low and high ascribed social status presented in equation 2.5, the following relationships should hold when achieved status is fixed:  $\frac{\partial U_{H,L}}{\partial a} < \frac{\partial U_{L,L}}{\partial a}$  and  $\frac{\partial U_{H,H}}{\partial a} < \frac{\partial U_{L,H}}{\partial a}$ . Similarly, given the relationship between the marginal net utility of CEOs with low and high achieved social status presented in equation 2.8, the following relationships should hold when ascribed status is fixed:  $\frac{\partial U_{L,H}}{\partial a} < \frac{\partial U_{L,L}}{\partial a}$  and  $\frac{\partial U_{H,H}}{\partial a} < \frac{\partial U_{H,L}}{\partial a}$ . As a result, the marginal utility from pursuing an acquisition is lowest for CEOs with dual high status characteristics:

$$\frac{\partial U_{H,H}}{\partial a} < \frac{\partial U_{L,H}}{\partial a} < \frac{\partial U_{L,L}}{\partial a} \quad (2.9)$$

$$\frac{\partial U_{H,H}}{\partial a} < \frac{\partial U_{H,L}}{\partial a} < \frac{\partial U_{L,L}}{\partial a} \quad (2.10)$$

**Hypothesis 3:** *Following a positive shift in achieved social status, CEOs with high ascribed social status reduce their acquisitiveness more than all other CEOs.*

My model predictions are in line with the prior evidence of a negative link between social status and corporate risk taking. Using secondary school prestige to proxy 'social status at birth' (or ascribed status), Palmer and Barber (2001) find that CEOs with elite background exhibit less risk taking with regards to M&A decisions and engage in fewer M&A transactions compared to marginal-status executives. Similarly, Koh (2011) and Shemesh (2017) demonstrate that CEOs with elevated achieved social status, measured through prestigious business awards, reduce their risk taking through more conservative accounting practices and lower R&D investments.

Although the balance of literature contemplates that higher social status is as-

sociated with reduced risk taking, it is worth noting that there is also research suggesting that attaining status can lead to riskier strategies. First, some literature suggests that higher achieved status might cultivate overconfidence (Kubick and Lockhart, 2017); and overconfidence has been linked to more aggressive corporate policies (see, for example, Malmendier and Tate, 2008). If CEOs become overconfident following an increase in achieved social status, they are likely to overestimate the probability of a successful acquisition,  $p$ , as well as the quality of the deal,  $q$ , resulting in an increased expected benefit from pursuing acquisitions. Second, Thaler and Johnson (1990) argue that decisions are influenced not merely by the potential future outcome but by prior outcomes as well. The authors present evidence of ‘the house money affect’ through which gains facilitate risk seeking by individuals. Applying Thaler and Johnson (1990) conclusions to social status concerns would imply that CEOs’ utility function is convex in  $a$ , resulting in higher marginal status benefits from potential acquisitions. While these scenarios are possible, they run contrary to both theoretical models of social status influence on risk taking as well as the majority of findings from prior empirical studies of social status.

## 2.3 Data and status measurement

### 2.3.1 Sample and data collection

My sample consists of yearly-rebalanced S&P 500 constituents between January 1992 and December 2012 and includes all companies except utilities, financial firms, conglomerates<sup>2</sup> and companies with complex governance structures (e.g. multiple simultaneous CEOs) (similar to the approach in Duso et al., 2014; Hirshleifer et al., 2012). The usable dataset is comprised of 660 companies and includes all observations for which financial and M&A information is available.

The list of companies’ CEOs and data on their age, tenure and gender are extracted from *Compustat ExecuComp* database. For the ascribed status indicator, educational background information is collected from *Marquis Who’s Who*, *Thomson One Banker*, *EDGAR listings*, *Notable Names Database*, and annual reports, where available. For identifying achieved status shifts, award data is hand-collected

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<sup>2</sup>Utilities: SIC codes 4900 - 4999; financial firms: SIC codes 6000 - 6999; conglomerates: SIC code 9997.

from a variety of publications that conferred prestigious CEO awards during the sample period. Publications include *Business Week*, *Financial World*, *Forbes*, *Industry Week*, *Chief Executive*, *Electronic Business Magazine*, *Time*, *Time & CNN*, *Harvard Business Review*, and *Morningstar.com*.

Financial controls and firm-specific characteristics are obtained from *Compustat*. These include firm size, Tobin’s Q, return on assets, cash holdings, book leverage and industry codes for all sample companies. In addition, monthly stock prices are collected from *CRSP* in order to estimate companies’ prior performance. Finally, M&A data is gathered from *Thomson One Banker SDC* database, including transaction size, toehold and the number of acquired shares.

CEO acquisitiveness is analyzed using the frequency and relative size of M&A transactions. Following Levi et al. (2014), M&A deals are included if they take the form of a merger (SDC deal form M), an acquisition of majority interest (AM), or an acquisition of assets (AA). I require the bidding company to hold less than 51% of the target company’s shares before the transaction and to acquire at least 51% of the target, providing the bidding firm with control (Levi et al., 2014; Malmendier and Tate, 2008). In addition, only transactions worth more than 5% of acquirer’s value are included in the main analysis in order to avoid deals that may not require active involvement of the acquirer’s CEO (Malmendier and Tate, 2008; Morck et al., 1990). However, robustness tests also include M&A deals worth more than 1% of acquirer’s value<sup>3</sup>.

### 2.3.2 Ascribed status measurement

Ascribed social status is assigned to individuals at birth and is dependent on family background and resources. Family resources, in turn, can be related to obtaining a more prestigious education (Karabel and Astin, 1975) and there is a range of elite academic institutions in the United States that have a history of providing admissions primarily to descendants of families with high social prominence. As a result, attending an elite secondary school or receiving a bachelor degree from a

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<sup>3</sup>While 5% remains the most commonly used cut-off point, including M&A deals worth over 1% of acquirer’s value might capture deals that are likely to receive less board oversight and might be more influenced by CEO personal characteristics. There is also no evidence in prior literature that 5% is a valid cut-off for acquisitions that receive board attention.

prestigious university is often argued to be indicative of an upper-class origin and can be used to determine individual's ascribed social status (Domhoff, 1970; Palmer and Barber, 2001; Useem and Karabel, 1986; Westphal and Khanna, 2003) .

Building on these conclusions, I use the level of university prestige to measure CEO ascribed social status and distinguish between lower and higher status CEOs based on the type of university that awarded their bachelor degree<sup>4</sup>. The majority of CEOs in my sample received their education in the United States, with United Kingdom being the most popular source of bachelor degrees among internationally educated executives. Within the United States, Ivy League<sup>5</sup> universities have been historically associated with social elitism and students with low ascribed status (even those possessing exceptional academic credentials) are considerably less likely to attend a university from this elite group (Karabel, 2005; Kingston and Lewis, 1991; Mullen, 2009; Roksa et al., 2007). Similarly, the Russell Group<sup>6</sup> is considered to encompass the most prestigious higher education institutions within the United Kingdom (see, for example, Chevalier and Conlon, 2003). Therefore, my binary ascribed status measure equals to one if a CEO holds a bachelor degree from one of the Ivy League or Russell Group universities, and equals to zero otherwise<sup>7</sup>.

Table 2.1 presents summary statistics for the ascribed status data. The fraction of high ascribed status CEOs remains between 10% and 20% throughout the sample period, with an average of 15%. Consistent with Hypothesis 1, both indicators of acquisitiveness show a lower average among firms with high ascribed status CEOs, suggesting that upper-class executives are less acquisitive. While the difference in the frequency of M&A is only approaching significance with a  $p$ -value of 0.11, the average

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<sup>4</sup>While second-level schooling would likely provide a better indicator of ascribed status, as university prestige places can also be attained by educational achievement, this approach suffers from significant incomplete data availability.

<sup>5</sup>The members of the Ivy League are as follows: Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, University of Pennsylvania and Yale University.

<sup>6</sup>The members of the Russell Group are as follows: University of Birmingham, University of Bristol, University of Cambridge, Cardiff University, Durham University, University of Edinburgh, University of Exeter, University of Glasgow, Imperial College London, King's College London, University of Leeds, University of Liverpool, London School of Economics & Political Science, University of Manchester, Newcastle University, University of Nottingham, University of Oxford, Queen Mary (University of London), Queen's University Belfast, University of Sheffield, University of Southampton, University College London, University of Warwick, University of York.

<sup>7</sup>Since the Russell Group can be considered too broad in comparison to the Ivy League, I confirm that the results remain virtually unchanged if only Oxford and Cambridge universities are considered to be indicative of higher ascribed social status in the United Kingdom.



value of M&A investment is 38% lower for high ascribed status CEOs compared to the average among lower status executives, and the difference is significant at the 5% level.

In terms of firm characteristics, companies with elite executives, on average, tend to have lower book leverage and slightly higher cash holdings. While the difference in leverage is significant at the 1% level, higher average cash among firms with high ascribed status CEOs is only significant at the 5% level and the medians are very similar between the two groups (0.067 versus 0.060), suggesting that a minority of outliers drives the difference in means. Table 2.1 also shows that there is no significant difference in size, past returns, Tobin’s Q or return on assets between companies with CEOs from varying status backgrounds.

As expected, there are some significant differences in terms of CEO characteristics. While average age does not appear to vary between CEOs with different status levels, upper-class executives tend to have longer tenure and are more likely to be female. Higher proportion of females among upper-class executives is not surprising considering that women tend to be disadvantaged in terms of achieving a CEO position relative to men, and are more likely to need higher social status and associated personal connections in order to be appointed as a company executive (Doldor et al., 2012).

### **2.3.3 Achieved status measurement**

Achieved social status is attained throughout the life of an individual and is assigned based on merit and personal efforts. While most models in a financial setting define achieved social status based on individuals’ relative wealth (see, for example, Hong et al., 2014; Roussanov, 2010), recent research indicates that relative reputation can be an important source of status among corporate executives, and reputational shifts can be useful in explaining the variation in executives’ risk attitudes, corporate policies and associated firm outcomes (Ammann et al., 2016; Koh, 2011; Raff and Siming, 2017; Shemesh, 2017). Building on this perspective, I use a range of prestigious business awards received by CEOs in order to assess the impact of higher status attainment on corporate investment decisions (similar to Malmendier and Tate, 2009).

Table 2.1: Ascribed status summary statistics

	High ascribed status CEOs				Lower ascribed status CEOs				Difference in means
	Obs.	Mean	Median	St. Dev.	Obs.	Mean	Median	St. Dev.	$p(\text{high-low})$
<i>M&amp;A variables</i>									
5% M&A frequency	880	0.118	0.000	0.366	5,146	0.141	0.000	0.395	0.114
5% M&A investment	880	0.021	0.000	0.097	5,146	0.034	0.000	0.158	0.020**
<i>Firm controls</i>									
Firm size	880	9.005	8.930	1.355	5,146	8.988	8.931	1.223	0.693
Past returns	880	0.199	0.203	0.539	5,146	0.188	0.189	0.535	0.576
Tobin's Q	880	2.409	1.748	2.244	5,146	2.285	1.766	2.084	0.107
ROA	880	0.165	0.160	0.087	5,115	0.165	0.158	0.087	0.813
Cash holdings	880	0.125	0.067	0.144	5,146	0.115	0.060	0.140	0.048**
Book leverage	880	0.218	0.203	0.139	5,138	0.234	0.227	0.152	0.003***
<i>CEO controls</i>									
CEO age	880	56.086	57	7.582	5,146	56.171	57	6.332	0.723
CEO tenure	880	9.468	7	7.000	5,146	7.512	6	6.116	0.000***
CEO gender	880	0.028	0	0.166	5,146	0.018	0	0.135	0.051*

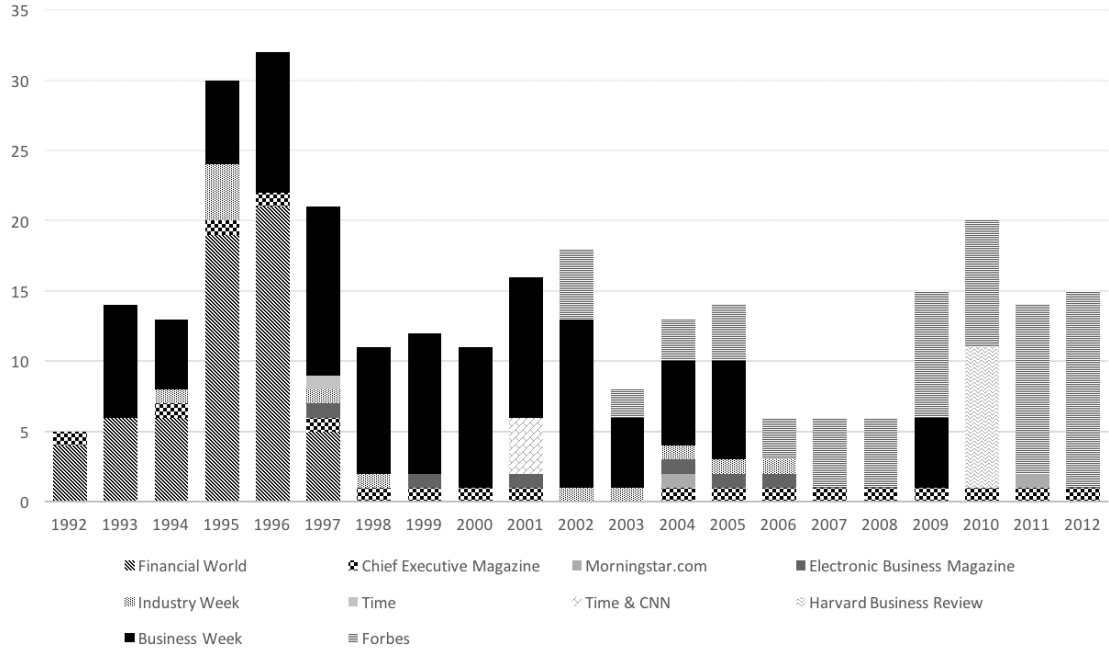
The table provides summary statistics for ascribed status data. Sample of CEOs consists of chief executive officers from S&P 500 constituents between 1992 and 2012. The measure of ascribed social status defines a CEO as having a high ascribed status when he or she received a bachelor degree from one of the Ivy League or Russell Group Universities. 5% M&A frequency is a variable indicating the number of deals worth more than 5% of acquirer's value. 5% M&A investment is a variable indicating the total value invested in acquisitions worth more than 5% of acquirer's value where each deal is scaled by firm's market capitalization two months prior to the transaction. All M&A deals are required to involve a purchase of at least 51% of target's shares. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. The column  $p(\text{high-low})$  shows the p-values of t-tests that the differences in means between high status CEOs and lower status CEOs are zero. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

The core of the achieved status data is a hand-collected list of award-winning CEOs between 1992 and 2012. Similar to Malmendier and Tate (2009), an award is only included if it is prominent enough to affect CEO status and any US executive has a possibility to win it. Therefore, all awards used in this study are national and are not subject to any constraints such as CEO age, gender or industry. Ten publications have been selected according to these criteria: *Business Week*, *Financial World*, *Forbes*, *Industry Week*, *Chief Executive*, *Electronic Business Magazine*, *Time*, *Time & CNN*, *Harvard Business Review* and *Morningstar.com*. Figure 2.1 presents a histogram of CEO awards in my sample by year and publication, indicating that *Financial World*, *Business Week* and *Forbes* proceed each other as predominant awards throughout the sample period<sup>8</sup>.

I identify award-winning CEOs within S&P 500 companies and merge award

<sup>8</sup>More details on each award are provided in the Appendix.

Figure 2.1: CEO awards by year and publication



The figure shows the annual number of awards conferred by selected publications between January 1992 and December 2012 to CEOs of the sample companies.

data with additional CEO characteristics, annual financial information, M&A data, and monthly performance. Table 2.2 provides summary statistics of the achieved status data, distinguishing between companies with award-winning CEOs and other sample firms. It is evident that award winners significantly differ from non-winners along most firm and CEO characteristics. Companies with winning CEOs tend to be larger with an average market capitalization of \$53.5 billion compared to \$14.2 billion among non-winners. Substantially lower book-to-market ratios among award winners suggest that these companies enjoy greater market expectations compared to other sample firms. Award-winning companies tend to have higher cash holdings, lower leverage and higher market value of assets. Significantly higher past returns among winning CEOs are not surprising considering that several awards consider prior performance in the selection process (for example, *Forbes*' 'Best Performing CEOs'). Finally, award winners tend to be younger CEOs with more experience and are more likely to be females. However, the differences in age and gender are only significant at the 10% level and the values between winners and other sample firms differ only by about 1% - 2%.

The simple utility model presented in Section 2.2 predicts that award winners only reduce their acquisitiveness following a positive shift in achieved social status.

Since the descriptive statistics in Table 2.2 utilise the last available information before award conferral (for winners), I do not expect significant differences in frequencies and values of M&A investments between award winners and other sample firms at this point. Consistent with expectations, both indicators of acquisitiveness show similar values for both groups of companies.

Table 2.2: Achieved status summary statistics

	CEO award-winners (W)				All non-winners (A)				Predicted winners (P)				Difference in means	
	Obs.	Mean	Median	St. Dev.	Obs.	Mean	Median	St. Dev.	Obs.	Mean	Median	St. Dev.	$p(W-A)$	$p(W-P)$
<i>M&amp;A variables</i>														
5% M&A frequency	299	0.161	0.000	0.472	58,765	0.144	0.000	0.407	299	0.124	0.000	0.340	0.487	0.228
5% M&A investment	299	0.036	0.000	0.139	58,765	0.034	0.000	0.156	299	0.025	0.000	0.129	0.861	0.294
<i>Firm controls</i>														
Firm size	299	10.132	10.012	1.240	58,765	8.604	8.602	1.081	299	9.654	9.549	1.212	0.000***	0.000***
Book-to-market	299	0.262	0.222	0.182	58,765	0.423	0.366	0.314	299	0.252	0.211	0.189	0.000***	0.495
Cash holdings	299	0.185	0.120	0.180	58,765	0.105	0.060	0.132	299	0.168	0.074	0.210	0.000***	0.242
Equity leverage	299	-0.610	0.291	12.711	58,765	0.770	0.540	8.378	299	-3.258	0.427	33.616	0.005***	0.204
Tobin's Q	299	3.908	2.648	5.547	58,765	2.108	1.693	1.512	299	3.037	2.410	2.384	0.000***	0.004***
Returns_2_3	299	0.023	0.017	0.110	58,765	0.004	0.009	0.107	299	0.038	0.047	0.107	0.002***	0.065*
Returns_4_6	299	0.034	0.046	0.133	58,765	0.008	0.018	0.152	299	0.042	0.064	0.145	0.004***	0.448
Returns_7_12	299	0.117	0.115	0.222	58,765	0.024	0.045	0.240	299	0.139	0.126	0.234	0.000***	0.204
Returns_13_36	299	0.393	0.346	0.546	58,765	0.151	0.169	0.499	299	0.336	0.316	0.673	0.000***	0.186
<i>CEO controls</i>														
CEO age	299	55.829	57	7.760	58,765	56.496	57	6.699	299	56.749	58	7.009	0.086*	0.138
CEO tenure	299	8.736	7	6.661	58,765	6.542	5	6.484	299	8.241	5	7.669	0.000***	0.413
CEO gender	299	0.023	0	0.151	58,765	0.012	0	0.110	299	0.040	0	0.197	0.077*	0.226

The table provides summary statistics for achieved status data. The sample includes all firms in all months in which a CEO award is conferred. Firm size is market capitalization (calculated as share price multiplied by common shares outstanding) which is measured two months prior to the award month and is in log form. Book-to-market ratio is calculated as stockholder's equity over market capitalization and is measured at the end of the last fiscal year that ended at least six months prior to the award month. Cash holdings represent cash and short-term investments divided by book assets. Equity leverage is calculated as total debt divided by shareholder's equity. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Returns\_x\_y are the total compound returns from the  $y^{\text{th}}$  to the  $x^{\text{th}}$  month prior to the award month. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. 5% M&A frequency is a variable indicating the number of deals worth more than 5% of acquirer's value. 5% M&A investment is a variable indicating the total value invested in acquisitions worth more than 5% of acquirer's value where each deal is scaled by firm's market capitalization two months prior to the transaction. All M&A deals are required to involve a purchase of at least 51% of target's shares. The column  $p(W-A)$  shows the p-values of t-tests that the differences in means between award winners and non-winners are zero. The column  $p(W-P)$  shows the p-values of t-tests that the differences in means between award winners and predicted winners are zero. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

## 2.4 Ascribed status and CEO acquisitiveness

### 2.4.1 Empirical specification

Summary statistics presented in Table 2.1 suggest that there is no significant systematic firm-level difference between companies with high and lower ascribed status CEOs, making a linear regression analysis appropriate for comparing M&A activities between these two groups. Therefore, I assess the relationship between ascribed social status and acquisitiveness using the following regression specification:

$$Acquisitions_{ft} = \alpha + \beta_1 Status_{ft} + \beta_2 Firm_{ft-1} + \beta_3 CEO_{ft} + FixedEffects_{ft} + \varepsilon_{ft} \quad (2.11)$$

$Acquisitions_{ft}$  is the level of CEO acquisitiveness in firm  $f$  at time  $t$ , where acquisitiveness is measured using the frequency and investment in M&A activity. All M&A deals are required to be worth more than 5% of acquirer's value and involve a purchase of at least 51% of target's shares<sup>9</sup>.  $Status_{ft}$  is the ascribed status indicator which equals to one if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to zero otherwise.

$Firm_{ft-1}$  represents a set of firm control variables, including market capitalization as a control for firm size, past returns as an indicator of firm's performance, return on assets as a measure of profitability, cash holdings and book leverage as measures of available resources, and Tobin's Q as an indicator for investment opportunities. All firm controls are lagged by one year.

$CEO_{ft}$  denotes a set of CEO-related control variables. Because recent research indicates that CEO career horizon problems can affect their propensity to engage in mergers and acquisitions (see, for example, Yim, 2013), I control for CEO age and CEO tenure, both of which are measured in years. In addition, there is evidence of gender differences in M&A behaviour of corporate executives and directors (see, for example, Huang and Kisgen, 2013; Levi et al., 2014), so I control for CEO gender,

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<sup>9</sup>Additional robustness tests also include deals worth over 1% of acquirer's value.

using a binary indicator that equals to one if a CEO is female and equals to zero otherwise.

*FixedEffects<sub>ft</sub>* account for time trends by including year fixed effects in all models. In addition, I include either industry or firm fixed effects in all estimations to account for potential inter-industry variations in M&A practices, and capture the effect of possible unobservable firm characteristics that affect both the likelihood of having a high ascribed status CEO and the firm's acquisitiveness. Finally, I account for the presence of autocorrelation and heteroskedasticity by clustering robust standard errors at the firm level in all regressions.

One of the considerations in my analysis is that the indicator of ascribed status is invariant in most companies included in my analysis. 85% of sample firms only ever have either high or lower ascribed status CEOs, leaving only 15% of companies that had both high and lower status executives at some point during the evaluation period. A fixed effects estimator relies on differencing observations within a given firm and, according to Cameron and Trivedi (2013), it should not be used for invariant or slow-moving variables.

A common approach to the analysis of slow-moving variables is the use of random rather than fixed effects which allows firm-specific error terms to vary randomly over time (see, for example, Jensen and Zajac, 2004). However, this approach requires that there is no correlation between the independent variables and the uncontrolled unit effects in order to provide reliable results. Utilising a test developed by Hausman (1978), I found that this assumption does not hold within my dataset.

Since 15% of firms in my sample were run by both high and lower ascribed status executives, fixed effects models might still provide insightful findings regarding the within-firm variation in M&A practices. However, these results are likely to be restricted by the fact that ascribed status appears to be, to a large degree, a fixed firm characteristic in itself.

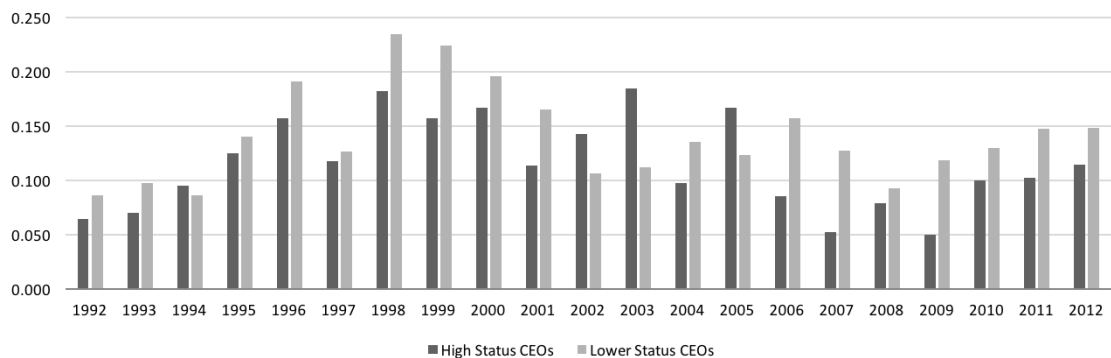
## 2.4.2 Empirical findings

Hypothesis 1 states that the marginal net utility from pursuing acquisitions is lower for CEOs with high ascribed social status and, as a result, they have a lower level of acquisitiveness compared to executives with lower ascribed status. This prediction

is tested using two indicators of acquisitiveness: the frequency and investment in M&A in each year. All deals are required to be worth more than 5% of acquirer's value in order to exclude deals that might not require active involvement of the acquirer's CEO. Further, each transaction must involve a purchase of at least 51% of target's shares, providing acquirer with control.

Figures 2.2 and 2.3 plot the average number and level of investment in M&A, respectively, among high and lower ascribed status CEOs in each year of my analysis. Consistent with Hypothesis 1, both indicators of acquisitiveness are lower among high ascribed status CEOs in most years. The pattern in the average level of investment in M&A is particularly strong after 2006, with the mean among upper-class executives at a level 65% lower compared to lower status CEOs. The period between 2002 and 2005 appears to be an exception from the overall trend: during these years, high ascribed status CEOs exhibited greater acquisitiveness compared to marginal status CEOs, nearly tripling the latter group's average M&A investment in 2003 and 2005. This period coincides with the sixth merger wave that occurred between 2003 and 2007 (Alexandridis et al., 2012), which might explain the reverse behaviour of upper-class CEOs. Prior research suggests that social constraints associated with growth through mergers and acquisition within the corporate elite circle weaken during the merger waves and the established elite can actually facilitate the spread of the wave as the strategy is imitated throughout the business community following the initial success of marginal status CEOs (Palmer and Barber, 2001; Stearns and Allan, 1996).

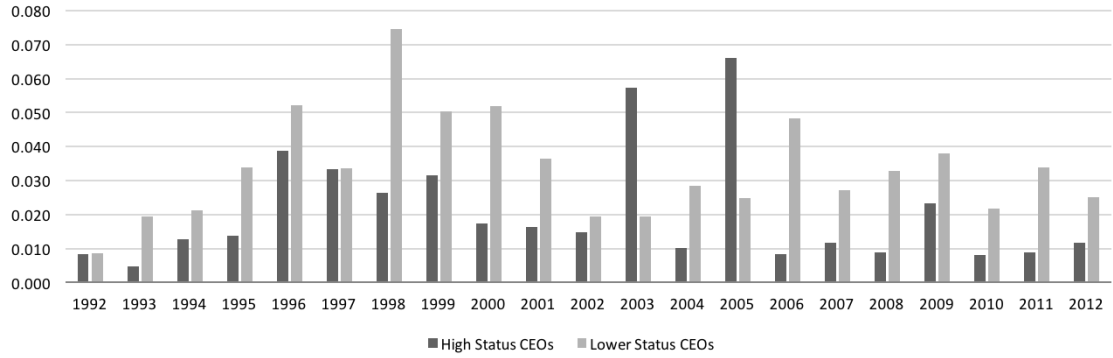
Figure 2.2: Average frequency of M&A (ascribed status)



The figure displays year-by-year average number of acquisitions for CEOs with high and lower ascribed status. For each subgroup, the average number of acquisitions is calculated as the number of acquisitions divided by the number of CEOs in that subgroup in a given year. All M&A deals are required to be worth more than 5% of acquirer's value and involve a purchase of at least 51% of target's shares.



Figure 2.3: Average value invested in M&A (ascribed status)



The figure displays year-by-year average values invested in M&A for CEOs with high and lower ascribed status. For each subgroup, the average value invested in M&A is calculated as the total value divided by the number of CEOs in that subgroup in a given year. All M&A deal values are scaled by company's market capitalization two months prior to the transaction. All M&A deals are required to be worth more than 5% of acquirer's value and involve a purchase of at least 51% of target's shares.

The evidence of the unconditional relationship between ascribed social status and acquisitiveness is formalized using multivariate regression analysis. Models 1 and 2 in Table 2.3 display the main results related to the frequency and level of investment in M&A, respectively, providing further evidence of a negative link between having an upper class origin and acquisitiveness and supporting Hypothesis 1. The coefficient for the frequency of acquisitions only approaches significance at the 10% level for the full sample period but further sub-period tests will show that the relationship becomes stronger in recent years. The negative impact of high ascribed status on acquisitiveness is more pronounced in terms of the total investment in M&A. High ascribed status CEOs invest approximately 32% less in mergers and acquisitions compared to the average among lower status executives. This relationship is significant at the 5% level, suggesting that CEOs from elite background do not simply engage in less acquisitions of higher value but have a lower level of investment in M&A.

In order to account for potential endogeneity associated with possible omitted variables, I reestimate the specifications in models 1 and 2 with firm fixed effects. These results are presented in models 4 and 5 of Table 2.3. The coefficient of the frequency of acquisitions remains relatively similar to that estimated using industry fixed effects but it is not significant at the 10% level when firm fixed effects are included. In addition, the findings reported in model 5 suggest that there is no significant effect of ascribed social status on the level of investment in M&A activity,

although the results using an alternative specification for acquisition investment (presented in model 6) show an effect of a similar magnitude to that found in a model with industry fixed effects.

The results of fixed effects estimations do not appear to support a significant causal link between CEO ascribed social status and their acquisitiveness. Rather, they suggest that the apparent correlation between ascribed status and the frequency and investment in M&A activity might both be caused by an unobservable fixed firm characteristic. However, as discussed in Section 2.4.1, the results of models with firm fixed effects are likely to be restricted by the fact that ascribed status is generally a fixed firm characteristic in itself.

### 2.4.3 Robustness

I perform several additional tests to verify that the results are robust to using alternative specifications for M&A data. Initially, I expand the M&A dataset to include deals worth over 1% of acquirer's value. While the 5% cut-off point remains the most commonly used, it is merely an arbitrary threshold. Expanding M&A dataset to include deals worth over 1% of acquirer's value might capture transactions that are likely to receive less board oversight and thus be more influenced by CEO personal characteristics. In addition, I consider an additional measure of investment in M&A where each deal value is scaled by firm's book assets rather than market capitalisation.

Models 1 and 2 in Table 2.4 present the results of testing the effect of CEO ascribed social status on the frequency and investment in acquisitions worth over 1% of acquirer's value. Similar to the main tests, the findings in model 1 do not show evidence of a significant relationship between ascribed status and the frequency of M&A transactions. However, the relationship between CEO ascribed status and M&A investment remains unchanged regardless of whether smaller deals are included, confirming the main findings.

Interestingly, using book assets as an alternative proxy for firm size in assessing the relative value of M&A transactions indicates a stronger relationship between status and acquisitiveness ( $p$ -value<0.01 versus  $p$ -value<0.05 in the main tests), and a better overall fit of the model. This pattern holds when using the traditional 5%

Table 2.3: CEO ascribed status and acquisitiveness

	Industry fixed effects			Firm fixed effects		
	[1] 5% M&A frequency	[2] 5% M&A inv. (scaled: mkt cap)	[3] 5% M&A inv. (scaled: assets)	[4] 5% M&A frequency	[5] 5% M&A inv. (scaled: mkt cap)	[6] 5% M&A inv. (scaled: assets)
Ascribed status	-0.024 (0.016)	-0.011** (0.005)	-0.026*** (0.009)	-0.021 (0.026)	-0.000 (0.006)	-0.022 (0.015)
Firm size	-0.023*** (0.006)	-0.009*** (0.002)	-0.018** (0.007)	-0.010 (0.024)	-0.014** (0.006)	-0.019 (0.031)
Past returns	0.024* (0.012)	0.010** (0.005)	0.053* (0.029)	-0.012 (0.015)	0.002 (0.005)	0.046 (0.038)
Tobin's Q	0.001 (0.004)	-0.001 (0.001)	0.055*** (0.018)	0.001 (0.004)	0.000 (0.001)	0.055** (0.024)
ROA	-0.010 (0.076)	0.023 (0.034)	-0.374** (0.179)	0.349*** (0.121)	0.145** (0.057)	-0.069 (0.214)
Cash holdings	-0.040 (0.059)	-0.004 (0.020)	-0.093 (0.095)	0.463*** (0.111)	0.100*** (0.033)	0.133 (0.278)
Book leverage	-0.085* (0.049)	0.021 (0.018)	0.025 (0.038)	-0.203** (0.081)	-0.050* (0.028)	-0.015 (0.060)
CEO age	-0.000 (0.001)	-0.000 (0.000)	0.000 (0.001)	0.005** (0.002)	0.001 (0.001)	0.002 (0.002)
CEO tenure	0.001 (0.001)	0.000 (0.000)	-0.001 (0.001)	-0.004** (0.002)	-0.001 (0.001)	-0.002 (0.001)
CEO gender	0.055** (0.027)	0.035 (0.026)	0.029* (0.015)	0.104** (0.041)	0.031 (0.021)	0.032 (0.031)
Industry fixed effects	Yes	Yes	Yes	No	No	No
Firm fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5,987	5,987	5,987	5,987	5,987	5,987
No. of firms	616	616	616	616	616	616
Adjusted R-squared	0.131	0.062	0.111	0.199	0.116	0.114

The table presents results of regressions testing the effect of possessing high ascribed social status on CEO acquisitiveness. The dependent variable in models 1 and 4 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in models 2 and 5 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in models 3 and 6 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year fixed effect. Models 1 - 3 include industry fixed effect, defined based on Fama-French 48 industries. Models 4 - 6 include firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

cut-off point for deal value (model 3 in Table 2.3) as well as for the expanded dataset that also includes deals worth between 1% and 5% of acquirer's value (model 3 in Table 2.4). The results suggest that high ascribed status CEOs invest approximately 45% less in mergers and acquisitions compared to the average among lower status executives.

Similar to the main findings, fixed effects estimations in tests involving M&A

deals worth over 1% of acquirer's value do not show evidence of a significant relationship between CEO ascribed social status and acquisitiveness, suggesting that these results should be interpreted with caution.

Table 2.4: CEO ascribed status and acquisitiveness: Alternative M&A specification

	Industry fixed effects			Firm fixed effects		
	[1] 1% M&A frequency	[2] 1% M&A inv. (scaled: mkt cap)	[3] 1% M&A inv. (scaled: assets)	[4] 1% M&A frequency	[5] 1% M&A inv. (scaled: mkt cap)	[6] 1% M&A inv. (scaled: assets)
Ascribed status	-0.011 (0.031)	-0.011** (0.005)	-0.028*** (0.009)	-0.009 (0.043)	0.000 (0.006)	-0.023 (0.015)
Firm size	0.004 (0.011)	-0.009*** (0.002)	-0.017** (0.007)	0.022 (0.029)	-0.014** (0.006)	-0.017 (0.030)
Past returns	0.069*** (0.021)	0.011** (0.005)	0.056* (0.029)	0.006 (0.022)	0.003 (0.005)	0.045 (0.039)
Tobin's Q	-0.007 (0.005)	-0.001 (0.001)	0.058*** (0.018)	-0.008 (0.005)	0.000 (0.001)	0.057** (0.024)
ROA	-0.053 (0.126)	0.022 (0.034)	-0.368** (0.171)	0.559*** (0.186)	0.150*** (0.057)	-0.022 (0.211)
Cash holdings	-0.232** (0.109)	-0.008 (0.021)	-0.091 (0.097)	0.457*** (0.156)	0.100*** (0.033)	0.122 (0.278)
Book leverage	-0.141* (0.084)	0.020 (0.018)	0.022 (0.038)	-0.381*** (0.127)	-0.055** (0.028)	-0.023 (0.061)
CEO age	-0.003 (0.002)	-0.000 (0.000)	0.000 (0.001)	0.004 (0.003)	0.001 (0.001)	0.002 (0.002)
CEO tenure	0.003 (0.002)	0.000 (0.000)	-0.001 (0.001)	-0.002 (0.003)	-0.001 (0.001)	-0.002 (0.001)
CEO gender	-0.042 (0.042)	0.033 (0.026)	0.028* (0.016)	0.045 (0.067)	0.030 (0.021)	0.031 (0.031)
Industry fixed effects	Yes	Yes	Yes	No	No	No
Firm fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5,987	5,987	5,987	5,987	5,987	5,987
No. of firms	616	616	616	616	616	616
Adjusted R-squared	0.228	0.073	0.129	0.331	0.130	0.135

The table presents results of regressions testing the effect of possessing high ascribed social status on CEO acquisitiveness using an alternative M&A deal specification. The dependent variable in models 1 and 4 is the number of deals worth more than 1% of acquirer's value made in a given year. The dependent variable in models 2 and 5 is the total investment in M&A transactions worth more than 1% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in models 3 and 6 is the total investment in M&A transactions worth more than 1% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year fixed effect. Models 1 - 3 include industry fixed effect, defined based on Fama-French 48 industries. Models 4 - 6 include firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

To check whether the results might be distorted by the recent financial crisis, the sample is split into two sub-periods: from 1992 to 2006 and from 2007 to 2012. Table 2.5 presents the results and shows that the relationship between ascribed status and

M&A investment holds in both sub-periods but becomes more significant after 2007. In addition, the link between having an elite background and the frequency of M&A also becomes significant in the second sub-period. However, this relationship is still weaker than the link between ascribed status and M&A investment ( $p$ -value $<0.10$ ) and does not hold consistently through the years. Additional tests of the second sub-period show that the influence of ascribed status on M&A investment remains similarly strong after the end of the recent financial crisis (2009 - 2012)<sup>10</sup>, suggesting that the increased significance of ascribed status impact after 2007 is likely to be unrelated to the occurrence of a turbulent economic period and is probably associated with the end of the merger wave (2003 - 2007). Finally, the results of the fixed effects estimations are presented in Table A.3 in the Appendix, showing a similar lack of ascribed status significance as in the full-period analysis.

It is evident from the descriptive statistics in Table 2.1 that M&A variables tend to be over-dispersed with variance greater than the mean and exhibit a large number of zero counts with over 80% of observations where CEOs made no qualifying acquisitions during a year. Therefore, in order to further investigate the link between CEO ascribed status and M&A frequency, I use a zero-inflated negative binomial model, which is designed to model over-dispersed count variables with excess zeros<sup>11</sup>. The results of this estimation are reported in Table 2.6, showing evidence of a significant relationship between CEO ascribed status and acquisitiveness. The Vuong test results ( $p$ -value $<0.01$ ) suggest that the zero-inflated negative binomial model is a significant improvement over a standard negative binomial model, indicating that it is beneficial to model the excess zeros separately.

#### 2.4.4 Alternative channels

Ascribed status measure relies on university prestige being an indicator of upper-class origin and executives who attended one of Ivy League or Russell Group universities are considered to possess an elite background. However, the significant negative relationship between ascribed status indicator and CEO acquisitiveness

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<sup>10</sup>These results are provided in the Appendix, Table A.2.

<sup>11</sup>The zero-inflated negative binomial model is only appropriate for testing count variables. Since M&A investment is a continuous variable, this model is only used to test ascribed status impact on M&A frequencies.

Table 2.5: CEO ascribed status and acquisitiveness: Sub-period analysis

	Before the crisis start (1992 - 2006)			After the crisis start (2007 - 2012)		
	[1] 5% M&A frequency	[2] 5% M&A inv. (scaled: mkt cap)	[3] 5% M&A inv. (scaled: assets)	[4] 5% M&A frequency	[5] 5% M&A inv. (scaled: mkt cap)	[6] 5% M&A inv. (scaled: assets)
Ascribed status	-0.023 (0.021)	-0.008 (0.005)	-0.028** (0.012)	-0.044* (0.024)	-0.026** (0.012)	-0.023*** (0.009)
Firm size	-0.024*** (0.007)	-0.007*** (0.002)	-0.020** (0.010)	-0.019** (0.008)	-0.012*** (0.004)	-0.011*** (0.003)
Past returns	0.019 (0.014)	0.010** (0.005)	0.063* (0.037)	0.028 (0.022)	0.004 (0.012)	0.014 (0.013)
Tobin's Q	0.005 (0.003)	0.000 (0.001)	0.060*** (0.019)	-0.035*** (0.009)	-0.012** (0.005)	-0.009 (0.007)
ROA	-0.062 (0.089)	0.012 (0.039)	-0.432** (0.213)	0.304** (0.126)	0.128* (0.068)	0.143 (0.093)
Cash holdings	-0.109 (0.074)	-0.022 (0.025)	-0.119 (0.130)	0.162* (0.085)	0.065** (0.029)	0.094* (0.055)
Book leverage	-0.117* (0.062)	0.027 (0.022)	0.042 (0.054)	-0.052 (0.069)	-0.002 (0.030)	-0.016 (0.033)
CEO age	-0.000 (0.001)	-0.000 (0.000)	0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
CEO tenure	0.001 (0.001)	-0.000 (0.000)	-0.002 (0.001)	0.001 (0.002)	0.001 (0.001)	0.000 (0.001)
CEO gender	0.095** (0.047)	0.015 (0.013)	0.035 (0.031)	0.025 (0.037)	0.049 (0.047)	0.010 (0.016)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	No	No	No	No	No
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	4,130	4,130	4,130	1,857	1,857	1,857
No. of firms	522	522	522	411	411	411
Adjusted R-squared	0.136	0.069	0.121	0.130	0.060	0.066

The table presents results of OLS regressions testing the effect of possessing high ascribed social status on CEO acquisitiveness. The sample is split into two sub-periods: models 1 - 3 use observations from 1992 to 2006 and models 4 - 6 use observation from 2007 to 2012. The dependent variable in models 1 and 4 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in models 2 and 5 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in models 3 and 6 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year and industry fixed effect, defined based on Fama-French 48 industries. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

could potentially be a result of receiving a better education. Ivy League and Russell Group universities are considered to be among the best universities in the world<sup>12</sup> and well-educated CEOs might be disinclined to pursue risky M&A deals that might

<sup>12</sup>According to the Times Higher Education World University Ranking, available at <http://www.timeshighereducation.co.uk/world-university-rankings/2012-13/world-ranking>.

Table 2.6: CEO ascribed status and acquisitiveness: Zero-inflated negative binomial model

Ascribed status	-0.367** (0.178)
Firm size	-0.254*** (0.082)
Past returns	0.119 (0.099)
Tobin's Q	0.028 (0.023)
ROA	-1.297* (0.672)
Cash holdings	-0.673 (0.420)
Book leverage	0.107 (0.405)
CEO age	0.014 (0.012)
CEO tenure	-0.012 (0.011)
CEO gender	0.682** (0.330)
Industry fixed effects	Yes
Year fixed effects	Yes
No. of observations	5,987
No. of firms	616

The table presents results of a zero-inflated negative binomial regression testing the effect of possessing high ascribed social status on CEO acquisitiveness. The dependent variable is the number of deals worth more than five percent of acquirer's value made in a given year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year and industry fixed effect, defined based on Fama-French 48 industries. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

destroy shareholder value (see, for example, Andrade et al., 2001).

In order to explore this alternative explanation, I add an additional ‘Top 100 universities’ dummy variable that distinguishes firms with well-educated CEOs who attended one the world’s top 100 universities (excluding prestigious Ivy League and Russell Group institutions) and replicate the main tests. Table 2.7 reports the results with industry fixed effects<sup>13</sup>. Interestingly, attendance at both prestigious and other world’s top 100 universities is negatively related to the frequency of M&A ( $p$ -value $<0.05$ ) suggesting that well-educated CEOs might be less inclined to pursue acquisitions compared to other executives. However, only attendance at the most prestigious Ivy League or Russell Group institutions is significantly related to the overall investment in M&A ( $p$ -value $<0.01$ ) and receiving a degree from one of the other top 100 universities in the world has no impact on this acquisitiveness indicator. The results are similarly significant regardless of whether market capitalization or assets are used to assess the relative size of M&A deals, confirming that the relationship found in this study is more likely to be caused by status influence rather than education quality.

The findings related to the investment in M&A are in line with research suggesting that CEO formal education is unlikely to affect executive’s corporate choices. A number of studies demonstrate evidence of no significant link between CEO educational characteristics and strategic decisions, and argue that a significant time gap between the attainment of education and entering the position of a CEO results in the lack of educational influence on corporate decisions (see, for example, Geletkanycz and Black, 2001).

## 2.5 Achieved status and CEO acquisitiveness

### 2.5.1 Empirical specification

Consistent with prior empirical evidence (see, for example, Malmendier and Tate, 2009), my data indicates that high achieved status assignment is not random and

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<sup>13</sup>Additional results presented in Table A.4 include specifications with firm rather than industry fixed effects. These models show a lower general significance of both attendance at one of the Ivy League institutions as well as other top 100 world universities. However, the effect of ascribed status proxy remains significant for the level of M&A investment scaled by firm’s book assets.



Table 2.7: Ascribed status vs. education

	[1] 5% M&A frequency	[2] 5% M&A invest. (scaled by market cap)	[3] 5% M&A invest. (scaled by assets)
Prestigious universities	-0.034** (0.017)	-0.013*** (0.005)	-0.030*** (0.010)
Top 100 universities	-0.030** (0.014)	-0.006 (0.005)	-0.013 (0.010)
Firm size	-0.022*** (0.006)	-0.009*** (0.002)	-0.018** (0.007)
Past returns	0.024* (0.012)	0.010** (0.005)	0.053* (0.029)
Tobin's Q	0.001 (0.004)	-0.001 (0.001)	0.055*** (0.018)
ROA	-0.010 (0.075)	0.023 (0.034)	-0.374** (0.179)
Cash holdings	-0.037 (0.059)	-0.003 (0.020)	-0.092 (0.095)
Book leverage	-0.085* (0.049)	0.022 (0.018)	0.025 (0.038)
CEO age	-0.000 (0.001)	-0.000 (0.000)	0.000 (0.001)
CEO tenure	0.001 (0.001)	0.000 (0.000)	-0.001 (0.001)
CEO gender	0.056** (0.027)	0.035 (0.026)	0.030* (0.015)
Industry fixed effects	Yes	Yes	Yes
Firm fixed effects	No	No	No
Year fixed effects	Yes	Yes	Yes
No. of observations	5987	5987	5987
No. of firms	616	616	616
Adjusted R-squared	0.132	0.062	0.111

The table presents results of regression models testing the effect of education quality on CEO acquisitiveness. The dependent variable in model 1 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in model 2 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in model 3 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Prestigious universities is a dummy variable that equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Top 100 universities is a dummy variable that equals to 1 if a CEO has received a bachelor degree from one of the world's top 100 universities excluding Ivy League or Russell Group, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year and industry fixed effect, defined based on Fama-French 48 industries. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

award-winning companies tend to be systematically different from non-winners (see Table 2.2). Malmendier and Tate (2009) discuss how post-award financial consequences could include mean reversion effects and note that winning companies may be unobservably different from other firms, making direct comparison of these groups problematic. To address these issues, I construct a nearest-neighbour matching esti-

mator adapted from Abadie and Imbens (2011), and identify a sample of ‘predicted winners’ to estimate the impact of achieved status shifts on CEO acquisitiveness<sup>14</sup>.

The control sample of predicted winners is constructed using a two-step procedure. Initially, a logit regression is estimated to identify determinants of CEO awards based on a range of observable firm and CEO characteristics. The sample includes firm-month observations from months in which an award is conferred. The binary dependent variable is equal to 1 if the company’s CEO received an award in the respective month, and equals to zero otherwise. Given the differences evident from Table 2.2, this award indicator is then regressed on company’s market capitalization two months prior to the award, book-to-market ratio, cash holdings, equity leverage, Tobin’s Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, and controls for CEO age, tenure, and gender. All accounting variables are measured at the end of the last fiscal year that ended at least six months prior to the award month. The regression also includes year, industry and award type fixed effects<sup>15</sup>.

Table 2.8 presents the results of the logit regression and confirms the patterns evident from the analysis of descriptive statistics. The coefficient estimates, displayed as odds ratios, suggest that awards tend to be predominantly received by CEOs of larger firms with relatively low book-to-market ratios, greater Tobin’s Q and substantially higher past returns. Particularly high odds ratios for returns within one year prior to the award-winning month are consistent with expectations as all included awards are conferred on an annual basis and several publications consider prior performance in the selection process. Award-winning companies are also likely to have higher cash holding and lower leverage, indicating lower financial risk among this group of firms. Most firm characteristics are significant at the 1% level, with the exception of returns from the third to the second months prior to the award month and Tobin’s Q (significant at the 10% level).

CEO personal characteristics are also shown to have a significant impact on the probability of winning an award, with age and tenure coefficients significant at the

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<sup>14</sup>This approach is similar to Malmendier and Tate (2009), Colak and Whited (2007), and Ammann et al. (2016), among others.

<sup>15</sup>The 48 Fama and French industries are used as industry indicators. Industries’ definitions can be found at [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html).

5% and 1% level, respectively. Winners tend to be younger executives with more experience. This contradictory pattern is at least partially driven by a handful of repeat winners who founded their respective companies at an age significantly lower than the average CEO age and remained in office for a period far beyond the average CEO tenure. Examples of these persistent superstars include Jeffrey Bezos, Michael Dell, Steven Jobs and William Gates, who between them can account for nearly 10% of all awards in my sample. Finally, the results of the logit regression also suggest that female CEOs are more likely to win an award, although there are low numbers of female executives in the period covered.

Table 2.8: Determinants of award winning

Market capitalization	2.532*** (14.916)
Book-to-market ratio	0.474*** (2.735)
Cash holdings	7.932*** (3.992)
Equity leverage	0.989*** (2.743)
Tobin's Q	1.028* (1.687)
Returns_2_3	2.934* (1.654)
Returns_4_6	5.443*** (3.452)
Returns_7_12	4.018*** (4.467)
Returns_13_36	1.609*** (3.353)
CEO age	0.979** (1.996)
CEO tenure	1.045*** (4.613)
CEO gender	2.443** (2.098)
Year fixed effects	Yes
Industry fixed effects	Yes
Award fixed effects	Yes
Pseudo R2	0.40
Observations	77,740

The table presents results of a logit regression of an indicator of award winning on observable firm and CEO characteristics used to predict winning an award. The sample includes firm-month observations from months in which an award is conferred. The binary dependent variable is equal to 1 if the company's CEO received an award in the respective month, and equals to zero otherwise. Market capitalization (calculated as share price multiplied by common shares outstanding) is measured two months prior to the award month and is in log form. Book-to-market ratio is calculated as stockholder's equity over market capitalization. Cash holdings represent cash and short-term investments divided by book assets. Equity leverage is calculated as total debt divided by shareholder's equity. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. All accounting variables are measured at the end of the last fiscal year that ended at least six months prior to the award month. Returns\_x\_y are the total compound returns from the  $y^{\text{th}}$  to the  $x^{\text{th}}$  month prior to the award month. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. The 48 Fama and French industries are used as industry indicators. Award fixed effects consist of dummy variables that are equal to 1 in months in which a particular award is given, and equal to 0 in all other months. Coefficients are presented as odds ratios. Absolute value of z statistics in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

The predicted values from the logit regression are then used to calculate propensity scores for all sample CEOs and construct a sample of predicted winners. In each award month, a non-winning CEO with the propensity score closest to the actual winner is chosen as the predicted winner (with replacement). Following Malamendier and Tate (2009), I use the propensity score as a match variable as opposed to matching across all characteristics directly as the resulting match sample exhibits fewer significant differences from the award winners' sample. Since matches are not exact, I also use a bias adjustment procedure from Abadie and Imbens (2011). The procedure estimates the effect of matching covariates on each outcome variable (in the control sample) and uses the estimates to adjust for remaining variation in the match variables between award winners and predicted winners.

Summary statistics for predicted winners are presented in Table 2.2, including the  $p$ -values of  $t$ -tests that the difference in means between award winners and predicted winners across each variable is zero. While award-winning CEOs are significantly different from non-winners across all twelve firm and CEO characteristics, predicted winners show some degree of variation in only three variables. The returns from the 3rd to the 2nd month before the award and Tobin's  $Q$  show significant differences between winners and their matches at the 10% and 1% level, respectively. However, in both cases, the medians are very close between these two groups, suggesting that the variation in means is driven by a small number of outliers<sup>16</sup>. Predicted winners also appear to be significantly smaller than actual winners. This is not surprising considering that I analyse a sample of the largest US firms and CEOs of larger companies were shown to be more likely to win awards. As a result, market capitalization for several winners is too high to match significantly close. However, the difference between winners and predicted winners is about three times smaller than the difference between winners and all other firms, confirming the good fit of the matched sample. In addition, the bias adjustment procedure ensures that winners too large to match closely do not drive the results, and robustness tests include an analysis of the subset of award winners for which predicted winners do not differ significantly among any of the discussed characteristics. Finally, in additional tests,

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<sup>16</sup>The difference in average Tobin's  $Q$  is driven by several high-tech winners with extremely high ratios of market to book value of assets.

I confirm that the results are robust to using larger numbers of match samples (up to four nearest neighbours).

Once predicted winners are identified, the influence of achieved status is assessed using an event study methodology. The date at which the award was made public is used as the event date<sup>17</sup>, and changes in acquisitiveness are measured from one year prior to award until four years later, where the year prior to award ends exactly six months before the award month. Only observations for which the award-winning CEO is still in office at the end of each event window are included. The average effect of a positive achieved status shift on acquisitiveness of award-winning CEOs is estimated using a ‘difference-in-difference’ method which accounts for time-invariant unobservable differences between companies with high and lower status executives:

$$\tau_{|A=1} = E(\Delta Y_i(1) - \Delta Y_i(0) | A = 1) \quad (2.12)$$

$A$  is a binary treatment indicator that equals to 1 if a CEO has received an award, and equals to zero otherwise.  $\Delta Y_i(A)$  denotes the change in acquisitiveness as a function of  $A$  for observation  $i$ , relative to its value before treatment. Therefore,  $(\Delta Y_i(1) | A = 1)$  indicates the expected difference in acquisitiveness of award-winning CEOs before and after a status shift, which is calculated by averaging the observed differences among the winners sample (high status CEOs).  $E(\Delta Y_i(0) | A = 1)$  indicates the unobservable expected difference in CEO acquisitiveness had they not received an award, which is calculated by averaging the observed differences among the CEOs in the predicted winners sample (lower status CEOs).

In order to correct for any remaining differences between award winners and predicted winners, I use a bias adjustment procedure from Abadie and Imbens (2011). The adjustment is only needed for the unobservable  $E(\Delta Y_i(0) | A = 1)$  term and it is calculated in two steps. Initially,  $\Delta Y_i(0)$  is regressed on a set of observable determinants of award-winning,  $D_i$ , identified in Table 2.8. Then, the bias adjusted estimate of  $E(\Delta Y_i(0) | A = 1)$  is constructed as the sum of  $\Delta Y_i(0)$  and  $\hat{c}_0(D_i) - \hat{c}_0(D_j)$ , where  $\hat{c}_0$  is a vector of the estimated regression coefficients with the same dimension as

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<sup>17</sup>Either the cover date of the issue in which the award recipients were announced or the first online appearance, whichever is earliest.

$D_i$ . The term  $\hat{c}_0(D_i) - \hat{c}_0(D_j)$ , therefore, represents the difference in the predicted values of  $\Delta Y_i(0)$  using the vector of determinants of award winning for the  $i^{th}$  award-winning CEO and the vector of determinants of award winning for his or her corresponding match, indexed by  $j$ .

### 2.5.2 Empirical findings

Attaining higher achieved social status is hypothesized to decrease the marginal net utility from pursuing acquisitions. As a result, Hypothesis 2 states that CEOs with high achieved status, indicated by prestigious business awards, are expected to reduce their acquisitiveness following an award, compared to their lower status matches. CEO acquisitiveness is measured using the frequency of M&A transactions as well as total investment in M&A in each sample year<sup>18</sup>.

Figures 2.4 and 2.5 plot the average M&A frequency and the average M&A investment, respectively, among winners, predicted winners and all non-winning firms. Both indicators of acquisitiveness show a similar pattern: in the year prior to award, winners and their matches start close to the average among all non-winning firms, reducing their M&A activities slightly in the award year. In subsequent three years, however, the pattern separates, with award winners decreasing the frequency and investment in mergers and acquisitions while predicted winners exhibit a steady rise in their acquisitiveness. Consistent with Hypothesis 2, by the end of the third year after the award conferral, both indicators of acquisitiveness appear substantially lower among award winners, compared to their own level of M&A activity prior to the status increase, as well as relative to the average acquisitiveness among firms with lower status CEOs. Interestingly, the increase in M&A frequency and investment among predicted winners goes beyond the average among other non-winning firms in the years after high status CEOs receive awards. This pattern lends some additional support to the work by Ammann et al. (2016) who argue that higher CEO achieved social status resulting from prestigious business awards can incentivise competitors to increase their risk taking.

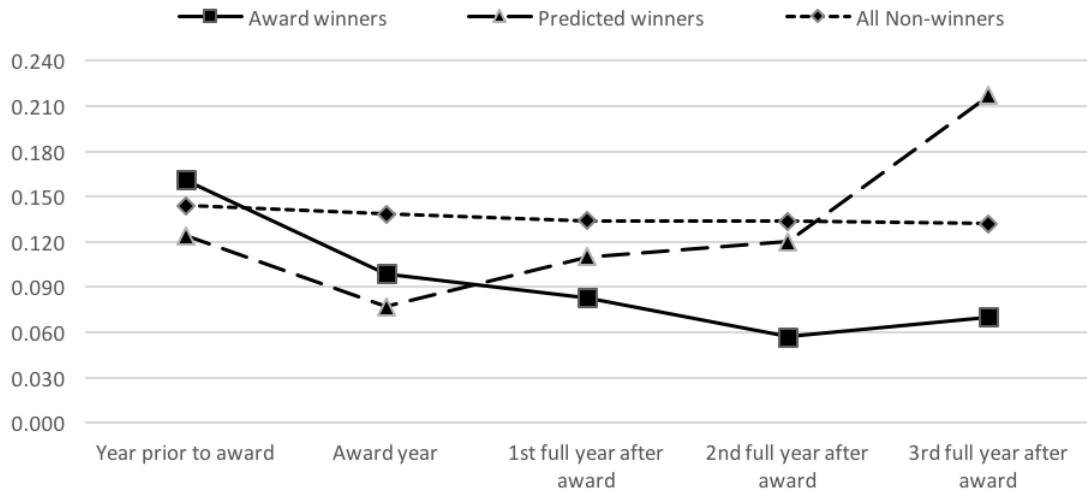
The observed declining trend in the frequency and investment in M&As among

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<sup>18</sup>All deals are required to be worth more than 5% of acquirer's value and involve a purchase of at least 51% of target's shares. For monetary values of M&A, each deal is scaled by firm's market capitalization two months prior to the transaction.

award-winning executives, together with the rise in acquisitiveness among predicted winners result in a considerable gap in the level of M&A activity between these two groups. By the end of the third year following the status increase, award-winning CEOs attempt approximately three times less acquisitions compared to their lower status matches, and reduce the total investment in M&A to almost four times below the average among predicted winners.

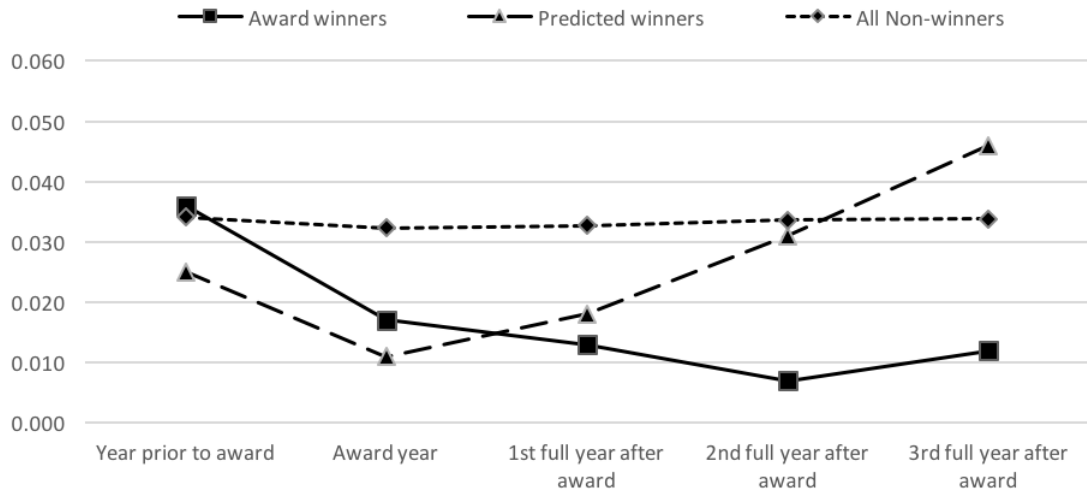
Figure 2.4: Acquisitiveness of award winners vs. predicted winners (frequency of M&A)



The figure displays the differences in the frequencies of M&A transactions worth more than 5% of acquirer's value between award winners and predicted winners. Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award ends exactly six months before the award month.

This graphical evidence is formalized using the difference-in-difference approach described in Section 2.5.1. Table 2.9 presents the differences in acquisitiveness between award winners and predicted winners from one year prior to the award until four years later. The results further confirm Hypothesis 2 and show that CEOs reduce their acquisitiveness following an increase in achieved social status compared to their own pre-award average as well as relative to executives with no status change. A significant drop in the frequency of M&A transactions among winning CEOs becomes evident six months after the award is conferred (at the end of award year), and while award winners continue to decrease the volume of acquisitions in the subsequent three years (with a slight rebound in year three), predicted winners exhibit a steady rise in the frequency of M&A. In addition, a significantly lower investment in M&A deals among award winners in the years following the award confirms that

Figure 2.5: Acquisitiveness of award winners vs. predicted winners (value of M&A)



The figure displays the differences in the value invested in M&A worth more than 5% of acquirer's value between award winners and predicted winners. Each deal is scaled by firm's market capitalization two months prior to the transaction. Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award ends exactly six months before the award month.

award-winning CEOs do not substitute a larger number of smaller transactions for less acquisitions of higher value but actually decrease their overall acquisitiveness, thereby reducing the risks associated with M&A.

The difference-in-difference in M&A activities between award winners and their matches remains negative for all event windows and becomes significant for both indicators of acquisitiveness one full year after award conferral. This difference is also economically meaningful: by the end of the second year after status increase, the change in acquisitiveness among CEOs with high achieved status is approximately six times lower in terms of M&A frequency and three times lower in terms of investment in M&A, compared to the change among lower status executives ( $p$ -value<0.01). Three years after the award, the change in M&A activity among high achieved status CEOs is about two times lower in both measures of acquisitiveness, compared to the change among predicted winners ( $p$ -value<0.01). Since the matching procedure used to obtain the sample of predicted winners ensures their pre-award similarity with award winners in terms of both firm and CEO characteristics, the observed results should represent the effect of award winning rather than mean reversion or any potential differences between winning and non-winning companies.



Table 2.9: CEO achieved status and acquisitiveness

Panel A: M&A frequency					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.066**	-0.044*	-0.022	-0.008
[-1, 0]		(2.11)	(1.78)	(0.58)	(0.20)
Event window	218	-0.069**	0.005	-0.073*	-0.062
[-1, 1]		(2.16)	(0.16)	(1.75)	(1.50)
Event window	175	-0.109***	0.023	-0.131***	-0.121**
[-1, 2]		(2.89)	(0.78)	(2.74)	(2.53)
Event window	129	-0.109**	0.109**	-0.217***	-0.213***
[-1, 3]		(2.37)	(2.19)	(3.29)	(3.28)

Panel B: M&A investment					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.019**	-0.014	-0.005	-0.001
[-1, 0]		(2.30)	(1.57)	(0.47)	(0.10)
Event window	218	-0.018**	0.003	-0.021**	-0.017
[-1, 1]		(2.16)	(0.29)	(1.99)	(1.65)
Event window	175	-0.030***	0.017	-0.046***	-0.042***
[-1, 2]		(2.93)	(1.42)	(2.98)	(2.73)
Event window	129	-0.031**	0.033**	-0.065***	-0.065***
[-1, 3]		(2.31)	(2.40)	(3.22)	(3.25)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status). Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 5% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 5% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Consistent with the graphical evidence, the results of the difference-in-difference estimation confirm that, by year three, the increase in acquisitiveness among predicted winners becomes significant relative to their own 'pre-award' level. These findings suggest that, similar to the influence of tournament incentives on corporate policies within a company (Kini and Williams, 2012), awards can motivate competing CEOs to increase firm risk. This conclusion is in line with recent evidence of the motivational effects of CEO achieved status shifts on their competitors (Ammann et al., 2016), and is consistent with the argument that marginal status executives are likely to be attracted by high profile M&A activities due to the publicity and status they can generate (Hayward and Hambrick, 1997; Palmer and Barber, 2001).

Malmendier and Tate (2009) show that award-winning CEOs tend to engage in earnings management following an award in order to prolong their 'superstar performance'. However, the frequency of negative earnings announcements becomes significantly higher among award winners compared to their non-winning matches

five years after the last award, suggesting that executives cannot follow the strategy indefinitely. Similar to Malmendier and Tate (2009), additional tests show that the impact of the status shift on CEO behaviour is not permanent, and both award winners and their matches revert back to the average level of acquisitiveness among all firms by year five<sup>19</sup>.

### 2.5.3 First time winners vs. repeat winners

Next, I investigate whether the effect of award winning on CEO status and their subsequent acquisitiveness differs depending on whether a CEO is a first time winner or has already won at least one award in the past. One (unlikely) possibility is that every award provides a similar increase in CEO achieved social status. If that is the case, the marginal status benefit of pursuing acquisitions should decrease with the number of awards, leading to a greater reduction in acquisitiveness following every subsequent award. Alternatively, the first award might provide the greatest shock to CEO social status and elevate the market's expectations regarding executive's future performance. As a result, subsequent awards would merely help to maintain CEO's current status position and the reduction in acquisitiveness should be the most pronounced following the first award.

Table 2.10 shows the change in acquisitiveness of first time winners and repeat winners. While both groups show evidence of lower frequency and investment in M&A after an award, the magnitude of the reduction is greater following the first award. By year three, the reduction in frequency and level of investment in M&A is approximately one and a half time greater among first time winners compared to repeat winners. These results suggest that the first award provides the highest shift in CEO achieved social status and increases expectations of future performance.

### 2.5.4 Personal vs. company awards

Prestigious CEO awards increase firm status and the relationship is likely to work both ways. Apart from awards conferred personally to companies' executives, U.S. firms have an opportunity to increase their status by appearing in prestigious annual surveys and rankings, such as *Fortune's 'Most Admired Companies'* or *Busi-*

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<sup>19</sup>These results are reported in the Appendix, Table A.5

Table 2.10: CEO achieved status and acquisitiveness: First time winners vs. repeat winners

Panel A: M&A frequency						
	First time winners				Repeat winners	
	Obs.	Difference (W-P)	Bias-adjusted difference	Obs.	Difference (W-P)	Bias-adjusted difference
Event window [-1, 0]	163	-0.061 (1.18)	-0.048 (0.94)	111	0.036 (0.68)	0.052 (0.98)
Event window [-1, 1]	133	-0.090 (1.56)	-0.079 (1.37)	85	-0.047 (0.81)	-0.037 (0.63)
Event window [-1, 2]	111	-0.162*** (2.67)	-0.150** (2.50)	64	-0.078 (1.00)	-0.069 (0.88)
Event window [-1, 3]	83	-0.253*** (2.80)	-0.247*** (2.78)	46	-0.152* (1.73)	-0.152* (1.74)

Panel B: M&A investment						
	First time winners				Repeat winners	
	Obs.	Difference (W-P)	Bias-adjusted difference	Obs.	Difference (W-P)	Bias-adjusted difference
Event window [-1, 0]	163	-0.009 (0.50)	-0.005 (0.27)	111	0.000 (0.03)	0.004 (0.36)
Event window [-1, 1]	133	-0.023 (1.48)	-0.019 (1.24)	85	-0.018 (1.47)	-0.015 (1.18)
Event window [-1, 2]	111	-0.039** (2.04)	-0.034* (1.82)	64	-0.060** (2.20)	-0.056** (2.08)
Event window [-1, 3]	83	-0.075*** (2.71)	-0.074*** (2.70)	46	-0.047* (1.74)	-0.049* (1.83)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status). Columns on the left include first time winners only, and columns on the right include winners who have already won at least one award in the past. Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 5% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 5% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

*ness Week's 'Top 50 Performers'*. Since CEOs are often viewed as an embodiment of a company, organizational achievements are likely to be attributed to individual leaders (Hayward et al., 2004), especially considering that media coverage of prestigious surveys often includes CEO profiles for highly-ranked firms. As a result, appearing in influential company rankings is likely to increase firm as well as CEO achieved social status<sup>20</sup>. Since such companies were present in the control sample, my results might have been diminished through comparing CEOs with high achieved status due to personal awards to executives with elevated status following company achievements. Therefore, I further collect *Fortune's 'Most Admired Com-*

<sup>20</sup>Such surveys have been used to proxy firm and CEO prestige in recent research. See, for example, Pfarrer et al. (2010).

*panies*' and *Business Week's* 'Top 50 Performers' company rankings and perform additional analysis<sup>21</sup>.

In order to ensure that predicted winners sample does not contain CEOs with status elevated due to company achievements, I exclude such firms from the control group, re-match award winners and repeat the tests<sup>22</sup>. Table 2.11 presents the results of the difference-in-difference estimation and shows that the more restrictive sample of predicted winners exhibits a more significant increase in their acquisitiveness compared to matches used in the main model, resulting in a larger gap in acquisitiveness among high achieved status CEOs and their lower status counterparts. The difference in the acquisitiveness change between high and lower status executives is almost 25% larger in terms of M&A frequencies (about 10% increase for M&A investment) when prestigious companies are excluded from the control group. Thus my results suggest that CEO social status might be enhanced through company achievements, potentially contributing to the reduction in marginal utility from pursuing acquisitions.

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<sup>21</sup>Further details on these company rankings are presented in the Appendix.

<sup>22</sup>Due to a large proportion (approximately 40% of the sample) of companies appearing in *Fortune's* 'Most Admired Companies' and *Business Week's* 'Top 50 Performers' surveys, a well-matched sample of predicted winners cannot be achieved if I also include CEOs of prestigious companies in the treatment group.

Table 2.11: CEO achieved status and acquisitiveness: Excluding prestigious companies from control group

Panel A: M&A frequency					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.066** (2.11)	0.004 (0.15)	-0.069* (1.84)	-0.051 (1.39)
[-1, 0]					
Event window	219	-0.064* (1.99)	0.014 (1.39)	-0.078* (1.88)	-0.063 (1.54)
[-1, 1]					
Event window	170	-0.100** (2.58)	0.041 (1.35)	-0.141*** (2.81)	-0.123** (2.45)
[-1, 2]					
Event window	115	-0.104** (2.23)	0.165*** (3.35)	-0.270*** (3.90)	-0.252*** (3.66)
[-1, 3]					

Panel B: M&A investment					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.019** (2.30)	0.005 (0.48)	-0.024* (1.90)	-0.015 (1.23)
[-1, 0]					
Event window	219	-0.018** (2.12)	0.010 (1.11)	-0.028** (2.21)	-0.021* (1.67)
[-1, 1]					
Event window	170	-0.025** (2.45)	0.017 (1.40)	-0.041** (2.59)	-0.037** (2.31)
[-1, 2]					
Event window	115	-0.032** (2.43)	0.040** (2.25)	-0.072*** (3.02)	-0.073*** (3.04)
[-1, 3]					

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status). Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. The control group excludes companies that appear in *Fortune's 'Most Admired Companies'* and *Business Week's 'Top 50 Performers'* rankings during the sample period. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 5% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 5% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

### 2.5.5 Robustness

I perform several robustness checks to ensure that my results are not distorted by any remaining differences between award winners and their matches, and are not driven by a particular choice of predicted winners. Table 2.12 presents the results excluding award winners too large to match closely and confirms that the results are not driven by any size mismatches. Furthermore, the differences in acquisitiveness between high and lower achieved status CEOs still hold (and are in fact stronger) excluding observations where propensity scores between award winners and their matches differ by over 0.1, as well as by a more restrictive limit of 0.05. Finally, in additional tests I confirm that my results are robust to using larger numbers of neighbours, and differences in M&A activities between award winners and predicted

winners remain significant when using two, three or four different matches<sup>23</sup>.

Table 2.12: Achieved status robustness tests: Size and propensity score limits

Panel A: M&A frequency									
	Size limit			PS limit (<0.1)			PS limit (<0.05)		
	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Diff. (W-P)	Bias-adj. difference
Event window	219	-0.041	-0.032	210	-0.029	-0.020	192	-0.021	-0.009
[-1, 0]		(0.94)	(0.74)		(0.64)	(0.45)		(0.43)	(0.20)
Event window	180	-0.067	-0.060	170	-0.088*	-0.081	154	-0.078	-0.068
[-1, 1]		(1.44)	(1.30)		(1.74)	(1.59)		(1.48)	(1.29)
Event window	149	-0.134**	-0.126**	138	-0.167***	-0.158***	124	-0.161**	-0.149**
[-1, 2]		(2.51)	(2.36)		(2.88)	(2.73)		(2.60)	(2.41)
Event window	109	-0.257***	-0.255***	105	-0.257***	-0.254***	94	-0.266***	-0.258***
[-1, 3]		(3.41)	(3.44)		(3.59)	(3.58)		(3.44)	(3.37)

Panel B: M&A investment									
	Size limit			PS limit (<0.1)			PS limit (<0.05)		
	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference
Event window	219	-0.007	-0.005	210	-0.005	-0.002	192	-0.007	-0.003
[-1, 0]		(0.51)	(0.39)		(0.38)	(0.16)		(0.46)	(0.22)
Event window	180	-0.023*	-0.022*	170	-0.027**	-0.024*	154	-0.027*	-0.024
[-1, 1]		(1.81)	(1.77)		(2.04)	(1.84)		(1.86)	(1.63)
Event window	149	-0.045***	-0.042**	138	-0.060***	-0.056**	124	-0.062***	-0.058***
[-1, 2]		(2.70)	(2.57)		(3.08)	(2.93)		(2.91)	(2.72)
Event window	109	-0.077***	-0.078***	105	-0.080***	-0.079***	94	-0.087***	-0.085***
[-1, 3]		(3.28)	(3.35)		(3.33)	(3.31)		(3.26)	(3.20)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status). Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 5% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 5% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Further robustness checks verify that my results hold for different subsets of awards. The data is re-tested including only the most influential awards (indicated by the highest circulation), such as *Financial World*, *Business Week* and *Forbes*, (I check pairwise combinations of these as well) and alternatively excluding less prominent awards (indicated by the lowest circulation), such as *Electronic Business Magazine*. The results are reported in Table 2.13 and show that the differences are even stronger when only the most prominent awards are included as well as when *Electronic Business Magazine* is excluded, confirming the intuitive expectation of *Financial World's*, *Business Week's* and *Forbes'* awards being the most influential in terms of status attainment. The findings are also robust to excluding the ex-

<sup>23</sup>These results are reported in the Appendix, Table A.6

treme years of 1995 and 1996, when the number of *Financial World's* Silver awards increased from around 10 to 70 per year.

Table 2.13: Achieved status robustness tests: Subsets of awards

Panel A: M&A frequency									
	Excluding 1995-1996			Including only <i>Financial World</i> , <i>Business Week</i> and <i>Forbes</i>			Excluding <i>Electronic Business Magazine</i>		
	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference
Event window	215	-0.037	-0.021	226	-0.027	-0.013	268	-0.030	-0.015
[-1, 0]		(0.87)	(0.50)		(0.62)	(0.29)		(0.79)	(0.40)
Event window	166	-0.072	-0.060	176	-0.063	-0.052	212	-0.085**	-0.074*
[-1, 1]		(1.48)	(1.24)		(1.35)	(1.14)		(2.03)	(1.77)
Event window	134	-0.112**	-0.101*	143	-0.119**	-0.108**	169	-0.130***	-0.119**
[-1, 2]		(2.05)	(1.85)		(2.24)	(2.06)		(2.68)	(2.46)
Event window	97	-0.165**	-0.160**	110	-0.227***	-0.222***	125	-0.224***	-0.220***
[-1, 3]		(2.31)	(2.27)		(3.13)	(3.10)		(3.34)	(3.32)

Panel B: M&A investment									
	Excluding 1995-1996			Including only <i>Financial World</i> , <i>Business Week</i> and <i>Forbes</i>			Excluding <i>Electronic Business Magazine</i>		
	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference
Event window	215	-0.002	0.003	226	-0.006	-0.002	268	-0.006	-0.002
[-1, 0]		(0.12)	(0.21)		(0.42)	(0.13)		(0.54)	(0.17)
Event window	166	-0.018	-0.014	176	-0.021*	-0.017	212	-0.024**	-0.020*
[-1, 1]		(1.54)	(1.20)		(1.69)	(1.43)		(2.18)	(1.82)
Event window	134	-0.031*	-0.027	143	-0.045**	-0.041**	169	-0.043***	-0.039**
[-1, 2]		(1.87)	(1.65)		(2.57)	(2.38)		(2.85)	(2.59)
Event window	97	-0.042**	-0.043**	110	-0.070***	-0.069***	125	-0.066***	-0.067***
[-1, 3]		(2.55)	(2.55)		(3.02)	(3.03)		(3.21)	(3.24)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status) using subsets of the awards data. Predicted winners sample is constructed using a nearest-neighbor propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than five percent of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than five percent of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t- statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10 5%, and 1% level, respectively.

Similar to the robustness checks within the ascribed status dimension, additional tests verify that the findings for achieved social status are robust to using alternative specifications for M&A data. Table 2.14 shows differences in M&A changes between high and lower status CEOs using M&A deals worth more than 1% of acquirer's value (1% M&A). The differences in M&A investment (Panel B) are extremely similar regardless of which cut-off point is used. The differences in 1% M&A frequency (Panel A) between winners and predicted winners, however, display a slightly different pattern. Including smaller deals shows evidence of a significant status influence on M&A frequency as early as six months after status is elevated (at the end of

award year), but the difference between high and lower status CEOs is weaker at the end of the third year compared to the results obtained with 5% M&A deals. The earlier evidence of a significant difference in M&A activities among high and lower status CEOs could be due to the fact that following the status increase, it is easier for award-winning CEOs to initially influence their M&A-related risks using smaller transactions that receive less board oversight. Panel C also confirms that the findings hold when deal values are scaled by book assets, showing an even higher magnitude of the difference between award winners and their matches compared to the main results.

Finally, I verify that the influence of achieved social status on acquisitiveness is not distorted by the financial crisis. Table 2.15 shows differences in M&A changes between high and lower status CEOs before and after the start of the crisis. While the pattern holds for both sub-periods, the difference in acquisitiveness (particularly in terms of M&A investment) is more significant before the recent financial crisis. The lower reduction (among high status CEOs) in risks associated with M&A activities after the start of the crisis is likely to be caused by stronger external pressures on CEO behavior during this period.

#### **2.5.6 Alternative channels**

The achieved status indicator considers CEO awards to be indicative of their attained social status. Such awards may also be a reflection of skills and the reduction (on average) in value-destroying M&A activities among award-winning CEOs might represent the influence of having a better skilled rather than a higher status executive. However, descriptive statistics presented in Table 2.2 show that award winners do not significantly differ from other firms in terms of their average acquisitiveness. Rather, the difference occurs specifically following an elevation in social status, suggesting that the reduction in M&A activities is motivated by the desire to preserve status through lower risk-taking. In addition, companies with award-winning CEOs have been documented to underperform following the award, both relative to their own prior performance, as well as compared to the performance of similar companies with non-winning executives (Ammann et al., 2016; Malmendier and Tate, 2009). Therefore, the observed influence of receiving prestigious business awards is more



Table 2.14: Achieved status robustness tests: Alternative M&amp;A data specifications

Panel A: 1% M&A frequency					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.124**	-0.022	-0.102*	-0.084
[-1, 0]		(2.55)	(0.59)	(1.72)	(1.42)
Event window	218	-0.110**	0.014	-0.124*	-0.099
[-1, 1]		(2.19)	(0.28)	(1.79)	(1.44)
Event window	175	-0.131**	0.023	-0.154*	-0.129
[-1, 2]		(2.09)	(0.43)	(1.85)	(1.54)
Event window	129	-0.140*	0.016	-0.155	-0.141
[-1, 3]		(1.87)	(0.23)	(1.55)	(1.43)

Panel B: 1% M&A investment					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.022**	-0.014	-0.008	-0.004
[-1, 0]		(2.58)	(1.57)	(0.70)	(0.33)
Event window	218	-0.020**	0.004	-0.024**	-0.020*
[-1, 1]		(2.39)	(0.49)	(2.23)	(1.86)
Event window	175	-0.031***	0.017	-0.048***	-0.043***
[-1, 2]		(3.03)	(1.44)	(3.04)	(2.78)
Event window	129	-0.033**	0.031**	-0.064***	-0.064***
[-1, 3]		(2.44)	(2.24)	(3.21)	(3.24)

Panel C: 5% M&A investment scaled by assets					
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)	Bias-adjusted difference
Event window	274	-0.106*	0.264	-0.369*	-0.354*
[-1, 0]		(1.77)	(1.40)	(1.88)	(1.81)
Event window	218	-0.039	-0.024	-0.015	0.005
[-1, 1]		(1.23)	(1.22)	(0.45)	(0.15)
Event window	175	-0.108***	0.000	-0.108**	-0.086**
[-1, 2]		(3.17)	(0.01)	(2.57)	(2.06)
Event window	129	-0.128***	0.014	-0.141***	-0.122**
[-1, 3]		(2.82)	(0.52)	(2.64)	(2.32)

The table presents the differences in acquisitiveness award winners (high achieved status) and predicted winners (lower achieved status). Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 1% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 1% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Panel C presents the differences between award winners and predicted winners in the investment in M&A transactions worth more than 5% of acquirer's value, where each deal value is scaled by company's book assets at the end of the previous fiscal year. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

likely to come primarily from social status concerns rather than an increased skill level.

Another potential channel through which award winning can reduce acquisitiveness is an increased participation in activities outside the firm. A study by Malmendier and Tate (2009) finds that award-winning CEOs increasingly engage in private activities, such as media interviews, writing books, sitting on outside corporate boards and playing golf. Such activities provide little firm value and distract executives from their core corporate responsibilities. It is, therefore, possible that

Table 2.15: CEO achieved status and acquisitiveness: Sub-period analysis

Panel A: M&A frequency						
	Before crisis start			After crisis start		
	Obs.	Difference (W-P)	Bias-adjusted difference	Obs.	Difference (W-P)	Bias-adjusted difference
Event window	176	-0.017	-0.010	106	-0.047	-0.023
[-1, 0]		(0.36)	(0.21)		(0.80)	(0.38)
Event window	146	-0.068	-0.062	79	-0.076	-0.057
[-1, 1]		(1.45)	(1.32)		(0.95)	(0.72)
Event window	121	-0.066	-0.061	58	-0.224**	-0.202**
[-1, 2]		(1.27)	(1.19)		(2.28)	(2.07)
Event window	101	-0.198***	-0.195***	33	-0.242*	-0.237*
[-1, 3]		(2.71)	(2.71)		(1.85)	(1.84)

Panel B: M&A investment						
	Before crisis start			After crisis start		
	Obs.	Difference (W-P)	Bias-adjusted difference	Obs.	Difference (W-P)	Bias-adjusted difference
Event window	176	-0.011	-0.008	106	0.001	0.008
[-1, 0]		(0.65)	(0.51)		(0.08)	(0.64)
Event window	146	-0.030**	-0.030**	79	-0.003	0.006
[-1, 1]		(2.31)	(2.25)		(0.17)	(0.37)
Event window	121	-0.049***	-0.048***	58	-0.035	-0.027
[-1, 2]		(2.75)	(2.68)		(1.23)	(0.95)
Event window	101	-0.071***	-0.073***	33	-0.038*	-0.036*
[-1, 3]		(2.87)	(2.97)		(1.84)	(1.69)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status). Columns on the left exclude awards conferred after 2003 (last event window ends before 2007), and columns on the right exclude awards conferred before 2003 (last event window starts after 2006). Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 5% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 5% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

some of the decrease in M&A activities following a positive status shift is caused by an increased amount of time that award-winning CEOs spend on outside activities instead of assessing potential M&A targets. However, Malmendier and Tate (2009) find that participation in private activities increases with the number of awards while my results show that the impact of award winning on CEO status and acquisitiveness is most pronounced following the first award. Therefore, the increased level of distractions is unlikely to explain the significant reduction in acquisitiveness following an award-based status shift.

## 2.6 Dual status and CEO acquisitiveness

Since the model in Section 2.2 suggests that the marginal net utility from pursuing an acquisition is lowest for CEOs with dual high status characteristics, Hypothesis 3 states that CEOs who possess high ascribed and high achieved social status simultaneously are less acquisitive compared to all other executives. Possessing both status types is indicated by a dummy variable that equals to one if a CEO has high ascribed and high achieved social status during the observation year<sup>24</sup>. Ascribed status is indicated by CEO receiving a bachelor degree from one of Ivy League or Russell Group universities. Based on the evidence from the event study (see Section 2.5), a CEO is considered to possess high achieved social status if he or she received a prestigious business award during two years prior to observation year<sup>25</sup>.

Figures 2.6 and 2.7 plot the average frequency and investment in M&A, respectively, among CEOs with dual elevated social status, CEOs with only one high status characteristic (either ascribed or achieved) and executives with lower status in both dimensions in each sample year. Both acquisitiveness indicators show a higher average among CEOs with lower ascribed and lower achieved social status in most years. The only exceptions occur around the major merger waves before the crash of 2000 and before the recent financial crisis. During these periods, high status CEOs exhibit reverse M&A behavior and often exceed the average among lower status executives. In fact, CEOs who possess both types of status only engaged in acquisitions during 1998 - 1999 and 2003 - 2005, and completed no deals during other years of the sample period.

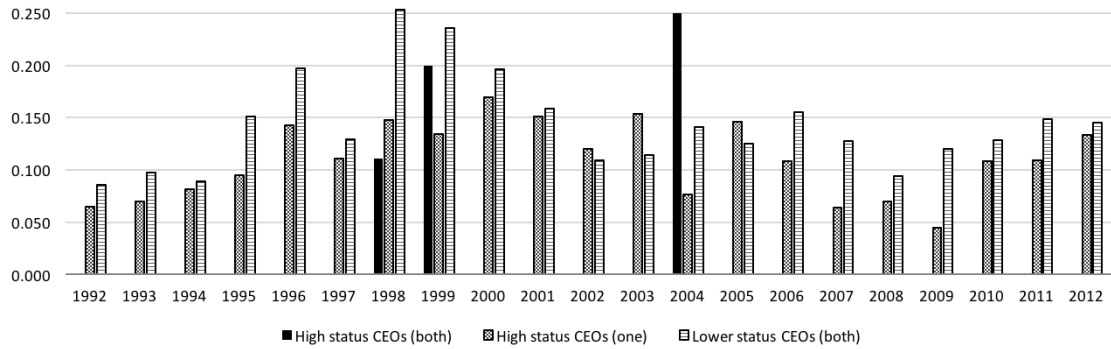
I further investigate the link between possessing dual high status characteristics and acquisitiveness using a multivariate regression analysis, in which the frequency and investment in M&A is regressed on indicators of CEO ascribed and achieved social status as well as the interaction term. Table 2.16 presents the results, confirming the presence of a negative relationship between high CEO social status characteristics and acquisitiveness. While the negative coefficients on status indicators remain

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<sup>24</sup>In the regression analysis, I examine the effect of holding both statuses simultaneously by including the main effects and the interaction term between ascribed and achieved social status.

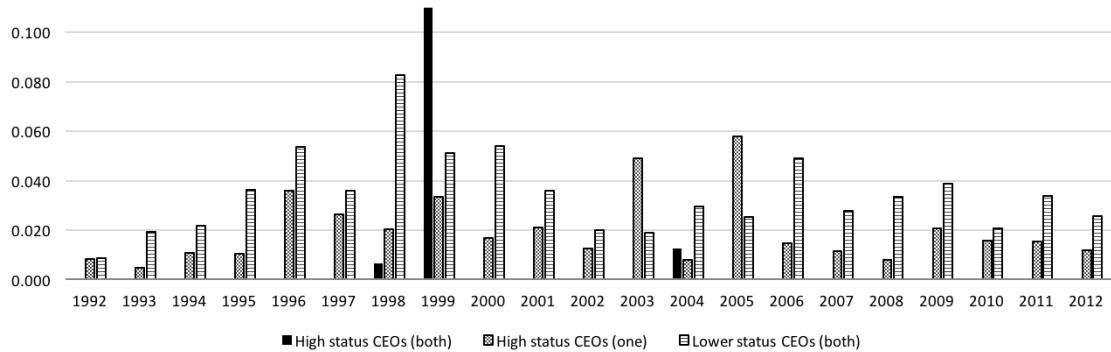
<sup>25</sup>While the main tests assume a two-year award impact on achieved status, the results remain qualitatively similar if a one, three, or a five year-impact is used instead. The two-year impact is chosen in consistency with the event study findings.

Figure 2.6: Average frequency of M&A (dual status)



The figure displays year-by-year average frequency of acquisitions for CEOs with high ascribed and high achieved social status, CEOs with high ascribed or high achieved social status and CEOs with lower ascribed and lower achieved social status. For each subgroup, the average number of acquisitions is calculated as the number of acquisitions divided by the number of CEOs in that subgroup in a given year. All M&A deals are required to be worth more than 5% of acquirer's value and involve a purchase of at least 51% of target's shares.

Figure 2.7: Average value invested in M&A (dual status)



The figure displays year-by-year average investment in M&A for CEOs with high ascribed and high achieved social status, CEOs with high ascribed or high achieved social status and CEOs with lower ascribed and lower achieved social status. For each subgroup, the average investment in M&A is calculated as the total value divided by the number of CEOs in that subgroup in a given year. All M&A deal value is scaled by company's market capitalization two months prior to the transaction. All M&A deals are required to be worth more than 5% of acquirer's value and involve a purchase of at least 51% of target's shares.

insignificant at the 10% level in modelling M&A frequency (model 1), both ascribed and achieved social status appear to have a significant independent impact on the level of investment in acquisitions. This finding remains robust independently of the scaling method used to assess acquisition value, suggesting that, consistent with Hypothesis 3, CEOs who possess high status level within both social status dimensions have the lowest level of acquisitiveness.

The coefficients on the interaction term between ascribed and achieved social status remain insignificant at the 10% level in all models. This indicates that the effect of possessing both higher ascribed as well as elevated achieved social status simultaneously does not extend beyond the additive impact of the two individual status types.

Models 4 - 6 in Table 2.16 replicate the main tests with firm rather than industry fixed effects. Similar to the results related to testing the effect of ascribed social status in isolation (presented in Section 2.4.2), these specifications show a lack of significance of CEO social status characteristics in explaining within-firm differences in M&A practices. As previously discussed in Section 2.4.1, while it is important to account for potential endogeneity due to omitted variables, fixed effects models might miss significant social status effects due to the slow-moving nature of status.

Table 2.16: CEO dual status and acquisitiveness

	Industry fixed effects			Firm fixed effects		
	[1] 5% M&A frequency	[2] 5% M&A inv. (scaled: mkt cap)	[3] 5% M&A inv. (scaled: assets)	[4] 5% M&A frequency	[5] 5% M&A inv. (scaled: mkt cap)	[6] 5% M&A inv. (scaled: assets)
Achieved status	-0.025 (0.026)	-0.011** (0.006)	-0.065* (0.039)	-0.016 (0.028)	-0.007 (0.006)	-0.088 (0.055)
Ascribed status	-0.016 (0.017)	-0.010** (0.005)	-0.026*** (0.009)	-0.015 (0.027)	0.001 (0.006)	-0.024 (0.015)
Achieved x Ascribed	-0.039 (0.036)	0.001 (0.008)	0.019 (0.038)	-0.063 (0.044)	-0.014 (0.010)	0.048 (0.050)
Firm size	-0.017*** (0.006)	-0.008*** (0.002)	-0.014** (0.007)	-0.010 (0.024)	-0.014** (0.006)	-0.016 (0.030)
Past returns	0.024* (0.012)	0.010** (0.005)	0.055* (0.029)	-0.012 (0.015)	0.003 (0.005)	0.048 (0.039)
Tobin's Q	0.001 (0.004)	-0.001 (0.001)	0.056*** (0.018)	0.001 (0.004)	0.000 (0.001)	0.055** (0.024)
ROA	-0.005 (0.076)	0.024 (0.034)	-0.374** (0.180)	0.352*** (0.121)	0.146*** (0.057)	-0.065 (0.213)
Cash holdings	-0.026 (0.060)	-0.000 (0.020)	-0.085 (0.095)	0.466*** (0.111)	0.101*** (0.033)	0.126 (0.276)
Book leverage	-0.074 (0.049)	0.024 (0.018)	0.029 (0.038)	-0.201** (0.081)	-0.050* (0.028)	-0.009 (0.061)
CEO age	0.001 (0.001)	0.000 (0.000)	0.001 (0.001)	0.005** (0.002)	0.001 (0.001)	0.002 (0.002)
CEO tenure	0.001 (0.001)	0.000 (0.000)	-0.001 (0.001)	-0.003** (0.002)	-0.001 (0.001)	-0.002 (0.001)
CEO gender	0.058** (0.027)	0.035 (0.026)	0.032** (0.015)	0.103** (0.041)	0.031 (0.021)	0.031 (0.031)
Industry fixed effects	Yes	Yes	Yes	No	No	No
Firm fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5,987	5,987	5,987	5,987	5,987	5,987
No. of firms	616	616	616	616	616	616
Adjusted R-squared	0.130	0.061	0.112	0.199	0.115	0.116

The table presents results of regression models testing the effect of possessing dual (ascribed and achieved) social status on CEO acquisitiveness. The dependent variable in model 1 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in model 2 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in model 3 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Achieved status indicator is equal to 1 if a CEO received a prestigious CEO award within two years prior to observation year. Achieved x Ascribed is the interaction term. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year fixed effect. Models 1 - 3 include industry fixed effect, defined based on Fama-French 48 industries. Models 4 - 6 include firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

The main results regarding the link between possessing dual high status characteristics and acquisitiveness are robust to using alternative specifications for CEO achieved social status and M&A data. In particular, the findings remain qualita-

tively similar if company awards are assumed to also influence CEO achieved social status<sup>26</sup>. In addition, the relationship between high CEO status and acquisitiveness is robust ( $p$ -value $<0.01$ ) to using M&A transactions worth over 1% of acquirer's value as well as scaling deal sizes using book value of assets rather than market capitalization<sup>27</sup>. Including smaller acquisitions results in a stronger relationship between CEO social status and acquisitiveness, particularly within the achieved status dimension, where higher status becomes significantly negatively related not only to the level of investment in M&A but also to the frequency of acquisitions.

## 2.7 Discussion and conclusions

In this study, I develop a novel utility model to generate a number of testable hypotheses on the relationship between CEO ascribed and achieved social status and acquisitiveness. Ascribed social status is proxied through educational prestige and achieved social status is measured using influential business awards. The empirical evidence supports lower acquisitiveness among high status CEOs, irrespective of the nature of status. However, the two types of social status influence CEO decision making through different underlying processes and while the impact of ascribed status is permanent, higher achieved status reduces CEO acquisitiveness following status shifts and the effect is most pronounced after the first award. This exploration of the dual paths of social status influence, and their differing influences, is the main contribution of this study.

Ascribed social position remains constant throughout the life of an individual and influences CEOs' level of acquisitiveness through the difference in social costs and benefits faced by high and lower status executives. CEOs with high inherited status face greater marginal social cost of pursuing acquisitions due to their strong identification with the corporate elite circle and reluctance to deviate from legitimated behavior. In addition, executives with high ascribed social status are likely to place less value on a potential achieved status increase since they already occupy a high status position within the ascribed dimension. As a result, the marginal util-

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<sup>26</sup>These results are reported in Table A.7 in the Appendix.

<sup>27</sup>Results using 1% M&A deals are reported in Table A.8 in the Appendix; results with scaling deals using book assets are reported in Model 3 in Table 2.16.

ity from pursuing acquisitions is higher for CEOs with lower ascribed social status. Consistent with these predictions, I find that high ascribed status CEOs invest approximately 32% less in mergers and acquisitions, compared to executives without prestigious backgrounds.

Within the achieved status dimension, I find a significantly lower frequency and investment in M&A following a positive status shift. The reduction in acquisitiveness becomes evident a year following the status increase and continues to drop for several years that follow. Further tests show that the reduction in M&A activities is most pronounced among first time winners, suggesting that the first award provides the greatest shock to CEOs' achieved social status. Since M&A is considered a risky activity, the findings are consistent with recent evidence of a reduced CEO risk taking following a positive status shift in areas such accounting practices and R&R investments (see, for example, Koh, 2011; Shemesh, 2017).

Furthermore, dual status models show that both ascribed and achieved CEO social status have a significant independent impact on firm's M&A activities, resulting in the lowest level of acquisitiveness among executives who possess both higher ascribed as well as elevated achieved social status simultaneously. This finding is consistent with my utility model considering that the two types of status have different origins and influence CEO social utility from acquisitions through different mechanisms.

The relationship between CEO social status and acquisitiveness does not appear to be strongly distorted by the financial crisis and my achieved and ascribed status results hold for two sub-periods that divide the overall sample based on the beginning of the crisis. The findings within the achieved status dimension are slightly stronger in the period before the crisis but the difference is mostly caused by reduced acquisitiveness among matched lower achieved status CEOs who probably experienced stronger external pressures during this period. The findings within the ascribed status dimension, on the other hand, appear slightly stronger in the second sub-period. However, additional tests showed that the difference is likely to be unrelated to the occurrence of financial crisis and stronger results in recent years are likely to be associated with the end of 2003 - 2007 merger wave during which elite CEOs exhibited reverse M&A behaviour.



The findings in this study contribute to our understanding of the influence of CEO personal attributes on their risk preferences and corporate decision making. Social status is a complex construct that can affect individuals' behaviour through a variety of channels, and this study shows the benefit of building detailed behavioural hypotheses from the source literature in order to better understand the psychological and sociological influences of personal CEO traits.

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## CHAPTER 3

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# CEO social status and market response to acquisitions

### 3.1 Introduction

Existing research suggests that acquisitions usually do not provide significant firm value, and can often reduce shareholder wealth over the short-term or long-term (Hayward and Hambrick, 1997). Consequently, researchers and corporate leaders are interested in understanding the determinants of acquisition performance, motivating a continued investigation of the factors that can explain the variation in announcement returns and the long term performance of mergers and acquisitions (Harford, 1999; Harford et al., 2012; Lamont and Polk, 2002; Moeller et al., 2004, 2005; Rau and Vermaelen, 1998).

A particular stream of this research examines the role of CEO personal characteristics in explaining the differences in firm value generated through acquisitions. Factors such as overconfidence (Malmendier and Tate, 2008), power (Fracassi and Tate, 2012), narcissism (Chatterjee and Hambrick, 2007), age (Yim, 2013) and gender (Levi et al., 2014) have been shown to be significantly related to the returns from mergers and acquisitions. This study adds to this literature by examining the implications of CEO social status characteristics for the value created through acquisition announcements.

My findings reveal that, despite the existence of some positive influences of CEO status and celebrity on firm value (Pfarrer et al., 2010; Pollock et al., 2009; Rindova et al., 2006), deals announced by executives with recently elevated social status tend to trigger a more negative market response, compared to acquisitions made by CEOs with lower achieved status. The negative reaction is particularly severe for stock-financed acquisitions which result in an average value destruction of approximately 4% within three days around the announcement. Considering prior evidence of higher premiums paid by celebrity CEOs following award conferral (Cho et al., 2016) and having examined the differences in acquisition attributes across CEOs with varying levels of achieved social status, I find that my results are most consistent with the idea that award-winning executives are incentivised to minimise the likelihood of a failed deal in order to avoid media scrutiny and preserve their status position. This is likely to result in recurrent overpayment for target firms (as documented by Cho et al., 2016), triggering a more negative market response to acquisition

announcements.

I find no evidence of a significant influence of ascribed status on announcement returns, suggesting that status concerns are only a factor in the market reaction to acquisition announcements within the achieved status dimension. These results indicate that CEO ascribed status is unlikely to be associated with a reduced quality of acquisitions, and potential agency concerns present in firms with powerful elite executives do not have a notable adverse effect on investor perception and expectations from deals announced by such CEOs.

The findings in this study provide important contributions to the literature examining the determinants of acquisition performance (Chatterjee and Hambrick, 2007; Malmendier and Tate, 2008), and research on firm value consequences of CEO celebrity (Cho et al., 2016; Koh, 2011) by showing that high achieved CEO social status has adverse implications for the M&A announcement returns. These results pose important governance implications, indicating the need for more effective monitoring mechanisms of CEO decisions in order to prevent investment distortions and reduce the level of value-destroying acquisitions.

### **3.2 Theory and hypotheses**

Existing research on award-winning and celebrity executives suggests that CEO achieved social status can have implications for the value created through M&A deal announcements. However, given the complexity of determinants of stock market perception and reaction to corporate events, with the added conflicting theory and evidence regarding the influence of CEO status on organisational strategy and outcomes, the exact role of CEO achieved social status is not clear.

It is possible that, on average, executives experience a positive market response to acquisition announcements following a status increase associated with prestigious award conferral. First, the evidence in Chapter 2 and several related studies (Koh, 2011; Shemesh, 2017) suggests that CEOs with high achieved social status value their elevated reputation and reduce risky activities to preserve their status position. Building on this logic, it is likely that high status CEOs would be more conservative in acquisition decisions, potentially paying lower premiums and refraining from riskier projects, such as acquiring firms in unrelated industries or

engaging in cross-border deals. The existing literature examining the determinants of M&A announcement returns suggests that such strategies are less likely to result in a negative market response (Lamont and Polk, 2002; Moeller and Schlingemann, 2005).

In addition, higher CEO reputational status is often perceived as a signal of managerial quality, and award-winning executives are thought of as more capable strategic actors, generally providing positive capital markets outcomes (Pfarrer et al., 2010; Pollock et al., 2009; Rindova et al., 2006). If investors recognise CEO status as a signal of superior ability, they are more likely to react positively to acquisition announcements by executives with high achieved social status.

Finally, the analysis of the data in my sample (as well as in related studies, such as Koh, 2011; Malmendier and Tate, 2009) shows that companies with award-winning CEOs are likely to have a strong recent stock performance. Psychological research suggests that individuals' expectations regarding the likelihood of future success is influenced by experiences of recent success, with greater attention paid to to most recent performance (Hogarth and Einhorn, 1992; Steiner and Rain, 1989). In line with this logic, Rau and Vermaelen (1998) document evidence of market extrapolation of positive past returns among low book-to-market ("glamour") firms, resulting in higher M&A announcement returns. Thus, investor extrapolation of strong recent performance among high achieved status CEOs could lead to a more positive reaction to acquisition announcements.

There are also arguments that suggest that M&A announcements made by high achieved status CEOs will result in a negative average market reaction. First, some literature argues that superior CEO status might cultivate overconfidence and can be associated with higher incidence of opportunistic activities (Kubick and Lockhart, 2017; Malmendier and Tate, 2009). While my findings do not show evidence of this perspective with respect to CEO acquisitiveness, it is possible that investors perceive award-winning executives as overconfident or opportunistic, resulting in a more negative reaction to deals announced by such CEOs.

Second, there is evidence suggesting that, even if executives with recently elevated status do not attempt a high number of acquisitions, they might overpay for the deals they engage in. Prior research argues that increases in CEO reputation

are likely to heighten shareholders' expectations regarding future performance, creating a 'burden of celebrity' among award-winning executives (Milbourn, 2003; Wade et al., 2006). In addition, high social status associated with prestigious CEO awards is likely to be accompanied by increased visibility and a substantial level of media attention, further strengthening performance pressures on high status executives. Major acquisition failures tend to be highly visible and can endanger CEO celebrity status and their position within the organisation (Gong and Guo, 2014; Lehn and Zhao, 2006). Faced with heightened performance expectations and increased media scrutiny, high status executives might be willing to pay higher premiums to avoid detrimental consequences of a failed deal. In line with this logic, Cho et al. (2016) finds that award-winning CEOs do indeed pay higher premiums in times when their performance is above or below the industry average, and this tendency is strongest in acquisitions closest to the award conferral. Higher premiums, in turn, could trigger a more negative market response to acquisition announcements if they are perceived as overbidding (Liu and Taffler, 2008).

The existing theoretical and empirical evidence therefore suggests that M&A deals announced by CEOs with elevated achieved social status have the potential to result in a positive or a negative market reaction, and it remains unclear which effect is more likely to be observed. Therefore, I investigate the role of CEO achieved social status in determining the market response to M&A announcements empirically.

**Hypothesis 1a:** *The average market response is higher for M&A deals announced by CEOs with high achieved social status compared to CEOs with lower achieved social status.*

**Hypothesis 1b:** *The average market response is lower for M&A deals announced by CEOs with high achieved social status compared to CEOs with lower achieved social status.*

The market response to M&A announcements could also vary within the ascribed status dimension. Research suggests that decisions regarding corporate acquisitions can be related to social rather than economic reasons (Haunschild, 1992, 1993; Palmer and Barber, 2001), and upper class executives with strong ties to the

core corporate elite might have the power and the incentives to engage in M&A deals that primarily suit the interest of their social networks.

Elite social background has been linked with greater ‘prestige’ power (see, for example, Chikh and Filbien, 2011), which is one of the four broad types of power identified by Finkelstein (1992)<sup>1</sup>. Managers with upper-class upbringing also tend to be more sophisticated and, as a result, more successful in using ingratiation behavior for further increasing their corporate power (Stern and Westphal, 2010). Powerful CEOs, in turn, have been shown to be more likely to appoint directors with pre-existing network ties, reducing the effectiveness of corporate governance and increasing the number of value-destroying acquisitions (Fracassi and Tate, 2012).

There is evidence that the market can recognise firms with agency problems and lower expectations about the future value potential created through acquisitions (Feito-Ruiz and Renneboog, 2017). It is therefore possible that investors would react more negatively to acquisition announcements by high ascribed status executives if such CEOs have less than optimal governance structure and incentives to engage in M&A deals for social rather than economic motives.

**Hypothesis 2:** *The average market response is lower for M&A deals announced by CEOs with high ascribed social status compared to CEOs with lower ascribed social status.*

### 3.3 Data and methodology

In order to analyse the stock market response to acquisition announcements by executives with varying status characteristics, I create a sample of M&A deals announced by S&P 500 CEOs between 1992 and 2012. I collect deal-specific data from *Thomson One Banker SDC* database, including transaction size, financing type, deal attitude, target industry and toehold. Similar to the requirements in Chapter 2, M&A deals are included if they take the form of a merger (*SDC* deal form M), an acquisition of majority interest (AM), or an acquisition of assets (AA). In addition, only transactions worth more than 5% of acquirer’s value are included in the main

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<sup>1</sup>For recent applications of Finkelstein (1992) power dimensions see, for example, Adams et al. (2005) and Chikh and Filbien (2011).

analysis, and the bidding company is required to acquire at least 51% of the target company's shares (Levi et al., 2014; Malmendier and Tate, 2008; Morck et al., 1990). The resulting sample consist of 1,612 M&A deals.

Daily stock prices are collected from *CRSP*, and the stock price reaction to each of the M&A announcements in my sample is evaluated using acquirer cumulative abnormal returns (CARs) over a three-day event window  $[-1, +1]$ . This is the most common approach adopted in related studies (Fracassi and Tate, 2012; Harford et al., 2012; Malmendier and Tate, 2008; Moeller et al., 2004, 2005). CARs are calculated as the arithmetic sum of acquirer abnormal returns from day -1 to day 1, where day 0 is the announcement day. Abnormal return for each company's common stock on each day is estimated using the market model:

$$AR_{jt} = R_{jt} - (\hat{\alpha}_j + \hat{\beta}_j R_{mt}) \quad (3.1)$$

$R_{jt}$  is the rate of return on the common stock of  $j^{th}$  firm on day  $t$ .  $R_{mt}$  is the rate of return on the *CRSP* market equal-weighted index on day  $t$ . Following Edmans (2011), the parameters  $\hat{\alpha}_j$  and  $\hat{\beta}_j$  are estimated over a 255-day period ending 46 days prior to the announcement of the deal. In additional tests, I verify that my results are robust to different event windows, using value-weighted *CRSP* market index, and using a market-adjusted model of expected returns with alpha equal to zero and beta equal to one.

I test the contribution of CEO ascribed and achieved social status to acquirer announcement CARs using the following regression specification:

$$CAR_d = \alpha + \gamma_1 Status_d + \gamma_2 Acquirer_d + \gamma_3 Deal_d + \varepsilon_d \quad (3.2)$$

$CAR_d$  is the three-day cumulative abnormal return for deal  $d$ .  $Status_d$  is the indicator of the level of social status of the acquiring firm's CEO. The status indicator is unique for ascribed social status but has five variations within the achieved status dimension. Ascribed status measure equals to one if the acquiring firm's CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to zero otherwise. Achieved status indicator equals to one if the acquir-



ing firm’s CEO has received an award within one year, two years, three years, five years or any time before the deal announcement (the five alternative indicators are modelled separately to better understand the longevity of achieved status influence).  $Acquirer_d$  and  $Deal_d$  represent a set of firm and deal-level control variables motivated by the evidence from prior studies (Moeller et al., 2004, 2005; Mulherin and Boone, 2000; Schoar, 2002). Specifically, I control for acquiring firm’s size (market capitalization two months prior to the transaction), Tobin’s Q, book leverage and industry. In addition, I control for several deal-level characteristics, including relative deal size, financing method indicators, relatedness indicator (within-industry deals), deal attitude indicator, tender offer indicator and toehold (proportion of the target firm’s shares owned by the acquirer prior to the announcement). Finally, I include binary year indicators to control for time trends, and cluster robust standard errors by the announcement date to account for cross-sectional correlation of returns.

### 3.4 Achieved status and market response to acquisitions

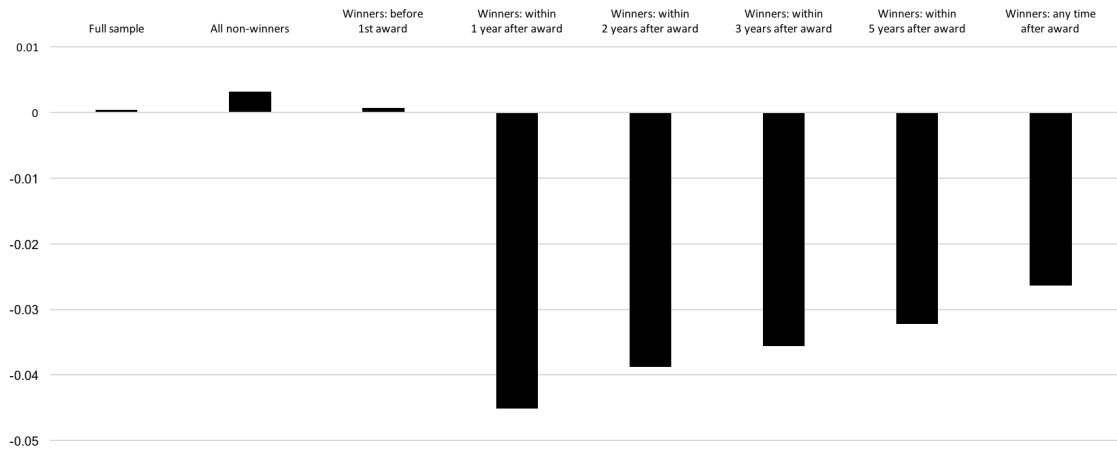
#### 3.4.1 Empirical findings

Since existing theoretical and empirical evidence provides some support for both a positive or a negative market response to M&A announcements by high achieved status CEOs, I develop two contrasting hypotheses and investigate this issue empirically. Hypothesis 1a posits that executives with elevated status will experience a more positive market reaction to acquisition announcements compared to CEOs with lower achieved social status, and Hypothesis 1b predicts lower announcement returns among executives with superior achieved status.

I begin by examining average three-day cumulative abnormal announcement returns across groups of CEOs with varying level of achieved social status. Figure 3.1 plots cumulative CARs for the full sample, non-winning executives, and award-winning CEOs before and after they experience a positive shift in achieved social status. Acquirers’ announcement returns for the full sample are negligible, averaging approximately 4 basis points and highly insignificant (probability that the mean is not different from zero is 0.81). Announcement returns among non-winners tend to be slightly positive: average CAR for this group is approximately 30 basis points

( $p$ -value $<0.10$ ). Market reaction to deals announced by award winners before they receive their first award is similar to that across the full sample of CEOs: average CAR is approximately 7 basis points and insignificant at the 10% level ( $p$ -value $>0.8$ ). In contrast, announcement returns become strikingly negative in the period after executives experience an increase in achieved social status. The negative response is most severe for deals completed within one year from winning an award (-450 basis points,  $p$ -value $<0.01$ ) and improves monotonically as the gap between award date and the deal announcement increases. However, M&A deals announced by high achieved status CEOs continue to be associated with significant value destruction for all subgroups, as evidenced by the average announcement effect of -260 basis points ( $p$ -value $<0.01$ ) for transactions completed any time after receiving an award. This trend provides initial support to Hypothesis 1b, and suggests that the negative market reaction to deals announced by high status executives might weaken when the status increase is more distant relative to the time of the acquisition, perhaps because public and media attention to award winners fades over time (Cho et al., 2016; Wade et al., 2006).

Figure 3.1: Achieved status: Average CARs



The figure displays average acquirer's cumulative abnormal returns (CARs) to M&A deals announced by CEOs with varying levels of achieved social status. CEOs are defined as having high achieved social status in the period after they win an award. CARs are calculated over a three-day event window  $[-1, +1]$  using a market model with the CRSP equal-weighted index as the proxy for market returns.

I further examine whether the significant negative market response can be related to the financing methods or the types of deals generally announced by high achieved status executives. Table 3.1 displays average three-day announcement CARs for CEOs with different status characteristics. Panel A splits acquisitions according to

the financing method, considering the differences in the usage of cash and equity offers<sup>2</sup> between various groups of CEOs, and the market reaction to deals with different financing approaches. Consistent with other related studies (see, for example, Malmendier and Tate, 2008; Moeller et al., 2005), I find that in most cases the average market response is higher for the acquirers when cash is used to finance the deal, and this effect is often attributed to equity offers emitting a negative market signal about the bidder's shares being overvalued (Moeller et al., 2004; Myers and Majluf, 1984). While the average announcement return for all deals in my sample is negligible, cash-financed acquisitions yield a significantly positive market return of 80 basis points ( $p$ -value $<0.01$ ). Deals financed with a proportion of equity, on the other hand, experience a significantly negative average stock price reaction of 50 basis points ( $p$ -value $<0.10$ ). Similarly, cash deals announced by non-winners generally yield a positive market response (110 basis points,  $p$ -value $<0.01$ ). Equity offers show a negative coefficient with negative announcement returns, although this is not significant.

Turning to award winners, I find no significant market reaction to either cash or equity M&A announcements before executives win their first award. However, following award conferral, executives with elevated achieved social status tend to complete relatively more deals financed with some portion of equity, similar to the acquisition behaviour of more powerful CEOs (Gong and Guo, 2014). Non-cash-financed acquisitions tend to have more severe value-destroying consequences, with the average announcement return ranging from -380 to -400 basis points across all high achieved status subgroups ( $p$ -value $<0.01$  in most subgroups). Cash offers made by award-winners are still associated with a negative market response, but the lower significance of announcement returns for cash-financed deals could be related to a relatively low number of such acquisitions in the examined sample (the number of cash offers is between 5 and 32 across subgroups of high achieved status CEOs).

Next, I investigate whether the negative market response for deals announced by high status CEOs could be related to the perceived deal quality. Considering the evidence of value destruction associated with diversifying acquisitions (Lam-

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<sup>2</sup>Similar to Malmendier and Tate (2008), I define cash deals as those financed with any combination of cash and debt, and stock deals as those financed with any proportion of equity.

ont and Polk, 2002; Schoar, 2002), I use diversification as a proxy for deal quality (similar to Malmendier and Tate, 2008). Panel B in Table 3.1 splits M&A deal announcements into diversifying and non-diversifying acquisitions based on whether the acquirer and the target firm are in the same macro industry. Across the full sample, announcement returns for same-industry and diversifying deals do not appear to be significantly different, and do not yield individually significant average CARs. Non-winners show some evidence of a positive market response to non-diversifying acquisitions, although it appears relatively weak (40 basis points,  $p$ -value=0.08).

Award winners tend to complete a slightly higher proportion of diversifying acquisitions before receiving their first award (36.1% of deals), compared to the acquisition behaviour across the full sample (26.1% of deals) and non-winning CEOs (25.0% of deals), but there is no significant market response to either same-industry or diversifying deals in this subgroup. However, following award conferral, executives with higher achieved social status appear to reduce the proportion of diversifying deals to be more in line with the average across other S&P 500 firms. Specifically, the proportion of diversifying deals falls to 26.1% in the first year following the increase in status and remains below 29% for all high status subgroups, suggesting that executives with high achieved social status might engage lower-risk M&A projects following a positive status shift. The market response tends to be negative and significant for both same-industry and diversifying deals, further indicating that deal quality is unlikely to explain lower announcement returns among high achieved status executives.

In order to further isolate achieved status influence from potential firm-level effects, deal and industry characteristics and the impact of deals' timing, I perform regression analysis controlling for a range of firm and deal attributes related to announcement returns, and include year and industry fixed effects. Results of these estimations are reported in Table 3.2, and the findings largely support the evidence from the univariate analysis. All achieved status indicators have negative coefficients, with four out of five models that indicate a more recent status increase reporting statistically significant results at 10% or better (Models 1-4). This pattern is consistent with the idea that high status executives are faced with increased media scrutiny and heightened performance expectations following an award, incen-

Table 3.1: Achieved status and market response to acquisition announcements: Average CARs

Panel A: Average CARs by financing method				
	Average CAR [-1, +1]			Proportion of stock-financed deals
	All deals	Cash deals	Stock deals	
Full sample	0.000 (n=1612)	0.008*** (n=665)	-0.005* (n=947)	58.7%
All non-winners	0.003* (n=1298)	0.011*** (n=540)	-0.003 (n=758)	58.4%
Award winners:				
- M&A deals before first award	0.000 (n=155)	-0.008 (n=52)	0.005 (n=103)	66.5%
- M&A deals within 1 year after award	-0.045*** (n=23)	-0.065 (n=5)	-0.040** (n=18)	78.3%
- M&A deals within 2 year after award	-0.039*** (n=42)	-0.037* (n=13)	-0.039*** (n=29)	69.0%
- M&A deals within 3 year after award	-0.036*** (n=45)	-0.029* (n=16)	-0.039*** (n=29)	64.4%
- M&A deals within 5 year after award	-0.032*** (n=61)	-0.019 (n=19)	-0.038*** (n=42)	68.9%
- M&A deals any time after award	-0.026*** (n=81)	-0.008 (n=32)	-0.038*** (n=49)	60.5%
Panel B: Average CARs by deal type				
	Average CAR [-1, +1]			Proportion of diversifying deals
	All deals	Non-diversifying	Diversifying	
Full sample	0.000 (n=1612)	0.001 (n=1191)	-0.001 (n=421)	26.1%
All non-winners	0.003* (n=1298)	0.004* (n=973)	0.001 (n=325)	25.0%
Award winners:				
- M&A deals before first award	0.000 (n=155)	-0.001 (n=99)	0.004 (n=56)	36.1%
- M&A deals within 1 year after award	-0.045*** (n=23)	-0.040** (n=17)	-0.059 (n=6)	26.1%
- M&A deals within 2 year after award	-0.039*** (n=42)	-0.034** (n=30)	-0.052*** (n=12)	28.6%
- M&A deals within 3 year after award	-0.036*** (n=45)	-0.031** (n=32)	-0.047** (n=13)	28.9%
- M&A deals within 5 year after award	-0.032*** (n=61)	-0.031*** (n=44)	-0.034** (n=17)	27.9%
- M&A deals any time after award	-0.026*** (n=81)	-0.027*** (n=59)	-0.026 (n=22)	27.2%

The table presents average acquirer's cumulative abnormal returns (CARs) to M&A deals announced by CEOs with varying levels of achieved social status. CEOs are defined as having high achieved social status in the period after they win an award. CARs are calculated over a three-day event window [-1, +1] using a market model with the CRSP equal-weighted index as the proxy for market returns. Panel A shows average CARs by deal financing method. Cash deals are financed with any combination of cash and debt. Stock deals are financed with any proportion of equity. Panel B shows average CARs by deal type. Non-diversifying deals are those where the acquirer and target firms are in the same macro industry. Diversifying deals are those where the acquirer and target firms are in different macro industries.

tivising them to potentially overpay for target firms in order to avoid detrimental consequences of a failed deal. Model 5 in Table 3.2 tests the influence of award winning on market response to acquisitions using M&A deals announced any time after award conferral. Here, the coefficient on the achieved status indicator becomes insignificant at the 10% level, suggesting that the effect of positive status shifts is not permanent and might decrease or disappear over time.

The coefficient estimates of control variables are similar to those of prior studies,

with some exceptions. Regression results confirm that cash-financed deals generally receive better market response, while the coefficient on the equity financing indicator is significantly negative (similar to the findings in Malmendier and Tate, 2008; Moeller et al., 2005). Consistent with Moeller et al. (2004), firm size is found to be significantly negatively related to the market reaction to deal announcements. In addition, the results show that within-industry deals are more favourably received by the market while large transactions reduce announcement returns.

Surprisingly, the indicator for hostile deals has a significantly positive coefficient, while the indicator for tender offers reports a significantly negative coefficient (though both are generally significant only at the 10% level). However, hostile offers account for only approximately 1.5% of deals in my sample and over half of these transactions are financed entirely through cash, which is generally associated with higher announcement returns (see, for example, Moeller et al., 2005). In addition, there were no hostile deals in my sample during the recent crisis period (last occurrence in 2005). Excluding cash-financed hostile deals (14 deals in total) results in an insignificant coefficient for hostile attitude, suggesting that this is the most likely source of the overall effect. The negative coefficient for the tender offers appears to be driven by a small number of outliers and becomes insignificant at the 10% level if one deal with extremely negative return is excluded.

Table 3.2: Achieved status and market response to acquisition announcements: Regressions

	CAR [-1, +1]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.023* (0.013)				
- M&A deals within 2 years after award		-0.022** (0.010)			
- M&A deals within 3 years after award			-0.019* (0.010)		
- M&A deals within 5 years after award				-0.017** (0.009)	
- M&A deals any time after award					-0.011 (0.008)
Firm size	-0.011*** (0.002)	-0.011*** (0.002)	-0.011*** (0.002)	-0.011*** (0.002)	-0.011*** (0.002)
Relative deal size	-0.027*** (0.006)	-0.027*** (0.006)	-0.027*** (0.006)	-0.027*** (0.006)	-0.027*** (0.006)
Tobin's Q	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Book leverage	-0.001 (0.012)	-0.001 (0.012)	-0.001 (0.012)	-0.001 (0.012)	-0.001 (0.012)
Cash financing	0.007* (0.004)	0.006* (0.004)	0.007* (0.004)	0.006* (0.004)	0.007* (0.004)
Equity financing	-0.017** (0.007)	-0.017** (0.007)	-0.017** (0.007)	-0.017** (0.007)	-0.017** (0.007)
Relatedness	0.007* (0.004)	0.007* (0.004)	0.007* (0.004)	0.007* (0.004)	0.007* (0.004)
Hostile	0.016* (0.009)	0.016* (0.009)	0.016* (0.009)	0.017* (0.009)	0.016* (0.009)
Tender offer	-0.010** (0.005)	-0.010* (0.005)	-0.010* (0.005)	-0.010* (0.005)	-0.010* (0.005)
Toehold	-0.023 (0.026)	-0.024 (0.026)	-0.024 (0.026)	-0.023 (0.026)	-0.023 (0.026)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1530	1530	1530	1530	1530
Adjusted R-squared	0.083	0.084	0.084	0.084	0.083

The table presents results from regression models testing the effect of CEO achieved social status on the announcement returns to M&A deals. The dependent variable in all models is acquirer's cumulative abnormal returns (CARs), calculated over a three-day event window [-1, +1] using a market model with the CRSP equal-weighted index as the proxy for market returns. CEOs are defined as having high achieved social status in the period after they win an award. Firm size is the log form of acquirer market capitalization two months prior to the transaction. Relative deal size is the transaction value scaled by acquirer's market capitalization two months prior to the transaction. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Book leverage is calculated as total debt divided by book assets. Cash financing equals to 1 if only cash is used to pay for the acquisition, and 0 otherwise. Equity financing equals to 1 if only equity is used to pay for the acquisition, and 0 otherwise. Relatedness equals to 1 for deals in which the acquirer and target firms are in the same macro industry, and 0 otherwise. Hostile equals to 1 if SDC regards the deal as hostile, and 0 otherwise. Tender offer equals to 1 if SDC regards the deal as a tender offer, and 0 otherwise. Toehold is the proportion of the target firm's shares owned by the acquirer before the deal announcement. All regressions include year and industry fixed effects, defined based on Fama-French 48 industries. Robust standard errors are clustered by event date to account for cross-sectional correlation of returns, and are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

### 3.4.2 Robustness

I verify that my results are robust to alternative event windows and are not sensitive to the choice of the model of expected returns. Table 3.3 provides the results of using alternative specifications for calculating acquirers' cumulative abnormal returns. For

tests reported in Panels A and B, CARs are accumulated over a 5-day and a 7-day event window, respectively. For the estimations in Panel C, abnormal returns are calculated using a market-adjusted returns model with alpha equal to zero and beta equal to one:  $AR_{jt} = R_{jt} - R_{mt}$ <sup>3</sup>. The results across all three alternative CAR specifications remain virtually identical to the main tests, with slightly higher coefficients on the achieved status indicators in tests with larger event windows.

In addition, I test whether my findings are sensitive to the chosen specification for qualifying M&A deals. Table 3.4 presents the results of testing an expanded sample of acquisition announcements that includes all deals worth more than 1% of acquirer value, as opposed to restricting the dataset to deals with the value greater than 5% of acquirer value. The findings remain qualitatively similar when smaller acquisitions are included in the sample, and hold for both the market model and the market-adjusted CARs (Panels A and B, respectively). While including a larger number of deals somewhat reduces the magnitude of the adverse impact of elevated achieved social status on announcement returns, the results remain highly significant. Lower average negative market reaction is expected when including additional smaller acquisitions as relative deal size has been shown to be negatively related to announcement returns (see Table 3.2).

The overall results presented in this section show evidence of a significantly negative market response to acquisition announcements made by executives with high achieved social status, particularly for deals announced nearer to the status increase. These findings are robust to a set of standard firm and deal-level controls, alternative specifications for the measurement of abnormal returns and an expanded sample of M&A deals, suggesting that the observed pattern is likely related to consequences of CEO status increase. Therefore, these results provide considerable support in favour of Hypothesis 1b.

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<sup>3</sup>In Panel C of Table 3.3, market-adjusted returns are accumulated over a 3-day event window. In additional tests I verify that the results are robust to using market-adjusted returns over a 5-day and a 7-day event windows. These results are reported in the Appendix in Table A.9.



Table 3.3: Robustness tests: Alternative CAR specifications

Panel A: Market model 5-day CARs					
	Market model CAR [-2, +2]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.025* (0.013)				
- M&A deals within 2 years after award		-0.022* (0.012)			
- M&A deals within 3 years after award			-0.019* (0.011)		
- M&A deals within 5 years after award				-0.017* (0.009)	
- M&A deals any time after award					-0.009 (0.009)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry and year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1530	1530	1530	1530	1530
Adjusted R-squared	0.066	0.067	0.067	0.067	0.066
Panel B: Market model 7-day CARs					
	Market model CAR [-3, +3]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.031* (0.016)				
- M&A deals within 2 years after award		-0.026* (0.013)			
- M&A deals within 3 years after award			-0.023* (0.012)		
- M&A deals within 5 years after award				-0.023** (0.010)	
- M&A deals any time after award					-0.008 (0.011)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry and year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1530	1530	1530	1530	1530
Adjusted R-squared	0.058	0.059	0.058	0.059	0.057
Panel C: Market-adjusted 3-day CARs					
	Market-adjusted CAR [-1, +1]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.023* (0.014)				
- M&A deals within 2 years after award		-0.023** (0.010)			
- M&A deals within 3 years after award			-0.020** (0.010)		
- M&A deals within 5 years after award				-0.017** (0.009)	
- M&A deals any time after award					-0.012 (0.008)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry and year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1530	1530	1530	1530	1530
Adjusted R-squared	0.073	0.074	0.073	0.073	0.072

The table presents results from regression models testing the effect of CEO achieved social status on the announcement returns to M&A deals greater than 5% of acquirer's value. CEOs are defined as having high achieved social status in the period after they win an award. All models use CRSP equal-weighted index as the proxy for market returns. Panels A and B utilise alternative event windows: CARs are calculated over a 5-day event window in Panel A and over a 7-day event window in Panel B. In Panel C, CARs are calculated over a 3-day event window using market-adjusted returns. Firm and deal controls are included in all models and are not reported for brevity. Controls include firm size, relative deal size, Tobin's Q, book leverage, cash financing indicator, equity financing indicator, deal relatedness indicator, hostile deal indicator and toehold. All regressions include year and industry fixed effects, defined based on Fama-French 48 industries. Robust standard errors are clustered by event date to account for cross-sectional correlation of returns, and are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table 3.4: Robustness tests: Alternative M&amp;A specification

Panel A: Market model 3-day CARs for M&A deals greater than 1% of acquirer value					
	Market model CAR [-1, +1]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.010 (0.007)				
- M&A deals within 2 years after award		-0.014** (0.006)			
- M&A deals within 3 years after award			-0.011** (0.005)		
- M&A deals within 5 years after award				-0.008* (0.004)	
- M&A deals any time after award					-0.006 (0.004)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	3275	3275	3275	3275	3275
Adjusted R-squared	0.044	0.046	0.045	0.045	0.044
Panel B: Market-adjusted 3-day CARs for M&A deals greater than 1% of acquirer value					
	Market-adjusted CAR [-1, +1]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.009 (0.007)				
- M&A deals within 2 years after award		-0.014** (0.006)			
- M&A deals within 3 years after award			-0.011** (0.005)		
- M&A deals within 5 years after award				-0.009** (0.004)	
- M&A deals any time after award					-0.007* (0.004)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	3275	3275	3275	3275	3275
Adjusted R-squared	0.040	0.041	0.041	0.040	0.040

The table presents results from regression models testing the effect of CEO achieved social status on the announcement returns to M&A deals greater than 1% of acquirer's value. CEOs are defined as having high achieved social status in the period after they win an award. All models use CRSP equal-weighted index as the proxy for market returns. In Panel A, CARs are calculated over a 3-day event window using a market model. In Panel B, CARs are calculated over a 3-day event window using market-adjusted returns. Firm and deal controls are included in all models and are not reported for brevity. Controls include firm size, relative deal size, Tobin's Q, book leverage, cash financing indicator, equity financing indicator, deal relatedness indicator, hostile deal indicator and toehold. All regressions include year and industry fixed effects, defined based on Fama-French 48 industries. Robust standard errors are clustered by event date to account for cross-sectional correlation of returns, and are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

### 3.5 Ascribed status and market response to acquisitions

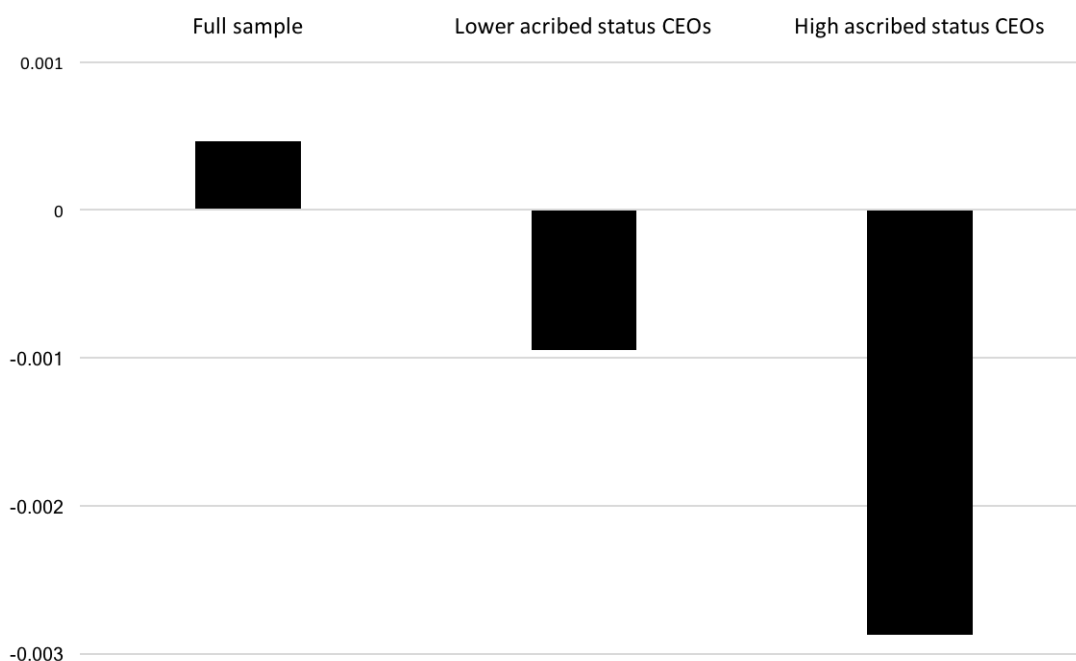
#### 3.5.1 Empirical findings

Hypothesis 2 predicts a negative market response to acquisition announcements by high ascribed status CEOs due to the likelihood of firms with such executives having less than optimal governance structure and incentives to engage in M&A

deals for social rather than economic motives. Due to the existing evidence of the market adjusting expectations for firms with agency problems (Feito-Ruiz and Renneboog, 2017), I expect investors to recognize the governance weaknesses in firms with high ascribed status executives and therefore react more negatively to acquisition announcements by such CEOs.

Figure 3.2 plots the average cumulative abnormal announcement returns for the full sample, executives with lower ascribed social status and high status CEOs. Both high and lower ascribed status CEOs appear to be associated with a slightly negative market response to deal announcements, with the average CAR among lower status executives of approximately -10 basis points, and the average CAR for acquisitions by high ascribed status CEOs of approximately -30 basis points. However, the difference between the two groups appears to be inconsiderable.

Figure 3.2: Ascribed status: Average CARs



The figure displays average acquirer's cumulative abnormal returns (CARs) to M&A deals announced by CEOs with varying levels of ascribed social status. High ascribed status CEOs are those who received a bachelor degree from one of the Ivy League or Russell Group Universities. CARs are calculated over a three-day event window  $[-1, +1]$  using a market model with the CRSP equal-weighted index as the proxy for market returns.

I summarise the average announcement returns for executives with high and lower ascribed social status in Table 3.5. In contrast to expectations, announcement returns to deals by high ascribed status CEOs do not show evidence of a negative market response, regardless of the payment method (Panel A) or the type of acqui-

sition (Panel B): across all specifications, the average CARs for deals announced by high status executives remain insignificant at the 10% level.

Table 3.5: Ascribed status and market response to acquisition announcements: Average CARs

Panel A: Average CARs by financing method				
	Average CAR [-1, +1]			Proportion of stock-financed deals
	All deals	Cash deals	Stock deals	
Full sample	0.000 (n=1612)	0.008*** (n=665)	-0.005* (n=947)	58.7%
Lower ascribed status CEOs	-0.001 (n=1162)	0.007*** (n=486)	-0.007 (n=676)	58.2%
High ascribed status CEOs	-0.003 (n=154)	-0.008 (n=62)	0.000 (n=92)	59.7%

Panel B: Average CARs by deal type				
	Average CAR [-1, +1]			Proportion of diversifying deals
	All deals	Non-diversifying	Diversifying	
Full sample	0.000 (n=1612)	0.001 (n=1191)	-0.002 (n=421)	26.1%
Lower ascribed status CEOs	-0.001 (n=1162)	-0.000 (n=857)	-0.003 (n=305)	26.2%
High ascribed status CEOs	-0.003 (n=154)	-0.003 (n=118)	-0.003 (n=36)	23.4%

The table presents average acquirer's cumulative abnormal returns (CARs) to M&A deals announced by CEOs with high and lower ascribed social status. High ascribed status CEOs are those who received a bachelor degree from one of the Ivy League or Russell Group Universities. CARs are calculated over a three-day event window [-1, +1] using a market model with the CRSP equal-weighted index as the proxy for market returns. Panel A shows average CARs by deal financing method. Cash deals are financed with any combination of cash and debt. Stock deals are financed with any proportion of equity. Panel B shows average CARs by deal type. Non-diversifying deals are those where the acquirer and target firms are in the same macro industry. Diversifying deals are those where the acquirer and target firms are in different macro industries.

I further test the potential ascribed status effect on announcement returns using regression models that control for a range of firm and deal attributes and include year and industry fixed effects. Table 3.6 presents the results, showing that the estimated coefficient on the ascribed status indicator is not significant at the 10% level across all models. These results suggest that potential agency concerns present in firms with powerful elite executives do not trigger a negative market response to deals announced by such CEOs.

### 3.5.2 Robustness

Similar to the robustness tests within the achieved status dimension, I verify that the results are similar for alternative event windows and when using a market-adjusted returns model to calculate abnormal returns. Models 2 - 6 in Table 3.6 present the results, confirming that ascribed status does not contribute to announcement returns regardless of the specification for measuring acquirer abnormal returns. I also repeat

Table 3.6: Ascribed status and market response to acquisition announcements: Regressions

	CAR [-1, +1]		CAR [-2, +2]		CAR [-3, +3]	
	[1] MM	[2] MAR	[3] MM	[4] MAR	[5] MM	[6] MAR
Ascribed status	-0.002 (0.006)	-0.002 (0.006)	0.004 (0.007)	0.006 (0.007)	0.006 (0.007)	0.008 (0.007)
Firm size	-0.013*** (0.002)	-0.012*** (0.002)	-0.014*** (0.002)	-0.013*** (0.002)	-0.015*** (0.002)	-0.014*** (0.002)
Deal size	-0.026*** (0.007)	-0.025*** (0.007)	-0.032*** (0.008)	-0.030*** (0.008)	-0.027*** (0.009)	-0.025*** (0.009)
Tobin's Q	0.001 (0.002)	0.002 (0.002)	0.001 (0.002)	0.002 (0.002)	0.000 (0.002)	0.002 (0.002)
Book leverage	-0.009 (0.016)	-0.009 (0.016)	-0.002 (0.018)	-0.001 (0.018)	-0.004 (0.021)	-0.002 (0.021)
Cash financing	0.008* (0.004)	0.009** (0.004)	0.007 (0.004)	0.008* (0.004)	0.006 (0.005)	0.007 (0.005)
Equity financing	-0.018** (0.008)	-0.015* (0.008)	-0.012 (0.009)	-0.011 (0.010)	-0.018* (0.009)	-0.017* (0.010)
Relatedness	0.004 (0.004)	0.004 (0.004)	-0.000 (0.005)	-0.000 (0.005)	-0.004 (0.006)	-0.003 (0.006)
Hostile	0.016 (0.010)	0.019* (0.010)	0.016 (0.011)	0.020* (0.011)	0.014 (0.013)	0.022 (0.014)
Tender offer	-0.012** (0.006)	-0.011** (0.005)	-0.009 (0.006)	-0.009 (0.006)	-0.017*** (0.006)	-0.018*** (0.006)
Toehold	-0.021 (0.029)	-0.019 (0.030)	-0.019 (0.040)	-0.021 (0.041)	-0.010 (0.041)	-0.016 (0.044)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	1273	1273	1273	1273	1273	1273
Adjusted R-squared	0.073	0.067	0.057	0.055	0.058	0.052

The table presents the results of regression models testing the effect of CEO ascribed status on announcement returns to M&A deals greater than 5% of acquirer value. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and 0 otherwise. The dependent variable is acquirer's cumulative abnormal returns (CARs) with varying specifications. All models use CRSP equal-weighted index as the proxy for market returns. Models 1, 3 and 5 use the market model (MM) to calculate CARs. Models 2, 4 and 6 use market-adjusted returns (MAR) to calculate CARs. Models 1 and 2 use CARs over a 3-day window; Models 3 and 4 use CARs over a 5-day window; Models 5 and 6 use CARs over a 7-day window. Firm size is the log form of acquirer market capitalization two months prior to the transaction. Relative deal size is the transaction value scaled by acquirer's market capitalization two months prior to the transaction. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Book leverage is calculated as total debt divided by book assets. Cash financing equals to 1 if only cash is used to pay for the acquisition, and 0 otherwise. Equity financing equals to 1 if only equity is used to pay for the acquisition, and 0 otherwise. Relatedness equals to 1 for deals in which the acquirer and target firms are in the same macro industry, and 0 otherwise. Hostile equals to 1 if SDC regards the deal as hostile, and 0 otherwise. Tender offer equals to 1 if SDC regards the deal as a tender offer, and 0 otherwise. Toehold is the proportion of the target firm's shares owned by the acquirer before the deal announcement. All regressions include year and industry fixed effect, defined based on Fama-French 48 industries. Robust standard errors are clustered by event date to account for cross-sectional correlation of returns, and are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

the main tests using a larger sample of M&A deals that includes smaller acquisitions worth more than 1% of acquirer value at the time of the transaction. The results of these estimations are presented in Table 3.7, providing further evidence that CEO ascribed status is unlikely to be related to M&A announcement returns.

Table 3.7: Robustness tests: Alternative M&amp;A specifications

	CAR [-1, +1]		CAR [-2, +2]		CAR [-3, +3]	
	[1] MM	[2] MAR	[3] MM	[4] MAR	[5] MM	[6] MAR
Ascribed status	0.002 (0.003)	0.001 (0.003)	0.002 (0.004)	0.002 (0.004)	0.002 (0.004)	0.002 (0.004)
Firm size	-0.007*** (0.001)	-0.006*** (0.001)	-0.008*** (0.001)	-0.008*** (0.001)	-0.009*** (0.001)	-0.008*** (0.001)
Deal size	-0.025*** (0.006)	-0.024*** (0.006)	-0.029*** (0.007)	-0.028*** (0.007)	-0.025*** (0.008)	-0.023*** (0.008)
Tobin's Q	0.001** (0.000)	0.001** (0.001)	0.000 (0.001)	0.001* (0.001)	0.000 (0.001)	0.001** (0.001)
Book leverage	-0.000 (0.009)	0.001 (0.009)	0.001 (0.011)	0.002 (0.011)	-0.003 (0.013)	0.001 (0.012)
Cash financing	0.006*** (0.002)	0.006*** (0.002)	0.006*** (0.002)	0.006** (0.002)	0.006** (0.003)	0.006* (0.003)
Equity financing	-0.008* (0.005)	-0.007 (0.005)	-0.004 (0.006)	-0.003 (0.006)	-0.005 (0.006)	-0.004 (0.006)
Relatedness	-0.001 (0.002)	-0.001 (0.002)	-0.000 (0.003)	-0.001 (0.003)	-0.002 (0.003)	-0.002 (0.003)
Hostile	0.008 (0.009)	0.010 (0.009)	0.011 (0.010)	0.014 (0.009)	0.007 (0.012)	0.014 (0.012)
Tender offer	-0.005 (0.003)	-0.005 (0.003)	-0.006 (0.004)	-0.005 (0.004)	-0.011*** (0.004)	-0.011*** (0.004)
Toehold	-0.023 (0.019)	-0.023 (0.018)	-0.021 (0.028)	-0.026 (0.028)	0.004 (0.028)	-0.007 (0.031)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	2730	2730	2730	2730	2730	2730
Adjusted R-squared	0.046	0.045	0.034	0.034	0.033	0.032

The table presents the results of regression models testing the effect of CEO ascribed status on announcement returns to M&A deals greater than 1% of acquirer value. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and 0 otherwise. The dependent variable is acquirer's cumulative abnormal returns (CARs) with varying specifications. All models use CRSP equal-weighted index as the proxy for market returns. Models 1, 3 and 5 use the market model (MM) to calculate CARs. Models 2, 4 and 6 use market-adjusted returns (MAR) to calculate CARs. Models 1 and 2 use CARs over a 3-day window; Models 3 and 4 use CARs over a 5-day window; Models 5 and 6 use CARs over a 7-day window. Firm size is the log form of acquirer market capitalization two months prior to the transaction. Relative deal size is the transaction value scaled by acquirer's market capitalization two months prior to the transaction. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Book leverage is calculated as total debt divided by book assets. Cash financing equals to 1 if only cash is used to pay for the acquisition, and 0 otherwise. Equity financing equals to 1 if only equity is used to pay for the acquisition, and 0 otherwise. Relatedness equals to 1 for deals in which the acquirer and target firms are in the same macro industry, and 0 otherwise. Hostile equals to 1 if SDC regards the deal as hostile, and 0 otherwise. Tender offer equals to 1 if SDC regards the deal as a tender offer, and 0 otherwise. Toehold is the proportion of the target firm's shares owned by the acquirer before the deal announcement. All regressions include year and industry fixed effect, defined based on Fama-French 48 industries. Robust standard errors are clustered by event date to account for cross-sectional correlation of returns, and are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

### 3.6 Discussion and conclusions

In this chapter I investigate the role of CEO social status in determining the value created through M&A announcements. I develop hypotheses by considering the complex implications of CEO social status characteristics for investor perception and expectations regarding acquisition announcements made by executives with varying

level of ascribed and achieved social status.

My findings reveal that possessing high achieved social status tends to trigger a negative market response. This results in an average value destruction of 4.5% within three days around deal announcements by executives with recently elevated status. The magnitude of the negative stock price reaction to all deals announced by high achieved status CEOs improves monotonically as the gap between status elevation and the deal announcement increases, but stock-financed acquisitions continue to trigger an average announcement return of -3.8% to -4% across all high achieved status groups. These findings are consistent with the idea that award-winning executives are faced with heightened performance expectations and increased media attention following a positive status shift, incentivising them to avoid scrutiny and preserve their status position by minimising the likelihood of a failed deal and likely overpaying for target firms. Indeed, there is evidence of higher premiums paid by celebrity CEOs following award conferral (Cho et al., 2016), and overbidding has been shown to trigger a more negative market response to acquisition announcements (Liu and Taffler, 2008).

In contrast to the strong market reaction to M&A announcements made by CEOs with elevated achieved social status, I find no evidence of a significant impact of ascribed status on announcement returns. My results suggest that possible social considerations of high ascribed status executives with regards to acquisition decisions, as well as potential agency concerns present in firms with powerful elite CEOs do not have a notable adverse effect on investor perception and expectations from deals announced by such CEOs.

My findings contribute to the research on firm value consequences of CEO personal attributes (Chatterjee and Hambrick, 2007; Fracassi and Tate, 2012; Malmendier and Tate, 2008). The evidence in this chapter is in line with the documented occurrence of higher premiums paid by executives with elevated social status (Cho et al., 2016), suggesting that social status concerns can distort CEO behaviour with regards to their acquisition decisions, resulting in adverse effects on shareholder value. These results pose important governance implications and confirm the need for a more advanced corporate governance structure that could offer a more effective supervision of CEO investment decisions in order to prevent investment distortions

and reduce the level of value-destroying acquisitions.



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## CHAPTER 4

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# CEO social status and corporate social responsibility

## 4.1 Introduction

The research on the relation between CSR and firms' financial outcomes remains inconclusive (Beurden and Gössling, 2008; Brammer and Millington, 2008; Seifert et al., 2004a), motivating a continuing investigation of factors that influence companies' decision to engage in responsible behaviours. The majority of this literature concentrates on external factors and firm-level justifications, such as building a competitive advantage (Porter and Kramer, 2006), enhancing reputation (Lin-Hi and Blumberg, 2016; Martínez-Ferrero et al., 2016), and responding to institutional and competitive pressures (Attig et al., 2016; Bertels and Pelozo, 2008; Dupire and M'Zali, 2016).

Another stream of literature considers CSR an agency problem and identifies personal benefits it can provide to the firms' executives, incentivising higher social expenditures. Existing findings suggest that CEOs can use CSR investments strategically to further their political connections (Borghesi et al., 2014), support affiliated charities (Masulis and Reza, 2015) and build beneficial ties with firm stakeholders (Cespa and Cestone, 2007). In addition, engaging in socially responsible behaviours can provide executives with private reputational benefits (Barnea and Rubin, 2010). Consistent with the agency view, there is evidence of lower CSR investments among firms with stronger governance and monitoring mechanisms (Adhikari, 2016; Cheng et al., 2013; Masulis and Reza, 2015).

Similar to the agency perspective, upper echelons literature searches for CSR determinants by considering the influence of firms' executives and the top management team. However, rather than concentrating on incentives, this stream of research investigates how managers' characteristics, values and perceptions shape CSR-related decisions of their firms. Recent evidence shows that factors such as age (Oh et al., 2016), gender (Manner, 2010), political ideology (Chin et al., 2013), hubris (Tang et al., 2015) and narcissism (Petrenko et al., 2016) can, in fact, affect firms' propensity to engage in socially responsible behaviours.

Building on insights from both agency and upper echelons perspectives, I investigate how CEO social status can affect CSR practices. The research on social constructs such as executive prestige, social status and standing within the elite

remains scarce and the majority of the studies concentrate on the performance implications of these factors. This literature tends to view CEO status as a resource that can provide companies with signalling benefits, easier access to new resources and information as well as increased organisational legitimacy, resulting in superior performance (Chen et al., 2008; D'Aveni, 1990; Hitt et al., 2001; Jian and Lee, 2011; Pollock et al., 2009).

There is less research on the strategic implications of CEO social characteristics but they are becoming increasingly recognised as important determinants of CEO risk-taking attitudes and drivers of corporate decisions. For example, Kish-Gephart and Campbell (2015) consider the lasting effects of CEO social class origins and show how these can shape individuals' risk preferences, resulting in executives from upper class exhibiting higher levels of strategic risk taking compared to their middle-class counterparts. Palmer and Barber (2001), on the other hand, argue the importance of normative expectations associated with different social class backgrounds and show how these considerations affected the likelihood of completing diversifying acquisitions in the 1960s.

I extend this literature by considering the influence of CEO social status on decisions related to socially responsible behaviours. Similar to the examination of status impact on CEO acquisitiveness, I distinguish between ascribed (inherited) and achieved (earned) social status in this analysis. These two status origins are commonly differentiated in sociological and management research due to their different underlying characteristics that likely result in varying influences on individuals' decision making (Lin, 1999; Piazza and Castellucci, 2014). Consistent with my previous methodological approach, I use the level of educational prestige to indicate high ascribed social status and employ a range prestigious business awards to indicate positive shifts in achieved social status.

Drawing on existing literature, I hypothesise that high ascribed social status can provide executives with both the motivation and the power to increase CSR to their advantage. Upper class background combined with a position of the most senior company's officer provides high ascribed status CEOs with membership within the "inner circle" of corporate elite (Domhoff, 2002; Useem, 1984). Prior research suggests that companies with strong links to the inner circle collectively share social

and reputational capital of their network, and members are likely to be encouraged to sustain a certain level of legitimacy and prestige (Kang, 2008; Sauerwald et al., 2016). The personal and professional benefits associated with being a part of this prestigious network (see, for example, D'Aveni, 1990; Flickinger et al., 2016; McDonald and Westphal, 2011) are likely to motivate high ascribed status executives to conform to the practices of this social group and preserve their standing. Since high social performance has been shown to be a powerful way to enhance companies' reputation (Creyer, 1997; Du et al., 2007), it provides an attractive way of sustaining a positive corporate image, motivating higher CSR investments among high ascribed status executives. In addition, charitable giving is often seen as a norm among the more prominent members of the elite (Galaskiewicz, 1985, 1997; Useem, 1984), and such donations can be a significant part of companies' CSR strategy. Finally, since higher status within the corporate elite can be a valuable organisational resource, such social standing can provide executives with a superior power position (Daily and Johnson, 1997; Finkelstein, 1992), making it easier for them to shape firms' CSR strategy to their advantage (Muttakin et al., 2016).

Turning to the achieved status dimension, I hypothesise that there will also be a positive relationship between this type of CEO status and corporate social performance, although there is a more diverse range of mechanisms that can link an increase in achieved social status to CSR-related decisions. On the one hand, higher pay-for-performance sensitivity among CEOs with recent status increase (Milbourn, 2003; Wade et al., 2006) might motivate them to preserve short-term profits and not invest in CSR due to its relatively long-term pay-off nature (Mahapatra, 1984; Oh et al., 2016). On the other hand, a positive shift in CEO status associated with winning an award increases media visibility and is likely to result in higher scrutiny and more diverse social demands from company stakeholders, creating pressures for CEOs to increase investment in socially responsible behaviours (Borghesi et al., 2014; Fiss and Zajac, 2006; Zyglidopoulos et al., 2012). In addition, engagement in social activities can assist high achieved status executives in preserving and promoting their own private reputation (Barnea and Rubin, 2010). On balance, the financial risks associated with investment in CSR activities appear less substantial compared to the reputational risks that high achieved status executives might face if they

decided to disengage from social activities following a positive status shift.

I test these hypotheses using a sample of CEOs from the S&P 500 companies between 1992 and 2012. Consistent with expectations, I find that both high ascribed and high achieved CEO social status are associated with superior overall social performance, and the effect of both status types on CSR remains significant after accounting for firm and CEO characteristics, as well as yearly trends. In particular, having an executive with high ascribed status results in an approximately 45% higher social performance compared to the average level of CSR among companies with lower ascribed status CEOs. Within the achieved status dimension, I find that the overall social performance increases by approximately 57% between one year before and one year after the positive status shift. I verify that the results are robust to two alternative measures of CSR, and use several approaches to ensure that the findings are not driven by endogenous firm-level characteristics.

In order to gain more insight into the ways through which high status executives adopt their CSR strategy, I further disaggregate the overall measure of CSR into its components across two dimensions. First, I examine whether the apparent increase in social performance is driven by superior social strengths or a reduction in social weaknesses. Firms are likely to have a more diverse choice of actions in increasing their positive social activities (Zyglidopoulos et al., 2012), and investment in CSR strengths has also been shown to have a more pronounced positive impact on firm performance compared to reducing social concerns (Servaes and Tamayo, 2013). However, focusing on improvement of social strengths can create a 'liability of good reputation' and might be perceived as a benefit-seeking activity rather than a genuine attempt to increase the social good (Lin-Hi and Blumberg, 2016; Lin-Hi and Müller, 2013). As a result, concentrating on prevention of irresponsible behaviour might be a more beneficial long-term strategy, and it can provide firms with a moral capital to withstand the consequences of future irresponsible behaviour (Bermiss et al., 2013; Lin-Hi and Blumberg, 2016).

Second, I analyse two separate categories of CSR based on the type of stakeholders that they target. Firms can choose to engage in social actions that directly address the needs of their primary stakeholders, such as employees and customers, or focus on social activities that are aimed at the society at large. Similar to the

varying effect from improving social strengths and reducing social concerns, the outcomes of corporate social actions can differ depending on the type of stakeholders they are aimed at. Social activities related to companies' primary stakeholders have more potential in strengthening firms' competitive advantage (Attig et al., 2016; Dupire and M'Zali, 2016), and have been shown to improve shareholder value (Hillman and Keim, 2001). On the other hand, CSR activities directed at the community and society at large appear to have substantially more value in growing firm's moral capital, which can provide insurance-like benefits in times of crisis (Godfrey et al., 2009).

I find that high achieved status executives improve their social performance primarily through a reduction in CSR concerns related to firms' primary stakeholders, and achieved status has no significant relationship with CSR strengths or social actions targeting society at large. High ascribed status CEOs, on the other hand, display a different approach for CSR activities related to the two broad types of stakeholders. These executive tend to improve social strengths associated with the primary company stakeholders, while reducing social concerns related to society at large. While the effect of ascribed and achieved CEO status on the focus of CSR strategy is different, both paths have potential to provide a balance between increasing firm financial value and strengthening the company's moral capital and responsible image.

This study makes an important contribution to several streams of literature. First, it provides theoretical and empirical contributions to the upper echelons literature by building and testing hypotheses regarding the influence of a personal CEO characteristic on corporate decision-making (see, for example, Benmelech and Frydman, 2015; Graham et al., 2013). Second, this study adds to the research on determinants and effects of CSR by providing evidence of a positive relationship between CEO social status and engagement in corporate social responsibility (see, for example, Attig et al., 2016; Moussu and Ohana, 2016; Shaukat et al., 2016). Finally, this study provides a conceptual contribution to the research on organisational implications of managerial status by bringing a sociological distinction between ascribed and achieved social status to the financial literature<sup>1</sup> (see, for example, McDonald

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<sup>1</sup>To my knowledge, the only similar examination of ascribed and achieved status in finance was published

and Westphal, 2010; Palmer and Barber, 2001).

## 4.2 Theory and hypotheses

### 4.2.1 Ascribed status and CSR

There exists an "inner circle" among senior managers of large organisations which differs from the rest of the corporate elite with respect to social and educational characteristics of its members, and the existence of this social stratification is generally recognised by corporate managers themselves (Domhoff, 2002; Useem, 1984; Useem and Karabel, 1986). CEOs with high ascribed social status are individuals who are born into elite families, and their high social class together with the achievement of the most senior managerial role provides membership within the inner circle (Domhoff, 2002; Useem, 1984).

Being part of this core elite group can provide multiple advantages, in both professional and personal domains. Members of the inner circle can get access to scarce resources, information and strategic help through valuable social ties (Galaskiewicz, 1985; McDonald and Westphal, 2010). Moreover, embeddedness within the core elite is associated with elevated social status and prestige, resulting in additional signalling benefits, because high managerial prestige tends to convey competence, credibility, trustworthiness and valuable networks (D'Aveni, 1990; Pollock et al., 2009). Finally, executives who strongly identify with the corporate elite are more likely to receive social support with regards to their personal problems (McDonald and Westphal, 2011).

Embeddedness within the inner circle can also provide its members with a superior power position within their organisation. Strong ties with the elite can be linked with higher "prestige" power (Finkelstein, 1992) which can be attributed to managers based on the value that their networks and status bring to their firms. Sources of such value can include managers' ability to acquire new resources at a lower cost (Chen et al., 2008), the signalling power of prestige (Pollock et al., 2009)

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in Lucey et al. (2013) out of my initial research in this topic. As discussed in the introduction chapter, the analysis in this thesis is a significant advance on that initial research as it incorporates a broader review of the ways in which social status can affect CEO behaviour, and addresses the unique methodological concerns related to the measurement of status influence (discussed in Malmendier and Tate (2009) and Ammann et al. (2016), among others).

as well as easier access to new information (D'Aveni, 1990). Moreover, prestigious CEOs are less likely to be penalised for deviant behaviour (D'Aveni, 1990) and their social ties can protect them from being dismissed in times of underperformance (Flickinger et al., 2016), contributing to their superior power position.

The multitude of benefits of being part of the elite network, however, comes at a price. As any social group, the corporate elite is governed by a set of norms and can exercise social pressures for members to conform (Kang and Kroll, 2014; Sauerwald et al., 2016). Members who violate normative expectations or deviate from priorities of the corporate elite can experience social sanctioning and risk losing their standing within the inner circle (Westphal and Khanna, 2003).

Members of a network are expected to share a sense of social solidarity and follow the norms of reciprocity (Sandefur and Laumann, 1998) as well as refrain from elite-threatening actions (Westphal and Khanna, 2003). As a result, directors and senior managers belonging to the core elite might be constrained with respect to their corporate practices and strategies, including board structure decisions (Westphal and Khanna, 2003) as well as acquisition behaviour (Palmer and Barber, 2001).

Normative expectations of belonging to the core elite can also influence executives' decisions regarding their firms' CSR investments. Companies with strong links to the inner circle are likely to be interlocked (Useem, 1984), with embedded directors and CEOs collectively owning the social and reputational capital of this elite network (Kang, 2008; Sauerwald et al., 2016). This can introduce reputational concerns as reputation of individual members of the network can have spillover effect on the associated firms, in positive and negative directions (Kang, 2008; Pollock et al., 2009). As a result, high ascribed status CEOs with membership within the inner circle are likely to be encouraged to sustain a certain level of legitimacy and prestige.

Engaging in CSR can be used as a means to enhance firms' image as it has been shown to be a powerful way of improving relationships with stakeholders (Du et al., 2007) as well as serve as advertisement and goodwill (Knauer, 1994). Moreover, reputational benefits from socially responsible activities have been shown to be particularly valuable during periods of crisis as firms that have accumulated positive moral capital tend to face lower stakeholder sanctions during times of reputational



threats (Godfrey, 2005; Godfrey et al., 2009; Schnietz and Epstein, 2005).

The broad reputational benefits of CSR practices can provide high ascribed status CEOs with a robust way of sustaining an acceptable level of positive corporate image, motivating higher socially responsible spending. In addition, multiple studies show that companies with senior managers with strong ties to the elite circles tend to make more charitable contributions. These include firms with more inner-circle directors (Useem, 1984), companies in cities with more gifting or tithing clubs (Navarro, 1988) as well as firms with CEOs who have ties to local philanthropic leaders (Galaskiewicz, 1985, 1997). The empirical evidence supports the argument of the institutional theory that posits that charitable giving can be considerably influenced by normative processes and social networks (Galaskiewicz, 1985, 1997). Since such contributions are among the most prominent components of CSR, this can have a significant impact in shaping companies' CSR strategy.

The combined effect of the benefits from the membership within the inner circle and the intrinsic value of the status it provides (Huberman et al., 2004) is likely to motivate CEOs that belong to the core elite to conform to the practices of this social group and preserve their standing, creating an incentive for higher CSR performance. Moreover, the superior power position associated with membership within the inner circle can help in facilitating higher CSR expenditures even if it does not benefit the company shareholders. Since high ascribed status is likely to provide executives with membership within the core elite (Domhoff, 2002; Useem, 1984), I hypothesise that high ascribed status will be associated with higher CSR.

**Hypothesis 1:** *There is a positive relationship between CEO ascribed status and corporate social responsibility.*

Despite the lack of a universal definition of CSR in academic literature, it is generally accepted that to engage in socially responsible behaviour, a firm must "further some social good, beyond the interests of the firm and that which is required by law" (McWilliams and Siegel, 2001, p.117). Drawing on this definition, companies can approach their CSR strategy in a variety of ways, and recently, there has been an increased interest in examining different dimensions of CSR in greater detail, both conceptually and empirically (see, for example, Dupire and M'Zali, 2016; Lin-Hi and

Blumberg, 2016; Wang and Berens, 2015; Zyglidopoulos et al., 2012).

One of the distinctions in CSR engagement comes from the idea that a firm can contribute to society either by increasing its positive effects (also referred to as "doing good" or CSR strengths) or by decreasing the negative ones (also referred to as "avoiding bad" or CSR concerns) (Lin-Hi and Blumberg, 2016; Lin-Hi and Müller, 2013). "Doing good" can be accomplished through activities such as charitable giving, volunteering programs and promotion of environmentally sustainable policies. "Avoiding bad" involves preventing harmful behaviours such as human rights violations, fraud and pollution.

Historically, the discussion of CSR has predominantly emphasised its positive effects (Lin-Hi and Müller, 2013), and companies have been generally showing preference for increasing their CSR through "doing good" rather than "avoiding bad", despite the fact that the former can be more costly to implement (Attig et al., 2016). This tendency is not surprising considering that increasing CSR strengths can be more beneficial to firms through its impact on firm performance (Servaes and Tamayo, 2013) and its ability to satisfy more diverse stakeholder demands (Zyglidopoulos et al., 2012). Moreover, concentrating on increasing firms' positive effects on society is likely to have a more prominent impact on strengthening a responsible image as it involves proactive decisions to contribute to the well-being of society, while decreasing the negative effects can often be viewed as actions that "any good citizen would do" (Davis, 1973, p. 313). Finally, increasing CSR strengths can be easier to implement as firms have a diverse choice of ways to further social goods while the paths to decreasing CSR concerns can be limited to the firms' particular environmental or ethical issues (Zyglidopoulos et al., 2012).

I hypothesise that the motivation behind superior CSR among executives with high ascribed status stems from the need to maintain a positive corporate image, suggesting that these CEOs will probably concentrate their CSR strategy on improving strengths rather than diminishing concerns. The additional normative expectation of higher donations among the members of the core elite is also likely to contribute to the increase in CSR strengths, leading to my second hypothesis:

**Hypothesis 2:** *Higher corporate social performance among CEOs with high ascribed status is driven by higher CSR strengths rather than lower CSR concerns.*

Another dichotomy in the CSR construct is related to the relevance of its component dimensions. Firms can choose to engage in social actions that directly address the needs of their primary stakeholders, such as employees and customers, or undertake activities that are directed at contributing to the society at large. Building on the recent work by Dupire and M'Zali (2016) and Flammer (2015), I refer to the former group of stakeholders as "core" and the latter group as "peripheral".

In his influential work on the organisation of the corporate elite in the United States, Useem (1984) describes corporate giving as a type of "social currency" used to promote class-wide interests of the inner circle. The author argues that corporations integrated into the core elite display greater commitment to culture and charitable donations, thereby promoting the common interests of the business and cultural elite. Useem (1984) also reports that corporate managers belonging to the inner circle are unlikely to reject appeals for charitable giving from other members of the network, regardless of the relevance of such contributions to the company's primary operations. Indeed, later studies provide additional empirical support for Useem's (1984) assertions, showing that firms with executives deeply embedded in elite circles make more charitable contributions (Galaskiewicz, 1985, 1997).

Useem's (1984) theory of charitable giving as a "social currency" suggests that high ascribed status executives deeply embedded in elite circles are likely to focus their social actions on issues related to the greater community rather than companies' primary stakeholders, thereby concentrating their CSR strategy on peripheral stakeholders. Therefore, my third hypothesis is as follows:

**Hypothesis 3:** *CEO ascribed status is associated with higher corporate social performance targeting peripheral stakeholders compared to corporate social performance targeting core stakeholders.*

#### **4.2.2 Achieved status and CSR**

Ascribed status and the implications of being a part of the inner circle of corporate elite provide a clear channel that links this aspect of CEO status to social performance. Considering the potential impact of an increase in achieved status on corporate social responsibility, on the other hand, unveils a more diverse range of

mechanisms that can theoretically point to both an increase or a decrease in CSR following a positive status shift.

An increase in CEO achieved social status following a prestigious business award is likely associated with greater reputation as it signals superior ability. Despite some evidence of negative consequences of CEO reputation on organisational outcomes (see, for example, Malmendier and Tate, 2009; Wade et al., 2006), it is generally viewed as a valuable resource due to the benefits it provides to the firm. In particular, D'Aveni (1990) argues that managerial prestige improves organisational legitimacy and is associated with easier access to new information. Wade et al. (2006) also note that CEO reputation increases firm's credibility with their stakeholders, including investors, employees, customers and suppliers. In addition, Pollock et al. (2009) provide evidence of a positive signalling influence of prestigious executives during IPOs, while Agarwal et al. (2011) assesses the financial value of managerial reputation and finds that firms with more reputed management are associated with lower cost of equity, higher market value, and a more persistent positive operating performance.

Regardless of the specific topic, the literature on the value of managerial reputation seems to agree that one of the most apparent and valuable effects of CEO prestige is that it generates an 'illusion of competence' (D'Aveni, 1990), whereby managerial reputation is taken as an indication of professional quality. Moreover, Hayward et al. (2004) posit that organizational achievements, and particularly financial performance, are likely to be attributed to individual leaders. These patterns of associating CEO reputation with firm performance can be particularly problematic to CEOs with greater reputation as it may not be sufficient for them to simply maintain a certain level of performance in order to preserve their status.

Indeed, several studies find evidence of higher pay-performance sensitivities among highly reputed (or celebrity) CEOs. Wade et al. (2006) use a sample of award-winning executives to examine the impact of CEO celebrity status on their pay, and find that, compared to non-winners, award-winning executives receive higher remuneration when performance is high following the award, but lower compensation when performance is low subsequent to the award. Milbourn (2003) proxies CEO reputation based on the number of press citations and finds a similar pattern of

greater pay-for-performance sensitivity among more reputed executives.

The findings provided by Milbourn (2003) and Wade et al. (2006) suggest that increases in CEO reputation are likely to heighten shareholders' expectations regarding the future performance. This results in higher standards that need to be met by celebrity CEOs in order to preserve their status, and can shift their attention from long-term goals to concentrating on short-term performance.

In their analysis of CEO career horizon problems in the context of corporate social responsibility, Oh et al. (2016) argue that executives that are more focused on short-term corporate outcomes are likely to exhibit disengagement from CSR activities. This is primarily due to the fact that social actions tend to be long-term investments that do not show immediate financial returns but can incur significant costs (Mahapatra, 1984; Orlitzky et al., 2003). While Oh et al. (2016) concentrate on how the timing of returns from CSR activities relates to CEO age, the long-term nature of social investments can also contradict the interests of highly reputed CEOs, particularly following a positive status shift. Specifically, if executives focus on the short-term performance in order to maintain their reputation, they are unlikely to engage in activities, such as CSR, that require substantial current investment without providing notable short-term value.

In addition, while the balance of literature suggests that there is a positive relationship between social and financial performance, there is still some credible evidence of a negative or a neutral link between CSR and firm performance, as well as research indicating that this relationship varies with certain firm characteristics, such as firm dynamism (Griffin and Mahon, 1997; McWilliams and Siegel, 2000; Waddock and Graves, 1997; Wang et al., 2008). These diverse and inconsistent results indicate that engagement in CSR is associated with high level of outcome uncertainty, making it a risky strategy. In turn, superior CEO status and reputation have been shown to be associated with lower risk taking, which is evident from the findings by Koh (2011) who shows that celebrity CEOs engage in more conservative accounting practices and are less likely to engage in opportunistic earnings management, and is also in line with the results of my first study that shows that award-winners decrease their M&A activities following a positive status shift.

Although, on the surface, the long term nature and uncertainty associated with

CSR engagement does not appear to be in the best interest of highly reputed CEOs, recent research indicates that highly visible award-winning CEOs might face more pressures to engage in social activities, and also outlines a range of advantages that CSR actions can provide to high status executives, including private reputational benefits as well as added value to their organisation.

First, winning an award is likely to increase media coverage for the company, resulting in higher media visibility. Fiss and Zajac (2006) investigate the role of media coverage in the adoption of strategic change and posit that more visible firms are exposed to more diverse stakeholder demands. Consistent with this argument, the authors find that firms with greater media visibility are more likely to adopt a balancing framing approach, seeking to "accommodate the diverging interests of different constituents" (Fiss and Zajac, 2006, p.1176).

Building on this line of argument, Zyglidopoulos et al. (2012) propose that media attention will be positively related to corporate social responsibility as greater visibility will induce companies to use social actions in order to meet the diverse stakeholder demands. The authors test this hypothesis using S&P500 firms between 2000 and 2004, and find that increases in media coverage are related to increases in CSR, noting that the influence appears to stem from superior CSR strengths rather than lower CSR weaknesses (Zyglidopoulos et al., 2012). A more recent study by Borghesi et al. (2014) expands the sample to include non S&P 500 firms between 1992 and 2006, and provide additional evidence of a positive relationship between media attention and CSR. These results indicate that a positive shift in CEO status and the subsequent increase in media visibility is likely to put more pressure on executives to engage in social actions.

In addition, there is research that suggests that investing in corporate social responsibility can provide insurance-like protection to firms, particularly in times of crisis. In his theoretical work on the relationship between corporate philanthropy and shareholders wealth, Godfrey (2005) argues that social actions can generate a positive 'moral capital' among stakeholders which can contribute to shareholder value by providing a buffer in times of crisis. In a subsequent empirical investigation, Godfrey et al. (2009) consider a sample of 178 negative regulatory and legal actions against firms between 1993 and 2003, and find that participation in CSR activities,

indeed, protected shareholder value during these negative events. Interestingly, the authors find that only social actions targeting peripheral stakeholders (or society at large) provided these 'insurance-like' benefits, suggesting that the value of the reputational capital from CSR activities can depend on the focus of social actions.

Since more visible firms are generally more vulnerable to crises (Zyglidopoulos et al., 2012), the insurance-like reputational benefits associated with social actions can provide substantial incentives to high status executives to engage in CSR. Moreover, if the higher pay-performance sensitivity among high status CEOs inclines them to engage in earnings management (see, for example, Malmendier and Tate, 2009), engagement in social actions can also be strategically used to attenuate the adverse perception from this practice (Martínez-Ferrero et al., 2016).

Finally, high status CEOs might be inclined to engage in CSR due to the private benefits associated with it. In particular, investment in social actions can improve executives' reputation as good citizens, and create a "warm-glow" effect since individuals contributing to public good have been shown to report higher levels of happiness and life satisfaction (Barnea and Rubin, 2010; Videras and Owen, 2006). The private reputational benefits from CSR can be particularly pronounced among high status CEOs due to the greater media coverage associated with their prestigious achievements (Borghesi et al., 2014).

Overall, the literature suggests that winning an award could potentially lead to both a decrease or an increase in CSR investments. An award-winning CEO might be motivated to decrease social activities in order to preserve short-term profits and reduce risk. On the other hand, winning an award increases media visibility, creating more pressures for CEOs to meet diverse stakeholder demands and generate a positive reputational capital for times of stress. In addition, an award-winning CEO might increase CSR activities in order to promote his own private reputation.

On balance, it appears, that the financial risks associated with higher CSR engagement are less substantial compared to the reputational risks that high status executives would face if they decided to disengage from social activities following a positive status shift. Combined with the variety of personal and professional benefits from CSR investments, it is more likely that an increase in achieved status will lead to higher rather than lower social performance.

**Hypothesis 4:** *A positive shift in CEO achieved social status results in higher corporate social performance.*

Next, I investigate the channels through which high achieved status CEOs might increase their social activities, and the first dichotomy in the CSR construct is related to the fact that overall social performance can be achieved through an increase in positive social actions or a decrease in negative social activities. In addition, research suggests that, while CSR strengths and concerns might be positively correlated as companies try to offset their negative impacts with positive proactive actions, "doing good" and "avoiding bad" should be viewed as independent constructs and modelled separately (Mattingly and Berman, 2006).

Zyglidopoulos et al. (2012) argue that firms have more freedom in increasing their social strengths since there is a diverse choice of actions that can further social goods, such as charitable giving, volunteer programs and improvements in employee benefits. On the other hand, paths to decreasing companies' negative impacts will usually be limited to the specific issues they face. Therefore, Zyglidopoulos et al. (2012) posit that investment in CSR strengths allows firms to better address the diverse stakeholder demands, making this side of social activity more attractive to firms. Indeed, the authors find that higher media scrutiny associated with greater coverage of a firm in one of the major US newspapers results in a significant increase in CSR strengths but has a neutral impact on CSR concerns.

In addition to the ability to satisfy more diverse stakeholder demands, Servaes and Tamayo (2013) find that investment in CSR strengths also has a more pronounced positive impact on firm performance compared to reducing CSR concerns. The authors argue that the reason CSR concerns are not as strongly related to firm performance is that a reduction in negative social actions is less likely to be a result of specific social efforts but rather an outcome of other organisational decisions. The higher apparent pay-off from increases in CSR strengths will likely motivate high status CEOs to focus on this side of social actions since they are faced with high performance expectations and greater pay-performance sensitivities (Milbourn, 2003; Wade et al., 2006).

Finally, investment in CSR strengths is likely to have a more prominent reputational impact and strengthen company's responsible image because positive social



actions usually involve proactive decisions to contribute to the well-being of society, while decreasing firm's negative social impacts can often be viewed as actions that "any good citizen would do" (Davis, 1973, p. 313). Following a positive shift in achieved status, CEOs who achieved recognition are incentivised to preserve their reputation and, since companies' actions are often attributed to their leaders (Hayward et al., 2004), high status executives are likely to make decisions that strengthen the image of their organisation.

Overall, investment in social strengths appears to be a more intuitive channel for high achieved status CEOs to increase their overall social performance. This side of CSR provides a more diverse choice of potential actions, has a more prominent impact on firm performance and can assist executives in building a reputation of a responsible leader. Therefore, I hypothesise that the increase in overall social performance among high achieved status CEOs will be driven through higher CSR strengths.

**Hypothesis 5:** *Higher corporate social performance among CEOs with high achieved status is driven by higher CSR strengths rather than lower CSR concerns.*

Another distinguishing factor in various CSR activities is the relevance of its component dimensions, as firms can choose to undertake activities that directly address the needs of their primary, or core, stakeholders, or engage in social actions that contribute to the society at large (Dupire and M'Zali, 2016; Flammer, 2015). Social actions targeting different groups of stakeholders can have a varying impact on the company's competitive advantage and pose distinct benefits to organisations and their leaders.

From a strategic perspective, it appears that focusing on primary stakeholders, such as employees, customers and suppliers, can have a more positive impact on the firm's overall competitive advantage. Hillman and Keim (2001) argue that investment in social actions targeting company's core stakeholders contributes to creating a better relationship with these essential stakeholder groups, and helps companies develop valuable intangible assets that can result in competitive advantage. In their empirical investigation, Hillman and Keim (2001) find support for their propositions and document that social activities related to companies' primary stakeholders lead

to improved shareholder value while social actions targeting society at large is negatively associated with shareholder wealth. Consistent with the theoretical and empirical foundations in Hillman and Keim (2001), Dupire and M'Zali (2016) find that competitive pressures tend to mainly improve social performance related to core stakeholders, while Attig et al. (2016) document that social actions targeting primary stakeholders are also more important to multinational corporations.

While, in general, the shareholder value appears to be positively related to CSR activities directed at core company stakeholders, Godfrey et al. (2009) shows how social actions aimed at the community and the society at large can provide insurance-like benefits to companies in times of crisis. In an event study of negative legal and regulatory actions against firms, the authors find that CSR investments targeting peripheral stakeholders protected shareholder value during the negative events, while activities related to firms' trading partners created no such protection. In their discussion on the mechanisms behind this pattern, Godfrey et al. (2009) argue that social performance towards firms' primary stakeholders is less likely to contribute to the company's "moral capital" as such actions create clear advantages for the firm and are viewed as less self-serving compared to activities that contribute to the greater society.

Therefore, social performance towards different groups of stakeholders appears to provide distinct advantages to companies, with core CSR activities having a generally positive impact on shareholder value and firms' competitive advantage, while peripheral CSR performance seems more valuable in times crisis. High performance expectations facing CEOs with greater achieved status are likely to concentrate their attention on the more immediate firm profitability, creating greater incentives to focus their CSR strategy on improving social performance related to the company's core stakeholders.

**Hypothesis 6:** *CEO achieved status is associated with higher corporate social performance targeting core stakeholders compared to corporate social performance targeting peripheral stakeholders.*

## 4.3 Data and methodology

### 4.3.1 Sample and data collection

The starting sample consists of yearly-rebalanced S&P 500 constituents between January 1992 and December 2012. Following prior research, I exclude utilities and financial firms<sup>2</sup> as the differences in regulatory environments in such companies are likely to limit CEOs' influence over strategic decisions such as CSR investment (Hirshleifer et al., 2012; Petrenko et al., 2016). The usable dataset is comprised of 5,080 firm-year observations from 470 companies and includes all observations for which financial and CSR information is available<sup>3</sup>.

Similar to the analysis of social status and CEO acquisitiveness, data on CEO personal characteristics, including age, tenure and gender is extracted from *Compustat ExecuComp* database. Educational background information used to indicate CEO ascribed status is collected from *Marquis Who's Who*, *Thomson One Banker*, *EDGAR listings*, *Notable Names Database*, and annual reports, where available. Award data used to indicate positive achieved status shifts is hand-collected from publications that conferred prestigious CEO awards during the sample period, including *Business Week*, *Financial World*, *Forbes*, *Industry Week*, *Chief Executive*, *Electronic Business Magazine*, *Time*, *Time & CNN*, *Harvard Business Review*, and *Morningstar.com*.

Financial variables and firm-specific characteristics are obtained from *Compustat*. These include firm size, return on assets (ROA), book leverage, R&D expenditures, advertising expenditures, capital expenditures and industry codes for all sample companies. Finally, data used to construct the measures of CSR performance is obtained from *MSCI ESG Stats* (formerly known as *Kinder, Lydenberg, Domini, and Company* or *KLD*). CSR variables used in this study are described in detail in the following section, and the description of all firm, CEO and CSR measures is also summarised in Tables A.10 and A.11 in the Appendix.

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<sup>2</sup>Utilities: SIC codes 4900 - 4999; financial firms: SIC codes 6000 - 6999.

<sup>3</sup>I expand the dataset to include observations between 1991 and 2015 within the achieved status tests in order to include data for the pre/post three year period for awards conferred at the beginning and at the end of the sample period. I am not able to expand the dataset as far as 1989 (which is three years before the first award in 1992) because KLD data coverage begins in 1991.

### 4.3.2 CSR measurement

I use data from KLD to measure corporate social responsibility performance. KLD uses a combination of government reports, financial statements, surveys and articles to provide an independent annual evaluation of firms' social performance. KLD dataset has been widely used in recent scholarly research (see, for example, Adhikari, 2016; Cahan et al., 2017; Dupire and M'Zali, 2016; Harjoto and Laksmana, 2016; Petrenko et al., 2016) and has become accepted as the standard for measurement of corporate social actions (see, for example, Chatterji et al., 2009; Mattingly and Berman, 2006).

KLD's assessment of corporate social performance is performed within seven major dimensions: community, diversity, employee relations, natural environment, human rights, product and corporate governance. Each of these dimensions includes several strength and concern subcategories that can be rated either 0 (neutral) or 1 (strength/concern present). The number of strengths and concerns varies between different dimensions and can be different from one year to another. For example, community dimension includes strength items such as support for housing, support for education and charitable giving. Community concerns include items such as investment controversies, community impact and tax disputes. The total number of annually evaluated community strengths is between two and seven throughout the sample period and the total number of community concerns is between one and four<sup>4</sup>.

Issues related to corporate governance are perceived to be separate from other CSR dimensions (Adhikari, 2016; Jian and Lee, 2015) and corporate governance has been shown to affect companies' CSR engagement (Jo and Harjoto, 2012). Therefore, I construct the measures of CSR performance based on the first six categories and use the net corporate governance rating (total corporate governance strengths minus total corporate governance concerns) as a control variable (similar to Cahan et al., 2017; Kim et al., 2012)<sup>5</sup>.

Specifically, for each firm-year observation, I first aggregate all strength and

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<sup>4</sup>Table A.13 in the Appendix presents the list of all strength and concern items for each of the seven KLD dimensions.

<sup>5</sup>While the main tests are performed with the corporate governance control, I verify that the results remain qualitatively similar if corporate governance is excluded from the model.

concern ratings across the six dimensions to arrive at annual measures of total CSR strengths and total CSR concerns. I then construct a net CSR performance variable by subtracting firm's total CSR concerns from its total CSR strengths<sup>6</sup>. I use the net CSR measure to test hypotheses related to the firms' overall social performance (Hypothesis 1 for ascribed status and Hypothesis 4 for achieved status), and employ the total CSR strengths and total CSR concerns measures in tests associated with hypotheses that distinguish between the impact of CEO status on the positive and negative dimensions of CSR (Hypothesis 2 for ascribed status and Hypothesis 5 for achieved status).

For tests associated with Hypotheses 3 and 6, I disaggregate the social performance measures described above based on the type of stakeholders that they target. Similar to Dupire and M'Zali (2016) and Flammer (2015), I consider CSR actions within the product, diversity and employee relations dimensions to affect primarily core company stakeholders, whereas CSR activities within the community, environment and human rights dimensions focus on the peripheral stakeholders. Therefore, core strengths and core concerns measures are defined as total strengths and total concerns within product, diversity and employee relations categories. Peripheral strengths and peripheral concerns variables are defined as total strengths and total concerns within community, environment and human rights categories. The net measures for core and peripheral CSR performance are calculated as total strengths minus total concerns within the respective type of CSR.

Aggregating strengths and concerns across multiple dimension of social performance might confound the potential effects of elite CEOs on the individual areas of CSR (Bouslah et al., 2013). Therefore, I perform several additional tests using separate measures of CSR strengths, CSR concerns and net CSR within each of the six individual dimensions of social performance in order to trace the specific areas of CEO status influence on firm's CSR practices.

Finally, I verify my results using two alternative measures of CSR that address the methodological limitations of the KLD dataset. In particular, since the number of evaluated strengths and concerns can differ over time, the aggregate CSR scores

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<sup>6</sup>This is a common approach to measuring CSR performance in recent studies. See, for example, Adhikari (2016) and Petrenko et al. (2016).

are not directly comparable over time. Therefore, I follow Servaes and Tamayo (2013) and supplement my analysis with additional tests using scaled proxies for CSR variables, which are calculated as aggregate strengths (concerns) within the relevant dimensions divided by the maximum possible number of strengths (concerns) within those dimensions in the given year. In addition, similar to Attig et al. (2016), I also employ industry-adjusted measures for CSR which are calculated as aggregate strengths (concerns) within the relevant dimensions minus the average CSR strengths (concerns) within the firm's industry. Table A.11 in the Appendix provides a description of all the variables used to proxy corporate social performance in this study.

### 4.3.3 Status measurement

To measure CEO social status, I follow the same approach as in the analysis of CEO acquisitiveness<sup>7</sup>. I use the level of educational prestige to indicate CEO ascribed status because elite educational background is viewed as a primary criteria for social categorisation and is likely to be indicative of upper-class upbringing (Domhoff, 1970; Karabel and Astin, 1975; McDonald and Westphal, 2010; Westphal and Khanna, 2003). Specifically, a CEO is defined as having high ascribed status if he or she received a bachelor degree from one of the Ivy League universities<sup>8</sup>, since the vast majority of CEOs in my sample received their education in the United States, and attendance at Ivy League schools has been historically associated with social elitism and selectivity<sup>9</sup> (Mullen, 2009).

I use prestigious business awards to indicate exogenous shocks to CEO achieved social status. Similar to Koh (2011) and Malmendier and Tate (2009), I only include national awards that are not subject to any constraints such as CEO age, gender or industry, assuring that they are prominent enough to affect CEO status, and any US executive has a possibility to win. The final list of publications selected based on

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<sup>7</sup>Please refer to Section 2.3 for details.

<sup>8</sup>The Ivy League includes eight members: Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, University of Pennsylvania and Yale University.

<sup>9</sup>The United Kingdom is the second most popular source of bachelor degrees in my sample and the Russell Group is considered to encompass the most elite institutions within the country. Therefore, I verify that my findings are robust to considering attendance at one of the Russell Group universities as also being indicative of high ascribed status.

these criteria includes ten sources: *Business Week*, *Financial World*, *Forbes*, *Industry Week*, *Chief Executive*, *Electronic Business Magazine*, *Time*, *Time & CNN*, *Harvard Business Review*, and *Morningstar.com*<sup>10</sup>.

## 4.4 Ascribed status and CSR

### 4.4.1 Empirical specification

I analyse the relationship between ascribed status and CSR performance using linear regression models with the following specification:

$$CSR_{ft} = \alpha + \beta_1 Status_{ft} + \beta_2 Firm_{ft-1} + \beta_3 CEO_{ft} + FixedEffects_{ft} + \varepsilon_{ft} \quad (4.1)$$

$CSR_{ft}$  is the level of CSR performance in firm  $f$  at time  $t$ , which is measured using a range of variables described in Table A.11 in the Appendix.  $Status_{ft}$  is the indicator of ascribed status which equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise.

$Firm_{ft-1}$  represents a set of firm control variables. Since larger and more profitable firms are more visible and have been shown to have a higher likelihood of engaging in CSR (see, for example, Kubik et al., 2012), I control for return on assets (ROA) and firm size, which is measured as the natural logarithm of total assets<sup>11</sup>. I also control for book leverage because constraints on available cash flows associated with higher debt might reduce firm's social spending (Adhikari, 2016), and CEOs' risk tolerance can influence their attitude toward social actions (Waddock and Graves, 1997). In addition, McWilliams and Siegel (2001) argue that there is a positive relationship between firms' social investment and their R&D and advertising expenditures. Therefore, I control for R&D intensity, measured as the ratio of R&D expenditures to total sales; and advertising intensity, measured as the ratio of advertising expenditures to total sales. Since reporting R&D and advertising

<sup>10</sup>Please refer to Table A.1 in the Appendix for more details on each of the awards.

<sup>11</sup>In recent CSR studies (see, for example, Adhikari, 2016; Attig et al., 2016; Petrenko et al., 2016), firm size is typically measured as either a natural logarithm of total assets or a natural logarithm of total sales. I use the logarithm of total assets as the main measure of firm size but verify that the results are robust to using a logarithm of total sales as a proxy for firm size.

expenditures is not mandatory, there are many observations with missing values. Following recent literature (see, for example, Dupire and M’Zali, 2016; Hirshleifer et al., 2012), I assign such observations a value of zero and keep them in the sample. Finally, corporate governance has been shown to affect engagement in social issues (Jo and Harjoto, 2012), so I include a corporate governance control measured based on firms’ net CSR rating within the corporate governance dimension (total corporate governance strengths minus total corporate governance concerns) (similar to Cahan et al., 2017; Kim et al., 2012). The above firm control variables are similar to those used in recent studies that examine the likelihood of firms’ CSR involvement (see, for example, Attig et al., 2016; Cahan et al., 2017; Dupire and M’Zali, 2016; Petrenko et al., 2016).

$CEO_{ft}$  represents a set of CEO-related control variables. Because recent research suggests that CEO career horizon problems can influence their attitude toward social activities (see, for example, Borghesi et al., 2014; Oh et al., 2016), I control for CEO age and CEO tenure, both of which are measured in years. In addition, many studies report gender differences in predicting CSR involvement (see, for example, Borghesi et al., 2014; Manner, 2010), so I control for CEO gender, using a binary indicator that equals to one if a CEO is female and equals to zero otherwise.

Finally,  $FixedEffects_{ft}$  account for time trends by including year fixed effects in all models. In addition, CSR practices could vary across industries due to differences in industry standards and competitive pressures (see, for example, Dupire and M’Zali, 2016). To account for potential inter-industry variations in social performance, I include either industry or firm fixed effects in all estimations.

I performed Cook-Weisberg tests to diagnose whether heteroskedasticity could be an issue in my estimations, and the results revealed the presence of heteroskedasticity ( $p < 0.001$ ) in my regression models. Therefore, I use robust standard errors that are corrected for heteroskedasticity, and also cluster standard errors at the individual firm level in order to account for the lack of independence among observations within a given firm throughout the sample period.

To assess the degree of potential multicollinearity in my statistical analysis, I first examined the pairwise correlations among the variables used in the regression models (see Table 4.5). The correlations appear to be generally low among the control



variables, suggesting that multicollinearity is not a particular concern. In addition, I calculated variance inflation factors (VIFs) for all of the predictor variables and found that all VIFs are below 1.5. This is outside the conventional threshold of 10 (Neter et al., 1985), providing further evidence that my analysis does not have multicollinearity issues.

Endogeneity is also a potential issue in my analysis, particularly because the estimations might suffer from omitted variables. It is possible that there are unobservable firm characteristics that affect both the likelihood of having a high ascribed status CEO and the firm's social performance. In order to account for this possibility, I include a model with a fixed effects estimator in all hypotheses testing, thus verifying that a certain trend is present within individual firms. In addition, following Attig et al. (2016), I also employ a propensity score matching procedure (using several matching methods) where firms with high ascribed status CEOs are matched with similar firms that have lower status CEOs, and the estimation is repeated within this restricted sample.

Another potential source of endogeneity is reverse causality. While the level of firm's CSR cannot directly affect the indicator of CEO's ascribed status (since it is based on past education), it is possible that elite CEOs are drawn to companies with certain social characteristics. In order to attenuate this concern and also address a potential simultaneous relationship between other independent variables and CSR, I lag all the financial variables by one period and only include observations where the CEO remains in office for the whole year. Therefore, all independent variables pre-date the dependent measures of social performance. This approach is a common response to threats of potential reverse causality in recent literature on predicting social outcomes (Dupire and M'Zali, 2016; Oh et al., 2016; Servaes and Tamayo, 2013)<sup>12</sup>.

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<sup>12</sup>Another common approach to address endogeneity concerns is through the instrumental variable (IV) estimation procedure. This two-stage approach requires an exogenous variable that is correlated with the endogenous regressor (the elite indicator in my analysis) while remaining uncorrelated with the error term in the equation of interest. While it would be beneficial to include this procedure as an additional robustness check, the potential instrumental variables that could satisfy these conditions require information regarding CEO family and I could not obtain such data.

#### 4.4.2 Univariate analysis

Figure 4.1 plots the average net CSR among firms with high and lower ascribed status CEOs in each year of the sample period. Consistent with Hypothesis 1, the overall social performance is higher among firms with high status CEOs in 19 out of 21 years. The two exceptional years are 1999 where firms with elite executives have a slightly inferior social rating, and 2012 where both subgroups are almost even in their net CSR, with a difference of 0.01. Considering the strong overall trend, these two years appear to be exceptions rather than part of a pattern. In addition, net CSR remains consistently positive among high ascribed status CEOs while companies with lower status executives exhibit negative average net CSR in years prior to 1995, suggesting that the level of their negative social impact outweighed their positive actions<sup>13</sup>. A notable spike in net CSR in both subgroups occurs between 2010 and 2012, which corresponds to the years when KLD changed a significant number of evaluated strength and concern items, suggesting that this pattern is likely to be related to the methodological changes in the KLD dataset rather than firms' social practices<sup>14</sup>. Since a similar threshold increase is apparent in both subgroups, it does not appear that the methodological changes happen to suit a particular type of firms more than the other.

Figures 4.2 and 4.3 plot the average CSR strengths and CSR concerns, respectively, among firms with high and lower ascribed status CEOs in each year of the sample period. The average CSR strengths are higher in companies with high status executives in 19 out of 21 years (same pattern as with the overall net CSR), and the average CSR concerns are generally lower among the elite, except for three years between 1994 and 1996. Hypothesis 2 posits that higher CSR performance among CEOs with high ascribed status will be driven by higher social strengths rather than lower concerns. The initial visual examination of the data shows that both higher strengths and lower concerns contribute to the superior overall social performance in firms with elite CEOs. The average difference in net CSR between the two subgroups is 0.8 across all sample years, with the positive difference in strengths

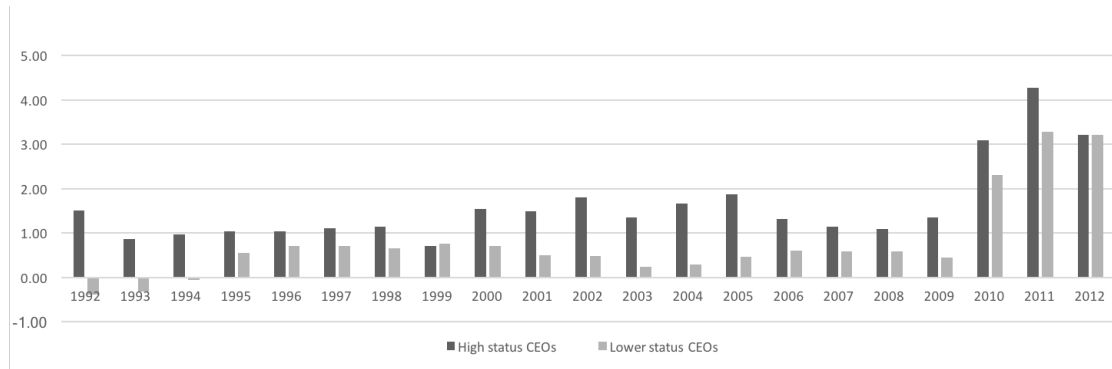
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<sup>13</sup>It is possible that this is not the case if companies with lower status CEOs engaged in positive social actions that were not evaluated by KLD at the time.

<sup>14</sup>For the full list of KLD strength and concern items evaluated within each year, please see Table A.13 in the Appendix.

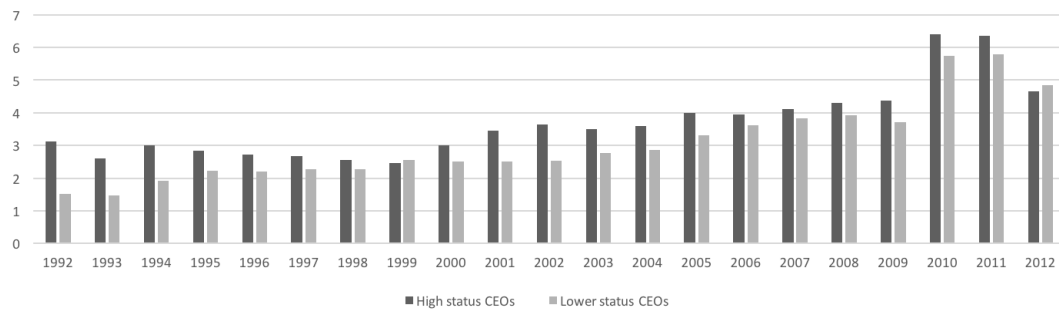
contributing 0.6 and the negative difference in concerns contributing a further 0.2. Thus, it appears that, while high status CEOs generally exhibit higher positive social performance as well as engage in less negative social actions, the former might have more weight in the overall CSR, providing some initial support to Hypothesis 2.

Figure 4.1: Net CSR by year



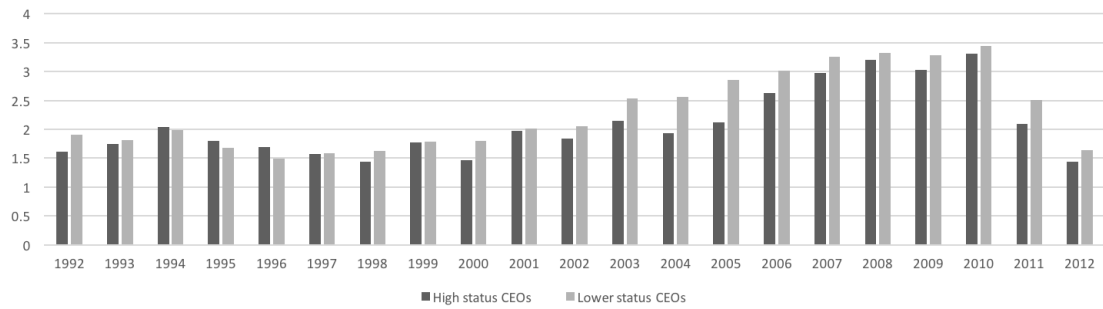
The figure displays year-by-year average net CSR for high and lower ascribed status CEOs where net CSR is calculated as the difference between CSR strengths and CSR concerns.

Figure 4.2: CSR strengths by year



The figure displays year-by-year average CSR strengths for high and lower ascribed status CEOs where the CSR strengths measure is calculated as aggregate strengths within all CSR dimensions.

Figure 4.3: CSR concerns by year



The figure displays year-by-year average CSR concerns for high and lower ascribed status CEOs where the CSR concerns measure is calculated as aggregate concerns within all CSR dimensions.

Table 4.1 presents summary statistics for the main variables used in this study. The fraction of high ascribed status CEOs remains between 10% and 19% throughout the sample period, with an average of 12%. Consistent with Hypothesis 1, all three overall CSR measures indicate a significantly higher average CSR performance among firms with high status CEOs ( $p$ -value<0.01), which is evident through both more positive social actions as well as less negative social impact. However, the medians for CSR concerns and the net measure are identical between the two groups of CEOs, while the median for CSR strengths is higher among executives with high ascribed status, suggesting that the difference in CSR strengths is less likely to be driven by outliers and indicating potential support for Hypothesis 2.

Summary statistics for the core and peripheral CSR measures show how firms with high and lower ascribed status CEOs differ in their average social performance towards different types of stakeholders. The general trend of superior social ratings among the elite remains consistent for all core and peripheral CSR variables, with the measures of strengths and net social performance being higher and the measures of social concerns being lower in firms with high ascribed status executives. However, it appears that within the core areas of CSR (those that target product, diversity and employee related issues), firms with elite CEOs are particularly strong in terms of positive social actions ( $p$ -value<0.01) while the difference in social concerns is insignificant at the 10% level. This pattern is reversed within the peripheral dimension of CSR (which includes issues related to community, environment and human rights), where high status executives seem to have superior efforts in reducing their negative social impact ( $p$ -value<0.01) while not showing a significant difference in

terms of positive social actions. Overall, the contribution from the core social actions to the aggregate measures of CSR appear to be more than double compared to the contribution from the peripheral dimensions (for example, the average core and peripheral CSR strengths, are 2.6 and 1.2, respectively). These initial insights suggest that, contrary to Hypothesis 3, high ascribed status executives might engage in more social actions targeting core stakeholders compared to peripheral stakeholders.

There is some variability between companies with high ascribed status executives and other firms in terms of firm characteristics. In particular, companies with elite CEOs appear to have slightly lower leverage ( $p\text{-value}<0.1$ ) while maintaining higher R&D and advertising intensity ( $p\text{-value}<0.5$  and  $p\text{-value}<0.01$ , respectively). On the other hand, there are no significant differences in firm size, return on assets or corporate governance between companies with elite and non-elite CEOs.

There are also significant differences in CEO personal characteristics. High ascribed status executives tend to be younger ( $p\text{-value}<0.01$ ), have a significantly longer tenure ( $p\text{-value}<0.5$ ) and are more likely to be female ( $p\text{-value}<0.01$ ). Higher average tenure among the more prominent members of the corporate elite is expected as such CEOs are likely to possess higher prestige power, which can protect them against dismissal, even in times of underperformance (Flickinger et al., 2016; Malmendier and Tate, 2009). Higher proportion of female executives among the elite is also not surprising as women are more likely to need a distinguished social status position and prestigious network connections in order to achieve a CEO position (Doldor et al., 2012). However, overall fraction of females is very low in both subgroups, ranging between 0.018 and 0.034.

The apparent differences in average firm and CEO characteristics between the two groups of companies suggest that there might be underlying unobservable differences between firms with high and lower ascribed status executives. It is therefore important to verify the evidence of the unconditional relationship between ascribed status and CSR using multivariate analysis with controls for unobservable firm characteristics (such as fixed effects estimator or propensity score matching).

Table 4.2 provides more detailed summary statistics for the aggregate CSR variables as well as individual CSR dimensions. A notable feature that emerges from the descriptive statistics is the relatively low magnitude of the means and the me-

Table 4.1: Summary statistics for high and lower ascribed status CEOs

	High ascribed status CEOs				Lower ascribed status CEOs				Difference in means
	Obs.	Mean	Median	St. Dev.	Obs.	Mean	Median	St. Dev.	$p(\text{high} - \text{low})$
<i>CSR variables</i>									
CSR net	623	1.642	1.000	3.285	4457	0.941	1.000	3.469	0.000***
CSR strengths	623	3.767	3.000	3.226	4457	3.403	2.000	3.302	0.009***
CSR concerns	623	2.125	2.000	2.001	4457	2.462	2.000	2.437	0.001***
Core CSR net	623	1.146	1.000	2.397	4457	0.747	0.000	2.331	0.000***
Core CSR strengths	623	2.559	2.000	2.224	4457	2.261	2.000	2.199	0.002***
Core CSR concerns	623	1.413	1.000	1.317	4457	1.514	1.000	1.464	0.102
Peripheral CSR net	623	0.496	0.000	1.605	4457	0.194	0.000	1.907	0.000***
Peripheral CSR strengths	623	1.209	1.000	1.475	4457	1.142	1.000	1.559	0.318
Peripheral CSR concerns	623	0.713	0.000	1.184	4457	0.949	0.000	1.517	0.000***
<i>Firm controls</i>									
Firm size	623	8.860	8.740	1.276	4457	8.877	8.800	1.151	0.732
ROA	623	0.170	0.162	0.092	4457	0.166	0.161	0.085	0.262
Leverage	623	0.218	0.207	0.144	4457	0.230	0.224	0.148	0.055*
R&D intensity	623	0.053	0.016	0.142	4457	0.044	0.011	0.080	0.016**
Advertising intensity	623	0.024	0.000	0.047	4457	0.014	0.000	0.028	0.000***
Corporate governance	623	-0.485	-1.000	0.804	4457	-0.527	-1.000	0.769	0.206
<i>CEO controls</i>									
CEO tenure	623	8.894	7.000	7.295	4457	6.645	5.000	6.155	0.029**
CEO age	623	55.811	56.000	7.356	4457	56.421	57.000	6.423	0.000***
CEO gender	623	0.034	0.000	0.181	4457	0.018	0.000	0.133	0.008***

The table provides summary statistics for the main regression variables used in this study. Sample of CEOs consists of chief executive officers from S&P 500 constituents between 1992 and 2012. Financial firms and utility companies are excluded from this study. The sample includes all firm-year observation for which a CEO was in office for the entire fiscal year. High ascribed status CEOs are those who received a bachelor degree from one of the Ivy League Universities. Please refer to Table A.11 in the Appendix for the description of CSR variables. Firm size is the natural logarithm of total assets. Leverage is calculated as total debt divided by total assets. ROA (return on assets) is calculated as operating income before depreciation divided by book assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. Corporate governance is measured as the difference between strengths and concerns within KLD's corporate governance dimension. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. The column  $p(\text{high} - \text{low})$  shows the p-values of t-tests that the differences in means between high and lower ascribed status CEOs are zero. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

dians across all the CSR variables and among both firms with high ascribed status CEOs and other sample companies. To put these values in perspective, Table 4.3 reports the annual number of strength and concern items evaluated by KLD within each dimension, as well the total number of strengths and concerns within a given year. Throughout the sample period, the overall number of strengths across all six dimensions varies between 29 and 43, with an average of 38. The specific annual values suggest that an aggregate CSR strengths score of 30 or more is potentially achievable in all years except 2012. Similarly, the overall number of concerns across all six dimensions ranges between 27 and 37, with an average of 34.

In reality, the average total CSR strengths are only 3.8 and 3.4 for firms with high and lower status CEOs, respectively, and the average total CSR concerns are 2.1 and 2.5 among high and lower status executives, respectively. The median values

are even lower, with the median for CSR concerns of 2 for both subgroups, and the median for CSR strengths of 3 and 2 for firms with high and lower status CEOs, respectively. These average figures are around ten times lower than the maximum scores that could have been achieved, suggesting that companies might not spread their social activities across many different dimensions at any given time. The pattern of relatively small average social performance is evident in other recent studies on CSR, and the mean values are even lower when firms outside of the S&P500 are included in the sample (see, for example, Adhikari, 2016; Attig et al., 2016; Borghesi et al., 2014), lending some support to the argument that smaller and less-visible firms might have lower general CSR engagement.

Table 4.2: Summary statistics for CSR variables

	High ascribed status CEOs								Lower ascribed status CEOs							
	Obs.	Mean	Min	Q1	Median	Q3	Max	St. Dev.	Obs.	Mean	Min	Q1	Median	Q3	Max	St. Dev.
CSR net	623	1.64	-7	-1	1	3	16	3.28	4457	0.94	-9	-1	1	3	18	3.47
CSR strengths	623	3.77	0	1	3	6	17	3.23	4457	3.40	0	1	2	5	21	3.30
CSR concerns	623	2.13	0	1	2	3	12	2.00	4457	2.46	0	1	2	3	15	2.44
CSR core strengths	623	1.17	0	0	1	2	7	1.31	4457	0.98	0	0	1	1	8	1.24
CSR core concerns	623	1.15	0	0	1	2	5	1.17	4457	1.21	0	0	1	2	9	1.31
CSR peripheral strengths	623	1.19	0	0	1	2	7	1.44	4457	1.10	0	0	1	2	8	1.50
CSR peripheral concerns	623	0.56	0	0	0	1	5	1.01	4457	0.78	0	0	0	1	8	1.32
CSR community strengths	623	0.58	0	0	0	1	4	0.87	4457	0.47	0	0	0	1	4	0.77
CSR diversity strengths	623	1.38	0	0	1	2	6	1.45	4457	1.28	0	0	1	2	7	1.48
CSR employee relations strengths	623	0.88	0	0	1	2	6	1.11	4457	0.77	0	0	0	1	7	1.05
CSR environment strengths	623	0.60	0	0	0	1	5	0.94	4457	0.64	0	0	0	1	5	1.05
CSR human rights strengths	623	0.02	0	0	0	0	1	0.15	4457	0.04	0	0	0	0	2	0.21
CSR product strengths	623	0.29	0	0	0	1	2	0.48	4457	0.21	0	0	0	0	3	0.45
CSR community concerns	623	0.12	0	0	0	0	2	0.33	4457	0.16	0	0	0	0	3	0.41
CSR diversity concerns	623	0.27	0	0	0	1	2	0.46	4457	0.30	0	0	0	1	2	0.51
CSR employee relations concerns	623	0.88	0	0	1	2	6	1.11	4457	0.77	0	0	0	1	7	1.05
CSR environment concerns	623	0.43	0	0	0	1	4	0.87	4457	0.61	0	0	0	1	6	1.09
CSR human rights concerns	623	0.16	0	0	0	0	2	0.41	4457	0.17	0	0	0	0	3	0.44
CSR product concerns	623	0.51	0	0	0	1	4	0.76	4457	0.54	0	0	0	1	4	0.85

The table provides summary statistics for the CSR variables used in this study, splitting the sample based on whether a firm had a CEO with high ascribed status in a given year. A CEO is identified as having high ascribed status if he or she received a bachelor degree from one of the Ivy League Universities. Please refer to Table A.11 in the Appendix for the description of CSR variables.



Table 4.3: Annual distribution of evaluated CSR strength and concern items across dimensions

	Community strengths	Community concerns	Diversity strengths	Diversity concerns	Employee rel. strengths	Employee rel. concerns	Envir. strengths	Envir. concerns	Human r. strengths	Human r. concerns	Product strengths	Product concerns	Total strengths	Total concerns
1992	4	4	7	4	10	6	9	8	0	4	5	5	35	31
1993	4	4	7	5	10	6	9	8	0	4	5	5	35	32
1994	6	4	7	5	9	6	9	8	2	7	5	5	38	35
1995	6	4	8	5	9	6	9	8	2	5	5	5	39	33
1996	6	4	8	5	9	6	8	8	1	5	5	5	37	33
1997	6	4	8	5	9	6	8	8	1	5	5	5	37	33
1998	6	4	8	5	9	7	8	8	1	6	5	5	37	35
1999	6	4	8	5	9	7	8	9	1	6	5	5	37	36
2000	6	4	8	5	9	7	8	9	2	7	5	5	38	37
2001	6	4	8	5	9	7	8	9	2	7	5	5	38	37
2002	6	4	8	5	10	7	8	9	3	6	5	5	40	36
2003	6	4	8	5	11	7	8	9	3	6	5	5	41	36
2004	6	4	8	5	11	7	8	9	3	6	5	5	41	36
2005	7	4	8	5	11	7	8	9	3	6	5	5	42	36
2006	7	4	8	5	11	7	9	9	3	6	5	5	43	36
2007	7	4	8	5	11	7	9	9	3	6	5	5	43	36
2008	7	4	8	5	11	7	9	9	3	6	5	5	43	36
2009	7	4	8	5	11	7	9	9	3	6	5	5	43	36
2010	4	1	7	4	10	5	9	9	2	5	3	5	35	29
2011	4	1	7	4	10	5	9	9	2	5	3	5	35	29
2012	2	1	4	3	9	5	9	9	2	4	3	5	29	27

The table presents annual distribution of the total number of CSR strength and concern items evaluated within each CSR dimension by KLD in a given year. Please refer to Table A.11 in the Appendix for the full list of strength and concern items evaluated by KLD.

To further investigate CSR practices of the sample companies, Table 4.4 describes engagement in different CSR dimensions by high and lower status CEOs, concentrating on positive social actions (i.e. CSR strengths). Panel A divides firm-year observations based on the number of different CSR dimensions that they engage in within a given year. Overall, 16% of firm-years are associated with no engagement in positive social activities and approximately half of the sample show CSR strengths in only one or two distinct dimensions within a particular year. This confirms that most companies do not tend to spread their social efforts across many different areas. The pattern is similar for firms with and without high ascribed status CEOs, although elite executives, on average, exhibit a slightly more diverse spread of CSR investments.

Panel B of Table 4.4 shows the proportion of firm-year observations with engagement in each CSR dimension. Approximately two thirds of the sample show some engagement in one of the core dimensions of CSR which include product, diversity and employee relations, and only one third exhibit CSR strengths within the peripheral dimensions, suggesting that most firms prioritise social actions targeting their primary stakeholders. The overall distribution of social strengths across different CSR dimensions appears to be very similar across all firms.

A quarter of observations are associated with engagement in only one CSR dimension (see Panel A), and to better understand firms' priorities regarding the direction of their social actions, I investigate the distribution of CSR engagement across different dimensions within years when firms only engage in one. Panel C presents the results, showing that the overall pattern of higher engagement in social areas targeting core stakeholders still holds. However, in this case, firms with high ascribed status CEOs show a relatively lower commitment to primary stakeholders compared to firms with non-elite CEOs. In addition, when companies concentrate on only one CSR dimension, high status executives appear to choose to invest in community strengths almost twice as much as other CEOs (15% and 8% of the time, respectively), suggesting that social actions such as charitable giving might be relatively more important to elite executives.

Table 4.5 presents a correlation matrix for the variables used in the regression analysis. Of particular interest is the significant correlation (at 1% level) between

Table 4.4: Engagement in different CSR dimensions

Panel A: Number of distinct CSR strength dimensions firms engage in within a given year							
	No engagement in CSR	Engag. in 1 dimen.	Engag. in 2 dimen.	Engag. in 3 dimen.	Engag. in 4 dimen.	Engag. in 5 dimen.	Engag. in 6 dimen.
High ascribed status CEOs	16%	17%	26%	18%	14%	8%	0%
Lower ascribed status CEOs	16%	26%	25%	17%	11%	5%	1%
Total	16%	25%	25%	17%	11%	5%	1%

Panel B: Proportion of firm-year observations with engagement in each CSR dimension						
	Community	Diversity	Employee relations	Environment	Human rights	Product
High ascribed status CEOs	17%	29%	23%	17%	1%	13%
Lower ascribed status CEOs	16%	30%	24%	18%	2%	10%
Total	17%	29%	24%	18%	2%	10%

Panel C: Proportion of firm-year observations with engagement in each CSR dimension when they only engage in one						
	Community	Diversity	Employee relations	Environment	Human rights	Product
High ascribed status CEOs	15%	42%	22%	13%	0%	7%
Lower ascribed status CEOs	8%	44%	26%	16%	0%	7%
Total	8%	43%	26%	16%	0%	7%

The table describes the engagement in different CSR dimensions (strengths only) by elite and non-elite CEOs. Panel A shows the proportion of firm-year observations where firms with high and lower ascribed status CEOs engage in zero, one, two, three, four, five or all six CSR dimensions. Panel B shows the proportion of firm-year observations with engagement in each CSR dimension. Panel C shows the proportion of firm-year observations with engagement in each CSR dimension when they only engage in one dimension within a given year.

the indicator of ascribed status and most CSR measures. Specifically, there is a positive and significant correlation between having a high status CEO and all three net measures of CSR: the overall net CSR, the core net CSR and the peripheral net CSR. There is also positive and significant correlation for two out of three CSR strengths measures: the overall CSR strengths and the core CSR strengths. Finally, there is a negative and significant correlation for two out of three CSR concerns measure: the overall CSR concerns and the peripheral CSR concerns. These patterns are consistent with the analysis of the summary statistics.

Overall, the univariate analysis provides some interesting initial insights into the social practices of firms with high ascribed status executives, compared to other companies. In particular, there is some support for Hypotheses 1 and 2 as high status CEOs show superior average CSR performance with a relatively higher contribution from superior positive actions compared to reduced negative actions. There is also evidence that can contradict Hypothesis 3 as firms with high status CEOs appear to exhibit relatively higher social performance targeting core stakeholders. However, a more detailed examination of the distribution of social activities across different dimensions shows that community-related issues might be relatively more important to the elite.

Table 4.5: Correlation matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Ascribed status	1.00																		
2	CSR net	<b>0.07</b>	1.00																	
3	CSR strengths	<b>0.04</b>	<b>0.75</b>	1.00																
4	CSR concerns	<b>-0.05</b>	<b>-0.41</b>	<b>0.29</b>	1.00															
5	Core CSR net	<b>0.06</b>	<b>0.86</b>	<b>0.70</b>	<b>-0.28</b>	1.00														
6	Core CSR strengths	<b>0.04</b>	<b>0.71</b>	<b>0.92</b>	<b>0.24</b>	<b>0.80</b>	1.00													
7	Core CSR concerns	-0.02	<b>-0.31</b>	<b>0.26</b>	<b>0.81</b>	<b>-0.40</b>	<b>0.23</b>	1.00												
8	Peripheral CSR net	<b>0.05</b>	<b>0.77</b>	<b>0.51</b>	<b>-0.41</b>	<b>0.33</b>	<b>0.31</b>	<b>-0.07</b>	1.00											
9	Peripheral CSR strengths	0.01	<b>0.58</b>	<b>0.82</b>	<b>0.29</b>	<b>0.35</b>	<b>0.53</b>	<b>0.24</b>	<b>0.64</b>	1.00										
10	Peripheral CSR concerns	<b>-0.05</b>	<b>-0.36</b>	<b>0.22</b>	<b>0.82</b>	<b>-0.06</b>	<b>0.16</b>	<b>0.33</b>	<b>-0.60</b>	<b>0.24</b>	1.00									
11	Firm size	-0.00	<b>0.10</b>	<b>0.52</b>	<b>0.57</b>	<b>0.16</b>	<b>0.47</b>	<b>0.45</b>	-0.01	<b>0.44</b>	<b>0.47</b>	1.00								
12	ROA	0.02	<b>0.13</b>	<b>0.05</b>	<b>-0.13</b>	<b>0.15</b>	<b>0.07</b>	<b>-0.13</b>	<b>0.06</b>	0.00	<b>-0.08</b>	<b>-0.16</b>	1.00							
13	Leverage	-0.03	<b>-0.08</b>	-0.02	<b>0.10</b>	<b>-0.09</b>	-0.03	<b>0.10</b>	<b>-0.04</b>	0.02	<b>0.06</b>	<b>0.17</b>	<b>-0.14</b>	1.00						
14	R&D intensity	0.03	<b>0.18</b>	<b>0.10</b>	<b>-0.12</b>	<b>0.17</b>	<b>0.14</b>	<b>-0.06</b>	<b>0.12</b>	0.02	<b>-0.13</b>	<b>-0.09</b>	<b>-0.08</b>	<b>-0.24</b>	1.00					
15	Advertising intensity	<b>0.11</b>	<b>0.19</b>	<b>0.15</b>	<b>-0.05</b>	<b>0.14</b>	<b>0.14</b>	-0.00	<b>0.17</b>	<b>0.13</b>	<b>-0.08</b>	0.00	<b>0.14</b>	-0.01	-0.03	1.00				
16	Corporate governance	0.02	<b>0.15</b>	<b>0.06</b>	<b>-0.12</b>	<b>0.10</b>	0.00	<b>-0.16</b>	<b>0.15</b>	<b>0.14</b>	<b>-0.04</b>	<b>-0.13</b>	<b>0.07</b>	0.02	<b>-0.11</b>	0.03	1.00			
17	CEO tenure	<b>0.12</b>	0.00	<b>-0.08</b>	<b>-0.11</b>	-0.01	<b>-0.07</b>	<b>-0.09</b>	0.03	<b>-0.06</b>	<b>-0.10</b>	<b>-0.08</b>	0.03	<b>-0.09</b>	0.01	<b>-0.04</b>	-0.01	1.00		
18	CEO age	-0.03	<b>-0.04</b>	<b>0.04</b>	<b>0.12</b>	-0.01	0.02	<b>0.05</b>	<b>-0.06</b>	<b>0.06</b>	<b>0.14</b>	<b>0.12</b>	0.01	<b>0.06</b>	<b>-0.13</b>	<b>-0.08</b>	<b>0.04</b>	<b>0.40</b>	1.00	
19	CEO gender	<b>0.04</b>	<b>0.14</b>	<b>0.16</b>	0.02	<b>0.15</b>	<b>0.18</b>	0.03	<b>0.07</b>	<b>0.09</b>	0.00	0.03	-0.02	<b>0.04</b>	0.00	<b>0.06</b>	0.00	<b>-0.06</b>	<b>-0.09</b>	1.00

The table presents a correlation matrix for the variables used in the regression models. Please refer to Table A.11 in the Appendix for the description of the variables. Correlation coefficients that are significant at the 1% level are reported in boldface.

#### 4.4.3 Multivariate analysis

I formalise the evidence of the unconditional relationship between ascribed status and social performance using a range of multiple regression models with different specifications. To test Hypothesis 1 and Hypothesis 2, Table 4.6 presents the main results regarding the influence of elite CEOs on the overall CSR variables that are based on all six dimensions of corporate social responsibility.

First, I test the relationship between ascribed social status and CSR using Ordinary Least Squares (OLS) regression models that include year and industry fixed effects, and the results of these estimations are reported in Models 1 - 3 of Table 4.6. Model 1 employs net CSR as the dependent variable and shows a positive and significant coefficient ( $p\text{-value} < 0.05$ ) on the ascribed status indicator. Model 2 estimates the influence of elite CEOs on the aggregate CSR strengths, and the coefficient on the ascribed status indicator is also positive and significant ( $p\text{-value} < 0.10$ ). Finally, Model 3 uses total CSR concerns as the dependent variable and reports no significant contribution ( $p\text{-value} > 0.10$ ) from CEO ascribed status in explaining this side of corporate social responsibility. Taken together, these results suggest that there is a positive link between CEO ascribed status and corporate social responsibility, and this relationship is driven by higher CSR strengths rather than lower CSR concerns.

The coefficients on the control variables are in line with findings in similar recent studies (see, for example, Attig et al., 2016; Borghesi et al., 2014; Petrenko et al., 2016) and are generally consistent with expectations. In terms of firm characteristics, I find that size, profitability, R&D and advertising intensity, and corporate governance are all positively related to CSR strengths as well as net CSR ( $p\text{-value} < 0.05$ ). In contrast, only firm size and corporate governance show a significant relationship with CSR concerns ( $p\text{-value} < 0.05$ ), and the coefficients suggest that companies' negative social actions increase with firm size and decrease with better corporate governance. The findings related to firm size are similar to those in other research that considers CSR concerns separately (Manner, 2010; Petrenko et al., 2016), and this pattern is interesting as it suggests that, perhaps, large organisations involve greater complexity or broader reach, potentially leading to higher propensity for social concerns to emerge.

There are also some significant influences from the CEO-related characteristics.

CEO gender appears to have a significant relationship with all CSR variables ( $p$ -value $<0.05$ ), with a particularly strong impact on CSR strengths and net CSR ( $p$ -value $<0.01$ ), suggesting that female executives are more likely to make socially responsible investments. The coefficient on CEO age is positive and significant in models with CSR strengths and CSR concerns ( $p$ -value $<0.10$  and  $p$ -value $<0.05$ , respectively) but is insignificant within the net CSR model ( $p$ -value $>0.10$ ). The coefficient on CEO tenure is only significant in relation to CSR concerns ( $p$ -value $<0.01$ ) and suggests that higher tenure is related to lower negative social actions.

The majority of research on predicting firms' involvement in CSR still concentrates on firm characteristics and there aren't many studies that include CEO controls in their models. Among the ones that do, the effect of gender on CSR is generally similar to that observed in my results (see, for example, Borghesi et al., 2014; Manner, 2010). Regarding the influence of CEO age and tenure, the majority of research reports either no significant relationship or a negative link between CEO age or tenure and socially responsible investments (see, for example, Borghesi et al., 2014; Manos and Drori, 2016; Oh et al., 2016). However, these studies tend to consider only the net effect of CSR or focus on the positive side of social actions (CSR strengths), making it hard to compare the findings. One exception is a study by Petrenko et al. (2016) that looks at the influence of CEO narcissism on both CSR strengths and CSR concerns, as well as the net corporate social responsibility. While the models in this study do not control for CEO tenure, they take account of CEO age and report a similar pattern of a positive relationship between CEO age and CSR concerns and no significant relationship between CEO age and the overall net CSR.

In models 4 - 6 of Table 4.6, I reestimate the specifications in models 1 - 3 with firm fixed effects. The results of these estimations look considerably different from those reported in models with industry rather than firm fixed effects. Here, the coefficient on the ascribed status indicator is positive for CSR strengths and net CSR but remains insignificant at the 10% level for both dependent variables (the coefficient in the net CSR model is approaching significance at the 10% level with  $p$ -value=0.12). In contrast, the results suggest that CEO ascribed status has a significant negative relationship with CSR concerns ( $p$ -value $<0.10$ ). The striking

difference in findings in models with firm fixed effects indicates that omitted firm variables are likely to be an important source of endogeneity in my analysis, and firms with elite CEOs might be fundamentally different compared to other companies. This suggests that the true effect of ascribed status on social performance is driven by lower CSR concerns among firms with elite CEOs rather than higher social strengths.

Taken together, the findings in Table 4.6 provide limited support for Hypothesis 1 which posits that CEO ascribed status is associated with superior overall engagement in CSR. Both net CSR models (with and without fixed firm effects) indicate an economically significant positive link between CEO ascribed status and corporate social responsibility: having an executive with elite background results in an approximate increase of 45% in net CSR compared to the base level among companies with non-elite CEOs<sup>15</sup>. However, while the coefficient on the ascribed status indicator is significant in the estimation with industry fixed effects (Model 1,  $p$ -value<0.10), it is only approaching significance at the 10% level when firm fixed effects are included in the model (Model 4,  $p$ -value=0.12).

On the other hand, testing whether higher social performance among the elite is driven by superior social strengths or reduced social concerns provides contrasting results depending on the approach. I find evidence of significantly higher CSR strengths among CEOs with elite background in models without firm effects and evidence of significantly lower CSR concerns in models that include fixed firm effects. These results suggest that CEOs with higher ascribed social status might be drawn to firms with higher CSR strengths but, once there, their influence affects social performance primarily through reducing CSR concerns. This pattern is not consistent with Hypothesis 2 which predicted the opposite effect and, overall, it appears that *firms* that attract high ascribed status CEOs are associated with superior social strengths, but the influence of *elite CEOs* is related to social concerns.

To take account of the apparent unobservable firm-level characteristics that affect both the likelihood of having an ascribed status CEO as well as social engagement practices, all further analyses are conducted utilising models with fixed firm effects. This approach helps to isolate the effect of possible omitted firm variables, and is more likely to capture the true effects of ascribed social status on CSR strategies.

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<sup>15</sup>Following Hirshleifer et al. (2012), I calculate the economic impact of status variables on CSR measures

Table 4.6: Ascribed status and CSR

	Industry fixed effects			Firm fixed effects		
	[1] CSR Net	[2] CSR Str.	[3] CSR Con.	[4] CSR Net	[5] CSR Str.	[6] CSR Con.
Ascribed status	0.540** (0.245)	0.400* (0.220)	-0.140 (0.131)	0.457 (0.291)	0.154 (0.221)	-0.302* (0.179)
Firm size	0.559*** (0.126)	1.603*** (0.106)	1.044*** (0.082)	-0.378* (0.213)	0.189 (0.142)	0.568*** (0.125)
ROA	5.395*** (1.061)	4.899*** (0.821)	-0.496 (0.678)	0.422 (0.931)	-0.181 (0.726)	-0.603 (0.600)
Leverage	-0.347 (0.726)	-0.772 (0.603)	-0.425 (0.427)	1.018 (0.622)	0.626 (0.469)	-0.392 (0.404)
R&D intensity	5.308*** (1.804)	4.404*** (1.367)	-0.904 (0.753)	0.909 (0.773)	1.001** (0.492)	0.092 (0.472)
Advertising intensity	8.803** (3.659)	7.927** (3.154)	-0.876 (1.716)	0.466 (4.201)	-1.176 (3.458)	-1.642 (2.478)
Corporate governance	0.768*** (0.116)	0.607*** (0.094)	-0.161** (0.069)	0.403*** (0.075)	0.317*** (0.064)	-0.086 (0.056)
CEO tenure	0.013 (0.014)	-0.019 (0.012)	-0.032*** (0.008)	0.005 (0.017)	-0.002 (0.015)	-0.008 (0.009)
CEO age	0.001 (0.015)	0.021* (0.012)	0.021** (0.009)	0.003 (0.015)	0.011 (0.013)	0.007 (0.009)
CEO gender	2.339*** (0.729)	2.906*** (0.682)	0.567** (0.243)	0.213 (0.408)	0.581 (0.497)	0.368 (0.296)
Industry fixed effects	Yes	Yes	Yes	No	No	No
Firm fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5080	5080	5080	5080	5080	5080
No. of firms	470	470	470	470	470	470
Adjusted R-squared	0.351	0.493	0.517	0.282	0.477	0.298

The table presents results of regression models testing the effect of CEO ascribed status on CSR ratings. Models 1 - 3 are estimated using OLS regressions with industry and year fixed effects. Models 4 - 6 are estimated using fixed effects regressions. The dependent variable in models 1 and 4 is net CSR. The dependent variable in models 2 and 5 is total CSR strengths. The dependent variable in models 3 and 6 is total CSR concerns. Please refer to Table A.11 in the Appendix for the description of CSR variables. Ascribed status indicator equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise. Firm size is the natural logarithm of total assets. ROA (return on assets) is calculated as as operating income before depreciation divided by book assets. Leverage is calculated as total debt divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. Corporate governance is measured as the difference between strengths and concerns within KLD's corporate governance dimension. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All models include year fixed effects. Industry fixed effects are defined based on Fama-French 48 industries. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

My third hypothesis posits that social actions among CEOs with high ascribed status will be focused on peripheral stakeholders (society at large) to a greater extent than the core stakeholders (such as employees and customers). To test whether this is the case, I disaggregate the overall CSR ratings based on the type of stakeholders that they target. Similar to Dupire and M'Zali (2016) and Flammer (2015), social actions within the product, diversity and employee relations dimensions are considered to belong to the core CSR, and social activities within the community, environment and human rights dimensions are included in the peripheral CSR measure.

Table 4.7 shows the results of testing the effect of CEO ascribed status on core

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as the regression coefficient on the status indicator divided by the mean in the relevant CSR measure across firms with executives that do not possess the high status characteristic.



and peripheral CSR. The coefficient on the ascribed status indicator is positive and significant in models that employ core net CSR ( $p$ -value $<0.05$ ) as well as core CSR strengths ( $p$ -value $<0.10$ ) but is insignificant at the 10% level with regards to core CSR concerns. This suggests that high ascribed status CEOs are associated with superior social performance targeting primary company stakeholders compared to executives without elite background, and this is driven primarily through greater positive social actions.

Tests in relation to the peripheral CSR, on the other hand, show that ascribed status has no significant relationship with either peripheral CSR strengths or the net peripheral CSR. In models that employ peripheral CSR concerns, the coefficient on ascribed status is negative but only approaches significance at the 10% level ( $p$ -value $=0.16$ ). These findings suggest that, to a large extent, ascribed status does not have a significant relationship with social actions targeting the society at large. However, there is limited support that CEOs with elite background might invest in reducing peripheral CSR concerns relatively more compared to lower status executives.

To gain further insight into the distribution of social initiatives across different types of stakeholders, I created several variables that measure the relative investment in core and peripheral CSR. The intuitive measure to use in this analysis is the ratio of core to peripheral CSR. However, 58% of firm-year observations in my sample have a zero value in either peripheral CSR strengths or peripheral CSR concerns. These observations would have to be dropped from the analysis, leaving a sample that might result in misrepresentation of the real pattern as it would exclude firms that do not have any investment in peripheral CSR<sup>16</sup>. Therefore, I calculate the main measure of the relative investment in core CSR as core CSR minus peripheral CSR, and this approach is applied to CSR strengths and concerns as well as the net CSR. In additional models, I still check whether the same behaviour holds when the ratio of core to peripheral CSR is used instead of the difference.

Table 4.8 shows that results of testing the effect of CEO ascribed status on the relative investment in core CSR. Models 1 - 3 use the difference between core and

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<sup>16</sup>While there are less observations with zero value for core CSR strengths and concerns, using core variables as the denominator would still eliminate approximately 30% of observations, and the resulting sample would suffer from similar misrepresentation issue.

Table 4.7: Ascribed status and core and peripheral CSR

	[1] Core Net	[2] Core Strengths	[3] Core Concerns	[4] Peripheral Net	[5] Peripheral Strengths	[6] Peripheral Concerns
Ascribed status	0.454** (0.191)	0.283* (0.150)	-0.171 (0.123)	0.002 (0.152)	-0.129 (0.119)	-0.131 (0.093)
Firm size	-0.101 (0.144)	0.102 (0.093)	0.203** (0.088)	-0.278*** (0.102)	0.087 (0.078)	0.365*** (0.068)
ROA	1.585** (0.671)	0.323 (0.524)	-1.262*** (0.479)	-1.163** (0.494)	-0.504 (0.398)	0.659** (0.277)
Leverage	0.578 (0.498)	0.496 (0.351)	-0.082 (0.355)	0.440 (0.284)	0.130 (0.254)	-0.310 (0.196)
R&D intensity	0.605 (0.543)	0.536 (0.358)	-0.069 (0.379)	0.304 (0.335)	0.465* (0.268)	0.161 (0.202)
Advertising intensity	0.750 (2.797)	-0.639 (2.050)	-1.389 (1.987)	-0.284 (2.177)	-0.537 (1.849)	-0.253 (1.072)
Corporate governance	0.139*** (0.053)	0.099** (0.043)	-0.039 (0.039)	0.264*** (0.042)	0.217*** (0.035)	-0.047 (0.029)
CEO tenure	0.008 (0.011)	0.001 (0.008)	-0.007 (0.008)	-0.003 (0.010)	-0.003 (0.008)	-0.001 (0.004)
CEO age	-0.001 (0.010)	0.006 (0.008)	0.007 (0.008)	0.004 (0.009)	0.005 (0.007)	0.001 (0.004)
CEO gender	0.144 (0.292)	0.348 (0.271)	0.205 (0.202)	0.070 (0.316)	0.233 (0.316)	0.163 (0.187)
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5080	5080	5080	5080	5080	5080
No. of firms	470	470	470	470	470	470
Adjusted R-squared	0.100	0.299	0.255	0.389	0.492	0.142

The table presents results of regression models testing the effect of CEO ascribed status on core and peripheral CSR ratings. The dependent variable in model 1 is core net CSR. The dependent variable in model 2 is core CSR strengths. The dependent variable in model 3 is core CSR concerns. The dependent variable in model 4 is peripheral net CSR. The dependent variable in model 5 is peripheral CSR strengths. The dependent variable in model 6 is peripheral CSR concerns. Please refer to Table A.11 in the Appendix for the description of CSR variables. Ascribed status indicator equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise. Firm size is the natural logarithm of total assets. ROA (return on assets) is calculated as as operating income before depreciation divided by book assets. Leverage is calculated as total debt divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. Corporate governance is measured as the difference between strengths and concerns within KLD's corporate governance dimension. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

peripheral CSR as dependent variables, while Models 4 - 6 use the ratio of core to peripheral CSR (with a reduced sample described above). The coefficient on the ascribed status indicator in Model 2 indicates a strong ( $p$ -value<0.01) positive relationship between ascribed status and the relative investment in core CSR strengths. In addition, Model 1 shows that having high ascribed status CEOs increases the overall (net) core CSR relative to the peripheral CSR ( $p$ -value<0.05). In contrast, there does not appear to be a significant difference in relative core and peripheral CSR concerns depending on the presence of an elite CEO ( $p$ -value>0.10).

Table 4.8: Ascribed status and core and peripheral CSR: Relative investment

	[1] Core-per. net CSR	[2] Core-per. CSR strengths	[3] Core-per. CSR concerns	[4] Core/per. net CSR	[5] Core/per. CSR strengths	[6] Core/per. CSR concerns
Ascribed status	0.452** (0.187)	0.413*** (0.156)	-0.039 (0.124)	-0.028 (0.213)	0.241* (0.143)	-0.174 (0.172)
Firm size	0.177 (0.130)	0.015 (0.097)	-0.162* (0.094)	-0.151 (0.108)	0.011 (0.132)	0.005 (0.098)
ROA	2.749*** (0.723)	0.827 (0.581)	-1.921*** (0.503)	-0.865 (0.832)	0.386 (0.723)	-1.816*** (0.584)
Leverage	0.138 (0.520)	0.367 (0.394)	0.229 (0.407)	1.080** (0.504)	0.367 (0.580)	0.666 (0.473)
R&D intensity	0.301 (0.465)	0.071 (0.398)	-0.230 (0.383)	-0.283 (0.766)	-0.275 (0.793)	-1.327* (0.769)
Advertising intensity	1.034 (2.735)	-0.102 (1.813)	-1.136 (2.014)	-4.383 (4.468)	4.108 (3.055)	-0.300 (3.623)
Corporate governance	-0.126** (0.059)	-0.118*** (0.045)	0.008 (0.040)	-0.064 (0.053)	-0.100* (0.051)	-0.007 (0.038)
CEO tenure	0.010 (0.011)	0.004 (0.008)	-0.006 (0.009)	0.006 (0.009)	-0.001 (0.010)	-0.008 (0.012)
CEO age	-0.005 (0.011)	0.001 (0.009)	0.006 (0.008)	0.016 (0.011)	-0.000 (0.012)	0.017 (0.011)
CEO gender	0.074 (0.452)	0.116 (0.315)	0.042 (0.253)	0.269 (0.497)	-0.074 (0.404)	-0.195 (0.322)
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5080	5080	5080	3014	2682	2173
No. of firms	470	470	470	404	368	285
Adjusted R-squared	0.148	0.163	0.102	0.050	0.143	0.145

The table presents results of regression models testing the effect of CEO ascribed status on the difference between core and peripheral CSR ratings. The dependent variable in model 1 is the difference between core and peripheral net CSR. The dependent variable in model 2 is the difference between core and peripheral CSR strengths. The dependent variable in model 3 is the difference between core and peripheral CSR concerns. The dependent variable in model 4 is the ratio of core net CSR to peripheral net CSR. The dependent variable in model 5 is the ratio of core CSR strengths to peripheral CSR strengths. The dependent variable in model 6 is the ratio of core CSR concerns to peripheral CSR concerns. Please refer to Table A.11 in the Appendix for the description of CSR variables. Ascribed status indicator equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise. Firm size is the natural logarithm of total assets. ROA (return on assets) is calculated as operating income before depreciation divided by book assets. Leverage is calculated as total debt divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. Corporate governance is measured as the difference between strengths and concerns within KLD's corporate governance dimension. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

The pattern remains similar when the ratio of core to peripheral CSR is used as dependent variable instead of the difference. However, when testing the latter, the influence of ascribed status appears to be somewhat reduced, and the coefficient on the ascribed status indicator is only significant in relation to the relative investment in core CSR strengths ( $p\text{-value}<0.10$ ). This suggests that prioritising core social investments relative to the peripheral CSR is less pronounced among CEOs with elite background across firms that exhibit some (non-zero) peripheral CSR strengths, compared to the full sample.

Overall, the findings in Tables 4.7 and 4.8 provide strong evidence to reject Hypothesis 3 which predicted a higher overall emphasis on peripheral CSR among executives with elite background. However, the results also suggest that the impact of ascribed status on firms' CSR activities is more nuanced than it might initially appear. While looking at the aggregate CSR variables across all dimensions (Table 4.6) suggests that ascribed status influences CSR through reducing negative social actions, disaggregating overall CSR measures into core and peripheral social activities (Table 4.7) shows that CEOs with elite background actually exhibit significantly higher social strengths across core CSR dimensions but might be associated with somewhat lower social concerns across peripheral CSR dimensions. In addition, considering the relative investment in core and peripheral CSR (Table 4.8) indicates that increasing positive core social actions compared to peripheral ones is relatively more pronounced among the elite, but the relative importance of peripheral concerns compared to those within core CSR dimensions is not significantly related to status. These findings lend support to the argument that considering only the aggregate measure of CSR might confound potential influences that exist in different directions and areas of social performance (see, for example, Dupire and M'Zali, 2016; Harjoto and Laksmana, 2016; Manos and Drori, 2016).

As a final step in investigating the influence of ascribed status on the focus of social investments, I examine status effects on individual CSR dimensions. Table 4.9 reports the results, showing that ascribed status loads significantly negatively on CSR concerns within community and product dimensions ( $p\text{-value}<0.10$ ) and also loads significantly positively on the net CSR measure within diversity and product components ( $p\text{-value}<0.10$ ). A significantly higher overall performance in the prod-

uct dimension and significantly lower community concerns among CEOs with high ascribed status appear to be the most consistent patterns across different models, reaffirming that, overall, social actions targeting primary company stakeholders are a priority among executives with elite background, but they also invest their efforts into reducing negative impacts towards the society at large.

Table 4.9: Ascribed status and individual CSR dimensions

Panel A: Net CSR within individual dimensions

	[1] Community net	[2] Diversity net	[3] Environment net	[4] Employee rel. net	[5] Human rights net	[6] Product net
Ascribed status	0.024 (0.092)	0.195* (0.115)	-0.027 (0.094)	0.115 (0.118)	0.005 (0.057)	0.143* (0.084)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5080	5080	5080	5080	5080	5080
No. of firms	470	470	470	470	470	470
Adjusted R-squared	0.087	0.238	0.420	0.176	0.068	0.100

Panel B: CSR strengths within individual dimensions

	[1] Community strengths	[2] Diversity strengths	[3] Environment strengths	[4] Employee rel. strengths	[5] Human rights strengths	[6] Product strengths
Ascribed status	-0.049 (0.078)	0.135 (0.096)	-0.058 (0.076)	0.127 (0.105)	-0.022 (0.016)	0.021 (0.045)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5080	5080	5080	5080	5080	5080
No. of firms	470	470	470	470	470	470
Adjusted R-squared	0.085	0.330	0.556	0.182	0.083	0.039

Panel C: CSR concerns within individual dimensions

	[1] Community concerns	[2] Diversity concerns	[3] Environment concerns	[4] Employee rel. concerns	[5] Human rights concerns	[6] Product concerns
Ascribed status	-0.073* (0.039)	-0.060 (0.043)	-0.031 (0.059)	0.011 (0.071)	-0.027 (0.056)	-0.122* (0.073)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5080	5080	5080	5080	5080	5080
No. of firms	470	470	470	470	470	470
Adjusted R-squared	0.077	0.084	0.094	0.231	0.056	0.127

The table presents results of regression models testing the effect of CEO ascribed status on social performance within individual CSR dimensions. Panel A reports results for net CSR within each of the six CSR dimensions. Panel B reports results for CSR strengths within each of the six CSR dimensions. Panel C reports results for CSR concerns within each of the six CSR dimensions. Ascribed status indicator equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise. All models include a set of firm and CEO controls that are not reported for brevity. Firm controls include firm size, ROA, leverage, R&D intensity, advertising intensity and corporate governance. CEO controls include CEO age, CEO tenure and CEO gender. Please refer to Table A.11 in the Appendix for the description of firm and CEO-related variables. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

#### 4.4.4 Robustness

I perform several additional robustness tests to verify that the findings remain consistent after controlling for methodological limitations of the KLD dataset. In particular, since KLD evaluate a varying number of strength and concern items within each dimension over time, I replicate the analysis with two alternative proxies of CSR that are robust to these changes in methodology: a scaled CSR measure that is adjusted by the maximum CSR score within each year and an industry-adjusted CSR measure that is adjusted for the average within each firm's industry. Panels A and B in Table 4.10 provide the results. The coefficient on ascribed status remains

negative and significant ( $p\text{-value}<0.10$ ) in all models that use CSR concerns as the dependent variable, and is positive and significant in one out of two models that employ net CSR as the dependent variable ( $p\text{-value}<0.10$ ). The exception within net CSR tests in Model 1 of Panel B which tests the relationship between industry-adjusted net CSR and ascribed status including fixed firm effects and the coefficient on ascribed status in this specification has the  $p$ -value of 0.12.

Panel C in Table 4.10 replicates the main tests within a restricted sample that includes observations before 2010. This cut-off point was motivated by the fact that 2010 represents the year with the greatest change in the total number of evaluated strength and concerns items across all CSR dimensions. In particular, Table 4.3 shows that the total number of strength items covered by KLD was reduced from 43 to 35, while the total number of evaluated concerns went down from 36 to 29, representing a decrease in both of approximately 19% in one year. The results in Panel C of Table 4.10 confirm that the influence of ascribed status on CSR concerns remains consistently negative and significant before 2010 ( $p\text{-value}<0.10$ ). However, the relationship between status and the net measure of CSR does not hold at the 10% level of significance.

Overall, the results in Table 4.10 confirm that the negative link between CEO ascribed status and social concerns is robust to using alternative proxies of CSR as well as restricting the sample to a more stable period in the number of social strengths and concerns evaluated by KLD.

Next, I follow the approach in Attig et al. (2016) and perform a propensity score matching procedure as a further robustness check that accounts for potential endogeneity in my estimations. This approach involves three main steps. First, I estimate a logit model in which I regress the ascribed status indicator on all the firm and CEO controls used in the main analysis. The results of the logit regression are reported in Panel A of Table 4.11 and, interestingly, there is a positive and significant coefficient on R&D intensity and advertising intensity, suggesting that there might be a link between ascribed status and corporate policies other than CSR and M&A.

In the second step, I use the coefficients obtained from the logit model to create propensity scores for all observations in the sample, and use these scores to match

Table 4.10: Robustness tests: KLD Methodology

Panel A: Scaled CSR measures			
	Fixed effects models		
	[1] Scaled CSR net	[2] Scaled CSR strengths	[3] Scaled CSR concerns
Ascribed status	0.091* (0.049)	0.024 (0.033)	-0.067* (0.038)
Firm and CEO controls	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
No. of observations	5080	5080	5080
No. of firms	470	470	470
Adjusted R-squared	0.257	0.509	0.288
Panel B: Industry-adjusted CSR measures			
	Fixed effects models		
	[1] Ind-adj. CSR net	[2] Ind-adj. CSR strengths	[3] Ind-adj. CSR concerns
Ascribed status	0.457 (0.291)	0.154 (0.221)	-0.302* (0.179)
Firm and CEO controls	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
No. of observations	5080	5080	5080
No. of firms	470	470	470
Adjusted R-squared	0.282	0.477	0.298
Panel C: Ascribed status and CSR before 2010			
	Fixed effects models		
	[1] CSR net	[2] CSR strengths	[3] CSR concerns
Ascribed status	0.439 (0.334)	0.101 (0.251)	-0.338* (0.199)
Firm and CEO controls	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes
Industry fixed effects	No	No	No
Year fixed effects	Yes	Yes	Yes
No. of observations	3770	3770	3770
No. of firms	415	415	415
Adjusted R-squared	0.039	0.335	0.292

The table presents results of robustness tests related to measuring the effect of CEO ascribed status on CSR. Panel A reports results of regression models using scaled CSR measures as dependent variables. Panel B provides results of regression models using industry-adjusted CSR measures as dependent variables. Panel C reports results of regression models using only observations before 2010. Please refer to Table A.11 in the Appendix for the definition of CSR variables. Ascribed status indicator equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise. All models include a set of firm and CEO controls that are not reported for brevity. Firm controls include firm size, ROA, leverage, R&D intensity, advertising intensity and corporate governance. CEO controls include CEO age, CEO tenure and CEO gender. Please refer to Table A.10 in the Appendix for the description of firm and CEO-related variables. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

each observation that is associated with a high ascribed status CEO (ascribed status indicator = 1) to an observation that is not (ascribed status indicator = 0). I use three different matching methods (one-to-one, k-nearest neighbours and kernel) with two specifications in each, and restrict the maximum propensity score difference to be within 0.5 (capiper = 0.5).

The final step is replicating the main analysis within the resulting restricted propensity score matched samples. Panel B in Table 4.11 reports the results, showing that ascribed status loads significantly negatively on the measure of CSR concerns



independently of the matching method ( $p < 0.05$  in three models and  $p < 0.10$  in the other three models). However, similar to findings in other robustness tests, the link between ascribed status and net CSR does not appear as consistent, with only one out of six models reporting a significant coefficient on the indicator of ascribed status.

Table 4.11: Robustness tests: Propensity score matching

Panel A: Logit regression

	Ascribed status
Firm size	0.164 (0.129)
ROA	0.485 (1.411)
Leverage	-0.574 (0.809)
R&D intensity	2.732*** (0.981)
Advertising intensity	10.293*** (3.665)
Corporate governance	0.061 (0.119)
CEO tenure	0.079*** (0.020)
CEO age	-0.051** (0.024)
CEO gender	0.597 (0.908)
Industry fixed effects	Yes
Year fixed effects	Yes
No. of observations	4685
No. of firms	429
Pseudo R-squared	4685

Panel B: Propensity-score matching

Matching method	Outcome = CSR net	Outcome = CSR strengths	Outcome = CSR concerns
<u>One-to-one</u>			
Without replacement	0.754 (0.474)	0.190 (0.335)	-0.563* (0.335)
With replacement	0.677 (0.530)	-0.020 (0.365)	-0.698* (0.400)
<u>k-nearest neighbours</u>			
Nearest neighbours (n=5)	0.514 (0.339)	0.049 (0.258)	-0.465** (0.230)
Nearest neighbours (n=10)	0.519 (0.333)	0.077 (0.244)	-0.442** (0.206)
<u>Kernel</u>			
Gaussian kernel	0.546* (0.295)	0.224 (0.219)	-0.323* (0.187)
Epanechnikov kernel	0.614 (0.318)	0.212 (0.240)	-0.402** (0.188)

The table presents results of the propensity score matching procedure. Panel A reports results of a logit model in which an indicator of ascribed status is regressed on firm and CEO controls, and includes year and industry fixed effects. Firm controls include firm size, ROA, leverage, R&D intensity, advertising intensity and corporate governance. CEO controls include CEO age, CEO tenure and CEO gender. Please refer to Table A.10 in the Appendix for the description of firm and CEO-related variables. Panel B shows the results of regression models testing the effect of ascribed status on CSR measures in propensity score matched samples obtained based on different matching methods. All models include a set of firm and CEO controls as well as year and industry fixed effects. Industry fixed effects are defined based on Fama-French 48 industries. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Finally, a potential concern of using attendance at one of the Ivy League universities as an indicator of CEO ascribed status is that the observed relationship

could be a result of receiving a better education rather than possessing superior social standing. Ivy League schools are considered to be among the best educational institutions in the world<sup>17</sup>, and higher quality education could potentially influence executives' decisions regarding socially responsible investments.

To test whether education quality might be driving the results, I repeat the main tests from Table 4.6 with an additional variable that indicates firms with well-educated CEOs who attended one the world's top 100 universities (excluding Ivy League schools). Table 4.12 provides the results and shows that attendance at prestigious Ivy League and other world's top 100 universities exhibit a similar pattern in relation to various measures of CSR. However, the coefficient on a degree from a top 100 world university remains insignificant at the 10% level across all models. The coefficient on a degree from one of the Ivy League schools, on the other hand, is significantly related to CSR concerns ( $p\text{-value} < 0.05$ ), confirming that the relationship between elite background and social concerns found in this paper is more likely to be driven by the status aspects associated with attending an Ivy League school rather than education quality.

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<sup>17</sup>According to the Times Higher Education World University Ranking, available at <http://www.timeshigher education.co.uk/world-university-rankings/2012-13/world-ranking>.

Table 4.12: Robustness tests: Ascribed status vs. education quality

	Fixed effects models		
	[1] CSR Net	[2] CSR Strengths	[3] CSR Concerns
Ascribed status	0.552* (0.283)	0.197 (0.217)	-0.355* (0.187)
Degree from top 100 world univ.	0.286 (0.201)	0.127 (0.165)	-0.159 (0.136)
Firm size	-0.365* (0.212)	0.195 (0.141)	0.560*** (0.125)
ROA	0.432 (0.933)	-0.176 (0.727)	-0.609 (0.600)
Leverage	1.029* (0.620)	0.631 (0.468)	-0.398 (0.403)
R&D intensity	0.915 (0.775)	1.004** (0.491)	0.088 (0.473)
Advertising intensity	0.623 (4.143)	-1.106 (3.436)	-1.729 (2.467)
Corporate governance	0.401*** (0.075)	0.316*** (0.064)	-0.085 (0.056)
CEO tenure	0.005 (0.017)	-0.002 (0.015)	-0.007 (0.009)
CEO age	0.005 (0.015)	0.011 (0.013)	0.007 (0.009)
CEO gender	0.189 (0.426)	0.571 (0.503)	0.381 (0.298)
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
No. of observations	5080	5080	5080
No. of firms	470	470	470
Adjusted R-squared	0.283	0.477	0.299

The table presents results of regression models testing the effect of CEO ascribed status on CSR ratings, including a control for education quality. Ascribed status indicator equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise. Degree from a top 100 world university is a dummy variable that equals to one if a CEO has received a bachelor degree from one of the world's top 100 universities excluding Ivy League schools, and equals to 0 otherwise. Firm size is the natural logarithm of total assets. ROA (return on assets) is calculated as as operating income before depreciation divided by book assets. Leverage is calculated as total debt divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. Corporate governance is measured as the difference between strengths and concerns within KLD's corporate governance dimension. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

## 4.5 Achieved status and CSR

### 4.5.1 Empirical specification

I analyse the relationship between achieved status and CSR performance by comparing within-firm changes in various measures of CSR before and after CEOs win their first high-profile award. To estimate within-firm variation in social performance, I use linear regression models with the following specification:

$$CSR_{ft} = \alpha + \beta_1 PostAward_{ft} + \beta_2 Firm_{ft-1} + \beta_3 CEO_{ft} + FixedEffects_{ft} + \varepsilon_{ft} \quad (4.2)$$

$CSR_{ft}$  is the level of CSR performance in firm  $f$  at time  $t$ , which is measured

using a range of variables described in Table A.11 in the Appendix.  $PostAward_{ft}$  is a binary variable set to one in the period after a CEO wins an award, indicating high achieved social status.

$Firm_{ft}$  represents a set of firm control variables, similar to those used to test the influence of ascribed status on CSR, and similar to the controls employed in recent studies that investigate the likelihood of firms' CSR involvement (see, for example, Attig et al., 2016; Dupire and M'Zali, 2016; Petrenko et al., 2016). Based on the evidence in prior research, I control for firm size<sup>18</sup> and profitability (Kubik et al., 2012), book leverage (Adhikari, 2016; Waddock and Graves, 1997), as well as R&D and advertising expenditures (McWilliams and Siegel, 2001). Unlike the tests within the ascribed status dimension, I do not include the corporate governance control in the main models that test the influence of achieved social status, as this variable is based on KLD data and including it results in loss of observations. The sample of award winners is not as substantial as the sample of high ascribed status CEOs, and in order to preserve observations, I estimate the main results without the corporate governance control but verify that my findings are robust to including it in the model.

$CEO_{ft}$  represents controls for CEO age and tenure, measured in years, in order to account for the influence of CEO career horizon problems on social engagement (see, for example, Borghesi et al., 2014; Oh et al., 2016). I do not include a control for CEO gender in testing the influence of achieved status because I measure the within-firm variation in CSR among award winners and each firm is only associated with one CEO throughout the sample period. Since CEO gender is a time-invariant characteristic, it is accounted for by including firm fixed effects.

Finally,  $FixedEffects_{ft}$  variable represents fixed effects included in my estimations. I account for time trends by including year fixed effects in all models. To account for potential inter-industry variation in CSR, as well as unobserved firm drivers of social performance, I also include firm fixed effects<sup>19</sup>.

Since heteroskedasticity is a concern in my estimations, I use robust standard

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<sup>18</sup>Similar to the tests within the ascribed status dimension, I verify that the findings are robust to using the logarithm of total sales instead of total assets as a proxy for firm size.

<sup>19</sup>Comparisons for two and three years include both firm and year fixed effects. For the one year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects (similar to Koh, 2011).

errors and cluster them at the individual firm level, thus accounting for the lack of independence among observations within a given firm throughout time. The analysis of VIF scores suggests that multicollinearity is not a problem in this analysis as VIFs for all of the predictor variables remain below 2 across models, which is outside the conventional threshold of 10 (Neter et al., 1985).

To establish causality and account for unobserved differences between companies with and without award-winning CEOs (Malmendier and Tate, 2009), I construct a sample of predicted winners - companies with similar characteristics to those with award-winning CEOs but whose executives did not win an award. I then repeat the within-firm variation analysis among firms with predicted winners to verify that the same trend is not present in these companies. In additional robustness tests, I also employ a difference-in-differences (DiD) technique to further confirm that observed patterns in CSR behaviour of award winners are not driven by an overall trend in social practices or by potential systematic differences between firms with and without award-winning executives. The use of a sample of predicted winners is a common approach to verify the robustness of findings related to the behaviour of award winners (Koh, 2011; Malmendier and Tate, 2009, see, for example).

#### **4.5.2 Univariate analysis**

Table 4.13 summarises the dataset of CEO awards. Panel A reports the number of awards by publication source, indicating that over a third of awards were conferred by *Business Week's*, followed by *Financial World* and *Forbes*. Panel B divides CEOs by the total number of awards they received during the sample period, showing that 66 out of 138 executives received multiple high-profile awards. To avoid duplicating firm observations in my estimations, only first award is considered for each CEO, resulting in a starting sample of 138 CEOs. Finally, Panel C describes the number of executives that were in office in each period of interest (pre/post 1, pre/post 2 and pre/post 3 years around the award) and whose firm has sufficient CSR data coverage within those periods. A total of 88 CEOs were in office for the pre/post 1 year period, with the number decreasing to 65 in the pre/post 2 year period and 43 in the pre/post 3 year period. I estimate the main models including all observations for which the CEO was in office in the corresponding period, and also verify that

the findings are robust to constricting the sample to the 43 executives that were in office in all periods.

Table 4.13: Summary statistics for awards and award-winning CEOs

Panel A: Number of awards by publication source		
Source	Title of award	Number of awards
Business Week	Top Managers of the Year	115
Financial World	CEOs of the Year	61
Forbes	Best Performing CEOs	53
Forbes	World's Most Powerful People	18
Chief Executive Magazine	CEO of the Year	18
Industry Week	CEO of the Year	12
Harvard Business Review	Best-Performing CEOs in the World	10
Electronic Business Magazine	CEO of the Year	6
Time & CNN	25 Most Influential Global Executives	4
Morningstar.com	CEO of the Year	2
Time	Person of the Year	1
Total		300

Panel B: Number of awards by each CEO		
Number of awards	Number of CEOs	Total number of awards
10 awards	3	30
7 awards	4	28
6 awards	2	12
5 awards	2	10
4 awards	11	44
3 awards	16	48
2 awards	28	56
1 award	72	72
Total	138	300

Panel C: Number of award-winning CEOs with sufficient CSR data coverage that remained in office for each period	
Total number of award-winning CEOs	138
Number of CEOs still in office for the pre/post 1 period	88
Number of CEOs still in office for the pre/post 2 period	65
Number of CEOs still in office for the pre/post 3 period	43

The table provides a breakdown of the number of awards conferred by selected publications between January 1992 and December 2012. Panel A shows the total number of awards received by CEOs within the data sample. Panel B describes the number of awards won by each CEO. Panel C summarises the number of award-winning CEOs that remained in office for each evaluation period and have sufficient CSR data coverage. The subsequent analysis utilises only the first award won by each CEO in order to prevent using the same observations for both the pre- and post- award period.

Table 4.14 provides summary statistics for companies with award-winning CEOs around the time they win their first award. The pattern in within-firm changes in the net CSR measure suggests that award-winners generally increase their overall social performance over time. In addition, the annual rise in net CSR is notably stronger in the years following the award: average social performance increased by approximately 44% in the first year following the award, and the overall rise in the average net CSR is over 80% in the three years after the award conferral (compared to approximately 26% in the three years preceding the award). The magnitude of these increases appears considerable since, similar to Attig et al. (2016), I do not find an overall trend of an increase in the net CSR over time when examining the full sample that includes non-winning firms. The observed pattern of higher

net CSR following awards, thus, provides potential support for Hypothesis 4 which states that there is a positive relationship between achieved status and overall social performance.

Considering the trends in average CSR strengths and concerns separately shows that award winners tend to increase both positive and negative social actions over time. However, while CSR strengths are gradually rising throughout the evaluation period, CSR concerns increase up to the award year and then drop for two years following the award, suggesting that award-winners might focus on reducing their negative actions after a positive shift in achieved status. This is a notable pattern since, generally, CSR concerns tend to increase over time (Attig et al., 2016), and it provides initial evidence that contradicts Hypothesis 5 which posits that superior social performance among CEOs with high achieved status is driven by higher CSR strengths rather than lower CSR concerns.

The within-firm variation in social actions targeting different types of stakeholders also exhibits some notable patterns. Following an award, executives display a considerably stronger rise in investment in social actions targeting core stakeholders compared to activities related to peripheral stakeholders. In particular, the net core CSR performance almost doubles in the three years after the award conferral while peripheral net CSR performance only increases by approximately 30% during the same period. In addition, the net social performance towards primary stakeholders shows a continuous increase following an award, while investment in social actions towards the society at large goes up and down in years after the award. It appears that both higher core CSR strengths and lower core CSR concerns, contribute to the overall increase in the core social performance. These trends lend initial support to Hypothesis 6 which posits that CEO achieved status has a stronger association with social actions targeting primary company stakeholders compared to activities aimed at the peripheral stakeholders.

The review of the variation in firm characteristics around the year of award conferral shows that there is a steady increase in firm size. Award-winning firms are also associated with a rise in profitability (proxied by ROA) in the years before the award, but exhibit a decline in the return on assets in the year following the award, lending some support to the evidence of underperformance of award-winning CEOs



following the increase in their status (see, for example, Malmendier and Tate, 2009; Wade et al., 2006). Another notable trend is the gradual decrease in leverage in the years prior to the award, followed by an annual increase in every year after the award conferral, suggesting that executives might be taking on additional risk after a positive status shift.

Table 4.14: Summary statistics for the sample of award-winning CEOs

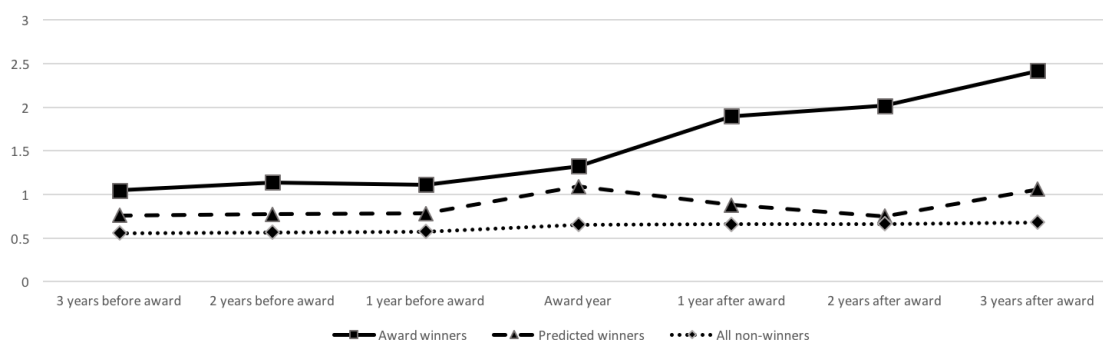
	3 years before award	2 years before award	1 year before award	Award year	1 year after award	2 years after award	3 years after award
<i>CSR variables</i>							
CSR net	1.047	1.138	1.114	1.322	1.898	2.015	2.419
CSR strengths	2.535	2.662	2.943	3.218	3.727	3.754	4.349
CSR concerns	1.488	1.523	1.830	1.897	1.830	1.738	1.930
Core CSR net	1.047	1.123	0.966	1.057	1.466	1.692	2.070
Core CSR strengths	1.884	1.954	2.102	2.230	2.568	2.708	3.233
Core CSR concerns	0.837	0.831	1.136	1.172	1.102	1.015	1.163
Peripheral CSR net	0.000	0.015	0.148	0.264	0.432	0.323	0.349
Peripheral CSR strengths	0.651	0.708	0.841	0.989	1.159	1.046	1.116
Peripheral CSR concerns	0.651	0.692	0.693	0.724	0.727	0.723	0.767
<i>Firm controls</i>							
Firm size	8.374	8.513	8.666	8.853	9.051	9.152	9.347
Leverage	0.248	0.235	0.211	0.188	0.197	0.212	0.233
ROA	0.066	0.080	0.073	0.094	0.078	0.087	0.076
R&D intensity	0.060	0.049	0.054	0.047	0.050	0.062	0.053
Advertising intensity	0.019	0.018	0.019	0.018	0.018	0.017	0.015
<i>CEO controls</i>							
CEO age	54.140	54.846	56.239	57.170	57.852	57.938	57.279
CEO tenure	8.186	8.277	9.227	10.170	11.045	11.908	11.558

The table provides mean values for the variables used in this analysis. The sample consists of firms from S&P 500 constituents with CEOs that received an award between January 1992 and December 2012. Financial firms and utility companies are excluded from this study. CSR Strengths (Concerns) variable is the sum of firm's CSR strengths (concerns) across six CSR dimensions. CSR net variable is the difference between CSR strengths and CSR concerns for any observation year. Firm size is the natural logarithm of total assets. Leverage is calculated as total debt divided by total assets. ROA (return on assets) is calculated as net income divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. CEO age and tenure are measured in years. CEO personal data is extracted from Compustat Execucomp and financial data is obtained from Compustat.

To put the within-firm variation in CSR among award winners in perspective, Figures 4.4, 4.5 and 4.6 plot the average net CSR, CSR strengths and CSR concerns, respectively, among firms with award-winning CEOs, firms with predicted winners and all non-winning companies. The sample of predicted winners is constructed using a nearest-neighbour propensity score match controlling for social and firm characteristics in the year before the award (similar to Koh, 2011; Malmendier and Tate, 2009), thus allowing a comparison of the patterns in social performance of high achieved status CEOs with executives of similar firms that did not experience a shift in status.

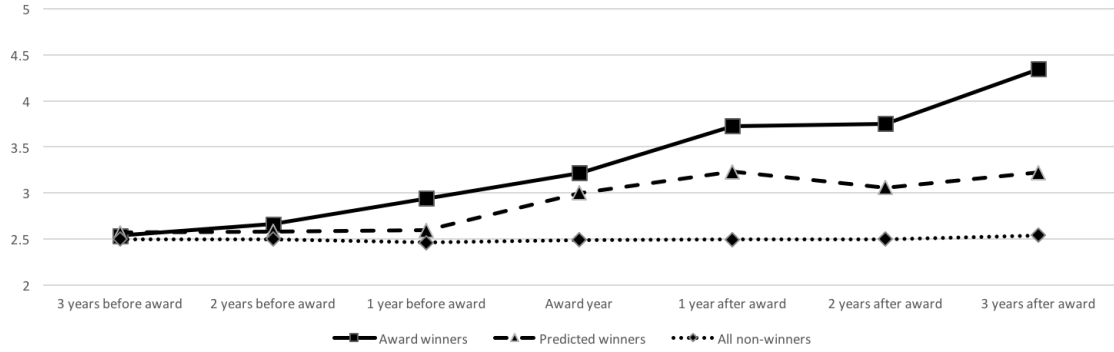
Both award winners and predicted winners, have a higher average level of net CSR and CSR strengths compared to all other companies, suggesting that firm characteristics associated with award-winning do play a role in determining social performance. The trend in CSR strengths is similar between CEOs who won an award and predicted winners (Figure 4.5), with both groups generally showing a gradual improvement in positive social activities. However, in the years following the award, winning CEOs appear to increase their social strengths at a greater pace compared to predicted winners, resulting in a widening gap between the two groups. In addition, having received an award, winning executives exhibit a notable decrease in CSR concerns over the following two years (Figure 4.6), while predicted winners display the opposite behaviour. These two trends result in a substantial divergence in the net social performance between winners and predicted winners after the award year (Figure 4.4), and indicate that the observed CSR tendencies among firms with winning executives are unlikely to be fully explained by firm characteristics alone.

Figure 4.4: Within-firm variation in net CSR



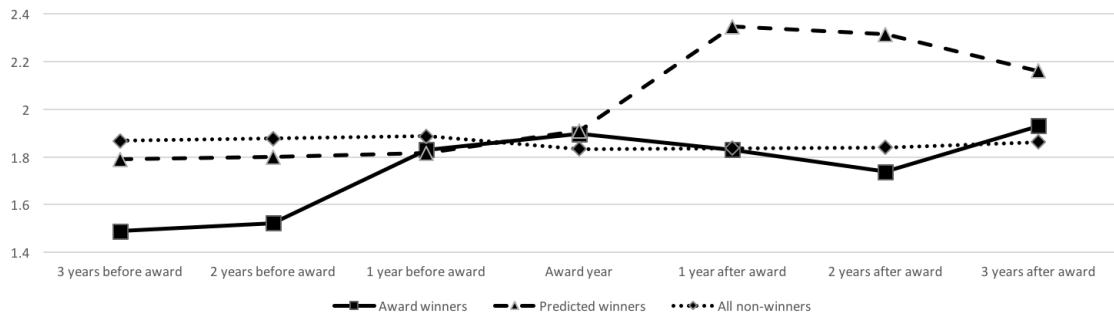
The figure displays the differences in net CSR between award winners, predicted winners and all non-winning companies. Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for firm size, leverage, R&D intensity, advertising intensity, CEO age and CEO tenure, as well as year and industry fixed effects.

Figure 4.5: Within-firm variation in CSR strengths



The figure displays the differences in CSR strengths between award winners, predicted winners and all non-winning companies. Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for firm size, leverage, R&D intensity, advertising intensity, CEO age and CEO tenure, as well as year and industry fixed effects.

Figure 4.6: Within-firm variation in CSR concerns



The figure displays the differences in CSR concerns between award winners, predicted winners and all non-winning companies. Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for firm size, leverage, R&D intensity, advertising intensity, CEO age and CEO tenure, as well as year and industry fixed effects.

### 4.5.3 Multivariate analysis

To formalise the initial insights from the univariate analysis, I compare the within-firm changes before and after CEOs win an award using multiple regression models that control for related firm and CEO characteristics. Table 4.15 presents the main results regarding the influence of an achieved status shift on the overall social performance (net CSR) as well as CSR strengths and CSR concerns, where all measures of CSR are based on all six dimensions of corporate social responsibility, and the *Post award* variable indicates the period after CEOs win their awards and achieve a positive status shift.

Models 1 - 3 in Table 4.15 estimate the impact of winning an award on the net CSR and, consistent with Hypothesis 4, the coefficient for the *Post award* variable is positive, indicating an increase in the overall social performance following a positive status shift. The influence of achieved status remains positive in all three evaluation periods but is statistically significant only in the pre/post 1 year period ( $p\text{-value} < 0.05$ ), suggesting that the impact of winning an award on CSR decisions is rapid but might be relatively short-lived. The magnitude of the *Post award* coefficient in the pre/post 1 year period (0.637) indicates that status influence is also economically significant: the average net CSR in the year before the award is 1.114 and winning an award, on average, increases the overall social performance by 57% after accounting for firm and CEO characteristics as well as yearly trends<sup>20</sup>.

The subsequent models in Table 4.15 estimate the influence of the positive achieved status shift associated with winning an award on CSR strengths and CSR concerns separately. Contrary to Hypothesis 5, the results indicate that higher social performance following an award is driven by reduced negative social impacts rather than a significant increase in positive social activities. When modelling CSR strengths, the coefficient on the *Post award* variable is insignificant at the 10% level in all evaluation periods, while in models with CSR concerns as the dependent variable, the coefficient on the indicator of the post-award period is negative and significant in the pre/post 1 ( $p\text{-value} < 0.05$ ) and pre/post 2 ( $p\text{-value} < 0.10$ ) year pe-

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<sup>20</sup>I follow the approach in Hirshleifer et al. (2012) to estimate the economic significance of explanatory variables. In the analysis of achieved social status shifts, I calculate the economic significance as the ratio of the regression coefficient on the achieved status indicator (*Post award*) to the mean CSR during the evaluated period before the award.

riods. The magnitude of the coefficient in the pre/post 2 year period indicates that winning an award results in an average decrease in CSR concerns of approximately 32% over two years after the award.

Since the focus of this analysis is to examine the within-firm variation in CSR among award-winners, the results on the control variables might be specific to the dataset and should not be generalised. Overall, the significance of the control variables is quite low and is not always consistent across different test periods. The lower general significance of controls is similar to that observed in other studies that include firm fixed effects in examining the likelihood of engaging in CSR (see, for example, Attig et al., 2016; Koh, 2011).

Table 4.15: Achieved status and CSR

	CSR net			CSR strengths			CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.637** (0.302)	0.629 (0.452)	0.426 (0.489)	0.253 (0.220)	0.089 (0.369)	0.079 (0.328)	-0.399** (0.200)	-0.541* (0.294)	-0.347 (0.313)
Firm size	0.125 (0.311)	-0.0869 (0.527)	-0.372 (0.385)	0.932*** (0.217)	0.162 (0.373)	0.073 (0.269)	0.835*** (0.212)	0.249 (0.251)	0.445* (0.228)
ROA	0.523 (1.839)	1.603 (1.913)	0.611 (1.687)	-0.207 (1.504)	1.571 (1.270)	0.075 (1.157)	-0.907 (0.768)	-0.032 (0.985)	-0.537 (0.946)
Leverage	1.762 (1.805)	-0.719 (1.371)	1.441 (1.094)	0.00264 (1.489)	1.158 (1.264)	1.409 (0.945)	-1.995* (1.153)	1.877** (0.811)	-0.032 (0.858)
R&D intensity	5.662* (3.051)	1.042 (0.946)	1.596 (1.303)	3.877* (2.260)	0.597 (0.842)	0.719 (0.825)	-1.826 (1.210)	-0.445 (0.582)	-0.877 (0.651)
Advertising intensity	9.789 (11.487)	-17.60** (7.654)	-14.72* (7.972)	11.74 (8.601)	-4.528 (5.465)	-4.381 (5.345)	1.172 (6.385)	13.07*** (3.958)	10.34** (4.170)
CEO age	-0.071 (0.053)	-0.220*** (0.073)	-0.021 (0.042)	-0.010 (0.042)	-0.148** (0.059)	0.015 (0.036)	0.060** (0.025)	0.072* (0.042)	0.036* (0.018)
CEO tenure	0.007 (0.052)	0.459*** (0.127)	-0.068 (0.042)	-0.0357 (0.044)	0.348*** (0.093)	-0.054* (0.031)	-0.042* (0.022)	-0.111 (0.071)	0.013 (0.019)
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.321	0.188	0.213	0.360	0.323	0.422	0.281	0.112	0.163

The table reports the within-firm change in firm's CSR ratings before and after a CEO wins an award. The dependent variable in models 1 - 3 is net CSR. The dependent variable in models 4 - 6 is total CSR strengths. The dependent variable in models 7 - 9 is total CSR concerns. CSR strengths (concerns) variable is the sum of firm's CSR strengths (concerns) across six CSR dimensions. CSR net variable is the difference between CSR strengths and CSR concerns for any observation year. Post award is a dummy variable set to 1 in the period after a CEO wins an award. Firm size is the natural logarithm of total assets. Leverage is calculated as total debt divided by total assets. ROA (return on assets) is calculated as net income divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. CEO age and tenure are measured in years. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All financial controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Next, I examine how an increase in CEO achieved social status might influence the direction of social investments based on the type of stakeholders they affect. Hypothesis 6 posits that executives that experienced a positive status shift will focus their CSR strategy on improving social performance related to the company's

primary (or core) stakeholders rather than greater community (peripheral stakeholders). Similar to the analysis of ascribed status as well as recent studies (Dupire and M'Zali, 2016; Flammer, 2015), I consider social actions within the product, diversity and employee relations dimensions to be primarily related to core stakeholders, and activities within the community, environment and human rights dimensions to be primarily relevant to peripheral stakeholders.

Panel A in Table 4.16 reports the results of testing the influence of achieved status on core CSR measures, and Models 1 - 3 show that award-winning CEOs increase their overall social investment towards core stakeholders following an award. The coefficient on the *Post award* variable is positive and significant in all three test periods, with  $p\text{-value} < 0.05$  in pre/post 1 year period and  $p\text{-value} < 0.10$  in the other two periods. The results indicate an average increase in the net core CSR of approximately 55% in the first year following an award, and an overall increase of approximately 66% over three years after an award, suggesting a notable economic significance. The examination of core CSR strengths and core CSR concerns suggest that the primary contribution to the higher overall social performance towards core stakeholders stems from reducing negative social outcomes rather than increasing positive ones. In contrast, Panel B in Table 4.16 documents the effect of achieved status shifts on peripheral CSR measures, showing no statistically significant relationship (at the 10% level) between winning an award and social actions towards society at large. These results suggest that achieved status is primarily related to core CSR performance, providing some initial support to Hypothesis 6.

In order to better estimate the relative importance of investments in core versus peripheral CSR activities following a positive status shift, I measure the effect of winning an award on the difference between core and peripheral CSR<sup>21</sup>. Panel C in Table 4.16 reports the results, confirming that high CEO status leads to prioritising social performance towards primary company stakeholders, lending further support to Hypothesis 6. In particular, Models 1 - 3 show a positive and significant coefficient on the *Post award* variable ( $p\text{-value} < 0.10$ ) for all three test periods. Considering relative investment in core and peripheral CSR strengths (Models 4 - 6) and concerns

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<sup>21</sup>Similar to the tests within the ascribed status dimension, the issue with using a ratio of core to peripheral CSR is that this approach result in significant loss of observations due to multiple firms reporting a zero value for either core or peripheral CSR.

(Models 7 - 9) suggests that the difference is likely driven by a higher focus on lowering core concerns rather than increasing core strengths, consistent with the trend observed in Panel A.

Table 4.16: Achieved status and core and peripheral CSR

Panel A: Achieved status and core CSR									
	Core CSR net			Core CSR strengths			Core CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.534** (0.215)	0.687* (0.367)	0.692* (0.409)	0.236 (0.174)	0.287 (0.304)	0.284 (0.270)	-0.314** (0.141)	-0.399 (0.241)	-0.408* (0.237)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.210	0.150	0.199	0.206	0.235	0.368	0.158	0.116	0.106

Panel B: Achieved status and peripheral CSR									
	Peripheral CSR net			Peripheral CSR strengths			Peripheral CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.076 (0.181)	-0.057 (0.243)	-0.266 (0.257)	-0.030 (0.117)	-0.199 (0.155)	-0.205 (0.173)	-0.107 (0.143)	-0.141 (0.145)	0.061 (0.145)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.467	0.233	0.164	0.515	0.258	0.280	0.214	0.098	0.188

Panel C: Achieved status and the relative investment in core versus peripheral CSR									
	Core-peripheral CSR net			Core-peripheral CSR strengths			Core-peripheral CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.482* (0.258)	0.744* (0.429)	0.958* (0.477)	0.283 (0.204)	0.486 (0.311)	0.489 (0.313)	-0.202 (0.197)	-0.258 (0.268)	-0.468* (0.238)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.297	0.169	0.160	0.263	0.147	0.258	0.097	0.105	0.103

The table reports the within-firm change in firm's core and peripheral CSR ratings before and after a CEO wins an award. Panel A shows changes in the net core CSR, core CSR strengths and core CSR concerns. Core CSR strengths (concerns) variable is the sum of firm's diversity, employee relations and product quality strengths (concerns). Core CSR net variable is the difference between core CSR strengths and core CSR concerns for any observation year. Panel B shows changes in the net peripheral CSR, peripheral CSR strengths and peripheral CSR concerns. Peripheral CSR strengths (concerns) variable is the sum of firm's community, environment and human rights strengths (concerns). Peripheral CSR net variable is the difference between peripheral CSR strengths and peripheral CSR concerns for any observation year. Panel C shows changes in the difference between core and peripheral CSR ratings. Post award is a dummy variable set to 1 in the period after a CEO wins an award. Firm and CEO controls are included in all models and are not reported for brevity. Firm controls include firm size, ROA, leverage, R&D intensity and advertising intensity. CEO controls include CEO age and tenure, measured in years. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All financial controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

I also explore the influence of a status increase on each of the six individual CSR dimensions used to construct the aggregate measures, since prior research suggests that considering only the overall constructs might confound the effect on the distinct

areas of social responsibility (Bouslah et al., 2013). Table 4.17 reports the result. The most consistent status effect is observed within the human rights (Panel E) and the product quality (Panel F) CSR dimensions. Within the human rights CSR measures, the indicator of the post-award period loads significantly positively on the net CSR and significantly negatively on CSR concerns in all three test periods (all coefficients are significant at least at the 10% level). The pattern is similar within the product quality dimension, although the coefficients on the *Post award* variable are notably stronger here compared to the effect associated with the human rights CSR, and the influence of achieved status remains significant (at least at the 10% level) only for the first two evaluation periods.

While social strengths and concerns within most KLD dimensions are generally applicable to all companies, many of the items within the human rights category appear to be specific to firms' operations. These include strengths such as "positive record in South Africa" and concerns such as "operations in Sudan" and "operations in Northern Ireland between 1991 - 1994". Since this analysis focuses on comparing the within-firm changes in CSR rather than considering a potential cross-sectional effect, the observed pattern of lowering human rights concerns is not necessarily related to the specific firm characteristics. However, I believe that the findings related to the human rights CSR dimension should be taken with caution due to the specificity of evaluated social activities.



Table 4.17: Achieved status and individual CSR dimensions

Panel A: Community CSR rating									
	Community CSR net			Community CSR strengths			Community CSR concerns		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
Post award	-0.046	-0.100	-0.246	-0.114	-0.150	-0.234**	-0.070	-0.050	0.012
	(0.113)	(0.148)	(0.148)	(0.103)	(0.127)	(0.114)	(0.046)	(0.063)	(0.057)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.269	0.065	0.069	0.302	0.062	0.106	0.217	0.061	0.108
Panel B: Diversity CSR rating									
	Diversity CSR net			Diversity CSR strengths			Diversity CSR concerns		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
Post award	0.169	0.119	0.280	0.138	0.076	0.204	-0.049	-0.043	-0.077
	(0.142)	(0.186)	(0.221)	(0.126)	(0.178)	(0.179)	(0.075)	(0.108)	(0.110)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.198	0.249	0.295	0.183	0.266	0.287	0.192	0.175	0.145
Panel C: Employee relations CSR rating									
	Employee relations CSR net			Employee relations CSR strengths			Employee relations CSR concerns		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
Post award	0.144	0.135	0.304	0.013	0.081	0.141	-0.136	-0.053	-0.162
	(0.120)	(0.200)	(0.243)	(0.083)	(0.153)	(0.156)	(0.096)	(0.149)	(0.140)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.255	0.025	0.034	0.256	0.074	0.221	0.22	0.037	0.073
Panel D: Environment CSR rating									
	Environment CSR net			Environment CSR strengths			Environment CSR concerns		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
Post award	0.000	-0.201	-0.235*	0.022	-0.127	-0.004	0.056	0.074	0.231***
	(0.109)	(0.127)	(0.128)	(0.065)	(0.088)	(0.104)	(0.101)	(0.091)	(0.081)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.365	0.233	0.19	0.327	0.293	0.384	0.162	0.038	0.214

Panel E: Human rights CSR rating									
	Human rights CSR net			Human rights CSR strengths			Human rights CSR concerns		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
Post award	0.131** (0.063)	0.243** (0.106)	0.215* (0.123)	0.023 (0.024)	0.097* (0.054)	0.037 (0.060)	-0.102* (0.053)	-0.165** (0.080)	-0.182* (0.096)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.269	0.177	0.207	0.204	0.083	0.127	0.279	0.2	0.236

Panel F: Product CSR rating									
	Product CSR net			Product CSR strengths			Product CSR concerns		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post	Pre/post
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
Post award	0.218*** (0.081)	0.432** (0.176)	0.108 (0.156)	0.091 (0.056)	0.130 (0.092)	-0.061 (0.114)	-0.133** (0.068)	-0.303* (0.161)	-0.169 (0.123)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.286	0.106	0.029	0.144	0.111	0.129	0.249	0.087	0.081

The table reports the within-firm change in firm's CSR ratings for each individual CSR dimension before and after a CEO wins an award. Panel A presents the within-firm change in firm's community CSR rating. Panel B presents the within-firm change in firm's diversity CSR rating. Panel C presents the within-firm change in firm's employee relations CSR rating. Panel D presents the within-firm change in firm's environment CSR rating. Panel E presents the within-firm change in firm's human rights CSR rating. Panel F presents the within-firm change in firm's product CSR rating. The dependent variable in models 1 - 3 is net CSR within the corresponding dimension. The dependent variable in models 4 - 6 is total CSR strengths within the corresponding dimension. The dependent variable in models 7 - 9 is total CSR concerns within the corresponding dimension. CSR strengths (concerns) variable is the sum of all strengths (concerns) within the corresponding dimension. CSR net variable is the difference between CSR strengths and CSR concerns within the corresponding dimension. Post award is a dummy variable set to 1 in the period after a CEO wins an award. Firm and CEO controls are included in all models and are not reported for brevity. Firm controls include firm size, ROA, leverage, R&D intensity and advertising intensity. CEO controls include CEO age and tenure, measured in years. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All financial controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

#### 4.5.4 Robustness

To control for the limitations in KLD methodology related to covering different sets of strength and concern items over time, I replicate the main analysis using two alternative approaches to measuring CSR. First, I create scaled measures of CSR by dividing the aggregate CSR scores by the maximum potential score within a given year. Second, I use industry-adjusted CSR measures that are adjusted for the average social performance within each firm's industry. Panels A and B in

Table 4.18 report the results, confirming that the relationship between the *Post award* variable and measures of social performance remains consistent for different approaches to estimating social performance. In particular, award winners exhibit a stronger overall social performance in the year following the award ( $p\text{-value}<0.05$ ), and show evidence of lowering negative social impacts in the two years following the award ( $p\text{-value}<0.05$  for the pre/post 1 year periods and  $p\text{-value}<0.10$  for the pre/post 2 year period).

In the main tests, I use all observations where a CEO remained in office for a given evaluation period, resulting in a coverage of a different number of firms across the three periods: 88 firms in the pre/post 1 year period, 65 firms in the pre/post 2 year period and 43 in the pre/post 3 year period. As a robustness check, I replicate the main results within a restricted sample that only includes firms in which executives were in office for the full range of test periods, resulting in a consistent coverage of 43 firms. The results are reported in Panel C of Table 4.18 and confirm that the same pattern holds for a more conservative sample. In addition, comparing the magnitude of the coefficients on the *Post award* variable in Panel C of Table 4.18 to that reported in the main results (Table 4.15) indicates that the effect of achieved status on the net CSR and CSR concerns is even stronger within the restricted sample.

To address the possibility that award-winning firms are systematically different from other companies, and endogenous firm characteristics may be driving the results, I construct a sample of predicted winners and compare the within-firm changes in CSR among award winners to the variation in CSR practices among executives of similar firms. To identify a control sample of predicted winners, I estimate a logit model and identify determinants of CEO awards based on a range of observable firm and CEO characteristics. This approach is similar to that used in other studies examining the influence of prestigious CEO awards (Koh, 2011; Malmendier and Tate, 2009), with an added advantage of including CEO-related variables in addition to firm-level characteristics.

Panel A in Table 4.19 reports the results of the logit regression, showing that receiving an award is positively related to firm size, profitability and advertising intensity, while higher leverage lowers the likelihood of winning an award. The strong

Table 4.18: Robustness tests: KLD methodology and sample restriction

Panel A: Scaled CSR ratings									
	Scaled CSR net			Scaled CSR strengths			Scaled CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.102** (0.048)	0.142 (0.112)	0.095 (0.092)	0.021 (0.033)	0.042 (0.074)	0.013 (0.059)	-0.075** (0.033)	-0.132* (0.079)	-0.099 (0.069)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.294	0.116	0.168	0.398	0.243	0.28	0.312	0.177	0.246

Panel B: Industry-adjusted CSR ratings									
	Industry-adjusted CSR net			Industry-adjusted CSR strengths			Industry-adjusted CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.616** (0.264)	0.629 (0.452)	0.426 (0.489)	0.260 (0.200)	0.089 (0.369)	0.079 (0.328)	-0.371** (0.157)	-0.541* (0.294)	-0.347 (0.313)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.341	0.188	0.213	0.377	0.323	0.422	0.306	0.112	0.163

Panel C: Same number of firms for all periods									
	CSR net			CSR strengths			CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.905** (0.428)	0.435 (0.562)	0.426 (0.489)	0.414 (0.366)	-0.185 (0.401)	0.079 (0.328)	-0.579** (0.238)	-0.621* (0.310)	-0.347 (0.313)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	86	172	258	86	172	258	86	172	258
No. of firms	43	43	43	43	43	43	43	43	43
Adjusted R-squared	0.378	0.175	0.213	0.513	0.393	0.422	0.324	0.151	0.163

The table reports the within-firm change in firm's CSR ratings before and after a CEO wins an award. Panel A reports the results using scaled CSR measures. Panel B reports the results using the industry-adjusted CSR measures. Panel C reports the results when restricting the sample to the same firms within all three periods. The dependent variable in models 1 - 3 is net CSR (scaled and industry-adjusted in Panels A and B, respectively). The dependent variable in models 4 - 6 is total CSR strengths (scaled and industry-adjusted in Panels A and B, respectively). The dependent variable in models 7 - 9 is total CSR concerns (scaled and industry-adjusted in Panels A and B, respectively). Please refer to Table A.11 in the Appendix for the definition of different CSR measures. Post award is a dummy variable set to 1 in the period after a CEO wins an award. Firm size is the natural logarithm of total assets. Firm and CEO controls are included in all models and are not reported for brevity. Leverage is calculated as total debt divided by total assets. ROA (return on assets) is calculated as net income divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. CEO age and tenure are measured in years. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All financial controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

links between higher profitability and lower leverage with winning an award are consistent with expectations as such characteristics are associated with financial health, and firm performance is considered in the selection process by several publications. In addition, award winners tend to be younger CEOs with more experience, and this pattern is at least partially driven by several repeat winners who founded their companies at a relatively young age and remained in office for a period far beyond the

average CEO tenure (such as Jeffrey Bezos, Michael Dell, Steven Jobs and William Gates).

Next, I use the coefficients from the logit model to calculate a propensity score for every company, and match each award winner to a non-winning CEO with the closest firm and CEO-related characteristics within a given year. Panel B in Table 4.19 compares the summary statistics between winners and predicted winners, reporting the significance of the difference in means between the two samples. The last column shows the t-statistic associated with the difference in means, confirming that there is no significant variation between winners and predicted winners in any firm or CEO characteristics, or in their CSR performance in the year before the award.

I then use the control sample of predicted winners and test for within-firm changes in CSR before and after CEOs are predicted to win awards. Table 4.20 summarises the impact of predicted winners on the overall measures of CSR (Panel A), as well as core and peripheral CSR individually (Panels B and C, respectively). *Post award* variable indicates the period after CEOs are predicted to win awards, and its coefficient is insignificant at the 10% level in 26 out of 27 models. The only exception occurs in Model 5 of Panel B which uses core CSR strengths as the dependent variable and evaluates the impact of predicted winners within the pre/post 2 year period. This does not pose concerns in relation to my main findings as award winning was not significantly related to CSR strengths. The general insignificance (at the 10% level) of predicted winners with regards to the measures of net CSR and CSR concerns indicates that the results in the previous section are not driven by endogenous firm-level characteristics associated with winning awards.

To further assure causality, I also employ a difference-in-differences (DiD) technique to compare changes in social performance among award winners to the variation in CSR among predicted winners. I verify the results using three different matching methods (one-to-one matching, k-nearest neighbours and kernel) using alternative specifications in each approach. Table 4.21 summarises the results for the overall measures of CSR as well as core and peripheral social performance.

Panel A reports the findings related to the overall measures of CSR across all six dimensions. The DiDs in the net CSR between winners and predicted winners are positive but remains insignificant at the 10% level in all three test periods. In con-

Table 4.19: Robustness tests: Sample of predicted winners

Panel A: Determinants of award-winning				
Variable				Coefficient
Firm size				0.652*** (0.063)
ROA				7.887*** (1.092)
Leverage				-2.348*** (0.612)
R&D intensity				0.549 (1.344)
Advertising intensityy				6.478*** (2.327)
CEO age				-0.034*** (0.011)
CEO tenure				0.047*** (0.010)
Industry fixed effects				Yes
Year fixed effects				Yes
No. of observations				7165
Pseudo R-squared				0.162
Panel B: Differences between award winners and predicted winners in the year before award				
	Award-winning CEOs	Predicted winners	Difference in means	t-statistic
Main CSR variables				
CSR Net	1.114	0.778	0.336	(0.59)
CSR Strengths	2.943	2.593	0.351	(0.79)
CSR Concerns	1.830	1.815	0.015	(0.04)
Firm variables				
Firm size	8.853	8.985	-0.132	(-0.70)
Leverage	0.188	0.208	-0.020	(-0.75)
ROA	0.094	0.102	-0.008	(-0.72)
R&D intensity	0.047	0.052	-0.005	(-0.48)
Advertising intensity	0.018	0.029	-0.012	(-1.64)
CEO variables				
CEO age	57.170	55.945	1.225	(0.96)
CEO tenure	10.170	9.709	0.461	(0.37)

Panel A presents results of a logit regression of an indicator of award winning on observable firm and CEO characteristics used to predict winning an award. The binary dependent variable is equal to 1 if the company's CEO received an award in the respective year, and equals to 0 otherwise. Firm size is the natural logarithm of total assets. Leverage is calculated as total debt divided by total assets. ROA (return on assets) is calculated as net income divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. CEO age and tenure are measured in years. All financial controls are lagged by one period. Standard errors in parentheses. To obtain a control sample of predicted winners, firms without award-winning CEOs are matched to firm-year observations with award-winning CEOs based on same year and closest predicted probabilities estimated from the logit regression in Panel A. Panel B compares firm and CEO characteristics between award-winning CEOs and predicted winners in the year before the award. The (t-statistic) column shows the t-statistics of t-tests that the differences in means between award winners and predicted winners are zero. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

trast, models testing the DiD in CSR concerns show a significant negative difference between the reduction in CSR concerns among winners compared to the change in the sample of predicted winners. The DiDs in CSR concerns remain significantly negative across all matching methods, with five out of six reporting significance at the 5% level and the most restrictive method (one-to-one without replacement) show-

ing significance at the 10% level. These findings provide further assurance that the observed reduction in negative social actions among award winners following status increase is not driven by endogenous firm-related characteristics. The lack of a significant DiD in the net CSR between the two groups of CEOs appears to be related to a slightly slower increase in CSR strengths among award winners compared to predicted winners.

Panels B and C describe the DiD in the core and peripheral CSR measures between award winners and predicted winners. As expected, there are no significant differences (at the 10% level) within social investments aimed at the greater community (Panel C), suggesting that achieved status is not particularly related to this aspect of social performance. The DiDs in the core CSR measures, on the other hand, confirm that, following a positive status shift, CEOs reduce core CSR concerns by a magnitude significantly beyond that which can be explained by firm-related characteristics ( $p$ -value $<0.05$  in most models). This effect holds for approximately two years after the status increase, and contributes to a significantly higher DiD in the net core CSR (at least at the 10% level) in the first year following award conferral.

Table 4.20: Robustness tests: Within-firm changes in CSR ratings among predicted winners

Panel A: Overall CSR ratings in firms with predicted winners									
	CSR net			CSR strengths			CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.498 (0.466)	-0.684 (0.637)	-0.861 (0.510)	0.419 (0.351)	-0.824 (0.644)	-0.628 (0.437)	-0.087 (0.198)	-0.140 (0.577)	0.233 (0.399)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.258	0.394	0.492	0.303	0.562	0.634	0.349	0.186	0.069
Panel B: Core CSR ratings in firms with predicted winners									
	Core CSR net			Core CSR strengths			Core CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.215 (0.277)	-0.738 (0.458)	-0.554 (0.392)	0.195 (0.191)	-0.892* (0.492)	-0.588 (0.377)	-0.036 (0.148)	-0.153 (0.274)	-0.034 (0.219)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.369	0.238	0.304	0.38	0.246	0.413	0.25	0.241	0.11
Panel C: Peripheral CSR ratings in firms with predicted winners									
	Peripheral CSR net			Peripheral CSR strengths			Peripheral CSR concerns		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years	[7] Pre/post 1 year	[8] Pre/post 2 years	[9] Pre/post 3 years
Post award	0.284 (0.297)	0.055 (0.396)	-0.308 (0.334)	0.229 (0.261)	0.068 (0.272)	-0.040 (0.181)	-0.052 (0.093)	0.013 (0.359)	0.267 (0.265)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43	88	65	43
Adjusted R-squared	0.369	0.636	0.641	0.369	0.804	0.742	0.351	0.012	0.072

The table reports the within-firm change in firm's CSR ratings before and after a CEO is predicted to win an award. Panel A reports results for the overall CSR ratings. Panel B reports the results for the core CSR ratings. Panel C reports the results for the peripheral CSR ratings. Please refer to Table A.11 in the Appendix for the definition of the different CSR measures. Post award is a dummy variable set to 1 in the period after a CEO is predicted to win an award. Firm and CEO controls are included in all models and are not reported for brevity. Firm size is the natural logarithm of total assets. Firm and CEO controls are included in all models and are not reported for brevity. Leverage is calculated as total debt divided by total assets. ROA (return on assets) is calculated as net income divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Advertising intensity is calculated as advertising expenditure divided by total sales. CEO age and tenure are measured in years. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All financial controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.



Table 4.21: Robustness tests: Difference-in-differences between winners and predicted winners

Panel A: DiD between winners and predicted winners in overall CSR ratings									
	CSR net			CSR strengths			CSR concerns		
	DiD	DiD	DiD	DiD	DiD	DiD	DiD	DiD	DiD
	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)
<i>One-to-one</i>									
Without replacement	0.605	0.310	0.933	-0.026	-0.069	0.333	-0.632	-0.379	-0.6
	( 1.24)	( 0.45)	( 1.10)	(-0.09)	(-0.15)	( 0.56)	(-1.68)*	(-0.85)	(-1.12)
With replacement	0.756	0.542	0.586	-0.295	-0.237	0.034	-1.051	-0.78	-0.552
	( 1.40)	( 0.69)	( 0.60)	(-0.82)	(-0.42)	( 0.06)	(-2.53)**	(-1.59)	(-0.83)
<i>k-nearest neighbours</i>									
Nearest neighbours (n=5)	0.603	0.595	0.655	-0.217	-0.067	0.034	-0.82	-0.663	-0.621
	( 1.22)	( 0.87)	( 0.70)	(-0.67)	(-0.14)	( 0.06)	(-2.24)**	(-1.58)	(-0.97)
Nearest neighbours (n=10)	0.660	0.595	0.655	-0.159	-0.067	0.034	-0.819	-0.663	-0.621
	( 1.35)	( 0.87)	( 0.70)	(-0.50)	(-0.14)	( 0.06)	(-2.26)**	(-1.58)	(-0.97)
<i>Kernel</i>									
Gaussian kernel	0.667	0.586	0.648	-0.201	-0.106	0.035	-0.869	-0.692	-0.613
	( 1.36)	( 0.86)	( 0.69)	(-0.63)	(-0.21)	( 0.06)	(-2.38)**	(-1.64)	(-0.96)
Epanechnikov kernel	0.705	0.352	0.566	-0.123	-0.231	0.004	-0.828	-0.584	-0.562
	( 1.38)	( 0.50)	( 0.58)	(-0.37)	(-0.46)	( 0.01)	(-2.19)**	(-1.35)	(-0.84)

Panel B : DiD between winners and predicted winners in core CSR ratings

	Core CSR net			Core CSR strengths			Core CSR concerns		
	DiD	DiD	DiD	DiD	DiD	DiD	DiD	DiD	DiD
	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)
<i>One-to-one</i>									
Without replacement	0.737	0.517	0.933	0.237	0.241	0.667	-0.500	-0.276	-0.267
	(1.93)*	(1.00)	(1.31)	(0.95)	(0.68)	(1.15)	(-1.96)**	(-0.99)	(-0.72)
With replacement	0.872	0.864	0.483	0.103	0.169	0.345	-0.769	-0.695	-0.138
	(2.18)**	(1.51)	(0.63)	(0.42)	(0.44)	(0.65)	(-2.74)***	(-2.22)**	(-0.32)
<i>k-nearest neighbours</i>									
Nearest neighbours (n=5)	0.697	0.766	0.517	0.115	0.188	0.345	-0.583	-0.578	-0.172
	(1.96)**	(1.52)	(0.70)	(0.54)	(0.54)	(0.67)	(-2.25)**	(-2.09)**	(-0.41)
Nearest neighbours (n=10)	0.706	0.766	0.517	0.137	0.188	0.345	-0.569	-0.578	-0.172
	(2.00)**	(1.52)	(0.70)	(0.65)	(0.54)	(0.67)	(-2.22)**	(-2.09)**	(-0.41)
<i>Kernel</i>									
Gaussian kernel	0.729	0.788	0.514	0.120	0.174	0.345	-0.609	-0.613	-0.169
	(2.06)*	(1.55)	(0.69)	(0.56)	(0.50)	(0.67)	(-2.37)**	(-2.21)**	(-0.40)
Epanechnikov kernel	0.737	0.682	0.373	0.122	0.088	0.220	-0.615	-0.594	-0.153
	(1.99)**	(1.29)	(0.50)	(0.55)	(0.24)	(0.43)	(-2.31)**	(-2.07)**	(-0.35)

Panel C: DiD between winners and predicted winners in peripheral CSR ratings									
	Peripheral CSR net			Peripheral CSR strengths			Peripheral CSR concerns		
	DiD	DiD	DiD	DiD	DiD	DiD	DiD	DiD	DiD
	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)	(t-1, t+1)	(t-1, t+2)	(t-1, t+3)
<i>One-to-one</i>									
Without replacement	-0.132	-0.207	0.000	-0.263	-0.310	-0.333	-0.132	-0.103	-0.333
	(-0.49)	(-0.58)	(0.00)	(-1.34)	(-1.18)	(-0.97)	(-0.70)	(-0.39)	(-1.16)
With replacement	-0.115	-0.322	0.103	-0.397	-0.407	-0.310	-0.282	-0.085	-0.414
	(-0.36)	(-0.81)	(0.19)	(-1.55)	(-1.27)	(-0.88)	(-1.41)	(-0.31)	(-1.07)
<i>k-nearest neighbours</i>									
Nearest neighbours (n=5)	-0.095	-0.171	0.138	-0.332	-0.255	-0.310	-0.237	-0.085	-0.448
	(-0.34)	(-0.49)	(0.27)	(-1.50)	(-0.89)	(-0.89)	(-1.43)	(-0.36)	(-1.20)
Nearest neighbours (n=10)	-0.046	-0.171	0.138	-0.296	-0.255	-0.310	-0.250	-0.085	-0.448
	(-0.17)	(-0.49)	(0.27)	(-1.35)	(-0.89)	(-0.89)	(-1.52)	(-0.36)	(-1.20)
<i>Kernel</i>									
Gaussian kernel	-0.061	-0.202	0.134	-0.321	-0.280	-0.310	-0.260	-0.078	-0.444
	(-0.22)	(-0.57)	(0.26)	(-1.46)	(-0.97)	(-0.89)	(-1.57)	(-0.33)	(-1.19)
Epanechnikov kernel	-0.032	-0.329	0.192	-0.245	-0.319	-0.217	-0.213	0.010	-0.409
	(-0.11)	(-0.92)	(0.36)	(-1.08)	(-1.08)	(-0.61)	(-1.23)	(0.04)	(-1.03)

This table reports the results from difference-in-differences (DiD) analysis of how winning an award affects CSR ratings. To obtain a control sample of predicted winners, firms without award-winning CEOs are matched to firm-year observations with award-winning CEOs based on same year and closest predicted probabilities estimated from the logit regression of an indicator of award winning on observable firm and CEO characteristics used to predict winning an award. Panel A shows the differences between award winners and predicted winners in the net CSR, CSR strengths and CSR concerns. Panel B shows the differences between award winners and predicted winners in the core net CSR, core CSR strengths and core CSR concerns. Panel C shows the differences between award winners and predicted winners in the peripheral net CSR, peripheral CSR strengths and peripheral CSR concerns. Please refer to Table A.11 in the Appendix for the definition of the different CSR measures. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

## 4.6 Discussion and conclusions

Issues related to executives' social background, prestige and standing within the elite circles are increasingly recognised as important factors that can affect not only firm performance (Chen et al., 2008; Hitt et al., 2001; Jian and Lee, 2011; Pollock et al., 2009) but also the level of risk CEOs are willing to accept, and the choices they make on behalf of their corporations (Certo and Hodge, 2007; Kish-Gephart and Campbell, 2015; Palmer and Barber, 2001). This study demonstrates that, consistent with the upper echelons theory, CEO social status characteristics can also influence decisions regarding socially responsible policies.

Building on the premise that high ascribed status CEOs value their membership within the inner circle of the corporate elite, I theorised that the effect of ascribed status can impact CSR decisions through two mechanisms. First, while embeddedness within the elite networks can provide a multitude of benefits, it can also exercise social pressures for members to conform to its normative expectations. Due to the value of the shared reputational capital within this elite network and the use of charitable giving as a form of "social currency", CEOs belonging to the inner circle are likely to be motivated to increase their social performance in order to preserve their prestigious social standing. Second, the prestige associated with upper-class background and membership within the inner circle is likely to elevate executives' power within their organisation, making it easier for them to adopt their corporate strategy to creating goodwill within their prestigious networks and maintain their social ties to the elite.

Using attendance at prestigious Ivy League universities as an indicator of high ascribed status, my results shows that upper-class origin can indeed exert influence on executives' decisions regarding their CSR strategy. Consistent with my primary hypothesis, I find that high ascribed status CEOs are associated with superior net CSR ratings. However, the effect of ascribed status on different CSR dimensions appears to be more nuanced than expected. In particular, high ascribed status executives tend to focus on improving social strengths associated with the core company stakeholders, while somewhat reducing social concerns related to peripheral stakeholders. This strategy suggests that these CEOs aim to balance the impact of

their CSR strategy by engaging in actions that are more beneficial to the financial firm value (such as increasing CSR strengths and core CSR activities) as well as those that have a more prominent impact on the company's responsible image and moral capital (such as reducing CSR concerns and contributing to the greater community) (Bermiss et al., 2013; Godfrey et al., 2009; Hillman and Keim, 2001; Servaes and Tamayo, 2013).

Using a range of prestigious business awards to indicate exogenous shocks to CEO achieved status, I find that this dimension of social status is also positively related to the firm's overall CSR performance. In contrast to the influence of having an upper-class origin, an increase in achieved social status results in a more focused CSR strategy that is primarily aimed at reducing negative social impacts related to the firm's core stakeholders. However, this approach is also likely to result in a balanced outcome that has positive impacts on firm performance (through addressing the needs of primary stakeholders), as well as contribute to building a lasting image of a responsible corporation (through focusing on reducing social concerns) (Bermiss et al., 2013; Godfrey et al., 2009; Hillman and Keim, 2001; Servaes and Tamayo, 2013).

The findings in this study add to the upper echelons literature and the research on determinants of CSR by showing that, similar to factors such as age (Oh et al., 2016), gender (Manner, 2010) and hubris (Tang et al., 2015), CEO's social status characteristics can have an impact on the firm's propensity to engage in social activities, and can have a significant role in shaping specific CSR strategies.

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## CHAPTER 5

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# CEO social status, CSR and firm performance

## 5.1 Introduction

A popular topic within the CSR literature has been concerned with the link between the social and financial performance of a firm, as well as the underlying processes that might drive this relationship. Despite the vast amount of theoretical and empirical research on the subject, the question of the exact relationship between CSR and firm financial performance remains open, with studies still producing mixed results (for reviews, see Aguinis and Glavas, 2012; Beurden and Gössling, 2008; Margolis and Walsh, 2003; Orlitzky et al., 2003). The majority of studies find evidence of a positive link between firms' social and financial performance, which seems to be facilitated by a number of positive organisational outcomes associated with engagement in CSR activities, including reputational benefits, higher goodwill, and increased customer loyalty (Brammer and Pavelin, 2006; Maignan et al., 1999; Orlitzky et al., 2003). With the evidence about the relationship between social and financial performance generally positive, it remains to find out whether CSR decisions motivated, at least in part, by CEO personal status concerns can influence this relationship. That is, does the fact that CSR investments and decisions might be driven not purely by firm value maximization rationale, but also by CEO personal attributes, influence the relationship observed.

In this chapter, I consider the financial performance implications of CSR initiatives by CEOs with high ascribed and high achieved social status. Building on existing research on executives with upper class background, I expect ascribed status to negatively moderate the relationship between social and financial firm performance, because CSR initiatives by high ascribed status CEOs are likely to be motivated by the class-wide interests of their elite social circles rather than considerations of firm-level economic benefits (Galaskiewicz, 1985, 1997; Useem, 1984).

Within the achieved status dimension, I develop two contrasting hypotheses in order to empirically address the conflicting theory and findings regarding the influence of CEO achieved social status on organisational strategy and outcomes. Specifically, if executives increase social performance for personal reasons following a positive shift in status, I expect a negative moderating effect from achieved status. Alternatively, if superior CSR performance is part of a business strategy aimed at

addressing higher social demands following the increase in firm visibility, I expect a neutral moderating status influence.

I test these hypotheses using the same sample of S&P 500 CEOs as in the previous chapter. I find no evidence of moderating impact within either status dimension, despite the fact that the motivation for higher CSR among high status executives is likely to be, at least partially, driven by their personal interests, particularly within the ascribed status dimension. This finding is important and adds to the argument that strategic or opportunistic use of CSR, whether for corporate or personal reasons, does not necessarily lead to poorer organisational outcomes (Petrovits, 2006)<sup>1</sup>.

## 5.2 Theory and hypotheses

### 5.2.1 Ascribed status

In recent decades, for-profit corporations have substantially increased the amount of corporate resources devoted to improving stakeholder relationships and promoting social welfare. Meanwhile, there is a continuing debate in academic literature on the instrumental relationship between social initiatives and organisational performance. Some researchers argue that CSR is an unnecessary cost imposed on shareholders which is inconsistent with the goal of profit maximisation (Friedman, 1970; Jensen, 2010; Karnani, 2011; Rappaport, 1986). Under this view, social initiatives are considered an inefficient use of managerial time and effort as well as a waste of valuable resources. Therefore, increased engagement in CSR can put firms at a disadvantage compared to less socially responsible firms (Aupperle et al., 1985; Vance, 1975). In line with these arguments, there is some empirical evidence of a neutral or even negative association between the level of social and financial firm performance (Brammer et al., 2006; Guerard, 1997; Seifert et al., 2004b).

Conversely, other scholars argue that there is intrinsic value in promoting social welfare and developing key stakeholder relations. Under this view, socially responsible firms are compensated through a range of direct and indirect benefits such as improved goodwill (Knauer, 1994), increased customer loyalty (Maignan et al.,

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<sup>1</sup>It is worth noting, however, that the influence of other personal CEO characteristics can be less favourable and Petrenko et al. (2016), for example, find that CEO narcissism does diminish the positive influence of CSR on firm performance.



1999), lower risk premiums (Cornell and Shapiro, 1987) and protection against litigation and regulation costs (Kacperczyk, 2009). Thus, this line of argument suggests that corporate social responsibility should have a positive effect on financial firm performance, and multiple empirical investigations provide support to these predictions (Barnett and Salomon, 2006; Beurden and Gössling, 2008; DiSegni et al., 2015; Lindgreen et al., 2009; Orlitzky et al., 2003).

As the literature within this area develops, more research has shifted from examining the general link between CSR and organisational performance to trying to understand the specific channels through which social initiatives affect firm value, and considering how different CSR strategies might translate to firm performance. The findings in this area indicate that investments in social responsibility can have varying implications for organisational outcomes, and factors such as customer awareness (Servaes and Tamayo, 2013), industry dynamism (Wang et al., 2008) and institutional environment (Wang et al., 2016) can affect the relationship between CSR and firm value. In addition, researchers have examined various aspects of CSR engagement strategies, revealing that factors such as consistency, relatedness and stakeholder focus can influence the profitability of social initiatives (Hillman and Keim, 2001; Tang et al., 2011).

Industry surveys and academic studies indicate that CEOs have a significant influence in shaping firm's social engagement strategy, and executives' preferences, values and perceptions can be reflected in CSR-related decisions of their firms (Bonini and Chênevert, 2008; Muttakin et al., 2016; Werbel and Carter, 2002). In particular, recent evidence shows that factors such as age (Oh et al., 2016), gender (Manner, 2010), political ideology (Chin et al., 2013), hubris (Tang et al., 2015) and narcissism (Petrenko et al., 2016) can affect both the level and the focus of firms' social initiatives. Since the relationship between social and financial performance is dependent on the specific strategies adopted by firms, CEOs' personal attributes can determine how social efforts translate into firm value.

Consistent with this line of argument, Petrenko et al. (2016) find that CEO narcissism reduces the otherwise positive effect of CSR on firm performance. The authors argue that narcissistic CEOs use social initiatives as means to satisfy their personal need for attention and image reinforcement, and their strong sense of per-

sonal ability and lower responsiveness to performance indicators leads to CSR decisions with less positive effects on operational performance. As a result, when net CSR increases one standard deviation above the mean, firms with less narcissistic CEOs benefit from 2.16% higher return on assets compared to companies with more narcissistic executives.

Similar to narcissistic CEOs, I find that high ascribed status executives engage in more social initiatives, compared to lower status CEOs. I expect ascribed status to negatively moderate the relationship between social and financial firm performance for three main reasons. First, executives with elite origins who have been socialised into upper class norms and behaviours are likely to use corporate social initiatives to promote the common interests of the business and cultural elite, regardless of the relevance of such activities to the company's primary operations (Galaskiewicz, 1985, 1997; Useem, 1984). This is likely to result in CSR decisions not supportive of the company's mission, and such social initiatives have been shown to have an adverse impact on firm value (Masulis and Reza, 2015). In addition, CSR decisions driven by personal social considerations of powerful high status CEOs can indicate a less than optimal governance structure, and such internal issues serve as an indicator of whether the company is hypocritical in its social engagements, reducing their positive affect on organisational outcomes (Janney and Gove, 2011).

Second, the use of corporate giving as a type of "social currency" among high ascribed status CEOs is likely to translate into widely varied social initiatives, particularly because upper class executives are unlikely to reject appeals for charitable giving from other members of their elite network (Useem, 1984). This can reduce the consistency of CSR engagement, making it harder to create economic value through social projects. Specifically, an irregular CSR strategy diminishes firms' ability to build complementary resources and efficiently plan the financing of social activities (Tang et al., 2012). In addition, inconsistency in social initiatives makes it harder to keep CSR activities aligned with firms' overall strategies, and can give the impression that a company is engaging in CSR in an opportunistic manner (Basu and Palazzo, 2008; Tang et al., 2012). In line with these arguments, several studies show evidence of a positive link between the consistency of the CSR engagement strategy and firm value (Husted et al., 2015; Rivera et al., 2017; Tang et al., 2012; Wang and

Choi, 2013).

Finally, the findings in the previous chapter show that high ascribed status CEOs primarily focus on proactive social initiatives, and display preference for targeting primary company stakeholders. While this strategy might have a more pronounced immediate positive effect on firm performance (Hillman and Keim, 2001; Servaes and Tamayo, 2013), focusing on improvements of social strengths without preventing irresponsible behaviours might be perceived as a benefit-seeking activity rather than a genuine attempt to increase the social good, particularly when firm's CSR concentrates on core stakeholders (Godfrey et al., 2009; Lin-Hi and Blumberg, 2016; Lin-Hi and Müller, 2013). Therefore, concentrating on preventing irresponsible behaviour as well as investing in social issues that benefit a wider community can have greater reputational benefits and provide firms with a moral capital to withstand the consequences of future crises, creating greater long-term economic value from CSR engagement (Bermiss et al., 2013; Godfrey et al., 2009; Lin-Hi and Blumberg, 2016; Lin-Hi and Müller, 2013).

Therefore, high CEO ascribed status may diminish or negate the mechanisms that link social engagement with firm outcomes, particularly through lower credibility of their CSR strategy and the inefficient use of company resources. As a result, I expect the presence of a high ascribed status CEO to lead to social initiatives that are less likely to have a positive impact on the firm's financial performance.

**Hypothesis 1:** *CEO ascribed status will negatively moderate the relationship between social and financial firm performance.*

### **5.2.2 Achieved status**

The examination of various perspectives on the risks and benefits related to investments in socially responsible behaviours suggests that, on balance, executives are more likely to increase social performance following a positive shift in achieved status and the associated increase in their reputation. The analysis in the previous chapter provides empirical support for this perspective. However, it remains unclear whether the motivation behind higher CSR stems from the desire to increase CEOs' own private benefits, or whether it is a part of a sound business strategy aimed at increasing shareholder value through building a responsible image and addressing

diverse stakeholder demands. In order to distinguish between these two conflicting channels, I examine the moderating effect of a positive achieved social status shift on the relationship between CSR and firm performance.

The first possibility is that award-winning CEOs increase companies' social performance in order to build their personal reputations and enjoy the benefits associated with engagement in social actions. This effect can be supported by the fact that winning an award is likely to increase CEOs' influence within a company (Malmendier and Tate, 2009), providing them with more power to affect board decisions, including those related to the firm's CSR investments (Muttakin et al., 2016). In addition, higher power can lead executives to underestimate their dependence on resources and support provided by their stakeholders, resulting in a lower focus on meeting their social demands (Tang et al., 2015). Finally, Malmendier and Tate (2009) argue that positive reputational shifts can distract CEOs from their core corporate responsibilities and divert their attention to finding ways to preserve their personal reputations.

There are several examples of opportunistic behaviour among highly reputed CEOs. Malmendier and Tate (2009) and Wade et al. (2006) document an increase in compensation among award winners without a corresponding increase in performance, suggesting that, following a positive status shift, CEOs often engage in rent extraction activities. Kim and Park (2014) investigate the effect of CEO awards on investor's earnings predictability and find that award-winning CEOs produce lower quality financial reporting. Francis et al. (2008) uses an alternative, media-based measure of CEO reputation and reports a similar pattern of poorer discretionary earnings quality as well as lower overall earnings quality. Finally, Malmendier and Tate (2009) find an increased incidence of earning management among award-winning executives, arguing that these CEOs are inclined to inflate earnings in order to maintain their "superstar" status.

If award-winning CEOs increase CSR primarily in order to improve their personal reputation, it will likely result into varied social initiatives that are poorly aligned with considerations of organisational outcomes. Despite a generally positive link between CSR and financial performance, such social projects are unlikely to create firm value due to inefficient use of company resources and the diminishing ef-

fect of inconsistent CSR engagement on the perceived credibility of company's social efforts (Basu and Palazzo, 2008; Rivera et al., 2017; Tang et al., 2012). Therefore, if the motivation behind higher CSR among CEOs with increased achieved status stems from a desire to improve their personal reputation, I expect to find a negative moderating effect of achieved status on the link between social and financial performance.

An alternative possibility is that award winners invest in CSR as a part of a sound business strategy, as executives realise the presence of higher stakeholder demands associated with increased firm visibility, and use social actions in order to meet these demands. This pattern of behaviour could be observed if award-winning CEOs realise the value of aligning their actions with stakeholder interests, which can be more beneficial to their reputational capital in the long term. Consistent with this argument, Koh (2011) finds that award-winning CEOs are less likely to use earnings management to meet short-term expectations and are more likely to use conservative accounting practices<sup>2</sup>. In addition, Yoo and Pae (2016) investigate the patterns in charitable contributions of award-winning firms in Korea, and find that corporate giving in such companies is more indicative of a business strategy aimed at maximizing firm value rather than opportunistic CEO behaviour.

If award-winning CEOs align their actions with stakeholder interests and increase CSR investments as a part of a sound business strategy, the resulting social performance should not have a negative impact on firm value, as it is more likely to reflect the company's mission and signal the firm's intention to promote social welfare. However, since higher social participation in this case is likely simply meeting increased stakeholder demand, it would not be expected to create additional value either. Therefore, if a positive achieved status shift incentivises executives to align their interests with those of their company's stakeholders, I expect to find a neutral moderating effect of achieved status on the relationship between social and financial performance.

The conflicting theory on the influence of CEO status and reputation on organisational strategy and outcomes makes it unclear which effect is more likely to be

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<sup>2</sup>Some of the results presented in Koh (2011) contradict those reported by Malmendier and Tate (2009), and Koh (2011) argues that the results presented by Malmendier and Tate (2009) are highly specific to their methodological approach of using a matched control sample.

observed. In addition, the empirical findings appear to provide some support to both views, suggesting that different effects might be observed depending on the examined aspect of corporate behaviour. Therefore, I address the question of the moderating effect of achieved status on CSR and firm performance empirically.

**Hypothesis 2a:** *CEO achieved status will negatively moderate the relationship between social and financial firm performance.*

**Hypothesis 2b:** *CEO achieved status will have a neutral moderating effect on the relationship between social and financial firm performance.*

### 5.3 Data and methodology

To analyse the financial performance implications of CSR initiatives by high status executives, I start with the same sample of S&P 500 CEOs as in the previous chapter that examined the role of CEO social status in strategic decisions related to corporate social responsibility. I then collect additional data for constructing firm performance measures from *Compustat*. The usable dataset is comprised of 5,031 firm-year observations from 469 companies and includes all observations for which financial and CSR information is available.

I proxy firm performance using return on assets (ROA), a common measure of financial performance that has been widely used in recent studies examining the performance implications of CSR initiatives (Jo and Harjoto, 2012; Petrenko et al., 2016; Servaes and Tamayo, 2013). Following Petrenko et al. (2016), ROA is calculated as net income divided by book assets. Additionally, I include two other measures of firm performance in supplementary analysis: return on sales (ROS), computed as net income divided by sales, and return on equity (ROE), calculated as net income divided by shareholder's equity. These measures are also commonly used to assess firm profitability (Jian and Lee, 2011; Servaes and Tamayo, 2013).

Consistent with the methodology in the previous chapters, I use the level of educational prestige to indicate CEO ascribed social status, and define a CEO as having high ascribed status if he or she received a bachelor degree from one of the Ivy League universities. I use prestigious business awards to indicate exogenous shocks to CEO achieved social status, utilising a selection of ten national publications that

are prominent enough to affect CEO status, and are not subject to any constraints such as CEO age, gender or industry<sup>3</sup>.

To measure corporate social responsibility performance, I utilise data from *MSCI ESG Stats* (formerly known as *Kinder, Lyndenberg, Domini, and Company* or *KLD*). For tests in this chapter, I use the aggregate CSR measures (total CSR strengths, total CSR concerns and net CSR) as independent explanatory variables, and also include interaction variables between the indicators of CEO status and the measures of CSR (similar to Petrenko et al., 2016). The construction of different CSR variables is described in detail in Chapter 4 (Section 4.3.2) and is summarised in Table A.11 in the Appendix.

## 5.4 Ascribed status, CSR and firm performance

### 5.4.1 Empirical specification

I analyse the moderating effect of CEO ascribed status on the link between social and financial firm performance using linear regression models with the following specification:

$$\begin{aligned} Performance_{ft} = & \alpha + \beta_1 CSR_{ft-1} + \beta_2 Status_{ft} + \beta_3 CSR_{ft-1} * Status_{ft} + \\ & \beta_4 Firm_{ft-1} + \beta_5 CEO_{ft} + FixedEffects_{ft} + \varepsilon_{ft} \end{aligned} \quad (5.1)$$

$Performance_{ft}$  is the level of performance in firm  $f$  at time  $t$ , where performance is proxied by the return on assets, return on sales and return on equity.  $CSR_{ft-1}$  is the measure of social performance. I use the net CSR ratings in the main model, and also consider total CSR strengths and total CSR concerns separately in additional models<sup>4</sup>.  $Status_{ft}$  is the indicator of CEO ascribed status which equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise.  $CSR_{ft-1} * Status_{ft}$  is the interaction term between CSR performance and the indicator of CEO ascribed status.

$Firm_{ft-1}$  and  $CEO_{ft}$  represent a set of firm and CEO-related control variables.

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<sup>3</sup>Chapter 2, Section 2.3 contains detailed discussion on the status measurement methodology adopted in this thesis.

<sup>4</sup>Table A.11 in the Appendix provides a description of how different CSR variables are constructed.

I employ a similar set of controls to those used in recent studies that examine the relationship between financial and social firm performance (see, for example, Jo and Harjoto, 2012; Petrenko et al., 2016; Servaes and Tamayo, 2013). Firm controls include firm size, leverage, R&D intensity and capital intensity. Since firm performance might be subject to previous trends idiosyncratic to a firm, the models also include a measure of firm performance in the previous year. CEO-specific controls include CEO age and CEO tenure, measured in years and a binary indicator of CEO gender that equals to one if a CEO is female and equals to zero otherwise. All financial and CEO-related variables are summarised in Table A.10 in the Appendix. *FixedEffects<sub>ft</sub>* include year and firm fixed effects to account for time trends as well as industry and firm-specific drivers of financial performance.

The results of the Cook-Weisberg tests show that the tests associated with the relationship between firm and social performance also suffer from the presence of heteroskedasticity ( $p < 0.001$ ). Therefore, I use robust standard errors clustered at the individual firm level. The VIF scores for all of the predictor variables are below 1.5, suggesting that multicollinearity is not a concern in this analysis. In addition, similar to the models used to predict CSR, I address potential endogeneity concerns by using models with a fixed effects estimator and verifying that all independent variables pre-date the dependent measures of financial performance (similar to Dupire and M’Zali, 2016; Oh et al., 2016; Servaes and Tamayo, 2013).

To address the existing theoretical concern that the effect of CSR on firm performance might show up with some lag, I examine the pairwise correlations between the main CSR variables and ROA, with CSR lags ranging between  $t-4$  and  $t+2$  relative to ROA at time  $t$ <sup>5</sup>. Table 5.1 reports these correlation coefficients, showing that the unconditional correlation between CSR variables and ROA is generally quite low and does not appear to vary considerably depending on the lag (coefficients remain within  $|0.1|$  across all CSR measures and all examined lags). Therefore, I lag the explanatory CSR measures by one period, consistent with the timing of other independent variables and in line with the approach adopted in similar studies (Harjoto and Laksmana, 2016; Servaes and Tamayo, 2013).

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<sup>5</sup>I include correlations with future values of CSR to check how firm performance is related to future CSR and whether this relationship shows any notable differences compared to past CSR.



Table 5.1: Pairwise correlations between ROA and CSR with different time lags

	CSR, t-4			CSR, t-3			CSR, t-2			CSR, t-1		
	1	2	3	1	2	3	1	2	3	1	2	3
ROA, t	0.07	0.04	-0.06	0.06	0.02	-0.06	0.06	0.01	-0.08	0.07	0.01	-0.09
	CSR, t			CSR, t+1			CSR, t+2					
	1	2	3	1	2	3	1	2	3			
ROA, t	0.08	0.01	-0.10	0.07	-0.00	-0.09	0.06	-0.01	-0.09			

The table reports pairwise correlation coefficients between return on assets (ROA) at time  $t$  and CSR measures at times  $t-4$ ,  $t-3$ ,  $t-2$ ,  $t-1$ ,  $t$ ,  $t+1$  and  $t+2$ . Columns with the heading 1 represent net CSR. Columns with the headings 2 and 3 represent total CSR strengths and total CSR concerns, respectively. Please refer to Table A.11 in the Appendix for the description of CSR measures.

### 5.4.2 Empirical findings

Hypothesis 1 posits that CEO ascribed status will negatively moderate the relationship between social and financial firm performance. The results of testing this hypothesis are presented in Table 5.2.

The coefficient on the ascribed status indicator remains insignificant at the 10% level across all models, suggesting that elite background in itself has no significant relationship with firm performance. Models with fixed firm effects also show no evidence of a significant relationship between firm's financial and social performance, as well as no moderating effect of ascribed status. Indeed, the coefficients on the interaction terms between ascribed status and CSR variables are not significant at the 10% level in models that use net CSR as well as estimations that model CSR strengths and CSR concerns separately. Specifically, the magnitude of the coefficients does not exceed  $|0.001|$  with  $p$ -values greater than 0.10. These findings provide sufficient evidence to reject Hypothesis 1 as ascribed status does not appear to lower the effect of social initiatives on firm performance, indicating that CSR decisions motivated by CEO status concerns do not result in lower firm benefits from social actions.

Table 5.2: The effect of CSR and ascribed status on firm performance

	[1] ROA	[2] ROA
Ascribed status	0.005 (0.007)	0.011 (0.009)
CSR net	-0.001 (0.001)	
Ascribed status x CSR net	-0.000 (0.001)	
CSR strengths		-0.002 (0.001)
CSR concerns		0.000 (0.001)
Ascribed status x CSR strengths		-0.001 (0.001)
Ascribed status x CSR concerns		-0.001 (0.002)
Firm size	-0.055** (0.021)	-0.054** (0.021)
R&D intensity	-0.116 (0.149)	-0.114 (0.148)
Capital intensity	-0.101** (0.043)	-0.102** (0.043)
Leverage	0.013 (0.023)	0.013 (0.023)
Lagged DV	0.138 (0.088)	0.137 (0.088)
CEO age	-0.000 (0.001)	-0.000 (0.001)
CEO tenure	0.001 (0.001)	0.001 (0.001)
CEO gender	-0.033** (0.016)	-0.032** (0.016)
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
No. of observations	5031	5031
No. of firms	469	469
Adjusted R-squared	0.108	0.108

The table presents results of regression models testing the moderating effect of CEO ascribed status on the relationship between firm performance and CSR. The dependent variable is the return on assets (ROA), calculated as net income divided by book assets. CSR strengths (concerns) are the aggregate CSR strengths (concerns) across all CSR dimensions. CSR net is the difference between CSR strengths and CSR concerns. Ascribed status \* CSR net, ascribed status \* CSR strengths and ascribed status \* CSR concerns are the interaction terms. Lagged DV is the lagged dependent variable. Firm size is the natural logarithm of total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Capital intensity is calculated as the net property, plant and equipment divided by total sales. Leverage is calculated as total debt divided by total assets. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

### 5.4.3 Robustness

To verify that the absence of a moderating ascribed status influence is not specific to the choice of the measure of firm performance, I perform supplementary analysis employing two additional commonly used indicators of firm profitability (Jian and Lee, 2011; Servaes and Tamayo, 2013). Table 5.3 presents the results, with Panel A showing the effect of CSR by high ascribed status executives on the return on sales, and Panel B reporting results of similar estimations using the return on equity as the dependent variable.

Consistent with the main results, the coefficients on the ascribed status indicator and the interaction terms between ascribed status and various measures of CSR are not significant at the 10% level across all models. These findings provide further

evidence that social initiatives by high ascribed status CEOs do not necessarily translate into lower firm performance, despite being motivated in part by CEO status concerns.

Table 5.3: Robustness tests: Alternative performance measures and ascribed status

Panel A: Return on sales (ROS)		
	[1] ROS	[2] ROS
Ascribed status	0.005 (0.015)	0.012 (0.017)
CSR net	-0.003 (0.003)	
Ascribed status x CSR net	0.000 (0.002)	
CSR strengths		-0.004 (0.003)
CSR concerns		0.002 (0.003)
Ascribed status x CSR strengths		-0.000 (0.002)
Ascribed status x CSR concerns		-0.002 (0.002)
Firm and CEO controls	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
No. of observations	5031	5031
No. of firms	469	469
Adjusted R-squared	0.126	0.126
Panel B: Return on equity (ROE)		
	[1] ROE	[2] ROE
Ascribed status	-0.156 (0.150)	-0.304 (0.188)
CSR net	0.016 (0.036)	
Ascribed status x CSR net	-0.013 (0.026)	
CSR strengths		-0.031 (0.049)
CSR concerns		-0.090* (0.052)
Ascribed status x CSR strengths		-0.003 (0.025)
Ascribed status x CSR concerns		0.050 (0.037)
Firm and CEO controls	Yes	Yes
Firm fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
No. of observations	5031	5031
No. of firms	469	469
Adjusted R-squared	0.004	0.006

The table presents results of regression models testing the moderating effect of CEO ascribed status on the relationship between firm performance and CSR. All models in Panel A employ return on sales (ROS) as the dependent variable, calculated as net income divided by total sales. All models in Panel B employ return on equity (ROE) as the dependent variable, calculated as net income divided by shareholder's equity. CSR strengths (concerns) are the aggregate CSR strengths (concerns) across all CSR dimensions. CSR net is the difference between CSR strengths and CSR concerns. Ascribed status \* CSR net, ascribed status \* CSR strengths and ascribed status \* CSR concerns are the interaction terms. All models include a set of firm and CEO controls that are not reported for brevity. Firm controls include firm size, R&D intensity, capital intensity, leverage, and a lagged dependent variable. CEO controls include CEO age, tenure and gender. All models include year and firm fixed effects. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

## 5.5 Achieved status, CSR and firm performance

### 5.5.1 Empirical specification

Next I analyse the moderating effect of achieved status on the link between social and financial firm performance by comparing within-firm changes in financial performance before and after CEOs receive their first high-profile award. Linear regression models are applied with the following specification:

$$\begin{aligned} Performance_{ft} = & \alpha + \beta_1 CSR_{ft-1} + \beta_2 PostAward_{ft} + \\ & \beta_3 CSR_{ft-1} * PostAward_{ft} + \beta_4 Firm_{ft-1} + \beta_5 CEO_{ft} + FixedEffects_{ft} + \varepsilon \end{aligned} \quad (5.2)$$

$Performance_{ft}$  is the level of firm performance proxied by the return on assets, return on sales and return on equity.  $CSR_{ft-1}$  is the measure of CSR performance. Net CSR score is used in the main model, with additional estimations also disaggregating the overall social performance into CSR strengths and CSR concerns<sup>6</sup>.  $PostAward_{ft}$  is a binary variable set to one in the period after a CEO wins an award, indicating high achieved social status.  $CSR_{ft-1} * PostAward_{ft}$  is the interaction term between CSR performance and the indicator of high achieved status.

$Firm_{ft-1}$  and  $CEO_{ft}$  represent a range of firm and CEO-related control variables, similar to those used in tests of ascribed status influence. Firm controls include firm size, leverage, R&D intensity, capital intensity, and a measure of firm performance in the previous year. CEO-specific controls include CEO age and CEO tenure, measured in years<sup>7</sup>. All financial and CEO-related variables are summarised in Table A.10 in the Appendix.  $FixedEffects_{ft}$  include year and firm fixed effects to account for time trends as well as industry and firm-specific drivers of financial performance.

Similar to the tests within the ascribed status dimension, I control for heteroskedasticity by using robust standard errors clustered at the individual firm level. The VIF scores for the predictor variables are slightly higher in tests related to CEO

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<sup>6</sup>Table A.11 in the Appendix provides a description of how different CSR variables are constructed

<sup>7</sup>CEO gender is not included in tests related to the achieved status dimension because it is a time-invariant characteristic within this sample, and it is accounted for by including firm fixed effects.

achieved social status, but remain below 3 across all variables, suggesting that multicollinearity is still not of particular concern. In order to attenuate endogeneity, I verify that independent variables, including measures of CSR, pre-date the dependent measure of financial performance (similar to Dupire and M’Zali, 2016; Oh et al., 2016; Servaes and Tamayo, 2013).

### 5.5.2 Empirical findings

This analysis is aimed at developing an understanding of the likely motivations that drive higher social performance among executives that experience a positive achieved status shift. In order to discern whether award-winners increase CSR for their personal benefits or as part of a sound business strategy, I analyse the moderating effect of a positive status shift on the link between social and financial performance. I developed two contrasting hypotheses: if executives increase CSR for personal reasons, there will be a negative moderating effect from achieved status (Hypothesis 2a); if higher CSR is part of a business strategy that addresses higher social demands following the increase in firm visibility, there will be a neutral moderating status influence (Hypothesis 2b). The results are presented in Table 5.4, with Models 1 - 3 employing the net CSR measure as the proxy for social performance and Models 4 - 6 using CSR strengths and CSR concerns separately.

I begin by considering the direct impact of an achieved status shift on firm financial performance. The coefficient on the *Post award* variable is negative in the pre/post 1 year period and positive in the two subsequent periods, but remains insignificant at the 10% level in all models, suggesting there is no direct relationship between an increase in status and firm financial performance. These results might appear to contradict those reported by Malmendier and Tate (2009), who also examine the influence of prestigious awards on firms’ return on assets (ROA), as the authors argue that firms with award-winning CEOs experience a significant decline in ROA following an award. However, the argument in Malmendier and Tate (2009) is primarily based on the results from an unconditional comparison of the difference in ROA among award winners between the year before the award and one to three years after the award. These findings do not hold when the variation among award winners is compared to the difference among predicted winners, suggesting that the

observed results might be related to firm characteristics other than increased CEO status<sup>8</sup>. Similar to Malmendier and Tate (2009), I also find a significant decrease in financial performance among award winners when considering the unconditional changes in ROA, but these results do not hold when controlling for other firm and CEO characteristics.

Turning to the relationship between social and financial performance among award winners, there are some significant results. The coefficient on the net CSR is significantly negatively related to the firm's ROA in Model 2 ( $p$ -value $<0.05$ ), and CSR strengths load significantly negatively on ROA in Models 5 and 6 ( $p$ -value $<0.10$ ). These findings suggest that there might be a general negative relationship between social and financial performance among award-winning firms. However, the results do not appear consistent in different evaluation periods, indicating that the observed pattern might be specific to a particular set of observations.

The coefficients on the interaction terms between the indicator of the post-award period and various measures of social performance are insignificant at the 10% level across all models. These results provide support to Hypothesis 2b, and are consistent with the view that award winners align their interests with company stakeholders following a positive status shift, increasing social performance as part of a sound business strategy rather than in pursuit of personal benefits. The evident focus on core CSR among award-winners (see Table 4.16) is also consistent with this view as social actions targeting primary stakeholders are more likely to be related to company strategy (Dupire and M'Zali, 2016; Flammer, 2015).

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<sup>8</sup>Malmendier and Tate (2009) show that the difference-in-differences in ROA is significant when the trend among award winners is compared to that among all non-winning firms rather than a matched sample of predicted winners. However, these results should be taken with caution as award-winning firms are likely to be systematically different from other companies, and these differences could be driving the results.

Table 5.4: The effect of CSR and achieved status on firm performance

	ROA			ROA		
	[1] Pre/post 1 year	[2] Pre/post 2 years	[3] Pre/post 3 years	[4] Pre/post 1 year	[5] Pre/post 2 years	[6] Pre/post 3 years
Post award	-0.009 (0.011)	0.011 (0.018)	0.002 (0.031)	-0.009 (0.014)	0.008 (0.021)	0.005 (0.035)
CSR net	0.000 (0.002)	-0.009** (0.003)	-0.007 (0.005)			
Post award * CSR net	-0.003 (0.002)	-0.000 (0.002)	0.001 (0.003)			
CSR strengths				0.002 (0.003)	-0.015** (0.006)	-0.014* (0.007)
CSR concerns				0.004 (0.004)	0.002 (0.005)	-0.001 (0.006)
Post award * CSR strengths				-0.003 (0.002)	0.000 (0.003)	0.000 (0.003)
Post award * CSR concernce				0.004 (0.003)	0.000 (0.004)	-0.004 (0.006)
Firm size	-0.012** (0.005)	-0.058** (0.027)	-0.049** (0.022)	-0.018*** (0.006)	-0.054** (0.027)	-0.047** (0.022)
Leverage	0.020 (0.052)	-0.087 (0.069)	-0.038 (0.048)	0.039 (0.053)	-0.082 (0.068)	-0.022 (0.049)
R&D intensity	0.241** (0.112)	0.703*** (0.091)	0.243* (0.122)	0.252** (0.112)	0.697*** (0.091)	0.232* (0.124)
Capital intensity	-0.039* (0.022)	-0.081 (0.097)	-0.122 (0.120)	-0.031 (0.023)	-0.079 (0.097)	-0.117 (0.117)
Lagged ROA	0.200*** (0.060)	0.061 (0.050)	0.060 (0.086)	0.213*** (0.059)	0.054 (0.051)	0.058 (0.091)
CEO age	-0.000 (0.001)	0.000 (0.007)	-0.001 (0.002)	-0.001 (0.001)	0.001 (0.007)	-0.001 (0.002)
CEO tenure	0.001 (0.001)	-0.005 (0.010)	0.000 (0.002)	0.001* (0.001)	-0.004 (0.010)	-0.000 (0.002)
Firm fixed effects	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43
Adjusted R-squared	0.461	0.362	0.185	0.480	0.368	0.193

The table reports the within-firm change in return on assets (ROA) before and after a CEO wins an award. The dependent variable in all models is ROA, calculated as net income divided by total assets. Post award is a dummy variable set to 1 in the period after a CEO wins an award. CSR strengths (concerns) are the aggregate CSR strengths (concerns) across all CSR dimensions. CSR net is the difference between CSR strengths and CSR concerns. Post award \* CSR net, post award \* CSR strengths and post award \* CSR concerns are the interaction terms. Firm size is the natural logarithm of total assets. Leverage is calculated as total debt divided by total assets. R&D intensity is calculated as R&D expenditure divided by total sales. Capital intensity is calculated as the net property, plant and equipment divided by total sales. CEO age and tenure are measured in years. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All non-CEO controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

### 5.5.3 Robustness

Similar to the approach within the ascribed status dimension, I supplement the analysis of achieved status influence on the link between social initiatives and return on assets with tests that employ two additional commonly used measures of firm performance: return on sales and return on equity (Jian and Lee, 2011; Servaes and Tamayo, 2013). Table 5.5 reports the results of these estimations, providing further

evidence of no significant effect (at the 10% level) of CSR efforts by high achieved status executives on firm performance.

One notable feature emerging from the additional tests is the presence of negative and significant ( $p$ -value $<0.5$ ) coefficients on the *Post award* variable. In particular, the results in Panel A show that the indicator of higher achieved social status is significantly negatively related to the return on sales in the pre/post 1 year period. While this finding could be interpreted to suggest a lower overall performance among award-winning executives following the increase in status, the absence of a similar pattern across other measures of firm performance indicates that this effect is not consistent, and is not robust to using alternative specifications for measuring firm profitability.



Table 5.5: Robustness tests: Alternative performance measures and achieved status

Panel A: Return on sales (ROS)						
	ROS			ROS		
	[1]	[2]	[3]	[4]	[5]	[6]
	Pre/post 1 year	Pre/post 2 years	Pre/post 3 years	Pre/post 1 year	Pre/post 2 years	Pre/post 3 years
Post award	-0.034** (0.015)	-0.018 (0.050)	0.019 (0.056)	-0.045** (0.023)	-0.032 (0.051)	0.003 (0.059)
CSR net	-0.003 (0.003)	-0.017*** (0.005)	-0.006 (0.010)			
Post award * CSR net	-0.001 (0.003)	-0.002 (0.004)	0.004 (0.005)			
CSR strengths				-0.004 (0.004)	-0.031*** (0.011)	-0.024** (0.010)
CSR concerns				0.001 (0.004)	0.000 (0.007)	-0.016 (0.015)
Post award * CSR strengths				0.000 (0.004)	-0.000 (0.005)	0.006 (0.004)
Post award * CSR concernce				0.005 (0.005)	0.004 (0.007)	-0.001 (0.008)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43
Adjusted R-squared	0.270	0.173	0.136	0.273	0.185	0.147

Panel B: Return on equity (ROE)						
	ROE			ROE		
	[1]	[2]	[3]	[4]	[5]	[6]
	Pre/post 1 year	Pre/post 2 years	Pre/post 3 years	Pre/post 1 year	Pre/post 2 years	Pre/post 3 years
Post award	-0.050 (0.099)	-0.508 (0.370)	-1.040 (0.846)	0.055 (0.156)	-0.352 (0.327)	-1.286 (0.971)
CSR net	0.070 (0.059)	0.045 (0.053)	0.215 (0.138)			
Post award * CSR net	-0.126 (0.082)	-0.084 (0.072)	-0.069 (0.111)			
CSR strengths				0.096 (0.079)	0.066 (0.090)	0.256 (0.210)
CSR concerns				-0.016 (0.041)	-0.045 (0.047)	-0.206 (0.128)
Post award * CSR strengths				-0.139 (0.098)	-0.107 (0.093)	-0.037 (0.129)
Post award * CSR concernce				0.093 (0.063)	0.028 (0.042)	0.198 (0.125)
Firm and CEO controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	176	260	258	176	260	258
No. of firms	88	65	43	88	65	43
Adjusted R-squared	0.167	0.240	0.128	0.172	0.238	0.122

The table reports the within-firm change in firm performance before and after a CEO wins an award. All models in Panel A employ return on sales (ROS) as the dependent variable, calculated as net income divided by total sales. All models in Panel B employ return on equity (ROE) as the dependent variable, calculated as net income divided by shareholder's equity. Post award is a dummy variable set to 1 in the period after a CEO wins an award. CSR strengths (concerns) are the aggregate CSR strengths (concerns) across all CSR dimensions. CSR net is the difference between CSR strengths and CSR concerns. Post award \* CSR net, post award \* CSR strengths and post award \* CSR concerns are the interaction terms. All models include a set of firm and CEO controls that are not reported for brevity. Firm controls include firm size, R&D intensity, capital intensity, leverage, and a lagged dependent variable. CEO controls include CEO age and tenure. Comparisons for 2 and 3 years include both firm and year fixed effects. For the 1 year comparison, firm fixed effects are not estimated because of insufficient observations required to estimate fixed effects. All non-CEO controls are lagged by one period. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

## 5.6 Discussion and conclusions

In this chapter, I consider the potential moderating role of CEO social status characteristics on the relationship between social and financial firm performance. Although prior research suggests that decisions regarding CSR strategy among high ascribed status CEOs are likely to be, at least partially, motivated by personal considerations related to their standing within the corporate elite, I find no evidence of a negative moderating effect from CSR initiatives by high ascribed status CEOs on the relationship between social and firm performance. This suggests that, with regards to the firm's CSR, personal motivations of elite executives do not necessarily misalign their interests with those of other stakeholders, and the adopted CSR strategy might be beneficial to the firm as well as its CEO.

Within the achieved status dimension, I develop two contrasting hypotheses and address the question of the moderating effect of achieved status on CSR and firm performance empirically. I find no evidence of a negative impact from social actions by high achieved status CEOs on firm performance, consistent with the view that positive shifts in achieved CEO status result in a better alignment of CEO and stakeholder interests (Koh, 2011; Yoo and Pae, 2016).

Overall, my findings suggest that despite the partially personal rather than organisational motivation behind some of the social initiatives, the presence of high status executives does not diminish the impact of their CSR activities on firm performance, lending some support to the argument that strategic or opportunistic use of CSR does not necessarily lead to poorer organisational outcomes (Petrovits, 2006). Therefore, despite the net effect of CSR on shareholder value still being debated, CSR initiatives motivated by executives' social status do not appear to result in additional agency concerns.

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## CHAPTER 6

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# Conclusion

The theoretical and empirical analysis in this thesis establishes the importance of CEO social status influence on corporate behaviour and firm-level outcomes. My overall findings are consistent with the hypothesis that executives value their social status position and associated membership within elite social groups, leading to strategic decisions that reflect a desire to preserve their social standing. In particular, I find that both high ascribed and elevated achieved social status are associated with reduced M&A activity, and the effect is strongest among executives who possess both status types simultaneously. In addition, both types of CEO status are positively related to the firms' social performance, although the specific strategies are different between executives with high ascribed and high achieved social status.

Several important distinctions between the influences of ascribed and achieved status emerge from this thesis, indicating the importance of considering social status origin. First, the effect of ascribed status is constant while the influence of achieved social status follows changes in the status position and the impact is limited to several years. Second, while ascribed status has no significant impact on firm value, possessing high achieved social status can have negative performance implications, as suggested by the negative market response to acquisition deal announcements by executives with recently elevated status. Finally, the behavioural hypotheses developed from the review of diverse literature on social status suggest unique motivations for the observed behavioural patterns among executives with high ascribed and high achieved social status. While the difference in motivations related to status origin was not particularly reflected in executives' approach to M&A and CSR strategies, it does not necessarily imply that the influence of ascribed and achieved social status will be similar for other corporate policies.

Thus, one natural avenue for future research is to examine other firm-level outcomes that might be influenced by CEO social status. For example, ascribed status might play a role in determining firms' decisions regarding strategic alliances, such as joint ventures. Lower status individuals might be more likely to view such alliances as advantageous due to the networking benefits they provide, and the social status of alliance partners may also differ between executives with different ascribed status characteristics. It would also be beneficial to explore whether the lower observed risk taking among executives with high achieved social status manifests itself in a

similar fashion in decisions related to the firms' financing strategy.

One of the limitations in this thesis is related to the measurement of CEO social status, particularly within the ascribed status dimension. While the level of university prestige has been linked with social class origins in prior literature (Domhoff, 1970; Useem and Karabel, 1986; Westphal and Khanna, 2003), the research in this area generally suggests that using prestige of preparatory or secondary school might be a better indicator of ascribed status (Lucey et al., 2013; Palmer and Barber, 2001). My problem in implementing such a measure was data availability, but this is likely to be a time-specific limitation given the general growth in alternative data available for finance.

A beneficial direction for future research would, therefore, be to develop additional measures of ascribed and achieved social status using more detailed personal information on CEOs. Within the ascribed status dimension, measures could be improved through incorporating educational information prior to college degrees (Lucey et al., 2013; Palmer and Barber, 2001), or using more direct measures of perceived social class background (Kish-Gephart and Campbell, 2015). Measuring achieved social status could also benefit from incorporating factors such as executive perks and corporate affiliations (McDonald and Westphal, 2010; Rajan and Wulf, 2006). Furthermore, ascribed and achieved social status characteristics could potentially be indicated by identifying relevant patterns in CEO speech, similar to one of the approaches to determining the level of CEO overconfidence (Liu and Taffler, 2008).

Another limitation of my analysis that results from the data availability issues is the focus on the CEO alone. While the theoretical and empirical research on the role of corporate executives points to a substantial CEO effect on corporate policies and firm performance (Baxamusa and Jalal, 2016; Benmelech and Frydman, 2015; Chen et al., 2014), other literature also highlights the importance of directors' characteristics in determining strategic decisions (Levi et al., 2014; Tang et al., 2011). Thus, examining the influence of directors' social status as well as considering the interaction between CEO and board members' social characteristics can provide a richer understanding of the role of social status in corporate decision making.

Finally, the findings in this thesis are limited to the North American context.

Considering the documented differences in the relative importance of status across different cultures (see, for example, Huberman et al., 2004), it would be beneficial to explore how my findings translate to other social settings, and investigate the potential variation in social status influence internationally.

I see these limitations as opportunities. Social status represents an evolution in our understanding of influences on financial decision making behaviour. It moves us beyond the cognitive psychology derived influences, such as overconfidence, that began behavioural investigations of CEO financial behaviour. The field of social influences on behaviour, including that of belonging to certain social groups, is a more dynamic, complex, and potentially much more rewarding approach to understanding behaviour given that it brings financial researcher's conceptualization of the CEO much closer to that of a real person with real (and often competing) influences on their decision making.

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## APPENDIX A

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### Appendices

## A.1 Appendix for Chapters 2 and 3

Table A.1: Description of CEO and company awards

Publication Title	Award Title	Award Details
<i>CEO awards</i>		
Business Week	Top Managers of the Year	Annual award with winners chosen by Business Week's editorial staff. The award was conferred to about 15 winners between 1992 and 1995, 25 winners between 1996 and 2002, roughly 15 winners between 2003 and 2005, and 12 winners in 2009. Awards were given between 1988 and 2009.
Financial World	CEOs of the Year	Annual award with winners chosen by Financial World's editorial staff. CEOs of the Year were classified into "Gold", "Silver" and "Bronze" winners. Due to a relatively large number of Bronze winners, only Gold (one winner per year) and Silver (about ten winners per year except in 1995 and 1996 when the number increased to around 70) are considered as indicators of high status. Awards were conferred between 1975 and 1997.
Forbes	Best Performing CEOs	Annual award with winners chosen by Forbes' editorial staff. The list includes five winners in 2001 and ten winners per year thereafter. Awards have been conferred from 2001 to 2012.
Forbes	World's Most Powerful People	Annual award with winners chosen by Forbes' editorial staff. The award is given to about 70 winners each year (one winner for every 100 million people on Earth). Awards have been conferred from 2009 to 2012.
Industry Week	CEO of the Year	Annual award based on a CEO survey. There were three winners in 1994, five winners in 1995 and one winner per year thereafter.
Chief Executive	CEO of the Year	Annual award with one winner chosen by a panel of CEOs since 1987.
Electronic Business Magazine	CEO of the Year	Annual award with winners chosen by Electronic Business Magazine's editorial staff. One winner per year was chosen between 1997 and 2006.
Morningstar.com	CEO of the Year	Annual award with one winner chosen by editorial staff since 1999.
Time	Person of the Year	Annual award with one winner chosen by editorial staff. Only one sample CEO has received this award between 1992 and 2012.
Time & CNN	25 Most Influential Global Executives	A one-time list of 25 most influential executives published in 2002.
Harvard Business Review	Best-Performing CEOs in the World	A one-time list of 50 world's best performing CEOs published in 2010.
<i>Company awards</i>		
Fortune	America's Most Admired Companies	Annual award with ten winners per year until 2005, 20 winners between 2006 and 2008, and 50 winners between 2009 and 2012.
Business Week	Top 50 Performers	Annual award with 50 winners each year.



Table A.2: CEO ascribed status and acquisitiveness: Post-crisis period

	[1] 5% M&A frequency	[2] 5% M&A invest. (scaled by market cap)	[3] 5% M&A invest. (scaled by assets)
Ascribed status	-0.039 (0.032)	-0.027** (0.013)	-0.022*** (0.007)
Firm size	-0.016 (0.010)	-0.009 (0.006)	-0.005 (0.004)
Past returns	0.006 (0.029)	-0.001 (0.015)	0.001 (0.016)
Tobin's Q	-0.034*** (0.011)	-0.011 (0.007)	-0.011 (0.008)
ROA	0.312** (0.156)	0.145 (0.100)	0.237** (0.113)
Cash holdings	0.130 (0.115)	0.055 (0.033)	0.048 (0.038)
Book leverage	-0.006 (0.092)	0.011 (0.043)	-0.041 (0.026)
CEO age	-0.000 (0.002)	-0.001 (0.001)	-0.000 (0.000)
CEO tenure	0.001 (0.002)	0.001 (0.001)	0.000 (0.001)
CEO gender	0.042 (0.049)	0.085 (0.077)	0.032 (0.025)
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
No. of observations	1230	1230	1230
No. of firms	380	380	380
Adjusted R-squared	0.129	0.057	0.090

The table presents results of OLS regressions testing the effect of possessing high ascribed social status on CEO acquisitiveness during the post-crisis period (2009 - 2012). The dependent variable in Model 1 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in Models 2 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in Model 3 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year and industry fixed effect, defined based on Fama-French 48 industries. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.3: CEO ascribed status and acquisitiveness: Sub-period analysis with firm fixed effects

	Before the crisis start (1992 - 2006)			After the crisis start (2007 - 2012)		
	[1] 5% M&A frequency	[2] 5% M&A inv. (scaled: mkt cap)	[3] 5% M&A inv. (scaled: assets)	[4] 5% M&A frequency	[5] 5% M&A inv. (scaled: mkt cap)	[6] 5% M&A inv. (scaled: assets)
Ascribed status	-0.056 (0.035)	0.001 (0.010)	-0.021 (0.019)	0.001 (0.070)	-0.009 (0.014)	-0.019 (0.021)
Firm size	-0.005 (0.028)	-0.012* (0.007)	-0.017 (0.040)	0.005 (0.035)	-0.027* (0.015)	-0.043** (0.018)
Past returns	-0.014 (0.018)	0.007 (0.005)	0.056 (0.049)	-0.040 (0.032)	-0.021* (0.013)	-0.022 (0.016)
Tobin's Q	0.004 (0.004)	0.001 (0.001)	0.058** (0.028)	-0.010 (0.015)	0.002 (0.006)	0.007 (0.012)
ROA	0.260 (0.160)	0.142* (0.079)	-0.035 (0.256)	0.936*** (0.287)	0.328** (0.137)	0.472*** (0.180)
Cash holdings	0.385*** (0.141)	0.073 (0.045)	0.030 (0.453)	1.139*** (0.233)	0.258** (0.113)	0.516* (0.271)
Book leverage	-0.338*** (0.121)	-0.085* (0.046)	-0.071 (0.101)	-0.424** (0.178)	-0.105 (0.066)	-0.191** (0.083)
CEO age	0.008*** (0.002)	0.001** (0.001)	0.003 (0.002)	0.001 (0.004)	0.001 (0.001)	0.001 (0.001)
CEO tenure	-0.005** (0.002)	-0.002*** (0.001)	-0.003 (0.002)	0.004 (0.005)	-0.001 (0.001)	0.000 (0.002)
CEO gender	0.178** (0.084)	0.032 (0.023)	0.073 (0.054)	0.145 (0.121)	0.002 (0.028)	-0.018 (0.066)
Industry fixed effects	No	No	No	No	No	No
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	4130	4130	4130	1857	1857	1857
No. of firms	522	522	522	411	411	411
Adjusted R-squared	0.215	0.149	0.135	0.190	0.076	0.107

The table presents results of regression models testing the effect of possessing high ascribed social status on CEO acquisitiveness. The sample is split into two sub-periods: models 1 - 3 use observations from 1992 to 2006 and models 4 - 6 use observation from 2007 to 2012. The dependent variable in models 1 and 4 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in models 2 and 5 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in models 3 and 6 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year and firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.4: Ascribed status vs. education with firm fixed effects

	[1] 5% M&A frequency	[2] 5% M&A invest. (scaled by market cap)	[3] 5% M&A invest. (scaled by assets)
Prestigious universities	-0.023 (0.026)	-0.003 (0.007)	-0.028* (0.015)
Top 100 universities	-0.008 (0.020)	-0.009 (0.006)	-0.017 (0.013)
Firm size	-0.010 (0.024)	-0.014** (0.006)	-0.019 (0.031)
Past returns	-0.012 (0.015)	0.003 (0.005)	0.046 (0.038)
Tobin's Q	0.001 (0.004)	0.000 (0.001)	0.054** (0.024)
ROA	0.349*** (0.121)	0.145** (0.057)	-0.069 (0.214)
Cash holdings	0.464*** (0.111)	0.101*** (0.033)	0.134 (0.278)
Book leverage	-0.203** (0.081)	-0.051* (0.028)	-0.016 (0.060)
CEO age	0.005** (0.002)	0.001 (0.001)	0.002 (0.002)
CEO tenure	-0.004** (0.002)	-0.001 (0.001)	-0.002 (0.001)
CEO gender	0.104*** (0.040)	0.032 (0.021)	0.034 (0.031)
Industry fixed effects	No	No	No
Firm fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
No. of observations	5987	5987	5987
No. of firms	616	616	616
Adjusted R-squared	0.199	0.116	0.114

The table presents results of OLS regressions testing the effect of education quality on CEO acquisitiveness. The dependent variable in model 1 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in model 2 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in model 3 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Prestigious universities is a dummy variable that equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Top 100 universities is a dummy variable that equals to 1 if a CEO has received a bachelor degree from one of the world's top 100 universities excluding Ivy League or Russell Group, and equals to 0 otherwise. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year and firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.5: CEO achieved status and acquisitiveness: Longer event windows

Panel A: M&A frequency				
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)
Event window	274	-0.066**	-0.044*	-0.022
[-1, 0]		(2.11)	(1.78)	(0.58)
Event window	218	-0.069**	0.005	-0.073*
[-1, 1]		(2.16)	(0.16)	(1.75)
Event window	175	-0.109***	0.023	-0.131***
[-1, 2]		(2.89)	(0.78)	(2.74)
Event window	129	-0.109**	0.109**	-0.217***
[-1, 3]		(2.37)	(2.19)	(3.29)
Event window	97	-0.103*	-0.031	-0.072
[-1, 4]		(1.85)	(0.65)	(1.07)
Event window	73	-0.096	-0.027	-0.068
[-1, 5]		(1.54)	(0.57)	(0.77)

Panel B: M&A investment				
	Obs.	Award winners (W)	Predicted winners (P)	Difference (W - P)
Event window	274	-0.019**	-0.014	-0.005
[-1, 0]		(2.30)	(1.57)	(0.47)
Event window	218	-0.018**	0.003	-0.021**
[-1, 1]		(2.16)	(0.39)	(1.99)
Event window	175	-0.030***	0.017	-0.046***
[-1, 2]		(2.93)	(1.42)	(2.98)
Event window	129	-0.031**	0.033**	-0.065***
[-1, 3]		(2.31)	(2.40)	(3.22)
Event window	97	-0.028	0.002	-0.030
[-1, 4]		(1.49)	(0.19)	(1.43)
Event window	73	-0.040*	0.006	-0.046*
[-1, 5]		(1.73)	(0.44)	(1.68)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status). Predicted winners sample is constructed using a nearest-neighbour propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than 5% of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than 5% of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.6: CEO achieved status and acquisitiveness: Multiple neighbours

Panel A: M&A frequency									
	Two neighbours			Three neighbours			Four neighbours		
	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference
Event window	272	-0.035	-0.024	271	-0.055	-0.044	270	-0.051	-0.041
[-1, 0]		(1.00)	(0.67)		(1.63)	(1.31)		(1.54)	(1.25)
Event window	217	-0.069*	-0.060	214	-0.070*	-0.061	214	-0.060	-0.051
[-1, 1]		(1.83)	(1.59)		(1.86)	(1.62)		(1.63)	(1.41)
Event window	172	-0.108**	-0.098**	169	-0.103**	-0.091**	165	-0.089**	-0.079*
[-1, 2]		(2.43)	(2.22)		(2.30)	(2.06)		(1.98)	(1.76)
Event window	122	-0.152***	-0.149***	115	-0.151***	-0.147***	113	-0.135***	-0.131**
[-1, 3]		(2.84)	(2.82)		(2.86)	(2.80)		(2.67)	(2.62)

Panel B: M&A investment									
	Two neighbours			Three neighbours			Four neighbours		
	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference	Obs.	Difference (W-P)	Bias-adj. difference
Event window	272	-0.008	-0.003	271	-0.010	-0.005	270	-0.010	-0.006
[-1, 0]		(0.77)	(0.33)		(1.06)	(0.58)		(1.09)	(0.63)
Event window	217	-0.017*	-0.012	214	-0.021**	-0.016	214	-0.018*	-0.013
[-1, 1]		(1.67)	(1.24)		(2.00)	(1.58)		(1.74)	(1.35)
Event window	172	-0.036***	-0.032**	169	-0.032**	-0.027**	165	-0.031**	-0.026**
[-1, 2]		(2.74)	(2.40)		(2.47)	(2.06)		(2.39)	(2.01)
Event window	122	-0.055***	-0.053***	115	-0.057***	-0.055***	113	-0.054***	-0.052***
[-1, 3]		(2.97)	(2.91)		(2.98)	(2.87)		(3.20)	(3.07)

The table presents the differences in acquisitiveness between award winners (high achieved status) and predicted winners (lower achieved status) using two, three or four neighbors. Predicted winners sample is constructed using a nearest-neighbor propensity score match controlling for market capitalization, book-to-market ratio, cash holdings, equity leverage, Tobin's Q, returns from 3rd to 2nd, 6th to 4th, 12th to 7th, and 36th to 13th months before the award month, CEO age, CEO tenure, CEO gender, as well as year, industry and award fixed effects. Year prior to award (year -1) ends exactly six months before the award month. Panel A shows the differences between award winners and predicted winners in the frequency of M&A transactions worth more than five percent of acquirer's value completed during the event window. Panel B displays the differences between award winners and predicted winners in the total investment in M&A transactions worth more than five percent of acquirer's value during the event window, where each deal value is scaled by company's market capitalization two months prior to the transaction. Absolute value of t-statistics are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.7: CEO dual status and acquisitiveness: Including company awards in achieved status identification

	Industry fixed effects			Firm fixed effects		
	[1] 5% M&A frequency	[2] 5% M&A inv. (scaled: mkt cap)	[3] 5% M&A inv. (scaled: assets)	[4] 5% M&A frequency	[5] 5% M&A inv. (scaled: mkt cap)	[6] 5% M&A inv. (scaled: assets)
Achieved status	-0.015 (0.016)	-0.008* (0.005)	-0.047** (0.021)	-0.008 (0.020)	-0.005 (0.006)	-0.052* (0.029)
Ascribed status	-0.014 (0.018)	-0.010** (0.005)	-0.026*** (0.010)	-0.014 (0.026)	0.002 (0.007)	-0.024 (0.015)
Achieved x Ascribed	-0.037 (0.029)	-0.003 (0.007)	0.003 (0.022)	-0.050 (0.035)	-0.014 (0.009)	0.009 (0.030)
Firm size	-0.017*** (0.006)	-0.008*** (0.002)	-0.012* (0.007)	-0.009 (0.025)	-0.014** (0.006)	-0.013 (0.031)
Past returns	0.024* (0.012)	0.010** (0.005)	0.055* (0.030)	-0.011 (0.015)	0.003 (0.005)	0.049 (0.039)
Tobin's Q	0.001 (0.004)	-0.001 (0.001)	0.055*** (0.018)	0.001 (0.004)	0.000 (0.001)	0.054** (0.024)
ROA	0.002 (0.076)	0.027 (0.034)	-0.356** (0.175)	0.353*** (0.121)	0.147*** (0.057)	-0.053 (0.211)
Cash holdings	-0.024 (0.060)	0.000 (0.021)	-0.082 (0.096)	0.463*** (0.110)	0.100*** (0.032)	0.124 (0.276)
Book leverage	-0.078 (0.049)	0.023 (0.018)	0.022 (0.038)	-0.202** (0.081)	-0.050* (0.028)	-0.011 (0.060)
CEO age	0.001 (0.001)	0.000 (0.000)	0.001 (0.001)	0.005** (0.002)	0.001 (0.001)	0.002 (0.002)
CEO tenure	0.001 (0.001)	0.000 (0.000)	-0.001 (0.001)	-0.003** (0.002)	-0.001 (0.001)	-0.002 (0.001)
CEO gender	0.060** (0.027)	0.036 (0.026)	0.034** (0.014)	0.105** (0.041)	0.031 (0.021)	0.035 (0.030)
Industry fixed effects	Yes	Yes	Yes	No	No	No
Firm fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5,987	5,987	5,987	5,987	5,987	5,987
No. of firms	616	616	616	616	616	616
Adjusted R-squared	0.130	0.061	0.112	0.199	0.116	0.116

The table presents results of regression models testing the effect of possessing dual (ascribed and achieved) social status on CEO acquisitiveness, including company awards in achieved status identification. The dependent variable in model 1 is the number of deals worth more than 5% of acquirer's value made in a given year. The dependent variable in model 2 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in model 3 is the total investment in M&A transactions worth more than 5% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Achieved status indicator is equal to 1 if a CEO received a prestigious CEO or firm-level award within two years prior to observation year. Achieved x Ascribed is the interaction term. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compounding returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year fixed effect. Models 1 - 3 include industry fixed effect, defined based on Fama-French 48 industries. Models 4 - 6 include firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.8: CEO dual status and acquisitiveness: Alternative M&amp;A specification

	Industry fixed effects			Firm fixed effects		
	[1] 1% M&A frequency	[2] 1% M&A inv. (scaled: mkt cap)	[3] 1% M&A inv. (scaled: assets)	[4] 1% M&A frequency	[5] 1% M&A inv. (scaled: mkt cap)	[6] 1% M&A inv. (scaled: assets)
Achieved status	-0.100** (0.046)	-0.013** (0.006)	-0.067* (0.039)	-0.084* (0.046)	-0.008 (0.006)	-0.093* (0.056)
Ascribed status	-0.003 (0.032)	-0.010** (0.005)	-0.027*** (0.010)	-0.006 (0.044)	0.002 (0.006)	-0.024 (0.016)
Achieved x Ascribed	0.013 (0.077)	0.001 (0.008)	0.016 (0.038)	-0.009 (0.080)	-0.013 (0.010)	0.051 (0.051)
Firm size	0.015 (0.011)	-0.007*** (0.002)	-0.013* (0.007)	0.024 (0.029)	-0.013** (0.006)	-0.015 (0.030)
Past returns	0.070*** (0.021)	0.011** (0.005)	0.058* (0.030)	0.009 (0.022)	0.003 (0.005)	0.047 (0.039)
Tobin's Q	-0.007 (0.005)	-0.001 (0.001)	0.059*** (0.018)	-0.007 (0.005)	0.000 (0.001)	0.058** (0.024)
ROA	-0.046 (0.127)	0.023 (0.034)	-0.367** (0.172)	0.564*** (0.186)	0.151*** (0.057)	-0.017 (0.210)
Cash holdings	-0.209* (0.111)	-0.005 (0.021)	-0.083 (0.098)	0.453*** (0.156)	0.100*** (0.033)	0.114 (0.276)
Book leverage	-0.123 (0.085)	0.023 (0.019)	0.027 (0.038)	-0.375*** (0.127)	-0.055** (0.028)	-0.017 (0.061)
CEO age	-0.002 (0.002)	-0.000 (0.000)	0.000 (0.001)	0.003 (0.003)	0.001 (0.001)	0.002 (0.002)
CEO tenure	0.003 (0.002)	0.000 (0.000)	-0.001 (0.001)	-0.002 (0.003)	-0.001 (0.001)	-0.002 (0.001)
CEO gender	-0.037 (0.041)	0.033 (0.026)	0.030** (0.015)	0.043 (0.067)	0.030 (0.021)	0.030 (0.030)
Industry fixed effects	Yes	Yes	Yes	No	No	No
Firm fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	5,987	5,987	5,987	5,987	5,987	5,987
No. of firms	616	616	616	616	616	616
Adjusted R-squared	0.228	0.073	0.131	0.331	0.130	0.137

The table presents results of regression models testing the effect of possessing dual (ascribed and achieved) social status on CEO acquisitiveness. The dependent variable in model 1 is the number of deals worth more than 1% of acquirer's value made in a given year. The dependent variable in model 2 is the total investment in M&A transactions worth more than 1% of acquirer's value made in a given year, where each deal is scaled by firm's market capitalization two months prior to the transaction. The dependent variable in model 3 is the total investment in M&A transactions worth more than 1% of acquirer's value made in a given year, where each deal is scaled by firm's book assets at the beginning of the year. All M&A deals are required to involve a purchase of at least 51% of target's shares. Ascribed status indicator equals to 1 if a CEO has received a bachelor degree from one of the Ivy League or Russell Group Universities, and equals to 0 otherwise. Achieved status indicator is equal to 1 if a CEO received a prestigious CEO award within two years prior to observation year. Achieved x Ascribed is the interaction term. Firm size is the log form of market capitalization, calculated as share price multiplied by common shares outstanding. Past returns are the total compound returns for two years prior to observation year. Tobin's Q is calculated as total assets plus market value of equity minus book value of equity, divided by total assets. Return on assets (ROA) is calculated as operating income before depreciation divided by book assets. Cash holdings represent cash and short-term investments divided by book assets. Book leverage is calculated as total debt divided by book assets. All fiscal controls are lagged by one year. CEO age and tenure are measured in years. CEO gender is a dummy variable that equals to 1 if a CEO is a female, and equals to zero otherwise. All regressions include year fixed effect. Models 1 - 3 include industry fixed effect, defined based on Fama-French 48 industries. Models 4 - 6 include firm fixed effect. Robust standard errors are clustered at the firm level and reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.

Table A.9: Achieved status and market response to acquisition announcements: Alternative CAR specifications

Panel A: Market-adjusted 5-day CARs					
	Market-adjusted CAR [-2, +2]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.023* (0.013)				
- M&A deals within 2 years after award		-0.021* (0.012)			
- M&A deals within 3 years after award			-0.019* (0.011)		
- M&A deals within 5 years after award				-0.017* (0.009)	
- M&A deals any time after award					-0.010 (0.010)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1530	1530	1530	1530	1530
Adjusted R-squared	0.057	0.058	0.057	0.058	0.057
Panel B: Market-adjusted 7-day CARs					
	Market-adjusted CAR [-3, +3]				
	[1]	[2]	[3]	[4]	[5]
Award winners:					
- M&A deals within 1 year after award	-0.027* (0.016)				
- M&A deals within 2 years after award		-0.024* (0.013)			
- M&A deals within 3 years after award			-0.021* (0.012)		
- M&A deals within 5 years after award				-0.023** (0.010)	
- M&A deals any time after award					-0.010 (0.011)
Firm and deal controls	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
No. of observations	1530	1530	1530	1530	1530
Adjusted R-squared	0.043	0.044	0.044	0.045	0.042

The table presents results from regression models testing the effect of CEO achieved social status on the announcement returns to M&A deals greater than 5% of acquirer's value. CEOs are defined as having high achieved social status in the period after they win an award. All models use CRSP equal-weighted index as the proxy for market returns. In Panel A, CARs are calculated over a 5-day event window using market-adjusted returns. In Panel B, CARs are calculated over a 7-day event window using market-adjusted returns. Firm and deal controls are included in all models and are not reported for brevity. Controls include firm size, relative deal size, Tobin's Q, book leverage, cash financing indicator, equity financing indicator, deal relatedness indicator, hostile deal indicator and toehold. All regressions include year and industry fixed effects, defined based on Fama-French 48 industries. Robust standard errors are clustered by event date to account for cross-sectional correlation of returns, and are reported in parentheses. Superscripts \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively.



## A.2 Appendix for Chapters 4 and 5

Table A.10: Description of status, firm and CEO-related variables

Variable	Description	Data Source
<i>Status variables</i>		
Ascribed status	A binary indicator that equals to one if a CEO received a bachelor degree from one of the Ivy League universities, and equals to zero otherwise	Marquis Who's Who, Thomson One Banker, EDGAR listings, Notable Names Database, annual reports
Post award	A binary indicator that equals to one in the period after a CEO wins an award and experiences a positive achieved status shift, and equals to zero otherwise	Business Week, Financial World, Forbes, Industry Week, Chief Executive, Electronic Business Magazine, Time, Time & CNN, Harvard Business Review, and Morningstar.com
<i>Firm variables</i>		
Firm size	Natural logarithm of total assets	Compustat
Leverage	Ratio of the sum of total long term debt and debt in current liabilities to total assets	Compustat
ROA	Ratio of operating income before depreciation to total assets	Compustat
R&D intensity	Ratio of R&D expenditures to total sales	Compustat
Advertising intensity	Ratio of advertising expenditures to total sales	Compustat
Capital intensity	Ratio of net property, plant and equipment to total sales	Compustat
Corporate governance	The difference between CSR strengths and concerns within the corporate governance dimension	MSCI ESG Stats (former KLD)
<i>CEO variables</i>		
CEO age	CEO age in years	Compustat ExecuComp
CEO tenure	CEO tenure in years	Compustat ExecuComp
CEO gender	A binary indicator that equals to one if a CEO is a female, and equals to zero otherwise	Compustat ExecuComp

Table A.11: Description of CSR-related variables

Variable	Description
<i>Overall CSR variables</i>	
CSR strengths	Aggregate strengths within six dimensions (excludes corporate governance)
CSR concerns	Aggregate concerns within six dimensions (excludes corporate governance)
CSR net	The difference between CSR strengths and CSR concerns
<i>Core CSR variables</i>	
Core strengths	Sum of "diversity", "employee relations" and "product quality" strengths
Core concerns	Sum of "diversity", "employee relations" and "product quality" concerns
Core net	The difference between core strengths and core concerns
<i>Peripheral CSR variables</i>	
Peripheral strengths	Sum of "community", "environment" and "human rights" strengths
Peripheral concerns	Sum of "community", "environment" and "human rights" concerns
Peripheral net	The difference between peripheral strengths and peripheral concerns
<i>Individual CSR dimensions</i>	
Community strengths (concerns)	Sum of all community strengths (concerns)
Diversity strengths (concerns)	Sum of all diversity strengths (concerns)
Environment strengths (concerns)	Sum of all environment strengths (concerns)
Employee relations strengths (concerns)	Sum of all employee relations strengths (concerns)
Human rights strengths (concerns)	Sum of all human rights strengths (concerns)
Product strengths (concerns)	Sum of all product strengths (concerns)
<i>Scaled CSR variables</i>	
Scaled CSR strengths	Aggregate strengths within six dimensions divided by the maximum possible number of strengths in the given year
Scaled CSR concerns	Aggregate concerns within six dimensions divided by the maximum possible number of concerns in the given year
Scaled CSR net	The difference between scaled CSR strengths and scaled CSR concerns
<i>Industry-adjusted CSR variables</i>	
Industry-adjusted CSR strengths	Aggregate strengths within six dimensions minus the average CSR strengths within the firm's industry
Industry-adjusted CSR concerns	Aggregate concerns within six dimensions minus the average CSR concerns within the firm's industry
Industry-adjusted CSR net	The difference between industry-adjusted CSR strengths and industry-adjusted CSR concerns

All data used to construct CSR measures is obtained from from MSCI ESG Stats (formerly known as Kinder, Lydenberg, Domini, and Company or KLD).

Table A.12: Description of firm performance measures

Variable	Description	Data Source
Return on assets (ROA)	Ratio of net income to total assets	Compustat
Return on sales (ROS)	Ratio of net income to total sales	Compustat
Return on equity (ROE)	Ratio of net income to shareholder's equity	Compustat

Table A.13: KLD social rating items within each dimension

KLD dimension	Strength items	Concern items
Community	Charitable giving (from 1991 through 2011) Innovative giving (from 1991) Support for housing (1991 to 2009) Support for education (1994 to 2009) Non-US charitable giving (1994 to 2009) Volunteer programs (2005 to 2009) Community engagement (from 2010) Other strengths (from 1991 through 2011)	Investment controversies (1991 to 2009) Community impact (from 1991) Tax disputes (1991 to 2009) Other concerns (1991 to 2009)
Diversity	CEO (1991 to 2009) Promotion (from 1991 through 2011) Board of directors - gender (from 1991) Work-life benefits (from 1991 through 2011) Women and minority contracting (from 1991) Employment of the disabled (1991 to 2009) Gay and lesbian policies (from 1995 through 2011) Employment of underrepresented groups (from 2010) Other strengths (from 1991)	Workforce diversity (from 1991) Non-representation (from 1993 through 2011) Board of directors - gender (from 1991) Board of directors - minorities (from 1991) Other concerns (1991 to 2009)
Employee relations	Union relations (from 1991) No-layoff policy (1991 to 1993) Cash profit sharing (from 1991) Employee involvement (from 1991) Retirement benefits strength (1991 to 2009) Employee health and safety (from 2003) Supply chain labor standards (from 2002) Compensation & benefits Employee relations Professional development Human capital management Controversial sourcing (from 2013) Other Strength (from 1991 through 2011)	Union relations (from 1991) Employee health & safety (from 1991) Workforce reductions (1991 to 2009) Retirement benefits concern (1992 to 2009) Supply chain (from 1998) Child labor Other concerns
Environment	Environmental opportunities (from 1991) Waste management (from 1991) Packaging materials & waste (from 1991) Climate change (from 1991) Property, plant, equipment (1991 to 1995) Environmental management systems (from 2006) Water stress Biodiversity & land use Raw material sourcing Natural resource use (from 2013) Environmental opportunities - green buildings (from 2013) Environmental opportunities in renewable energy (from 2013) Waste management - electronic waste (from 2013) Climate change - energy efficiency (from 2013) Climate change - product carbon footprint (from 2013) Climate change - insuring climate change risk (from 2013) Other strengths (from 1991)	Hazardous waste (1991 to 2009) Regulatory compliance (from 1991) Ozone depleting chemicals (1991 to 2009) Toxic spills & releases (from 1991) Agriculture chemicals (1991 to 2009) Climate change (from 1999)  Impact of products & services (from 2010) Biodiversity & land use (from 2010) Operational waste (from 2010) Supply chain management Water management  Other concerns (from 1991)

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Human rights	Positive record in S. Africa (1994 to 1995)	South Africa (1991 to 1994)
	Indigenous peoples relations strength (from 2000)	Northern Ireland (1991 to 1994)
	Labor rights strength (2002 to 2009)	Support for controversial regimes (from 1994)
	Human rights policies & initiatives (from 1994)	Mexico (1994 to 2001) Labor rights concern (1998 to 2009) Indigenous peoples relations concern (2000 to 2009) Operations in Sudan (from 2010 to 2011) Freedom of expression & censorship Human rights violations Other concerns (from 1994)
Product	Quality (from 1991)	Product quality & safety (from 1991)
	R+D, innovation (1991 to 2009)	Marketing & advertising (from 1991)
	Social opportunities (from 1991)	Anticompetitive practices (from 1991)
	Access to finance (from 1991)	Customer relations
	Social opportunities - access to communications (from 2013)	Privacy & data security (from 2015)
	Social opportunities - opportunities in nutrition and health (from 2013)	Other concerns (from 1991)
	Product safety - chemical safety (from 2013)	
	Product safety - financial product safety (from 2013)	
	Product safety - privacy and data security (from 2013)	
	Product safety - responsible investment (from 2013)	
	Product safety - insuring health and demographic risk (from 2013)	
	Other strengths (1991 to 2009)	
Corporate Governance	Limited compensation (1991 to 2009)	High compensation (1991 to 2009)
	Ownership strength (1991 to 2009)	Ownership concern (1991 to 2009)
	Reporting quality (From 1996 - 2012)	Accounting concern (2005 to 2009)
	Political accountability strength (2005 to 2009)	Reporting quality (from 1996 - 2012)
	Public policy strength (from 2007 through 2011)	Political accountability concern (2005 to 2007)
	Corruption & political instability	Public policy concern (from 2007 through 2011)
	Financial system instability	Governance structures (from 2010)
	Other strengths (1991 to 2009)	Controversial investments Business ethics Other concerns (from 1992)

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