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YOU DON'T FORGET YOUR ROOTS: THE INFLUENCE OF CEO SOCIAL CLASS BACKGROUND ON STRATEGIC RISK TAKING

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Social class is increasingly recognized as a powerful force in people's lives. Yet despite the long and extensive stream of research on the upper echelons of organizations, we know little about how executives' formative childhood experiences with social class influence their strategic choices. In this study, we investigate the influence of chief executive officers' (CEOs') perceived social class origins on firm risk taking. We also explore the moderating influences of other important career experiences, in the form of elite education and diverse functional backgrounds. Our theory and findings highlight that an executive's social class origins have a lasting and varying impact on his or her preferences, affecting his or her tendency to take risks. By examining this novel managerial characteristic, we offer important implications for theorizing about social class and upper echelons.

> Americans have a really hard time talking about the class system, because they really don't want to admit that the class system exists. But the reality is it does. . . . No matter how you define it, coming to terms with class in America means understanding how it shapes most everything about you. (*PBS, 2001*)

The terms "corporate elite" and "upper echelons" often invoke images of strategic leaders at the apex of the societal hierarchy. Yet the attendant wealth and privilege of such positions may obscure the fact that not all executives share the same social class *origins*, or early experiences with, and access to, valuable resources while growing up (Domhoff, 2010; Freeland, 2011). Recent empirical and theoretical work in the fields of psychology, education, and sociology suggests that social class can have a profound influence on individuals' perspectives and decision making (Côté, 2011; Fiske & Markus, 2012; Liu, Ali, Soleck, Hopps, Dunston, & Pickett, 2004). Moreover, anecdotal evidence implies that the effects of childhood social class are not easily discarded—even after an individual experiences objective success and movement into a higher social class (see, e.g., Lubrano, 2004). As one chief executive officer (CEO) from a lower social class background explained to the authors:

> You grow up in that kind of a world where you have to work for what you have. You don't have a lot of extra things. You know you've got to work together. How can that not help but have an impact on you?[1]

Despite such evidence that social class matters, organizational researchers know little about how childhood experiences with social class—and subsequent upward mobility—influence individuals in the workplace, including those who have ascended to the top of the corporate hierarchy.

In this study, we take an initial step toward addressing this conspicuous oversight and examine the influence of CEOs' perceived social class

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[1] As part of a larger project aimed at understanding the role of social class background in executive careers, the authors conducted interviews with CEOs from the S&P1500.

background on strategic risk taking at the firm level. We define social class as "a person's perceived place in an economic hierarchy" (Liu et al., 2004: 9). This economic hierarchy reflects differences in access to material resources (more or less abundant) and societal rank (where one stands in comparison to others in society) (Côté, 2011: 47; Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012). Drawing on imprinting theory (Marquis & Tilcsik, 2013), we argue that individuals develop a social class imprint that is highly resistant to decay over time. We apply this perspective to the corporate suite and, building on upper echelons theory (Hambrick & Mason, 1984), suggest that top executives' social class origins will shape how they view and respond to strategic situations. Following prior research (for example, Fiske, Moya, Russell, & Bearns, 2012; Gray & Kish-Gephart, 2013), we distinguish between three levels of social class—lower, middle, and upper—and compare those executives who have experienced the least and the most resource constraints (the upper and lower social classes, respectively) to the "normative" middle class (Skeggs, 2004) with regard to strategic risk taking. We focus on risk taking as the firm-level outcome because of its relevance to a number of influential organizational theories beyond upper echelons, including agency theory (Eisenhardt, 1989) and prospect theory (Kahneman & Tversky, 1979).

Consistent with the idea that the "effects and external manifestations" of imprints can strengthen or decay over time (Marquis & Tilcsik, 2013: 195), we also consider how certain salient characteristics of an executive's career experiences influence the relationship between his or her social class imprint and his or her strategic risk taking. Starting with college education, we suggest that an elite college education will have unique implications for strategic risk taking, because social class origins influence how individuals perceive and respond to that success—as something to be leveraged or something to be protected. Moving beyond prior research that has used elite education as a proxy for social class background (see, e.g., Westphal & Khanna, 2003), this allows us to separate theoretically and empirically the influences of perceived social class background and elite education. We also consider the moderating influence of the executive's functional background. To the extent that executives have experience in diverse and varied functional areas of organizations, we suggest that they will be able to build on their existing mental models and social capital, which will result in higher levels of strategic risk taking.

In this paper, we build on and integrate disparate literatures on upper echelons, social class, and imprinting to theorize and test a model that highlights the complex ways in which social class origins affect risk taking. In so doing, we contribute to the research on the upper echelons of organizations, and extend our understanding of why and how managerial characteristics influence strategic choices. Thirty years ago, Hambrick and Mason (1984: 201) observed that "there has been almost no attempt in the organizational literature to relate socioeconomic background to organizational strategy." To our knowledge, our study represents the first direct empirical test of the effects of perceived CEO social class background on strategic decision making. We also contribute to the emergent stream of social class research in organizational studies and extend researchers' limited understanding of the effects of upward mobility in organizational settings. Our results suggest that an individual's social class origins are not easily shed as he or she rises to the corporate elite; rather, social class origins, and the experiences inherent in them, have a lasting and differential impact on the individual's risk-taking preferences.

THEORETICAL BACKGROUND

Upper Echelons

Hambrick and Mason's (1984) seminal work forms the basis of the empirical stream of research on the "upper echelon" of organizations. In contrast to organizational demography research (see Pfeffer, 1983), which highlighted the importance of the demographic make-up of entire organizations (that is, spanning multiple organizational levels), Hambrick and Mason (1984) brought the focus to the organization's top level, arguing that characteristics of the upper echelon—executive values and preferences—are reflected in organizational outcomes. According to this theorizing, "the givens that a manager brings to an administrative situation" (Hambrick & Mason, 1984: 196) form the manager's mental model, which has a bearing on managerial perceptions, interpretations, and subsequent strategic choices.

Since the publication of that formative article, a stream of studies on executive characteristics and their impact on organizational outcomes has followed. For instance, researchers have examined the effects of executive tenure (see, e.g., Finkelstein & Hambrick, 1990) and various executive traits, such

as hubris (Hayward & Hambrick, 1997), narcissism (Chatterjee & Hambrick, 2007), and charisma (Waldman, Javidan, & Varella, 2004). Upper echelons researchers have also analyzed a score of relationships between top management team (TMT) composition and/or demographic characteristics and firm outcomes (for reviews, see Carpenter, Geletkanycz, & Sanders, 2004; Finkelstein, Hambrick, & Canella, 2009).

Nevertheless, among the plethora of executive characteristics examined, one construct mentioned by Hambrick and Mason (1984) has not been given much research consideration—namely, executive social class background. Some studies have examined the relationship between elite education and executive behavior (see, e.g., Haunschild, Henderson, & Davis-Blake, 1998; Palmer, Jennings, & Zhou, 1993). Tihanyi, Ellstrand, Daily, and Dalton (2000), for example, found that the average level of elite college education of the TMT was positively related to international diversification. Although attendance at an elite college institution is often used as a proxy for an upper social class background (Domhoff, 1970; Westphal & Khanna, 2003), this practice is problematic because it assumes that those who graduated from an elite college institution share such a background. In addition, in an examination of acquisition behavior in the 1960s, Palmer and Barber (2001) used elite secondary education (and/or family membership in a social register) as a proxy for upper social class background, finding that elite secondary education was negatively related to acquisition behavior. While informative, this work did not account for meaningful differences in the early experiences of executives from the lower and middle social classes. Consequently, much remains to be understood about the potentially highly influential nature of childhood social class origins—a topic to which we turn now.

(Lingering) Effects of Social Class Background

As defined earlier, social class represents "a person's perceived place in an economic hierarchy" (Liu et al., 2004: 9). This economic hierarchy reflects differences in individuals' access to material resources and societal rank (Côté, 2011). According to social class theorizing, the objective and subjective aspects of social class are highly interrelated (Bourdieu, 1984; Kraus, Tan, & Tannenbaum, 2013; Markus & Fiske, 2012). Material conditions, through their influence on what a person owns and experiences, shape how individuals perceive where they stand in comparison to others (Kraus et al., 2012). In addition to material conditions (reflecting economic capital), Bourdieu (1984, 1994) argued that individuals in different social classes share similarities in social capital (e.g., connections and networks) and cultural capital (e.g., tastes and practices that are culturally valued). This is because, through socialization and life experiences, individuals develop a "habitus," or a set of dispositions, expectations, and behaviors that are considered normative for members of a particular social class. An individual's habitus operates primarily beneath consciousness, and manifests in tastes, styles, and preferences (such as leisure time and ways of interacting with community institutions). It is also reproduced through everyday actions and interactions (Gray & Kish-Gephart, 2013). As Stephens, Markus, and Townsend (2007: 814, emphasis original) noted: "Although the material conditions of the sociocultural context do not *determine* people's actions, they do *promote* certain kinds of actions and increase the likelihood that these actions will become normative and preferred. . ."

Within organizational studies, direct consideration of social class is limited (for exceptions, see, e.g., Gray & Kish-Gephart, 2013; Leana, Mittal, & Stiehl, 2012; Scully & Blake-Beard, 2006; Smith, Menon, & Thompson, 2012). As Côté (2011: 44) noted, "organization science typically ignores social class," and when it is considered, its indicators (such as occupational position) tend to be "'treated as nuisance variables whose influence must be excluded' (Christie & Barling, 2009: 1474–1475)." Yet researchers in education, psychology, and sociology increasingly recognize social class as "one of the most meaningful cultural dimensions in people's lives" (Liu et al., 2004: 3), influencing such outcomes as long-term health, well-being, and judgments and decision making (Côté, 2011; Fiske & Markus, 2012; Scott, 2005).

Furthermore, whereas much of the aforementioned work related to social class in organizations has focused on *current* social class standing, less is known about situations in which individuals have experienced *movements into* a higher social class rank—as is the case for the CEOs from lower and middle social class backgrounds in the current study. According to Kniffin (2007: 56), a common assumption, even among some researchers, is that upwardly mobile adults experience a "molting process" and discard "their old cultural skins" when they experience movement into a higher social class. However, qualitative research (see, e.g., Ostrove & Stewart, 1998) and writings by successful upwardly mobile adults (see, e.g., Lubrano, 2004) hint at the

enduring nature of social class origins. As Mahony and Zmroczek (1997: 4) have explained, "class is deeply rooted, retained, and carried through life rather than left behind (or below). In this sense, it is more like a foot which carries us forward than a footprint which marks a past presence." Moreover, research in biology suggests that childhood social class continues to have pervasive effects on the human body, even after accounting for movement to a higher social class in adulthood (Kittleson, Meoni, Wang, Chu, Ford, & Klag, 2006; Marin, Chen, & Miller, 2008). Miller and colleagues (2009) argued that childhood social class influences the body's biological programming such that "repeated social adversity in early life can program a 'defensive' phenotype ... that persists across decades and thereby accentuates vulnerability to disease later in life" (Miller et al., 2009: 14719). From this perspective, childhood social class has the potential to leave a "biological residue" (Miller et al., 2009).

Social Class "Imprint"

Similar to a "biological residue," social class origins may leave a "cognitive residue that explains variations in the decisions of organizational members" (Côté, 2011: 59). Drawing on organizational theorizing, one explanation for the long-term influence of perceived childhood social class despite upward mobility is imprinting. "Imprinting" refers to the process through which, during one or more sensitive time periods in a person's life, that person "develops characteristics that reflect prominent features of the environment, and these characteristics persist despite significant environmental changes in subsequent periods" (Marquis & Tilcsik, 2013: 199). Originally inspired by Stinchcombe's (1965) theorizing about organizations, the concept of imprinting has also been applied to individual-level phenomena. Researchers have investigated, for instance, how imprints from early career experiences (such as employment at a particular company) persist throughout careers and across organizations (Bianchi, 2013; Higgins, 2005). Others have suggested that imprinting shapes managers' mental models, "which they then use to interpret the environment and guide their actions" (Holburn & Zelner, 2010: 1293).

As the definition implies, social imprints are most likely to occur during sensitive or vulnerable periods in an individual's life, including childhood and other significant role transitions (such as entry into college or job transition: Marquis & Tilcsik, 2013). During these periods, individuals look to and adopt cues from their environment regarding "appropriate" cognitive and behavioral patterns. This perspective is consistent with social class theorizing suggesting that childhood serves an especially important role in socializing "different ways of being" for members of different social classes (Stephens, Markus, & Phillips, 2014: 626; Bourdieu, 1984). For example, activities as simple as storytelling by family members communicate distinctive ways of perceiving and responding to the world (e.g., a focus on opportunity and self-expression versus a focus on dangers and risk; Miller, Cho, & Bracey, 2005). These messages are further reinforced by teachers in grade schools, who socialize children to the conditions of the context (Stephens et al., 2014). In addition, individuals tend to be surrounded by, and spend the majority of their time with, others of similar social classes to themselves (for example, via neighborhoods, schools, and work institutions), rarely crossing social class boundaries (Hout, 2008; Kraus et al., 2012; Liu et al., 2004).

Imprinting theory thus provides support for the longevity of the effects of social class origins even after movement from one's childhood social class into a new social class standing. To the extent that people adopt the attendant norms and cognitions learned through their childhood social class background, "their subsequent behaviors bear the stamp [or imprint] of the environment they experienced" (Marquis & Tilcsik, 2013: 201). This social imprint is likely to persist, such that it influences behavior over time and across contexts (Bianchi, 2013; Higgins, 2005). Indeed, some related empirical research supports the influence of early macroeconomic circumstances on beliefs and behavior years later (see, e.g., Bianchi, 2013; Malmendier & Nagel, 2011). As one example, Giuliano and Spilimbergo (2009) found that experiencing a recession in early adulthood influenced individual beliefs about success.

In the following section, we integrate the literatures on upper echelons and social class to argue that, because of childhood experiences with material resources and societal rank, senior executives will differ with regard to firm-level risk taking. Using the normative middle class as the baseline, we begin by contrasting executives from the upper social classes with those from the middle social classes. We then compare the risk-taking preferences of executives from the lower social classes with the preferences of those from middle social class backgrounds. Next, building on the idea that the influence of imprints may vary within certain boundaries (Marquis &

Tilcsik, 2013), we consider the interactive effects of other important experiences during an executive's career—that is, the level of elite education and varied career functional background—on the relationship between perceived social class origins and risk taking.

SOCIAL CLASS ORIGINS AND RISK TAKING

Individuals' risk preferences are influenced by their motivation toward avoidance or opportunity, as well as by relevant situational factors (Lopes, 1987; March & Shapira, 1987). While some individuals may pay more or less attention to the worst (or best) possible outcomes, situational factors (such as the risk of a highly undesirable outcome or his or her current reference point) can also direct an individual's focus toward either avoidance or opportunity (March & Shapira, 1987). Building on this, we argue that an executive's experience with childhood social class—and its attendant resources and rank—directs his or her attention toward avoidance (or threat) or opportunity. This emphasis on avoidance or opportunity shapes an individual's social class imprint, persisting across time and influencing strategic decisions years later.

Upper Social Class Background and Risk Taking

Having grown up with an abundance of resources, individuals from the upper social classes have experienced the benefit of a substantial safety net that provides not only economic security, but also—and perhaps more importantly—psychological security. As Williams (2012: 42) pointed out, individuals from this type of background "are encouraged to experiment, secure in the knowledge that if they get into scrapes, parents usually can get them out." As such, individuals from the upper social classes tend to perceive the world as safe, welcoming, and full of opportunity (Kusserow, 2012). Furthermore, upper social class standing is characterized by superior societal rank. This position yields such benefits as higher levels of optimism, self-esteem, and sense of control (Kraus et al., 2012; Marmot, 2004; Twenge & Campbell, 2002).

In contrast, the middle social class position is characterized by adequate access to resources that allow for basic necessities and limited extras (for example, family vacations and college education; Williams, 2012). In comparison to the upper social classes, the middle class safety net is smaller and less secure, because access to resources is predicated on continued employment, creating vulnerability to ebbs in the economy (Gray & Kish-Gephart, 2013). Further, the middle rank position involves both the potential for upward movement (into the upper social classes) and the potential to fall into the lower social classes. For this reason, the psychology of the middle class has been described as "fear of falling" (Ehrenreich, 1989) and "status panic" (Mills, 1951), such that those from the middle classes are especially motivated to maintain their current position and minimize the likelihood of status loss (Schwalbe, 2008; Smith, 1982).

Based on the aforementioned research, we argue that executives from the upper social classes will be more willing than their middle class counterparts to engage in strategic risk taking. First, because of differences in the size of their childhood safety nets (social and economic resources), individuals with an upper social class imprint are less likely than their middle class counterparts to perceive the same action as risky. According to March and Shapira (1987: 1407), managers perceive high risk as "the threat of a very poor outcome." An individual's definition of a very poor outcome, however, depends on the level of resources available to him or her (Lopes, 1987). All else being equal, those with more abundant resources (as is the case for those from the upper social classes) will have a higher tolerance for potential loss. As Williams (2012: 42) noted: "Because money can buy second chances, those who have it have a different attitude toward novelty and risk."

Second, given their superior societal rank, individuals from the upper social classes are likely to have developed an approach motivation, characterized by a focus on rewards and disinhibited behavior (Keltner, Gruenfeld, & Anderson, 2003). This is because social class standing reflects differences in power, or control over valuable resources (Bullock & Lott, 2010; Smith et al., 2012). According to Keltner and colleagues (2003: 269), "acting within reward-rich environments and being unconstrained by other's evaluations or the consequences of one's actions" is related to elevated perceptions of power. Such elevated power increases approach-related behavior (including risk taking), because individuals with elevated power focus more on rewards and downplay the potential for loss in a given situation—in other words, they are more optimistic about their chances for success (Keltner et al., 2003). Anderson and Galinsky (2006) found empirical support for this perspective, showing a positive relationship between power and risk taking, as mediated by optimism. Consistent with existing research suggesting

that individuals from the upper social classes experience elevated levels of optimism, self-esteem, and control (Lamm, Schmidt, & Trommsdorff, 1976; Marmot, 2004; Twenge & Campbell, 2002), perceptions of self-esteem and control have also been empirically linked to risk taking (Anderson & Galinsky, 2006; March & Shapira, 1987).

Consequently, in comparison with those from the middle classes, we expect that upper social class upbringing will heighten managers' sense of security and control, thus increasing their optimism about future prospects (Keltner et al., 2003; Malmendier & Tate, 2005). In line with research suggesting that CEOs who are optimistic or overconfident are more likely to undertake acquisitions, especially unrelated ones (signifying a willingness to engage in risky strategies: Malmendier & Tate, 2008), we expect that CEOs of upper social class origins will engage in greater levels of strategic risk taking in comparison to their middle class counterparts. Formally:

Hypothesis 1. In comparison with their middle class counterparts, CEOs of upper social class origins engage in higher levels of strategic risk taking.

Lower Social Class Background and Risk Taking

Having experienced the lowest level of resources and societal rank, executives of lower social class origins are familiar with circumstances characterized by regular uncertainty and lack of control (Shipler, 2004). In such environments, "every small error [has] large consequences" because individuals do not have adequate safety nets to cushion against unexpected negative events (Shipler, 2004: 45). Parents in lower social class contexts teach their children to recognize the potential downsides of an action and "to avoid errors" (Stephens et al., 2014: 618). Over time, individuals in lower social class contexts are likely to develop a "greater sensitivity to potential social and environmental threat" (Kraus et al., 2012: 550; Miller, Chen, & Cole, 2009a), or an avoidance motivation (Keltner et al., 2003; March & Shapira, 1987).

Despite this heightened vigilance toward threat, we argue that individuals from the lower social classes will be more likely than their middle class counterparts to engage in risk taking. As discussed already, middle class individuals are in a vulnerable position: Their societal rank comes with many advantages (including adequate access to resources and access to institutions designed around middle class norms), but also rests precariously on continued employment (Skeggs, 2004). Individuals from the middle class are particularly focused on dangers (March & Shapira, 1987) and are motivated to maintain the status quo (Schwalbe, 2008; Smith, 1982). This perspective is supported by the limited research on middle status positions. For example, according to Nagi (1963), in comparison to upper and lower status positions, individuals in the middle status position experience the highest level of anxiety when facing risks, because risks in the middle class position represent a "double threat": They threaten the individual's current middle class standing (with its many advantages) *and* the potential to increase that standing in the future (Nagi, 1963: 442; Smith, 1982). In contrast, individuals in lower social class positions face the lowest amount of potential loss (Nagi, 1963). They have less to lose in the event of failure and may be more willing to take risks because the negative consequences of failure are not *perceived* to be as destructive (in comparison to the consequences perceived by those in a middle status position). Therefore, their disadvantaged position may focus their attention on opportunities for gain, rather than on the dangers of loss (March & Shapira, 1987).

In sum, this paper suggests that, in comparison with those from the middle classes, CEOs from the lower social classes may perceive that they have "less to lose" and may be more willing to accept the potential downside of a risky decision. Executives from the middle social classes, in contrast, may be more concerned about avoiding any loss from their current position. Thus, consistent with Hambrick and Mason's (1984) original proposition that CEOs from lower social class backgrounds are more likely to take strategic risks, we hypothesize that:

Hypothesis 2. In comparison with their middle class counterparts, CEOs of lower social class origins engage in higher levels of strategic risk taking.

SOCIAL CLASS ORIGINS, POST CHILDHOOD EXPERIENCES, AND RISK TAKING

According to imprinting theory, the "effects and external manifestations" of imprints can "vary over time, reflecting an interplay of the past and the present" (Marquis & Tilcsik, 2013: 195). Consequently, it is important to understand when and how an executive's social class origins may interact with other,

less distal, experiences. In this section, we consider the potential for an executive's experience with elite education and diverse career functional background to influence the relationship between his or her social class origins and firm-level risk taking.

Elite Education

For those from the upper social classes, an elite education is not uncommon (Domhoff, 2002) nor is the environment (characterized by upper social class norms) unusual (Johnson, Richeson, & Finkel, 2011). However, it does represent an opportunity for an individual to improve his or her access to resources and to form valuable connections—the latter being easier for those from the upper social classes because of their familiarity with navigating upper class culture (Stephens et al., 2014). Indeed, prior research suggests that people are able to easily and quickly discern the social class standing of others (Hout, 2008; Kraus & Keltner, 2009; Liu et al., 2004; Tudor, 1971). This is especially likely in elite circles, in which cultural capital plays a crucial role in interactions (Fussell, 1983; Skeggs, 2004). In addition, people in a state of elevated power tend to be socially uninhibited (Keltner et al., 2003) and "feel less constrained by their in-groups" (Smith et al., 2012: 71). The formation of networks should be easier for those from the upper social classes, leading to exposure to new ideas (for example via connections with people across industries), as well as additional resources on which to fall back in case of loss. Research in entrepreneurship shows that informal industry networks play an important role in opportunity recognition or the individual's level of alertness to new business opportunities (Ozgen & Baron, 2007). Moreover, Cao, Simsek, and Jansen (2012) argue that external social ties, through their ability to provide external feedback, give CEOs "a greater sense of mastery, control and preparedness" that encourages higher levels of entrepreneurial risk. Additional resources should also lessen the perception of the threat of risk, because any negative outcomes can be more easily mitigated as the individual's safety net grows (March & Shapira, 1987). Consequently, for executives from the upper social classes, we expect that an elite education will increase the likelihood of taking strategic risks.

For those from the lower social classes, an elite education may potentially result in a similar boost of resources. However, two points make the experience of an elite education for individuals from the lower social classes fundamentally different from that of their upper social class counterparts, and thus lead us to hypothesize that rather than increasing risk taking, an elite education for those from the lower social classes will attenuate risk taking. First, whereas the upper social classes benefit from a nonstigmatized identity and are familiar with elite institutions' dominant norms, those with lower social class origins carry with them the burden of a stigmatized identity (Bullock & Lott, 2010; Skeggs, 2004). Similar to the experiences of gender and racial minorities, a stigma does not have to be fully internalized to represent a threat to an individual's positive sense of self (Gray & Kish-Gephart, 2013); simply making one's social class (minority) status salient is enough to trigger stereotype threat and its attendant consequences (e.g., increased anxiety and fear of being perceived according to the stereotype; Hall, 2012; Steel & Aronson, 1995). Indeed, prior research demonstrates that social class differences are likely to be salient during the individual's educational experience, especially for those from the lower social classes in an elite environment (Bullock & Lott, 2010; Lubrano, 2004; Stephens et al., 2007, 2014). Managing this stigmatized identity (for example, by concealing it from others or avoiding situations in which it may become salient) exacts a high emotional and cognitive toll (Clair, Beatty, & MacLean, 2005), including psychological strain (Ragins & Cornwall, 2001) and self-regulatory depletion (Johnson et al., 2011). As Smart and Wegner (2000: 221) noted, "concealing a stigma leads to an inner turmoil that is remarkable for its intensity and its capacity for absorbing an individual's mental life." Based on the high level of cognitive effort involved, we expect that it will be more difficult for individuals of lower social class origins to capitalize fully on the benefits of an elite education, such as forming interpersonal relationships and expanding their networks (Clair et al., 2005). In line with this, recent empirical research suggests that when low status individuals experience threat, they "protect themselves from the uncertainties implicit in networking among less familiar contacts" (Smith et al., 2012: 70).

A second difference is the degree to which graduation from an elite institution represents a notable and rare accomplishment for those from the lower social classes. For those in the lower societal ranks, graduation from any institution of higher education—let alone an elite institution—is often out of reach (Resnick & Wolff, 2003; Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). As Bullock and Lott (2010: 417) noted, "for low

income families, [a four-year education] means tremendous, if not impossible sacrifice." As such, we expect that graduation from an elite institution will change the reference point for evaluating future risks (Lopes, 1987). Drawing on our earlier argument, rather than having "nothing to lose," individuals of lower social class origins who have graduated from an elite institution now have a "positive balance" that is likely to reduce their motivation to engage in subsequent high-risk efforts (Bateman & Zeithaml, 1989; Kahneman & Tversky, 1979). This is consistent with March and Shapira's (1987) theorizing that moving to just over a performance target shifts an individual's focus from opportunities for gain to dangers of loss. As one CEO from a lower social class background communicated to us, "you don't need to throw another Hail Mary pass if you're ahead by 20 points." Formally, we hypothesize that:

Hypothesis 3a. Elite education moderates the relationship between upper social class origins and risk taking, such that it amplifies the tendency of CEOs of upper social class origins to engage in risk taking.

Hypothesis 3b. Elite education moderates the relationship between lower social class origins and risk taking, such that it reduces the tendency of CEOs of lower social class origins to engage in risk taking.

Executive Functional Background

Another potentially influential factor is a CEO's experience acquired via a varied career background. In the upper echelons framework, managers' perceptions, problem-solving frameworks, and—ultimately—strategic decisions are a reflection of their backgrounds (Wiersema & Bantel, 1993). Executive functional background in particular is one of the key characteristics outlined in upper echelons theory (Hambrick & Mason, 1984). And while multiple studies have examined TMT heterogeneity or diversity, including functional background heterogeneity (Bunderson & Sutcliffe, 2002; Carpenter et al., 2004), little research examines diverse managerial experience (that is, the diversity of experience within an individual, as opposed to within a team). We focus on intrapersonal functional diversity, defined as "breadth of functional experience *within* TMT members" (Cannella, Park, & Lee, 2008: 769, emphasis original); however, it should be noted that our focus is on the single most powerful executive—the CEO—rather than the entire TMT. As Hitt and Tyler (1991: 334) pointed out: "Top executives often have experience in multiple functions, although they may have dominant experience in one." We thus consider how the influence of the social class imprint varies based on whether the CEO is a broad generalist or a narrow functional specialist (Bunderson & Sutcliffe, 2002; Cannella et al., 2008).

This moderating influence comes from two sources. First, executives with diverse functional experience are likely to have more extensive personal networks and to "have a good perception of where the knowledge is and how to tap into it" (Bunderson, 2003: 460; Cannella et al., 2008: 769). In other words, functional job rotation expands executives' networks, and allows for a broader flow of information and exchange of ideas (Geletkanycz & Black, 2001). This in turn increases the potential set of investment opportunities and should positively affect strategic risk taking.

Second, because executives tend to view strategic decisions through the prism of their personal backgrounds, those "with high intrapersonal functional diversity are less likely to be narrowly parochial" (Cannella et al., 2008: 769; Raskas & Hambrick, 1992) and more likely to have a broader, open-minded perspective. Experience in different functional areas broadens an executive's knowledge of strategic approaches and practices, and lessens his or her commitment to the status quo (Geletkanycz & Black, 2001). Conversely, as tenure within a single functional area increases, an executive's perspective successively narrows and more closely reflects the dominant logic of the particular functional area (Geletkanycz & Black, 2001).

For those from both the upper and lower social classes, this reasoning suggests that having a diverse functional background—reflecting a broad, "general management," career track—will enhance the likelihood that these executives will perceive new investments that entail a level of risk as comparatively less risky (vis-à-vis those with narrow functional backgrounds). As one CEO explained to us:

> [Y]ou can take more risks because you've been there and you've done that and you have more leeway to do it and you have more confidence in doing it. And you also realize that you know you are going to do the right thing because you just have that experience that's built up . . . I did about every marketing and sales job in [name of company] when I was there, and general management job, and presidents' jobs at three different major ones. I did worldwide marketing, I did operations in the U.S. and Canada, I did all of our

channels. So, you know, I think you are a victim of the building blocks of your experience. And the more experience you get, the more diversity you have. . .

Consequently, we expect a diverse, general management functional background to positively affect risk taking by amplifying the effect of CEOs' social class origins. Formally, we hypothesize that:

Hypothesis 4a. A general management functional background moderates the relationship between upper social class origins and risk taking, such that it amplifies the tendency of CEOs of upper social class origins to engage in risk taking.

Hypothesis 4b. A general management functional background moderates the relationship between lower social class origins and risk taking, such that it amplifies the tendency of CEOs of lower social class origins to engage in risk taking.

METHODS

Sample and Data Sources

The sample frame for our study included the CEOs of S&P1500 firms. We obtained data on CEO social class background via a mail survey sent to all current chief executives in August 2012. The packet included a solicitation letter featuring the school's logo, a one-page survey instrument, and a prestamped, pre-addressed envelope. We received responses from 272 CEOs,[2] making the response rate 16.3%—a favorable outcome, given our target group[3] and the sensitive nature of our research topic. We addressed the potential for self-selection bias among our responder group in our analyses (see "Additional Analyses and Robustness Checks").

We obtained demographic data and other background information on the CEOs from a variety of sources, including the Execucomp database, company websites, Businessweek.com, Forbes.com, and company annual reports. Firm-level data were collected from the Center for Research in Security Prices (CRSP) and Compustat databases. We matched the CEOs to their respective firms and constructed a panel dataset of 265 executives (308 unique CEO–firm combinations) over 10 years (that is, 2002–2011). Our final sample used in the regressions (after missing data) consists of 1,042 observations.

Measures

Independent variable: CEO social class background. We measured subjective social class using a categorical measure adapted from existing research (see, e.g., Davis & Robinson, 1988; Jackman & Jackman, 1973; Smith et al., 2012). To gauge *childhood* social class (versus *current* social class), CEOs were asked to answer the question, "Which of the following best describes your family's socioeconomic situation while you were growing up?" Response choices included five categories: lower, lower-middle, middle, upper-middle, and upper (Jackman & Jackman, 1973). The distribution of the responses in our sample was as follows: 3.40% lower, 38.49% lower-middle, 38.11% middle, 16.98% upper-middle, and 3.02% upper class.[4]

To examine the validity of our measure, we coded interview data for two indicators of objective social class: parents' occupation and highest level of completed education. The interviews were conducted as part of a larger data collection effort and comprised 31 CEOs who responded to our initial paper survey request (11.7% of all respondents). One of the authors and an independent coder (unfamiliar with the hypotheses of this study) coded each of the interviews separately. Following Adler, Epel, Castellazzo, and Ickovics (2000), each parent's education was coded into one of five categories (no degree, high school degree, college degree, master's degree, and higher professional degree); occupation was coded into one of three categories (blue collar or service, clerical or self-employed, and professional or managerial). Initial agreement between coders was 100% for education and 97% for occupation; the two coders subsequently discussed and reached agreement on codes for the two discrepant cases for occupation. Consistent with the idea that "individuals identify with the 'highest' class possible" in their household (Davis & Robinson, 1988: 109), we calculated Spearman's rank-order correlation using the occupation and education codes from the parent with the highest level of occupation or education,

[2] Seven of the CEOs declined the invitation to participate.

[3] As Cycyota and Harrison (2006) discussed, based on their 12-year study, the survey response rates for top executives are significantly lower compared to other populations (including employees and lower-level managers), and appear to be steadily declining.

[4] We addressed the potential nonrepresentativeness of our sample and self-selection bias via a Heckman maximum likelihood procedure, as discussed later.

respectively. The correlation between CEOs' perceived social class origins and parents' occupation was 0.68 ($p < .001$); and the correlation between the CEOs' perceived social class origins and parents' highest level of completed education was 0.63 ($p < .001$). These results are consistent with existing research showing a moderate-to-strong correlation between subjective and objective measures of social class (see, e.g., Côté, 2011; Hout, 2008; Smith et al., 2012). Subjective and objective measures of social class have also been found to similarly predict a variety of outcomes, including those related to health, cognition, and behavior (see, e.g., Adler & Snibbe, 2003; Adler et al., 2000; Piff, Kraus, Côté, Cheng, & Keltner, 2010; Smith et al., 2012). In the final analyses, and in line with existing theorizing (Fiske et al., 2012; Gray & Kish-Gephart, 2013), the lower and lower-middle categories were aggregated into one category (*lower social class origins*), and the upper and upper-middle categories were aggregated into a second category (*upper social class origins*).

Dependent variable: Strategic risk taking. Following Martin, Gomez-Mejia, and Wiseman (2013) and Devers, McNamara, Wiseman, and Arrfelt (2008), we measured *strategic risk taking* using three variables: research and development (R&D) expenditures, capital expenditures, and the value of the firm's long-term debt. This approach is consistent with our focus on managerial risk taking, "defined as management's *proactive* strategic choices involving the allocation of resources" (Palmer & Wiseman, 1999: 1038, emphasis original). Consistent with prior research, we use the unscaled versions of the variables and explicitly control for firm size in our models, which avoids the issue of spurious correlations common to ratio measures (Wiseman, 2009). Principal components factor analysis returned a single factor, with a 1.58 eigenvalue, explaining 53% of the variance. The factor loadings were 0.66 for R&D, 0.81 for capital expenditures, and 0.71 for long-term debt, justifying the aggregation of the variables into a single composite indicator of firm risk taking. We used a one-year lag between the measurement of the dependent variable and our predictors (strategic risk taking was measured at time $t+1$).

Moderator: Elite education. Degree of *elite education* was measured using a modified version of the index used by Tihanyi and colleagues (2000). The variable was coded as "0" if the CEO did not complete a formal four-year degree (15.4% of our sample), "1" if he or she had an undergraduate degree from a nonelite university (70.3%), "2" if he or she had an undergraduate degree from an elite university (5.6%), and "3" if both degrees were from elite universities (8.7% of our sample). Because our study focuses on the effects of early, formative life experiences, our index places a high importance on the elite status of undergraduate education as a key period of growth and self-discovery in the life of young adults.[5] In line with prior research (see, e.g., Bigley & Wiersema, 2002), we used the list of elite universities reported in Finkelstein (1992).

Moderator: General management functional background. Following Hambrick and Mason's (1984) classification scheme, each CEO's career functional background was coded into one of the three following categories: throughput functions (R&D, operations, engineering); output functions (marketing and sales); and peripheral functions (law, finance, accounting). If the CEO's functional background did not fit into one of these categories (39% of the CEOs in our sample), it was coded as *general management functional background* (Bednar, 2012). This coding scheme thus resulted in four functional background indicators. In the analyses, we took a conservative approach and used peripheral background as the baseline because of its rather broad focus in terms of organizational functions vis-à-vis other options (that is, throughput or output).[6]

Control variables. We included a number of industry-level, firm-level, and individual-level control

[5] This also accounts for the fact that many of the CEOs in our sample received their MBAs from elite universities, when they were already on a management career path. Our results hold if we drop the last category and use an elite undergraduate education index that ranges from 0 to 2. They also hold if we use a measure of elite education representing the years of education spent at elite institution(s). This particular measure is less precise because we know only if a CEO has a degree from said institution, but not the number of years spent there; as such, we assume four years for an undergraduate degree, two years for a graduate degree, and six years if both degrees were from an elite school. The years of *elite education* measure is correlated at 0.86 with that used for our primary analyses.

[6] By using peripheral background as the baseline, we are better able to isolate the effect of background *diversity* versus background *focus*, because both output and throughput functions are concentrated in certain parts of organizational process, while peripheral functions such as law and accounting can apply to all stages of organizational production function. However, our results and conclusions remain essentially unchanged if we use all three nondiverse categories combined (throughput/output/peripheral) as the baseline.

variables to isolate the influence of CEO social class background. First, we included a lagged value of the dependent variable (*strategic risk taking*$_t$), a control for firm *accounting performance* (as return on assets, or ROA: Bromiley, 1991), and *market performance* (as total stockholder return: Sanders & Hambrick, 2007). We also included a control for *firm size* using the natural log of assets (Martin et al., 2013) and *diversification* via the entropy index (Hoskisson, Hitt, Johnson, & Moesel, 1993). We used *CEO age* to control for the fact that risk-taking propensity may vary with age (Devers et al., 2008; Hambrick & Mason, 1984). We included a separate control for *CEO tenure* at the focal firm. We controlled for the CEO's compensation and incentives by including measures for his or her *salary*, *bonus* compensation, (the Black-Scholes value of) stock *option awards* compensation, and stock ownership percentage (*CEO ownership*). Because research suggests that risk taking may vary by gender (MacCrimmon & Wehrung, 1986) and founder status (Begley, 1995), we included *female* and *founder* indicator variables. We also included three additional educational controls: *MBA*, *CPA/CFA*, and *professional degree* (JD or PhD) dummies. Moreover, we controlled for the organization's task environment via measures of industry *munificence*, *dynamism*, and *complexity* (Keats & Hitt, 1988).

Because risk perception is relative and may vary with exposure to various business environments, we also included binary (dummy) controls for each executive's career background. Specifically, we collected information from executive biographies about his or her industry experience and coded for the following industries: aerospace, commercial banking, finance and investment banking, biotechnology or pharmaceuticals, business services, casino operations, construction, chemicals, consulting, consumer goods, industrial goods, health care and medical equipment, insurance, information technology, law/legal, manufacturing, oil and gas, public accounting, publishing, retail, software, technology, telecommunications, transportation/freight, and utilities. Industry indicators at the two-digit standard industrial classification (SIC) level are also included in all models to control for the variance in risk taking resulting from (current) industry affiliation (Martin et al., 2013). Finally, we included year dummy variables to remove the issue of contemporaneous correlation in panel data (Certo & Semadeni, 2006) and to control for general macroeconomic fluctuations. These three sets of dummy variables (CEO industry background experience, the firm's industry, and year) were included in all models, but are not reported due to space constraints.

Analysis

Because of the panel structure of our data and the potentially endogenous nature of the elite education variable (whereby the effects of social class background and elite education are confounded as a result of their interdependent relationship),[7] we employed endogeneity-corrected models suited to panel data analysis. Specifically, we relied on two-stage least squared (2SLS) instrumental variable regressions (see Bascle, 2008). While the matter of instrument appropriateness is ultimately determined statistically, our initial search was theoretically motivated. Two variables had good statistical properties and aligned well theoretically with elite education: (a) an indicator for whether the CEO was awarded an honorary PhD, and (b) the number of external board appointments (reflective of the individual's status and social network).

The two requirements for a good instrument (Murray, 2006) are that it is relevant (that is, a "strong," or "not weak," predictor of the potentially endogenous variable) and valid (that is, exogenous—not correlated with the error term of the second-stage equation). We performed appropriate statistical tests that confirmed both instrument relevance and exogeneity. First, the *F*-statistic for the instrument relevance test was equal to or greater than 17.23 ($F > 10$) for all models ($p > F = 0.000$), providing strong evidence that our instruments were relevant and not weak predictors (Staiger & Stock, 1997). In support of this conclusion, both instrumental variables were statistically significant in the first-stage models and had significant partial R^2 contributions to the first-stage model ($p < .001$ for all models). Further, the Anderson canonical correlations likelihood-ratio (LR) test rejected the null hypothesis in all cases, indicating that the instruments were relevant and the model was identified (StataCorp, 2011).

Second, because our models included more instruments than potentially endogenous regressors, we were able to perform a direct test of instrument exogeneity (Wooldridge, 2002). Both the Sargan and the Basmann tests failed to reject the null hypothesis of exogeneity—that is, that the instruments are uncorrelated with the error term and correctly excluded from the estimated equation. Finally, we investigated whether there was any evidence that the elite

[7] We thank a thoughtful reviewer for pointing this concern out to us.

education variable was in fact endogenous. The Durbin χ^2 test, as well as the Wu-Hausman F-statistic showed some evidence of variable endogeneity (p values often less than or around .10), suggesting that an endogeneity-corrected model was warranted.[8]

All nonindicator variables used in the creation of the interaction terms were mean-centered to reduce nonessential multicollinearity. We ran multicollinearity diagnostics and the results indicated that all individual variance inflation factor (VIF) values were below 10, with a mean VIF of approximately 2, suggesting that multicollinearity did not affect our results.

RESULTS

Table 1 reports summary statistics and correlations. Table 2 reports the results of our hypotheses testing. Hypothesis 1 predicted that, in comparison with their middle class counterparts, CEOs of upper social class origins engage in higher levels of strategic risk taking. The coefficient on the upper social class background indicator variable in Model 2 of Table 2 is positive and statistically significant ($p < .001$), supporting Hypothesis 1.

Hypothesis 2 predicted that, in comparison with their middle class counterparts, CEOs of lower social class origins engage in higher levels of strategic risk taking. The coefficient on the lower social class background indicator variable in Model 2 of Table 2 is positive and statistically significant ($p < .05$), supporting Hypothesis 2.

Hypothesis 3a proposed that elite education moderates the relationship between upper social class origins and risk taking, such that it strengthens (amplifies) the relationship between upper social class origins and risk taking. The coefficient on the interaction between upper social class status and elite education in Model 3 of Table 2 is not statistically significant, thus failing to support Hypothesis 3a. In Hypothesis 3b, we argued that elite education reduces the tendency of CEOs with lower social class origins to engage in risk taking. The coefficient on the interaction between lower social class origins and elite education in Model 3 of Table 2 is negative and statistically significant ($p < .05$), supporting Hypothesis 3b.

Hypothesis 4a predicted that general management functional background positively moderates the relationship between upper social class origins and risk taking, while Hypothesis 4b predicted that general management functional background positively moderates the relationship between lower social class origins and risk taking (amplifying the tendency of both groups to engage in risk taking). Based on the positive coefficients on the interactions reported in Model 4 of Table 2 ($p < .01$ and $p < .001$, respectively), both hypotheses receive statistical support. All significant interactions are depicted in Figures 1 and 2.

Additional Analyses and Robustness Checks

Our findings indicate that CEOs from both the upper and lower social classes take higher levels of strategic risk than their middle class counterparts. Further tests indicate that while both groups take more risk than executives from the middle class, CEOs with upper social class backgrounds nevertheless take greater levels of strategic risk than those of lower social class origins ($p < .001$). In other words, while both groups of CEOs differ from those from the middle class, they also differ from one another.

To help to ensure the robustness of our results, we collected additional data on the firm's governance characteristics, including board size, average director age, average director tenure, average director ownership, outside director percentage, and outside director ownership. None of the governance controls were statistically significant or substantively changed our results; as such, they were excluded for parsimony and to preserve degrees of freedom.

Moreover, we fitted a model that accounts for self-selection into our sample (which thus accounts for the potential nonrepresentativeness of our sample compared to the more general pool of CEOs). Specifically, we relied on a Heckman self-selection model using an indicator variable for the selection equation whereby we coded CEO-firm observations in our sample as "1" and coded the others (that is, the remaining group of S&P1500 CEOs) as "0". We suspected that the firm's prominence or visibility may have played a role in whether the CEO chose to respond to our survey, especially given the nature of our topic. It is also probable that upper-middle and upper class CEOs are more likely to be hired into more prominent firms (which would help to explain the perhaps lower-than-expected proportion of upper-middle class respondents). As such, as a proxy for the firm's prominence or visibility, we collected data from the I/B/E/S database on the number of financial analysts following the firm (that is, issuing recommendations). The higher the

[8] We performed a similar analysis treating the social class indicators as endogenous and found no evidence of endogeneity.

TABLE 1
Descriptive Statistics and Correlations

	Variable	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1	Strategic risk taking$_{t+1}$	0.00	1.00	1.00											
2	Lower social class origins	0.42	0.49	−0.03	1.00										
3	Upper social class origins	0.20	0.40	0.08	−0.42	1.00									
4	Elite education	1.10	0.75	0.12	−0.17	0.12	1.00								
5	General management functional background	0.39	0.49	0.03	0.04	0.01	−0.14	1.00							
6	Strategic risk taking$_{t}$	0.00	1.00	0.82	0.02	0.01	0.11	0.10	1.00						
7	Accounting performance (ROA)	0.04	0.14	−0.04	0.09	−0.06	0.03	0.03	−0.03	1.00					
8	Market performance	11.25	73.74	0.00	0.03	−0.02	0.01	−0.02	−0.01	0.03	1.00				
9	Firm size	7.64	1.67	0.15	0.01	−0.03	0.13	0.08	0.37	−0.03	−0.01	1.00			
10	Diversification	0.40	0.60	−0.04	0.07	−0.05	0.08	−0.02	−0.02	−0.03	−0.01	0.04	1.00		
11	CEO age	53.83	6.82	−0.03	0.19	−0.09	−0.03	0.01	−0.01	0.04	0.01	−0.02	0.04	1.00	
12	CEO tenure	4.61	6.59	−0.08	0.08	−0.08	−0.02	0.07	−0.09	0.01	−0.02	−0.08	−0.08	0.43	1.00
13	Salary	579.51	307.14	0.14	0.04	−0.08	0.04	0.11	0.28	0.02	0.01	0.29	0.02	0.34	0.26
14	Bonus	304.48	682.46	0.03	0.02	−0.03	0.07	0.01	0.13	0.11	−0.01	0.11	−0.04	0.08	0.11
15	Options awards	314.12	1120.24	−0.01	−0.03	0.03	0.07	−0.01	−0.01	−0.02	−0.01	0.09	0.02	−0.10	−0.06
16	CEO ownership	0.01	0.05	−0.02	−0.01	0.08	−0.12	0.01	−0.05	0.01	0.00	−0.18	−0.04	0.24	0.33
17	Female	0.03	0.18	−0.02	−0.03	0.02	−0.02	−0.11	−0.03	−0.07	0.00	−0.08	−0.03	−0.08	−0.01
18	Founder	0.10	0.30	−0.03	0.03	−0.08	−0.09	0.06	−0.06	−0.03	−0.01	−0.15	−0.04	0.13	0.46
19	MBA	0.40	0.49	0.05	−0.05	−0.08	0.11	0.22	0.08	0.00	−0.02	0.00	−0.04	0.06	0.12
20	CPA/CFA	0.10	0.30	0.00	0.03	0.01	−0.03	−0.17	−0.02	−0.05	−0.01	0.01	0.01	0.00	0.01
21	Professional degree	0.11	0.31	−0.02	0.02	0.04	0.11	−0.12	−0.02	0.02	−0.01	−0.06	0.02	−0.04	0.06
22	Output background	0.09	0.29	0.00	−0.08	−0.10	−0.06	−0.26	−0.03	−0.01	0.09	−0.03	0.03	−0.04	0.00
23	Throughput background	0.21	0.41	−0.02	−0.01	0.04	0.09	−0.41	−0.07	0.03	−0.01	−0.06	−0.04	0.02	−0.03
24	Munificence	0.04	0.10	0.01	−0.04	0.03	0.06	0.00	0.04	0.07	−0.01	0.06	−0.08	−0.07	−0.06
25	Dynamism	0.03	0.03	−0.02	−0.06	0.05	0.07	−0.05	0.01	−0.06	−0.03	0.13	0.05	0.01	−0.01
26	Complexity	1.05	0.17	0.00	−0.02	0.02	0.04	−0.01	0.01	0.12	0.00	0.02	0.00	−0.04	−0.02

TABLE 1
(cont'd)

		13	14	15	16	17	18	19	20	21	22	23	24	25
13	Salary	1.00												
14	Bonus	0.18	1.00											
15	Options awards	−0.02	0.19	1.00										
16	CEO ownership	−0.03	0.14	−0.02	1.00									
17	Female	−0.09	−0.06	−0.02	0.01	1.00								
18	Founder	0.09	0.08	0.05	0.33	0.03	1.00							
19	MBA	0.01	−0.02	−0.01	−0.06	−0.04	0.01	1.00						
20	CPA/CFA	−0.03	−0.03	0.01	0.00	0.03	−0.03	−0.02	1.00					
21	Professional degree	−0.03	0.03	0.00	0.04	0.03	0.04	−0.12	−0.12	1.00				
22	Output background	−0.06	−0.02	−0.03	0.01	0.16	0.01	−0.02	−0.08	−0.11	1.00			
23	Throughput background	−0.06	−0.03	0.02	−0.04	−0.03	−0.07	−0.12	−0.15	0.00	−0.16	1.00		
24	Munificence	−0.13	0.06	0.06	−0.05	−0.01	−0.03	0.06	0.06	0.08	−0.07	−0.03	1.00	
25	Dynamism	−0.01	0.02	0.02	−0.01	−0.03	−0.05	−0.08	−0.01	0.13	0.01	0.02	−0.21	1.00
26	Complexity	−0.06	0.05	0.06	0.02	0.00	−0.02	0.04	−0.01	0.03	−0.02	0.02	0.25	−0.19

Note: Correlations greater than 0.04 are statistically significant at $p < .05$.

number of analysts following the firm, the higher its prominence or visibility to the public.

We used the newly constructed prominence variable—the average number of analysts following the firm in a given year—as our instrument in the first-stage model. The variable was highly significant in the model ($p < .001$) and the sign was negative, in line with our expectations. We relied on the Heckman maximum likelihood procedure to draw our conclusions, because the literature indicates that it has better econometric properties than the traditional, "two-step" Heckman model (although our results are very similar and our conclusions unchanged if we use the two-step model). Our conclusions regarding our hypotheses tests remain substantively unchanged from our primary analyses (that is, there are only minor differences in significance levels and/or magnitudes of individual coefficients), with one important exception: Hypothesis 3b, regarding the moderating effect of elite education on the relationship between lower social class origins and risk taking, is no longer supported, while Hypothesis 3a, regarding the moderating effect of elite education on the relationship between upper social class origins and risk taking, is now supported (in other words, what changes is which half of Hypothesis 3 is supported). This is likely to be the result of the endogeneity of our elite education variable. As such, since all other conclusions are essentially unchanged, we use the models accounting for endogeneity resulting from unobserved variable bias instead of self-selection for our primary analyses.

DISCUSSION

Social class is increasingly recognized as a powerful force in people's lives. Yet our understanding of the influence of social class and upward mobility at work, including how executives' formative childhood experiences with social class influence their strategic choices, has been limited. In this paper, we integrated theorizing from several literatures—upper echelons, social class, and imprinting theory—to suggest that top executives are likely to vary systematically in terms of their strategic risk-taking preferences because of different experiences with childhood societal rank and access to resources, or their social class imprint. Using a direct measure of CEOs' perceived social class origins, our results suggest that social class imprints do indeed endure and exert a lasting influence on executive decision making. We found that the perceived social class origins of top

TABLE 2
Results of 2SLS Instrumental Variables Regression Models for Strategic Risk Taking$_{t+1}$

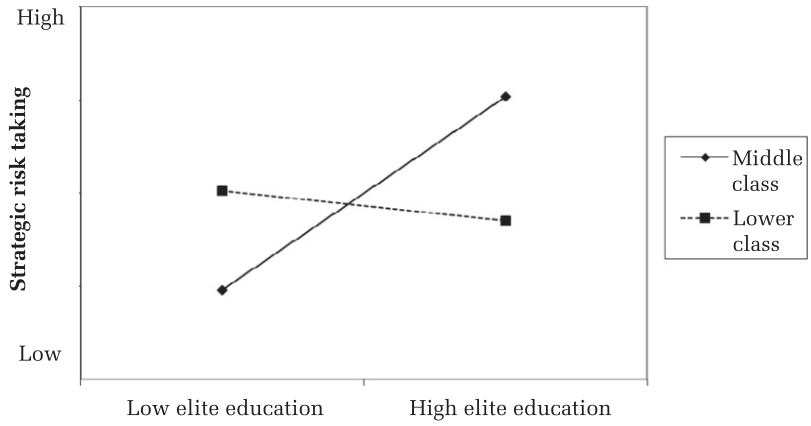
	Model 1	Model 2	Model 3	Model 4	Model 5
	Control model	*Main effects*	*Elite education*	*General management*	*Full model*
Strategic risk taking$_t$	0.15***	0.15***	0.14***	0.14***	0.14***
Accounting performance (ROA)	0.01	0.01	0.01	0.01	0.00
Market performance	0.00	−0.00	−0.00	−0.00	−0.00
Firm size	0.00	0.01	0.01	0.01	0.01
Diversification	−0.01	−0.01	−0.00	−0.00	−0.00
CEO age	0.00	0.00	0.00	0.00	0.00
CEO tenure	0.00^{+}	0.00^{+}	0.00	0.00*	0.00
Salary	0.07**	0.07**	0.07*	0.07**	0.07**
Bonus	0.03**	0.03*	0.04***	0.03*	0.04**
Option awards	0.04	0.01	0.01	0.03	0.03
CEO ownership	−0.10	−0.10	−0.07	−0.10	−0.08
Female	−0.08**	−0.08**	−0.09**	−0.08**	−0.09**
Founder	−0.11***	−0.10***	−0.08**	−0.13***	−0.09***
MBA	−0.04*	−0.03	−0.04*	−0.02	−0.04*
CPA/CFA	0.09***	0.09***	0.09***	0.08***	0.08**
Professional degree	0.04*	0.06**	0.09***	0.05*	0.08***
Output background	0.20***	0.21***	0.22***	0.20***	0.21***
Throughput background	0.07***	0.07***	0.09***	0.07***	0.10***
Elite education	0.06	0.06	0.13^{+}	0.06	0.12^{+}
General management background	0.13***	0.13***	0.14***	0.07**	0.10**
Munificence	−0.12	−0.11	−0.17^{+}	−0.12	−0.18^{+}
Dynamism	0.01	−0.08	−0.09	−0.10	−0.11
Complexity	0.02	0.01	0.01	0.01	0.01
Upper social class origins		0.09***	0.08***	0.06**	0.05**
Lower social class origins		0.03*	0.03*	−0.01	−0.01
Upper social class origins × Elite education			−0.00		−0.01
Lower social class origins × Elite education			−0.14*		−0.14*
Upper social class origins × General management background				0.10**	0.07*
Lower social class origins × General management background				0.10***	0.06*
Constant	−0.19	−0.32	−0.28*	−0.27	−0.25*
F df	98	100	102	102	104
F	36.89***	37.89***	36.89***	37.97***	36.26***
N	1032	1032	1032	1032	1032
R^2	0.79	0.80	0.80	0.81	0.81

Note: Industry, year, and CEO industry experience indicator variables are included in all models.
$^{+}$ $p < .10$
* $p < .05$
** $p < .01$
*** $p < .001$

executives help to explain their risk-taking preferences at the firm level years later, such that CEOs of lower and upper social class origins take greater strategic risks than their middle class counterparts. Post hoc analyses also revealed that while differing from individuals of middle social class origins on risk taking, CEOs of upper and lower social class origins also differed from each other. In particular, CEOs from the lower social classes engage in lower levels of strategic risk taking than their upper social class counterparts.

Furthermore, consistent with the idea that the manifestations of imprints can change over time, we found that experiences with elite education and career diversity influenced the relationship between executives' perceived social class origins and strategic risk taking. First, our results suggest that CEOs from lower social class backgrounds become more risk averse as the amount of elite education increases. However, contrary to our expectations, the level of elite education did not significantly influence the relationship between upper social class

FIGURE 1
Influence of Elite Education on Risk Taking among CEOs of Lower Social Class Origins



origins and risk taking. This finding may be explained by the fact that, for those from the upper social classes, obtaining an elite education is not uncommon or unexpected (Domhoff, 2002). As such, individuals from the upper social classes may not perceive (or objectively accrue) any significant increases in their economic or social capital as a result of graduation from an elite institution.

Second, presumably through its influence on expanding executives' networks and knowledge base, we found that a diverse functional (general management) background serves to amplify the relationship between CEO social class origins and strategic risk taking among executives from both the lower *and* upper social classes. In contrast to the asymmetric effects of elite education, this finding suggests that executives of lower and upper social class origins may be able similarly to capitalize on the networking and informational (that is, social and cognitive) benefits of a diverse functional background.

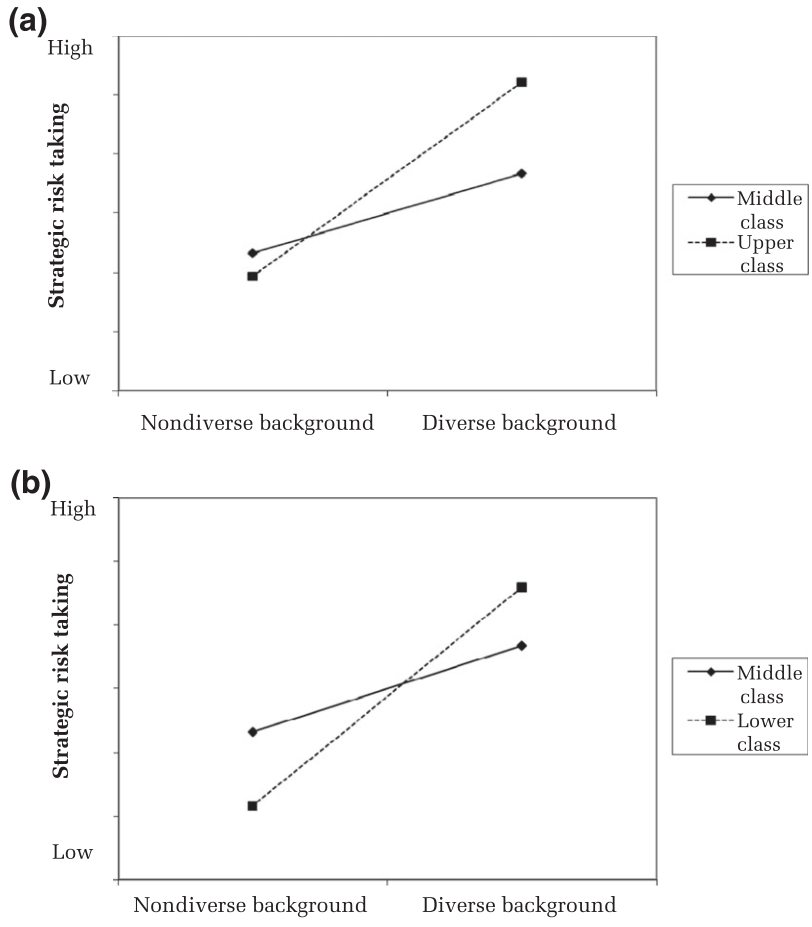
Implications for Research

Our study has a number of implications for strategic management and organization science research. First, by integrating social class theorizing and imprinting theory with upper echelons work, our study contributes new insights to the question of why, how, and when managerial characteristics impact firm outcomes and, specifically, strategic decision making. In particular, we demonstrate that *childhood social class matters*. Despite some executives taking the "long road" to the corporate elite, executives appear to hold on to the lessons and understandings garnered from their formative years. Moreover, our work points to the synergy that exists between upper echelons and imprinting theorizing, and suggests the importance of going beyond traditional demographic variables (such as age or gender) to consider how (and when) early experiences influence executives' perceptions and decision making (see also Crossland, Zyung, Hiller, & Hambrick, 2014).

Second, our study sheds new light on the constructs of elite education and executive functional background. Importantly, we provide empirical evidence that elite education may not be an adequate proxy when studying social class origins. Although prior research has used elite education as a proxy for social class background (e.g., Westphal & Khanna, 2003), graduation from an elite college institution does not necessarily equate to an upper social class background. In our sample, 25% of the CEOs of upper social class origins attended an elite undergraduate institution, compared to 10% and 14% of those from the lower and middle social classes, respectively. By showing that the effect of elite education is, in fact, contingent on social class background, we demonstrate the promise of using primary data to assess executive social class origins, despite the challenges inherent in collecting such data. We also introduce the concept of executive diverse functional background—which we label "general management background"—as another key contextual variable and show its utility for upper echelons research. Whereas prior research has highlighted the role that functional background diversity plays in a team context, our study brings the focus to the individual (intrapersonal) level.

Third, our work contributes to research on social class diversity in organizations more broadly. Despite increasing interest in the topic, organizational

FIGURE 2
Influence of General Management Functional Background on Risk Taking among CEOs of (a) Upper Social Class Origins and (b) Lower Social Class Origins



researchers still have much to learn about how social class influences individuals in the workplace. In calling for research to address this oversight, one scholar admonished organizational researchers for making "the assumption that employees doff their social class when they come to work each day and put it on again when they leave work" (Cotton, 1994: 412). Our work helps to answer this and other calls to consider social class in organizations (see, e.g., Côté, 2011; Fiske & Markus, 2012; Gray & Kish-Gephart, 2013; Leana et al., 2012; Scully & Blake-Beard, 2006). We demonstrate that the individual's social class background is not checked at the organization's door; rather, individuals appear to import their early experiences with material resources and societal rank into organizations. Moreover, the effects of social class origins persist, influencing decisions in the workplace even among the most successful in our society—the corporate elite.

Finally, our study extends researchers' understanding of how and why executive risk-taking preferences vary, offering a contribution to multiple theories in management scholarship. For example, by introducing a novel construct and documenting its influence on executive risk aversion with respect to firm investments, our theory and findings directly contribute to the normative stream of agency theory, which seeks to understand what influences executives' willingness to bear firm-specific risk (Eisenhardt, 1989). Thus, our findings point to several potential applications of the concept of social class origins to other theoretical domains.

Future Research Opportunities

Our study points toward several avenues for future research. One fruitful area for future research—and the most natural extension of this study—is to examine

other firm-level outcomes that may be influenced by social class origins. For example, prior research suggests that people in the middle and upper social classes tend to value independence and influence, while those in the lower social classes value interdependence, integrity, and care for others (Kraus et al., 2012; Lucas, 2011). This is consistent with empirical evidence demonstrating that individuals in the lower social classes tend to be more other-oriented, charitable, and generous than individuals in the upper social classes (see, e.g., Piff et al., 2010). Future research might consider whether and how social class origins influence CEOs' decisions about employment programs (such as benefits or work arrangements) and cooperative strategies, such as strategic alliances (for example, joint ventures). Strategic alliances, for instance, may be used more frequently by CEOs of lower social class origins who value working with others and thus may be more likely to view alliances as a value-creating strategy. We also speculate that the types of alliance partners may differ (for example, in terms of status) between CEOs from different social class backgrounds.

Future research could also examine the moderating effect of social class origins on executive financial or compensation incentives. Surprisingly, individual differences between executives and the resulting motivational effects of incentive compensation have yet to receive significant research attention (Gerhart, Rynes, & Fulmer, 2009; Hambrick, 2007). This avenue seems especially promising given our findings regarding differences in risk-taking preferences, because incentive compensation is often issued with the goal of discouraging risk aversion and incentivizing managers to take more risk than they would otherwise be inclined to accept. Future work might examine whether CEOs of upper social class origins are more sensitive to risk-inducing compensation incentives, such as stock options, because of their lifelong experience with a financial "safety net." In addition to the effects of compensation, social class origins may also influence the structure of compensation packages that CEOs are willing to accept (as their own compensation) and approve (as pay for other TMT members).

Lastly, our research points to upward mobility as a rich area for future research in organizational studies. As Zweigenhaft and Domhoff (1998: 184) noted, social class has become "the factor most affecting the likelihood of reaching the highest levels of the institutional structure for all Americans." Those who are able to achieve upward mobility, especially into the corporate elite, must navigate environments dominated by middle and upper social class cultural norms (Domhoff, 2002; Johnson et al., 2011; Stephens et al., 2012). Future research might consider how executives' experiences with upward mobility influence their sense of identity and connection to the organization, as well as their interactions with coworkers, leaders, and subordinates (see also Fiske & Markus, 2012; Gray & Kish-Gephart, 2013).

Limitations

As with all research, our study has limitations, which offer further opportunities for future research. First, because our study is set in a North American context, future research might explore how our findings translate to other social and institutional settings. For example, the traditional social structure of the Indian society, with well-defined and entrenched social class boundaries, may provide an interesting setting in which to study the effects of social class background.

A second limitation of our study is our focus on the CEO alone as a result of data availability. While recent studies point to a comparatively large CEO effect on firm performance (see, e.g., Hambrick & Quigley, 2013; Mackey, 2008), especially in the United States (Crossland & Hambrick, 2007), collecting data on the social class background of other TMT members—from S&P1500 firms or other populations—would allow for richer theoretical and empirical treatment of executive social class roots. Specifically, a focus on the entire team would allow researchers to assess two dimensions—average TMT social class background and the variance in TMT social class background—reflective of a novel and unexplored dimension of TMT diversity.

Finally, while we obtained direct measures of perceived social class background, we were unable to assess executive decision making directly. We thus encourage researchers to attempt a more proximal approach to measuring executive decision making, such as scenario analysis, computer simulation (see Hambrick, 2007), or policy capturing (Hitt & Tyler, 1991). Although the population of S&P1500 CEOs may be beyond reach for such an approach, smaller or regional firms (or even executive MBA programs) may be a good starting point.

CONCLUSION

Despite the appeal of "rags to riches" stories in American discourse, the long-term influence of social class origins on the upwardly mobile in the

workplace—especially those who have reached the heights of the socioeconomic hierarchy—has been unclear. By integrating work on social class, imprinting, and upper echelons theorizing, we provide an important initial step toward understanding the effects of the social class background of strategic leaders on firm-level outcomes. Overall, our results demonstrate that early formative experiences with social class matter. We thus strongly encourage future research related to upward mobility and the role of social class in the workplace.

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