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Seeking pleasure or avoiding pain: Influence of CEO regulatory focus on firms' advertising, R&D, and marketing controversies

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ABSTRACT

This research examines the influence of CEOs' regulatory focus on firms' strategic marketing behavior. The authors propose that the degree of CEOs' promotion focus relative to their prevention focus positively impacts firms' advertising and R&D intensities. However, the authors also propose a dark side of predominantly promotion-focused CEOs: a higher likelihood of firms getting involved in marketing controversies. The impact of CEO regulatory focus on these outcomes is proposed to be magnified when CEOs have high power, when stock options comprise a small proportion of CEOs' compensation, and when firms operate in highly dynamic environments. Findings based on observing a sample of publicly listed U.S. firms between 2006 and 2010 provide considerable support for the authors' hypotheses. These findings have important implications for managers, board members, investors, and researchers interested in the determinants of and mechanisms to prevent marketing myopia and marketing controversies.

1. Introduction

Scholars of upper echelon theory (Hambrick & Mason, 1984) have highlighted that Chief Executive Officers' psychological traits such as their narcissism, hubris, and overconfidence play a pivotal role in shaping firm strategy and performance (Chen, Cross, & Luo, 2015; Hayward & Hambrick, 1997; Zhu & Chen, 2015). A key psychological trait related to CEOs' goal orientation that has recently gained the interest of upper echelon researchers is their regulatory focus (e.g., Hmieleski & Baron, 2008; Tumasjan & Braun, 2012): an attribute reflecting the motivation individuals have for attaining gains (promotion focus) and avoiding losses (prevention focus). Given that CEOs' regulatory focus is directly related to their motivation under uncertainty, researchers expect it to have a critical impact on CEOs' choices, particularly those involving highly uncertain gain-loss outcomes (Gamache, McNamara, Mannor, & Johnson, 2015; Wowak & Hambrick, 2010). Indeed, recent research demonstrates that CEOs' regulatory focus impacts such key corporate choices as firm acquisitions (Gamache et al., 2015), leadership style (Stam, Van Knippenberg, & Wiesse, 2010), and contract framing (Weber & Mayer, 2011). Surprisingly, despite CEOs also taking an active part in strategic marketing choices (Kashmiri & Mahajan, 2017), a number of which involve a trade-off between gain-maximization and loss-avoidance, research investigating the effect of CEO regulatory focus on firms' strategic marketing behavior remains scant. This omission means that the impact of CEO regulatory focus on firms is potentially understated.

Two key elements of a firm's marketing strategy that each require managers to make a trade-off between attaining gains and avoiding losses are investments in advertising and R&D (Mizik & Jacobson, 2003). Advertising investments present significant growth opportunities by building brand equity (Mizik, 2010), and R&D investments promise strong competitive advantages by helping launch successful new products (Krasnikov & Jayachandran, 2008; Srinivasan & Hanssens, 2009). However, both these investments are highly risky with their returns being highly uncertain (Currim, Lim, & Kim, 2012; Joshi & Hanssens, 2010). Researchers have also established that marketing controversies significantly hurt firms' financial performance (Ahluwalia, Burnkrant, & Unnava, 2000; Dawar & Pillutla, 2000), highlighting the need for investments in control systems aimed towards avoiding these controversies. However, given firms' resource constraints, how much a CEO prioritizes such loss-avoidance investments relative to investments in growth-generating projects is again likely to be influenced by the relative importance the CEO places on avoiding losses versus obtaining gains. Yet, despite the monumental impact of advertising, R&D, and marketing controversies, and despite these outcomes inherently involving trade-offs between attaining gains and

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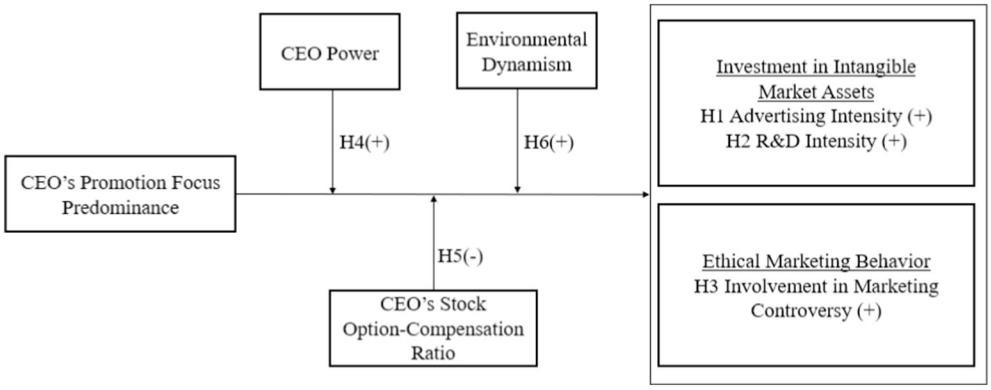


Fig. 1. Framework of the influence of CEO regulatory focus on firms' advertising, R&D, and marketing controversies.

avoiding losses, scholars have not investigated the role of CEO regulatory focus as a possible antecedent of these outcomes, leading to calls for such an investigation (Gamache et al., 2015).

In light of the existing research gaps, we investigate whether CEOs' regulatory focus impacts firms' advertising intensity, R&D intensity, and likelihood of getting involved in marketing controversies. We also investigate whether factors related to corporate governance and industry environment moderate the impact of CEOs' regulatory focus on these strategic marketing variables. As Fig. 1 reveals, we predict that firms whose CEOs are predominantly promotion-focused (i.e., whose CEOs have greater degrees of promotion focus relative to prevention focus) are likely to make greater investments in advertising and R&D. However, such firms are also more likely to get involved in marketing controversies. We also posit that CEO regulatory focus is likely to have a more meaningful impact on these marketing outcomes when the CEO has high power, when stock options comprise a relatively small proportion of the CEO's compensation, and when the firm operates in highly dynamic environments. Our empirical study of 395 CEOs belonging to large publicly listed U.S. firms supports most of our hypotheses. Our results are, on the whole, robust to the use of alternative regression techniques, and to concerns of sample selection bias, endogeneity, serial correlation, heteroscedasticity, and outliers.

Our research makes a number of important contributions to existing research. First, we add to upper echelon literature by theorizing and finding empirical support that the impact of CEOs' regulatory focus extends not only *to corporate* policies such as mergers and acquisitions, as found by prior scholars (e.g., Gamache et al., 2015), but also to a number of key strategic *marketing* outcomes in which CEOs may or may not be directly involved.

Second, researchers studying myopic management (i.e., the practice of managers making lower advertising and R&D investments than is justified from a value-maximization perspective) and marketing controversies (e.g., Kashmiri & Brower, 2016; Mizik, 2010) have called for an investigation on the antecedents of these important outcomes. We answer the call of these researchers by highlighting a key psychological antecedent of these outcomes. In doing so, our research promises to help board members understand where they need to focus in their efforts to decrease the incidence of myopic management and controversial marketing behavior.

Finally, unlike previous researchers who have investigated the main effects of CEOs' personal characteristics (e.g., Hutton, Jiang, & Kumar, 2014), corporate governance factors (e.g., Finkelstein & D'Aveni, 1994), and environmental factors (e.g., Dess & Beard, 1984) on firm outcomes, we reveal how a key CEO psychological characteristic works *in tandem* with factors related to corporate governance (CEO power and CEO compensation structure) and firm environment (industry dynamism) to shape firms' strategic marketing behavior. In doing so, we provide a nuanced understanding to board members and compensation committees on factors they can use to monitor and control the marketing impact of CEOs' regulatory focus.

2. Theoretical framework

2.1. Regulatory focus theory

According to regulatory focus theory (Higgins, 1997), two distinct motivational systems influence how individuals approach pleasure and pain: promotion focus and prevention focus. An individual's degree of promotion focus refers to the individual's level of motivation to focus on advancement and growth, while an individual's degree of prevention focus refers to the individual's level of motivation to avoid losses and ensure safety (Higgins, 1997).

Prior research suggests that promotion and prevention foci represent independent systems rather than opposite ends of a single continuum (Forster, Higgins, & Bianco, 2003). Indeed, it is possible for an individual to have high levels of both promotion and prevention foci, high levels of just one focus, or low levels of both foci. However, despite promotion and prevention focus being theoretically distinct constructs, several researchers have suggested that in situations involving a trade-off between obtaining gains and avoiding losses, *the relative strength* of one's promotion and prevention foci is likely to determine which regulatory focus gains salience and drives behavior (e.g., Camacho, Higgins, & Luger, 2003; Lockwood, Jordan, & Kunda, 2002; Molden & Higgins, 2004). These researchers point out that in situations containing a trade-off between attaining gains and avoiding losses, the best predictor of behavior is regulatory focus *predominance*: the relative strength of one's promotion and prevention foci (Cesario & Higgins, 2008; Higgins, 1997).

Simply put, individuals who are predominantly promotion-focused (i.e., those who have higher degrees of promotion focus relative to prevention focus) are intrinsically motivated to focus on advancement, growth, and gains, even if striving for these benefits requires these individuals to take considerable risks (Higgins, 2000; Stam et al., 2010). These individuals strive to "insure hits and insure against errors of omission (i.e., a loss of accomplishment)" (Crowe & Higgins, 1997, p. 120). By contrast, predominantly prevention-focused people (i.e., those who have higher degrees of prevention focus relative to promotion focus) desire safety, stability, and avoidance of losses, even if these goals require individuals to forgo the opportunity of obtaining gains (Higgins, 2000; Stam et al., 2010). These individuals take a more

conservative approach in their decision making and try to "insure against errors of commission (i.e., making a mistake)" (Crowe & Higgins, 1997, p. 120).[1]

2.2. Mechanisms linking CEOs' regulatory focus with strategic marketing outcomes

Prior scholars have found that CEOs' regulatory focus impacts such corporate outcomes as firm acquisitions (Gamache et al., 2015), leadership style (Stam et al., 2010), and contract framing (Weber & Mayer, 2011). Research suggests that CEOs are also directly involved in a number of strategic marketing choices (Kashmiri & Mahajan, 2017). Thus, we expect the impact of CEOs' regulatory focus to also extend to their strategic marketing choices, particularly those with highly uncertain gain-loss outcomes. Furthermore, we expect CEOs' regulatory focus to affect the choices made by their subordinates.

Prior research reveals that CEOs engage in "behavior channeling" (England, 1967) by directing their subordinates to select alternatives that meet their personal goals (Thompson, 2003) such as their goals of obtaining gains or avoiding losses. We expect CEOs to have considerable success in shaping the behavior of their marketing subordinates, given the range of corporate governance mechanisms they have at their disposal: the allocation of resources and rewards, and the establishment of policies, systems, and procedures (Bower, 1970). Such a view is in line with Fama and Jensen's (1983) observation that although operational decisions such as setting advertising and R&D spending budgets are frequently taken by lower-level managers, CEOs take an active part in approving and monitoring these budgets. To that end, marketing managers initiating and implementing marketing-related spending budgets learn to submit budgets that have a "convergence-of-interest" with CEOs, ensuring that CEOs approve these budgets (Joseph & Richardson, 2002, p. 96). Through these mechanisms, CEOs' regulatory focus is likely to shape a variety of operational decisions taken by marketing managers. Specifically, predominantly promotion-focused CEOs, given their stronger focus on obtaining gains (relative to avoiding losses), are likely to influence their marketing subordinates to pursue strategic plans that promise growth, even if these plans come with significant downside risks (Resick, Whitman, Weingarden, & Hiller, 2009).

2.3. Influence of CEO's promotion focus relative to prevention focus on investments in intangible market assets: advertising and R&D

Investments in intangible market assets, such as advertising and R&D spending, are associated with high potential benefits but also high risks (Kothari, Laguerre, & Leone, 2002), suggesting that CEOs' regulatory focus plays a key role in determining how these executives navigate this risk-return trade-off.

Advertising investments are considered risky because while advertising can help grow brands significantly by building brand equity, improving brand awareness, and increasing customer satisfaction (Srinivasan & Hanssens, 2009), the returns to advertising are highly uncertain with many advertising campaigns failing to have a meaningful impact on the growth of brands (e.g., Jedidi, Mela, & Gupta, 1999; Joshi & Hanssens, 2010). The uncertainty surrounding the benefits of advertising exists because the returns to advertising are dependent on the complex and unpredictable interplay of such factors as the creative content of the advertisement, the effectiveness of the media strategy, the past product experience of customers, and the nature of competitors' response (Eastlack Jr & Rao, 1986; Erickson & Jacobson, 1992).

Similarly, while R&D provides the potential for strong competitive advantages via improvements in product quality, and development of successful new products (Srinivasan & Hanssens, 2009), helping R&D intensive firms generate abnormal earnings levels (Chan, Lakonishok, & Sougiannis, 2001; Eberhart, Maxwell, & Siddique, 2004), the returns to R&D investment are also highly uncertain: 10% of patents account for more than 80% of the patent value in the U.S. (Scherer, Harhoff, & Kukies, 2000), and 40% to 90% of all newly introduced products fail in the marketplace (Gourville, 2006), resulting in the distribution of R&D payoffs being highly skewed (Lev, 2001).

Prior research also suggests that a number of technical, competitive, and market risks are inevitably associated with R&D investments. First, while technological specifications in R&D projects are typically planned before the projects start, in many cases the specifications become outdated because of changes in the technological or legal environment (e.g. Raz, Shenhar, & Dvir, 2002), resulting in these projects being terminated (Lev, 2001). Second, many R&D projects fail when a competitor takes out a patent for a technology being used in the project or launches a comparable product before the project has been completed (Ciftci & Darrough, 2016; Raz et al., 2002). Third, even when R&D projects reach completion and result in new technologies, the cash flows associated with these technologies tend to be highly volatile as they are affected by product-specific and macroeconomic shocks on customer demand (Nishihara, 2018).

Given the high gain-high loss nature of advertising and R&D, we expect CEOs' regulatory focus to impact firms' investments in advertising and R&D. Specifically, we propose that CEOs with greater promotion focus (relative to prevention focus) are likely to invest more in advertising and R&D, as they are likely to focus on the potential gains from these risky investments (e.g., Currim et al., 2012). In contrast, CEOs with greater prevention focus (relative to promotion focus) are likely to invest less in advertising and R&D as they are likely to focus on the risk of failing to recoup these risky investments.

H1. The greater a CEO's promotion focus relative to the CEO's prevention focus, the greater the firm's advertising intensity is likely to be.

H2. The greater a CEO's promotion focus relative to the CEO's prevention focus, the greater the firm's R&D intensity is likely to be.

2.4. Influence of CEO's promotion focus relative to prevention focus on the incidence of marketing controversies

While introducing new products or supporting the health of existing ones, companies typically make claims about their products, highlighting a number of product quality attributes such as durability, effectiveness, and country of manufacture. A marketing controversy results if it becomes publicly known that in supporting its products, a firm has made a product claim that is incorrect or scientifically unproven, or one that omits important information such as relevant risks or limitations (Tipton, Bharadwaj, & Robertson, 2009). Firms also encounter a marketing controversy if it becomes publicly known that they have not disclosed defects or limitations of their products.

When firms encounter a marketing controversy, they risk losing current and potential customers and tend to provide "ammunition for adversaries" (Elsbach & Sutton, 1992). Such firms also risk incurring tangible costs associated with corrective advertising, consumer compensation and/or civil fines, and tend to experience a drop in their shareholder value (Tipton et al., 2009). Given the significant negative effects of marketing controversies, we expect all CEOs to make at least some resource commitments towards avoiding these controversies (Goodden, 2008; Newman, 2011). These resource commitments include

[1] In line with this stream of work, we calculate an individual's promotion focus predominance score by subtracting the individual's prevention focus score from the individual's promotion focus score. Thus, an individual's promotion focus predominance score provides a continuous measure, where a positive number indicates a predominant promotion focus and a negative number indicates a predominant prevention focus.

clinical trials, scientific testing of marketing claims, and scrutiny of marketing claims by legal, R&D, and product-design teams. However, given that firms' resource commitments towards avoiding marketing controversies result in fewer resources available for projects such as advertising and R&D that offer growth-generating potential (Kashmiri & Brower, 2016), we expect significant heterogeneity among firms with regards these loss avoidance-related resource commitments.

According to regulatory focus theory, when faced with a tradeoff between attaining gains and avoiding losses, CEOs with stronger prevention focus relative to promotion focus tend to be more focused on avoiding losses, even if doing so means forgoing potential gains. A predominantly prevention-focused CEO, then, is likely to make *greater* resource commitments towards avoiding marketing controversies, even if making these commitments results in cutting down potentially profit-generating investments such as investments in advertising and R&D. Firms whose CEOs are predominantly prevention-focused, given their greater loss avoidance-related resource commitments, are therefore less likely to get involved in marketing controversies.

Higher levels of advertising and R&D intensities also typically result in a greater scope of marketing activities (i.e., more advertising campaigns, more new product introductions, etc.) (Srinivasan & Hanssens, 2009), and consequently a greater number of marketing claims. As discussed earlier, we expect firms led by predominantly promotion-focused CEOs to have higher levels of advertising and R&D intensities than those led by predominantly prevention-focused CEOs. We therefore expect such firms to make a greater number of marketing claims. Given managers' limited oversight capacity, a greater number of marketing claims is likely to result in firms led by predominantly promotion-focused CEOs committing more inadvertent marketing mistakes. Put simply, given the deleterious effects of marketing controversies (Tipton et al., 2009), we *do not* expect predominantly promotion-focused CEOs to be more likely to engage in opportunistic behavior by deliberately making incorrect marketing claims; nevertheless, managers' limited oversight capacity implies that an increased scope of marketing activities will inevitably result in diminished internal scrutiny of marketing claims, resulting in firms led by predominantly promotion-focused CEOs inadvertently making more marketing mistakes.

H3. The greater a CEO's promotion focus relative to the CEO's prevention focus, the more the firm's likelihood of getting involved in a marketing controversy.

2.5. Moderating role of corporate governance: CEO power

There is considerable heterogeneity among CEOs in regard to their power (e.g., Finkelstein, Hambrick, & Cannella Jr., 2009). A number of factors lead to this heterogeneity. These factors include (1) differences in voting power: greater amounts of firm ownership gives CEOs greater voting power (Morck, Shleifer, & Vishny, 1988); (2) differences in structural power: CEOs who also serve as board chairs and those who serve on many board committees have greater structural power (Finkelstein & D'Aveni, 1994); and (3) differences in board vigilance: CEOs who serve under boards that are not very independent have greater discretionary power. CEO power has been found to moderate the impact of CEO attributes on a number of strategic firm outcomes. Indeed, researchers have found that the higher the CEO power, the higher the impact of CEO hubris on the size of premiums paid for firm acquisitions (Hayward & Hambrick, 1997). Similarly, researchers have shown that the link between CEOs' political ideologies and firms' corporate social performance is moderated by CEO power (Chin, Hambrick, & Trevino, 2013). This area of research suggests that powerful CEOs have greater ability to influence strategic outcomes directly as well as through their subordinates.

In line with this stream of work, we expect that CEOs will inject their personal goal orientations (i.e., their degree of promotion focus relative to prevention focus) into their firms' strategic marketing outcomes in proportion to the degrees of power they hold. When CEOs hold low degrees of power, the impact of their regulatory focus on firms' strategic marketing decisions is likely to be attenuated. Thus, we hypothesize:

H4. The relation between a CEO's level of promotion focus relative to the CEO's prevention focus and the firm's (a) advertising intensity, (b) R&D intensity, and (c) incidence of marketing controversies is likely to be moderated by the power of the CEO, such that the relationship is likely to be stronger when CEO power is high.

2.6. Moderating role of corporate governance: stock option-compensation ratio

A stock option has been found to be an important compensation-related tool that can help board members shape CEO behavior (Sanders & Hambrick, 2007). By making CEOs eligible to benefit from upside gains, while simultaneously providing a floor to limit losses, stock options encourage CEOs to take greater risks (Rajgopal & Shevlin, 2002; Sanders, 2001). However, we expect that the *marginal* impact of stock option-compensation ratios on CEOs' risk taking propensity will be higher for CEOs who are predominantly prevention focused.

Predominantly promotion-focused CEOs are intrinsically motivated to focus on *obtaining gains*. Thus, they can be expected to be relatively insensitive to their compensation structure when investing in risky investments such as advertising and R&D. In other words, predominantly promotion-focused CEOs are likely to be relatively *unconditional* supporters of risky marketing investments. Given the presence of ceiling effects, we would expect the *marginal* impact of stock options on such CEOs' propensity to make such investments to be low. On the contrary, predominantly prevention-focused CEOs are intrinsically motivated to *avoid risks*. These CEOs are thus likely to pursue risky marketing investments when they have strong financial incentives, and avoid them without these incentives. In other words, predominantly prevention-focused CEOs are likely to be relatively *conditional* supporters of risky marketing investments and thus the *marginal* impact of stock options on these CEOs' propensity to make such investments is likely to be high. We would therefore expect the *differences* between predominantly prevention-focused CEOs and predominantly promotion-focused CEOs with regard their emphases on advertising, and R&D to be *magnified* when these CEOs have low stock-option compensation ratios.

When CEOs' stock option-compensation ratios are low, a drop in the stock price of the firm, brought about by the firm getting involved in a marketing controversy is also expected to be less burdensome to them: such a drop makes a lower impact on CEOs' total compensation. In such a context, CEOs' psychological traits, such as whether they are promotion or prevention-focused, are likely to play a more crucial role in shaping their emphasis on avoiding marketing controversies (with predominantly prevention-focused CEOs being significantly more motivated than predominantly promotion-focused ones). However, when CEOs' stock option to total compensation ratios are high, both predominantly prevention and predominantly promotion-focused CEOs are likely to be highly incentivized to prevent marketing controversies and thereby protect the value of their options. In such a context, the difference between these two types of CEOs' emphasis on preventing marketing controversies is likely to be minimized. Hence:

H5. The relation between a CEO's level of promotion focus relative to the CEO's prevention focus and the firm's (a) advertising intensity, (b) R&D intensity, and (c) incidence of marketing controversies is likely to be moderated by the CEO's stock options to total compensation ratio, such that the relationship is likely to be stronger when the CEO's stock options to total compensation ratio is low.

2.7. Moderating role of industry environment: environmental dynamism

When firms operate in highly dynamic environments, customer preferences, technologies, and competitive dynamics are highly unpredictable (Moorman & Miner, 1998), increasing decision-making uncertainty (Henderson, Miller, & Hambrick, 2006). In such unstable environments, the value of feedback-based learning from choices made by CEOs or their peers in the past depreciates rapidly (Eisenhardt & Tabrizi, 1995; Sidhu, Commandeur, & Volberda, 2007; Song & Montoya-Weiss, 2001), forcing CEOs to rely more heavily on their intuition, personal biases, and goals in their decision-making (Aldrich, 1979; Nadkarni & Chen, 2014). Thus, when making risk-return tradeoffs in highly dynamic environments, CEOs are likely to draw upon their regulatory focus more heavily, with predominantly promotion-focused CEOs focusing even more strongly on initiatives that promise gains (e.g., advertising and R&D) and predominantly prevention-focused CEOs focusing even more strongly on initiatives that minimize the threat of losses (e.g., investments in control systems aimed at avoiding marketing controversies).

Individuals who make decisions in highly dynamic environments also face considerable job demands, forcing them to make their decisions quickly (Hambrick, Finkelstein, & Mooney, 2005) and making them more likely to take mental shortcuts by drawing upon their psychological attributes (Gilbert, Pelham, & Krull, 1988; Miller & Droge, 1986). In such a context, CEOs are more likely to act in accordance with their predominant regulatory focus. In more stable environments, however, individuals have more time to make decisions, making them less reliant on their psychological dispositions in making choices (Hambrick et al., 2005), and more likely to weigh the pros and cons of their choices as part of a more measured, objective, and rational decision process.

Finally, given the higher levels of uncertainty prevailing in dynamic environments (Achrol & Stern, 1988; Curley, Yates, & Abrams, 1986; Dess & Beard, 1984; Wijbenga & van Witteloostuijn, 2007), risky marketing investments made under such environments are associated with *bigger gains* and *bigger losses* than the same investments made under stable environments (Baum & Wally, 2003; Moorman & Miner, 1998; Simerly & Li, 2000). As such, CEOs with a strong promotion focus relative to prevention focus are likely to find advertising and R&D investments even more appealing given the higher upside potential of these investments is such environments. In contrast, CEOs with a strong prevention focus relative to promotion focus are likely to be even more concerned about the risk of failing to recoup financial returns from risky marketing investments in an environment with higher downside risks. All in all, we expect that environmental dynamism, typified by rapid change in the market conditions a firm operates in will magnify the impact of CEO regulatory focus on strategic marketing decisions.

H6. The relation between a CEO's level of promotion focus relative to the CEO's prevention focus and the firm's (a) advertising intensity, (b) R&D intensity, and (c) incidence of marketing controversies is likely to be moderated by the level of environmental dynamism in which the firm operates, such that the relationship is likely to be stronger when the environmental dynamism in which the firm operates is high.

3. Methodology

3.1. Sample

We tracked the performance of a sample of 395 large publicly listed U.S. firms, annually across 5 years (2006–2010). We reached our sample by first considering all firms in the ExecuComp and WRDS GMI Ratings databases that appointed a new CEO in the year 2003–2005. This resulted in an initial sample of 890 firms. We then restricted ourselves to firms whose CEO did not change during the period of observation (2006–2010), resulting in a final sample of 395 firms. We restricted our analyses to firms with newly appointed CEOs because (1) we wanted to consider the impact of CEOs' values from the outset of these CEOs' tenure, and (2) calculate the correlation between the regulatory focus scores of our sample CEOs with those of their immediate predecessors. We imposed the restriction of no CEO turnover between 2006 and 2010 because we were interested in exploring how the regulatory focus of one CEO alone impacts each firm's behavior during the entire 5 years the firm was observed. Our sample firms belonged to a diverse set of industries, representing 8 different one-digit SIC codes.[2]

3.2. Measures and sources

3.2.1. CEO's promotion focus relative to prevention focus

In our analysis, the variable 'CEO's Promotion Focus Predominance' reflected the degree of a CEO's promotion focus relative to the CEO's prevention focus. To measure CEO's promotion focus predominance, following Gamache et al. (2015), we conducted a content analysis of CEOs' letters to shareholders for the years 2006–2008 for our sample of firms. To measure CEOs' promotion focus relative to prevention focus, we first considered the dictionary of promotion and prevention-related words developed and validated by Gamache et al. (2015). However, one could argue that the words "promotion", "promoting" and "responsible" that were included in the dictionary of words by Gamache et al. (2015) overlap with our outcome variables. More specifically, the words "promotion" and "promoting" could potentially be mentioned in a letter to shareholders in the context of advertising, while the word "responsible" could potentially be mentioned in the context of avoiding marketing controversies. Thus, we dropped these words from the dictionary of promotion and prevention-related words, with our final dictionary of words shown in Table 1.[3]

Using the text-analysis software DICTION 7.0 (Hart & Carroll, 2013), we noted the average percentage of promotion-related words in each firm's letters to shareholders in the years 2006–2008. Next, we noted the average percentage of prevention-related words in each firm's letters to shareholders in the years 2006–2008. We then subtracted the average percentage of prevention-related words from the average percentage of promotion-related words in each firm's letters to shareholders, and used this difference measure to reflect the CEO's promotion focus predominance (i.e., degree of promotion focus relative to prevention focus). Note that positive values for CEO's promotion focus predominance suggested that the CEO was predominantly promotion-focused while negative values suggested that the CEO was predominantly prevention-focused. We followed the suggestions of prior scholars with regard to testing moderated multiple regression models (e.g., Irwin & McClelland, 2001), and mean-centered CEO's promotion focus predominance before including it in our regression models.

3.2.2. Advertising intensity and R&D intensity

Using Compustat, we measured advertising intensity for each firm-year as the advertising expenditure expressed as a percentage of the firm's total assets, i.e., (Advertising expenditure ÷ Total assets) * 100. Firm-years with missing advertising data were coded as zero. Similarly, using Compustat, we measured R&D intensity for each firm-year as the R&D expenditure expressed as a percentage of the firm's total assets, i.e., (R&D expenditure ÷ Total assets) * 100. Firm-years with missing R

[2] Our sampled industries were: SIC 1 (construction), SIC 2 (light manufacturing), SIC3 (heavy manufacturing),SIC4 (transportation & communications),SIC 5 (retail), SIC 6 (finance & insurance), SIC 7 (personal, recreation, & business),and SIC8 (health & education).

[3] We thank an anonymous reviewer for highlighting the need to drop these words. Nevertheless, as Gamache et al. (2015)'s measure has been shown to have high content, convergent and discriminant validity, we also conducted a robustness check where we included the words "promotion", "promoting", and "responsible" in our measure of CEO's promotion focus predominance, with no significant change in our overall conclusions.

Table 1
Variable definitions and sources.

	Variable	Definition and sources
1	CEO's promotion focus predominance	We conducted a content analysis of letters to shareholders for the fiscal years 2006–2008 for our sample firms. The dictionary of words we used for testing the level of promotion focus predominance was borrowed from Gamache et al. (2015). We first calculated the average number of the following promotion-related words in each firm's letters to shareholders in the years 2006–2008, for every 100 words in these letters: Accomplish, Achieve, Aspire, Aspiration, Advancement, Attain, Desire, Earn, Expand, Grow, Gain, Hope, Hoping, Ideal, Improve, Increase, Momentum, Obtain, Optimistic, Progress, Speed, Swift, Towards, Velocity, Wish. We then calculated the average number of the following prevention-related words in each firm's letters to shareholders in the years 2006–2008, for every 100 words in these letters: Accuracy, Afraid, Anxious, Avoid, Careful, Conservative, Defend, Duty, Escape, Escaping, Evade, Fail, Fear, Loss, Obligation, Ought, Pain, Prevent, Protect, Risk, Safety, Security, Threat, Vigilance. The more the promotion-related words relative to prevention-related words, the more a CEO focuses on obtaining gains versus avoiding losses, and the more promotion-focused (relative to prevention-focused), the CEO is considered to be. We therefore, subtracted the average number of prevention-related words from the average number of promotion-related words in each firm's letters to shareholders in the years 2006–2008, for every 100 words in these letters. We then used this measure to reflect the degree of a CEO's promotion focus predominance (i.e. their degree of promotion focus relative to prevention focus). We followed the suggestions of prior scholars who had tested moderated multiple regression models (e.g., Irwin & McClelland, 2001), and mean-centered CEO's promotion focus predominance before including it in our regression models. Sources: CEOs' letters to shareholders from annual reports found in corporate websites, S&P Capital IQ, and Mergent database.
2	Advertising intensity	Firms' advertising expenditure as a % of their total assets i.e., (Advertising expenditure ÷ Total assets) * 100. Firms with missing data were coded = 0. Source: Compustat.
3	R&D intensity	Firms' R&D expenditure as a % of their total assets i.e., (R&D expenditure ÷ Total assets) * 100. Firms with missing data were coded = 0. Source: Compustat.
4	Marketing controversy	Recorded as a dummy variable which took the value of 1 if the firm, in the year of observation, got involved in a marketing controversy according to data from Kinder, Lydenberg and Domini Research & Analytics (KLD). KLD rates firms' social concerns (controversies) in multiple categories and sub-categories. To measure marketing controversy, we focused only on the category of 'product concern', and the sub-category that KLD classifies as 'marketing controversy'. KLD gives each firm in its database a score of 1 for marketing controversy for each year in which the firm paid fines or civil penalties relating to advertising practice, or consumer fraud Source: KLD.
5	CEO power	Following the approach of prior researchers (e.g., Finkelstein, 1992; Zhu & Chen, 2015), we recorded multiple indicants of CEO power. Specifically, we recorded the following indicants for each firm-year: (1) the percentage of the firm's shares owned by the CEO, (2) a dummy variable indicating whether the CEO also served as the chairman of the board, (3) the number of inside directors as a proportion of the total number of directors on the board, and (4) the number of board committees on which the CEO has a role. We created a single CEO power index by standardizing the scores of these four indicators and using the standardized sum of their standard scores. Sources: S&P Capital IQ database, DEF-14A proxy statements, 10-K reports, and firm websites.
6	CEO's stock option-compensation ratio	The proportion of the CEO's overall compensation in the year of observation that comprised of stock options. Sources: DEF-14A proxies; Execucomp.
7	Environmental dynamism	Following prior researchers (e.g., Boyd et al., 2005), we regressed the total industry revenues (classified by 2-digit SIC code) for each focal firm in the Compustat universe on time for ten years of data leading up to the focal year. We divided the root mean-squared error (RMSE) of this regression by the average industry sales for ten years of data leading up to the focal year, and used the standardized measure of RMSE as a proportion of average industry sales as our measure of environmental dynamism. Source: Compustat
8	Firm age	Natural logarithm of the difference between the year of observation and the firm's founding year. Sources: Compustat; corporate websites; Hoovers.
9	Firm size	Natural logarithm of total employees where total employees were recorded in '000 s. Source: Compustat.
10	Globalization	The proportion of firm revenues from outside the U.S. Source: Compustat.
11	Diversification	Palepu (1985)'s entropy measure of total diversification. Source: Compustat.
12	Leverage	The ratio of long-term debt to total assets. Source: Compustat

&D data were coded as zero. As our dependent variables (DVs) could potentially differ systematically across industries, it was important to control for industry-level differences while measuring advertising and R &D intensity. For each year, we therefore measured the mean advertising intensity and mean R&D intensity in the Compustat universe, for each 2-digit SIC industry featured in our sample. These were subtracted from firms' advertising intensity and R&D intensity measures respectively.

3.2.3. Marketing controversy

We measured marketing controversy as a binary variable which took the value of 1 if the firm, in the year of observation, got involved in a marketing controversy according to data from KLD, 0 otherwise. KLD rates firms' social controversies in multiple categories and sub-categories. As we were interested in marketing-related controversies, we focused only on the sub-category that KLD classifies as 'marketing controversy'. KLD gives each firm in its database a score of 1 for marketing controversy for each year in which the firm "paid fines or civil penalties relating to advertising practice, or consumer fraud". To assess the validity of our KLD-based measure of marketing controversy, we randomly selected 45 firm-years from our sample and searched news reports using LexisNexis database, and the websites of Federal Trade Commission (FTC) and Food and Drug Administration (FDA), to record incidents of firms paying fines or civil penalties relating to advertising practice, or consumer fraud. This data on marketing controversies matched the KLD ratings on marketing controversies for all 45 firm years, increasing confidence in our measure. To control for systematic industry differences, we included seven industry dummies according to 1-digit SIC codes.[4]

3.2.4. CEO power

Following prior researchers (e.g., Finkelstein, 1992; Zhu & Chen, 2015), we recorded multiple indicants of CEO power in the top management team (TMT). Specifically, using S&P Capital IQ database, DEF-

[4] As a robustness check, we randomly selected from the KLD database eight peer industry firms for each 2-digit SIC featured in our sample. For each firm-year, we then subtracted from each measure of marketing controversy, the mean proportion of peer firms that encountered a marketing controversy, as measured by KLD. This resulted in a continuous dependent variable that was bounded between −1 and +1. We then re-ran our analysis using a GLS random effects regression. Our results were, on the whole, robust to this specification, though H4c which was marginally supported using our regular specification, became non-significant. KLD data for 24 out of the 395 sample firms were not available. Consequently, we dropped these 24 firms, while analyzing firms' marketing controversies.

14A proxy statements, 10-K reports, and firm websites, we recorded the following indicants for each firm-year: (1) the percentage of the firm's shares owned by the CEO, (2) a dummy variable indicating whether the CEO also served as the chairman of the board, (3) the proportion of inside to total number of directors on the board, and (4) the number of board committees on which the CEO has a role. We created a single CEO power index by standardizing the scores of these four indicators and using the standardized sum of these scores.

3.2.5. CEO's stock option-compensation ratio

Using Execucomp & DEF-14A proxy statements, we calculated the proportion of each CEO's overall compensation for each firm-year that comprised of stock options. We then mean-centered this proportion and used the mean-centered proportion in our models.

3.2.6. Environmental dynamism

Following prior researchers (e.g., Bahadir, Sundar, & Srivastava, 2008; Boyd, Gove, & Hitt, 2005), we used the following regression to measure environmental dynamism.

$$IR_t = b_0 + b_1(t) + a_t, \quad (1)$$

where IR = total industry revenues; t = year; and a = the residual in the regression.

Industries were classified according to 2-digit SICs. We regressed the total industry revenues for each focal firm in the Compustat universe on time for ten years leading up to the focal year. We divided the root mean-squared error (RMSE) of this regression by the average industry sales for ten years of data leading up to the focal year, to find the coefficient of variation of sales. We then used the standardized coefficient of variation of sales to reflect environmental dynamism.

3.2.7. Control variables

We controlled for variables that could potentially be related to companies' R&D and advertising intensities or likelihood of engaging in a marketing controversy. Our control variables included firm age, firm size, globalization, diversification, and financial leverage. In addition, to account for potential selection effects we included the inverse Mills ratio (IMR), for each firm-year obtained from a two-stage Heckman model as described later. Note that as discussed earlier, we controlled for industry effects by using mean measures of our dependent variables at the two-digit SIC level and/or by including industry dummies at the one-digit SIC level. We describe the measures and sources of our control variables in Table 1.

3.3. Regression models

We used the following models to test our hypotheses. For the models introduced below, i and t represented the firm i and the year t, respectively; $\delta_0 \ldots, \delta_{10}$ were the regression coefficients; advertising intensity, R&D intensity, and CEO's promotion focus predominance were measured as shown in Table 1; control variables were the variables discussed earlier in Section 3.2.7; α_i and ε_{it} represented unobserved heterogeneity and idiosyncratic error terms, respectively.

We used a GLS random effects regression[5] to model firms' advertising and R&D intensity and employed the following equations:

$$\text{Advertising intensity}_{it} = \delta_0 + \delta_1(\text{CEO's Promotion focus Predominance})_i + \delta_{2-9}(\text{Control variables})_{it} + \delta_{10}\,\text{IMR}_{it} + \alpha_i + \varepsilon_{it}, \quad (2)$$

$$\text{R\&D intensity}_{it} = \delta_0 + \delta_1(\text{CEO's Promotion focus Predominance})_i + \delta_{2-9}(\text{Control variables})_{it} + \delta_{10}\,\text{IMR}_{it} + \alpha_i + \varepsilon_{it}, \quad (3)$$

As marketing controversy was a binary variable, we used a random effects logistic regression to model it, using the same set of predictor variables listed in Eqs. (2) and (3), along with seven industry dummy variables using 1-digit SIC codes. To test the impact of our proposed moderators, we analyzed the interaction effect between these proposed moderators and CEO's promotion focus predominance.

The descriptive statistics and correlations for our measures are presented in Table 2. As shown in Table 2, none of the correlations between our independent variables was greater than the benchmark of 0.50. We also found that the variance inflation factors were smaller than 10. These results indicate that our regression models did not have multicollinearity problems.

3.4. Correction for potential sample selection bias

Our sample consists of firms for whom the CEO did not experience turnover during 2006–2010. A sample selection bias may occur if the selection of these firms with relatively longer CEO tenure is not independent of our outcome variables. We accounted for potential sample selection bias by conducting a two-stage Heckman analysis. We first estimated a probit selection model where the dependent variable was 1 for each year (during the 2006–2010 window) for which the firm did not experience CEO turnover, and 0 for the year the firm experienced CEO turnover. We had a total of 3513 firm-year observations, with 395 firms not experiencing CEO turnover for the full 2006–2010 window and therefore contributing 1975 firm-year observations. We obtained the inverse Mills ratio (IMR) from the Heckman first-stage selection model, which we then included as a control variable in our subsequent second-stage regression models.[6]

We included a number of independent variables in our selection model that could potentially affect CEO tenure, and therefore affect the probability of a firm being selected in our sample. Besides all independent variables used in our focal regressions that we could measure reliably[7] (i.e., firm age, firm size, globalization, diversification, financial leverage, CEO's stock option-compensation ratio, and industry dynamism), we also included firm performance (firm's net income over total assets), firm slack (ratio of firm's current assets to current liabilities), CEO duality (1 if the incoming CEO was also appointed as the board chairman and 0 otherwise), CEO gender (1 if the CEO was a male

[5] We used random effects rather than fixed effects in our models as our focal independent variable (CEO's promotion focus predominance) is time-invariant. One can also argue that the error terms in Eqs. (2) and (3) are contemporaneously correlated as a one-time shock may impact both advertising and R&D decisions simultaneously. To address this concern, we also employed a seemingly unrelated regression (SUR) with the error terms in Eqs. (2) and (3) allowed to be correlated. Our overall conclusions remained the same upon using this alternate modeling technique. Furthermore, the Breusch-Pagan test of independence showed that the null hypotheses of no correlation between the error terms of Eqs. (2) and (3) was not rejected (chi2(1) = 0.93, Pr = 0.33 > 0.10).

[6] For the 1st stage, we employed a random-effects probit model to account for the lack of independence across multiple observations of the same firm. However, our overall results remained robust to the use of a pooled probit regression model with cluster-robust standard errors.

[7] We did not include CEO regulatory focus as an independent variable in the 1st stage regression as 273 firms experienced CEO turnover before the start of 2009, and we could not measure their CEO's regulatory focus reliably owing to a lack of at least 3 letters to shareholders by the focal CEO. Nevertheless, in unreported analysis, we modelled the 1st stage differently where we only included the 617 firms whose CEOs did not experience turnover till at least the end of 2008 (and hence for whom CEO regulatory focus could be measured reliably). We included CEO regulatory focus as an additional independent variable in the 1st stage probit regression. We did not find CEO regulatory focus to be related to the dependent variable in the 1st stage, and the inclusion of IMR in the 2nd stage (calculated using this alternate 1st stage model) did not change our results.

Table 2
Descriptive statistics and correlation coefficients.

		M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	Advertising intensity† (%)	1.61	3.34												
2	R&D intensity† (%)	6.41	15.79	−0.06***											
3	Marketing controversy	0.12	0.32	0.06**	−0.06***										
4	CEO's Promotion focus predominance†	0.44	0.40	0.11***	0.08***	0.16***									
5	CEO power	0.00	1.00	−0.01	0.02	−0.01	−0.001								
6	Stock option-compensation ratio†	0.45	0.23	0.04*	0.09***	0.06***	0.07***	−0.01							
7	Environmental dynamism†	0.09	0.31	0.003	−0.06**	0.01	−0.02	−0.01	0.004						
8	Firm age (natural log of age)	3.46	1.04	0.03	−0.26***	0.09***	0.06***	−0.02	0.01	0.06***					
9	Firm size (natural log of size)	1.08	2.12	0.15***	−0.40***	0.33***	0.19***	−0.01	0.14***	0.05**	0.50***				
10	Globalization	0.58	0.38	0.08***	−0.18***	0.02	−0.04*	−0.004	0.02	−0.001	0.11***	0.11***			
11	Diversification	0.37	0.48	−0.001	−0.17***	0.16***	0.12***	0.02	0.08***	0.01	0.24***	0.38***	−0.04*		
12	Leverage	0.21	0.22	0.03	−0.11***	0.09***	0.04*	0.002	−0.04	−0.01	0.05**	0.13***	0.22***	−0.01	

Advertising intensity and R&D intensity were mean-centered by their respective two-digit SIC industries in the Compustat university, while the remaining variables marked by † were mean-centered by the sample firms. The correlations provided are between the transformed variables. Table shows pairwise correlation between a maximum of 1975 firm-year observations (395 firms observed annually from 2006 to 2010). Because of missing data, there were 1855 firm-year observations for marketing controversy.

* $p < .10$, two-tailed significance levels.
** $p < .05$, two-tailed significance levels.
*** $p < .01$, two-tailed significance levels.
† Indicates that although the raw values of these variables are provided here, these variables were transformed in the models.

and 0 otherwise), CEO age (natural log of the CEO's age), and CEO ownership (percentage of firm's common stocks owned by the CEO).

4. Results

4.1. Analysis of selection model

Table 3 presents the result for our selection model. The Wald test shows good model fit (χ^2 (13) = 304.8, $p < .01$). Younger ($p < .05$), more globalized ($p < .01$), less diversified ($p < .01$) and larger ($p < .01$) firms, firms whose CEOs were male ($p < .10$), firms whose CEOs were younger ($p < .01$), and those whose CEOs had higher stock option-compensation ratios ($p < .01$), had a higher likelihood of continued CEO presence, and therefore were more likely to be selected.

Table 3
Results of probit regression with CEO continuation (vs. turnover) as dependent variable.

Independent variable	Coefficient (z value)
Firm age	−0.09(−2.42)**
Globalization	0.71(7.14)***
Diversification	−0.40(−8.17)***
Leverage	0.17(0.98)
Firm size	0.05 (2.61)***
Firm performance	0.009 (0.13)
Firm slack	0.001 (0.04)
CEO duality	−0.01 (−0.16)
CEO male	0.35 (1.83)*
CEO age	−0.82 (−3.81)***
CEO ownership	0.38 (0.86)
CEO stock option-compensation ratio	3.85(9.54)***
Environmental dynamism	0.004(0.12)
Constant	3.70 (4.41)***

N = 3513 firm years i.e., 890 firms observed in the 2006–2010 window till the year their CEO experienced turnover, with 395 of these 890 firms experiencing no turnover during the 2006–2010 window and thus contributing to 1975 of these 3513 observations. To account for lack of independence between observations of the same firm, random effects were employed. However, our results in Table 3 and the subsequent tables did not change significantly when we employed a probit regression with cluster-robust standard errors. Wald $Chi^2(13) = 304.8$, $Prob > Chi^2 = 0.0001$.

* $p < .10$, two-tailed significance levels.
** $p < .05$, two-tailed significance levels.
*** $p < .01$, two-tailed significance levels.

4.2. Analysis of differences in advertising intensity

The results of our GLS random effects regression with advertising intensity (adjusted by subtracting the mean advertising intensity of the firm's 2-digit SIC industry) as the dependent variable are shown in Table 4 (Models 1 and 2).

In Model 1, where we included all the moderators but not their interaction terms with CEO regulatory focus, we found support for H1. The greater a CEO's promotion focus predominance, the greater the firm's advertising intensity tends to be ($\beta = 0.87, p < .05$). In Model 2, we found support for H5a: While high CEO stock option-compensation ratio tended to result in marginally higher advertising intensities, the interaction of CEO's promotion focus predominance and stock option-compensation ratio was negative and significant ($\beta_{\text{stock option interaction}} = -1.61, p < .01$). We also found support for the moderating effect of environmental dynamism as proposed in H6a ($\beta_{\text{environmental dynamism interaction}} = 0.37, p < .05$). However, we did not find support of H4a: the interaction of CEO's promotion focus predominance and CEO power, although positive, was not statistically significant ($\beta_{\text{CEO power interaction}} = 2.35, p = .16$). The coefficient of IMR was not significant in Table 4 (Models 1 and 2), suggesting that sample selection bias was not a concern while modeling advertising intensity as a dependent variable.

4.3. Analysis of differences in R&D intensity

The results of our GLS random effects regression with R&D intensity (adjusted by subtracting the mean R&D intensity of the firm's 2-digit SIC industry) as the dependent variable are shown in Table 4 (Models 3 and 4). In Model 3, we found support for H2. The greater a CEO's promotion focus relative to the CEO's prevention focus, the greater the firm's R&D intensity tends to be ($\beta = 5.94, p < .01$). In Model 4, we found, in support of H4b that the impact of CEO's regulatory focus on firms' R&D intensity was stronger when CEO power was high ($\beta_{\text{CEO power interaction}} = 21.30, p < .05$). We also found support of H5b: the impact of CEO's regulatory focus on firms' R&D intensity was found to be stronger when CEO's stock option-compensation ratio was low ($\beta_{\text{stock option interaction}} = -13.01, p < .01$). Finally, we found support for the moderating impact of environmental dynamism, as proposed in H6b ($\beta_{\text{environmental dynamism interaction}} = 5.23, p < .01$). The coefficient of IMR was negative and significant ($\beta_{\text{IMR}} = -10.72, p < .05$), suggesting that not including IMR as a control variable would have resulted in sample selection bias. More specifically, the negative and significant coefficient of IMR suggests that unobserved factors associated with

Table 4
Results of GLS random effects regression with industry-adjusted advertising intensity and industry-adjusted R&D intensity as dependent variables.

	Model 1	Model 2	Model 3	Model 4
Dependent variable	Advertising intensity	Advertising intensity	R&D intensity	R&D intensity
Independent variable	Coefficient (z-value)	Coefficient (z-value)	Coefficient (z-value)	Coefficient (z-value)
CEO's promotion focus predominance	0.87(1.98)**	0.92(2.08)**	5.94(4.27)***	6.39(4.65)***
CEO Power	0.01(0.20)	0.01(0.41)	0.09(0.33)	0.16(0.58)
CEO's promotion focus predominance * CEO Power		2.35(1.41)		21.30(2.02)**
CEO's stock option-compensation ratio	0.28(1.69)*	0.26(1.67)*	2.36(1.99)**	2.10(1.98)**
CEO's promotion focus predominance * stock option-compensation ratio		−1.61(−3.13)***		-13.01(−3.14)***
Environmental dynamism	−0.04(−1.32)	0.10(1.45)	−0.13(−0.51)	1.80(2.98)***
CEO's promotion focus predominance * environmental dynamism		0.37(2.15)**		5.23(3.48)***
Firm age	−0.62(−4.19)***	−0.62(−4.20)***	−1.05(−1.83)*	−1.01(−1.80)*
Firm size	0.26(3.49)***	0.26(3.49)***	−2.64(−8.97)***	−2.63(−9.05)***
Globalization	−0.31(−1.18)	−0.29(−1.12)	−5.93(−4.32)***	−5.86(−4.32)***
Diversification	−0.52(−2.77)***	−0.50(−2.69)***	−0.48(−0.45)	−0.51(−0.49)
Leverage	0.32(1.22)	0.24(0.92)	1.58(0.87)	0.94(0.52)
Inverse mills ratio	−1.64(−1.10)	−1.58(−1.07)	−11.19(−2.25)**	−10.72(−2.19)**
Constant	2.96 (5.37)***	2.96 (5.40)***	11.08(5.22)***	11.11 (5.31)***

In order to control for industry effects, the mean advertising intensity and the mean R&D intensity of the industry (by 2-digit SIC code) was subtracted from each firm-year's advertising and R&D intensity respectively before employing them as the DV. For all models, N = 1975 observations (395 firms observed over a 5 year period from 2006 to 2010). For Model 1, Wald $Chi^2(10) = 44.0$, Prob > $Chi^2 = 0.0001$ & for Model 2, Wald $Chi^2(13) = 59.9$, Prob > $Chi^2 = 0.0001$. The difference in Chi^2 test rejects Model 1 (with no interaction terms) in favor of Model 2: (the calculated $\chi 2 = 15.9$, whereas the critical $\chi 2(3, 0.01) = 11.3$), indicating significantly improved model fit going from Model 1 to 2. For Model 3, Wald $Chi^2(10) = 188.3$, Prob > $Chi^2 = 0.0001$ & for Model 4, Wald $Chi^2(13) = 218.9$, Prob > $Chi^2 = 0.0001$, the difference in Chi^2 test rejects Model 3 (with no interaction terms) in favor of Model 4: (the calculated $\chi 2 = 30.6$, whereas the critical $\chi 2(3, 0.01) = 11.3$), indicating significantly improved model fit going from Model 3 to 4.

* $p < .10$, two-tailed significance levels.
** $p < .05$, two-tailed significance levels.
*** $p < .01$, two-tailed significance levels.

longer CEO tenure are negatively associated with firms' R&D intensity.

4.4. Analysis of differences in marketing controversy

The results of our random effects logistic regression with the firm's involvement in a marketing controversy as the DV are shown in Table 5 (Models 1 and 2). In Model 1, we found support for H3: Firms with promotion-focused CEOs were more likely to encounter marketing controversies ($\beta = 1.89, p < .05$). We also found, in Model 2, marginal support for H4c ($\beta_{\text{CEO power interaction}} = 14.40, p < .10$), and support for H6c ($\beta_{\text{environmental dynamism interaction}} = 6.56, p < .01$). However, we failed to find support for H5c ($\beta_{\text{stock option-compensation interaction}} = 2.03$, $p = .38$). Again, the coefficient of IMR was significant, highlighting the importance of conducing the two-step Heckman analysis to correct for sample selection bias. More specifically, the negative and significant coefficient of IMR ($\beta_{\text{IMR}} = -4.55, p < .05$) suggests that unobserved factors associated with longer CEO tenure are negatively associated with the likelihood of marketing controversies.

4.5. Graphical analysis of moderation effects

To improve the interpretation of interaction effects we also present these effects graphically in the Appendix. As illustrated in Figs. A.1 and A.2, the marginal effect of CEO's promotion focus predominance on industry-adjusted advertising intensity is seen to be greater under conditions of low stock option-compensation ratio and high environmental dynamism. A similar conclusion is drawn in Figs. A.3 and A.4 where the marginal effect of CEO's promotion focus predominance on industry-adjusted R&D intensity is seen to be greater under conditions of low stock-option-compensation ratio and high CEO power. In unreported analysis, we obtained a similar graph of the moderating effect of environmental dynamism on the link between CEO's promotion focus predominance and industry-adjusted R&D. Following Zelner (2009), we also employed STATA's *clarify* program and used Monte Carlo simulation to estimate the probability of a marketing controversy. As Figs. A.5 and A.6 illustrate, we found a stronger relationship between CEO's promotion focus predominance and the probability of marketing controversy under conditions of high CEO power (Fig. A.5 and A.6) and high environmental dynamism (Fig. A.5 and A.6).

4.6. Alternative regression techniques

In Table A.1 in the Appendix, we present the results from alternative regression techniques of controlling for serial correlation and heteroscedasticity. These techniques include: (a) Generalized estimating equations (GEE) population-averaged regressions with AR(1) serial correlation, and (b) pooled OLS regression with year fixed effects and robust standard errors clustered by firm. As shown in Table A.1, the results of these alternative regression techniques were quantitatively and qualitatively similar to the ones reported in Tables 4 and 5. However, there were a few minor changes to our results when we applied alternative technique (b). Specifically, H1, H4b, and H6a which were significant at 5% level in Table 4 became marginally significant at 10% level. In addition, although we had not found support for the moderating impact of CEO power on the link between CEO's promotion focus predominance and industry-adjusted advertising intensity (i.e., H4a) in Table 4, we now found marginal support for H4a at 10% significance level.

4.7. Increasing sample size: use of unbalanced panel data

Our original sample consisted of 395 large publicly listed U.S. firms, whose CEOs were appointed in 2003–2005 and who remained CEOs during the years 2006–2010. We tested the robustness of our results by expanding our sample size. In our alternate sample, we also included 222 firms whose CEOs were appointed during 2003–2005 but who experienced turnover in the year 2009 or 2010; hence for these firms at least 3 shareholder letters written by the focal CEO were available. This resulted in an unbalanced panel of 2774 firm-year observations, where each of the 617 firms was tracked from 2006 till the last full year the CEO remained in his or her role, or till 2010 (for firms experiencing no CEO turnover in the 2006–2010 window). As shown in the Appendix

Table 5
Results of random effects logistic regression with marketing controversy as dependent variable.

	Model 1	Model 2
Dependent variable	Marketing controversy	Marketing controversy
Independent variable	Coefficient (z-value)	Coefficient (z-value)
CEO's promotion focus predominance	1.89(2.39)**	1.92(2.29)**
CEO Power	0.10(0.54)	0.19(0.93)
CEO's promotion focus predominance * CEO power		14.40(1.84)*
CEO's stock option-compensation ratio	1.46(1.76)*	1.24(1.54)
CEO's promotion focus predominance * stock option-compensation ratio		2.03(0.88)
Environmental dynamism	−0.04(−0.37)	2.44(2.60)**
CEO's promotion focus predominance * environmental dynamism		6.56(2.86)***
Firm age	−0.65(−2.10)**	−0.66(-2.02)**
Firm size	1.49(6.08)***	1.58(5.90)***
Globalization	−0.70(−0.85)	−0.75(−0.89)
Diversification	0.81(1.43)	0.73(1.24)
Leverage	1.41(1.68)*	1.77(1.78)*
Inverse mills ratio	−4.84(−1.69)*	−4.55(−1.98)**
Industry dummies added	Yes	Yes
Constant	−4.22(−2.48)**	−4.82(−2.63)**

Notes: For all models, 7 SIC one-digit industry dummies were included as independent variables. The coefficients of the 7 SIC one-digit industry dummies have not been presented for the sake of simplicity. For both models, N = 1855 observations (371 firms observed over a 5 year period from 2006 to 2010). Note that KLD data for 24 out of the 395 sample firms were not available. Hence, we dropped these 24 firms in these analyses, leaving 371 firms and 1855 firm-year observations. For Model 1, Log likelihood = −355.5 & for Model 2, Log likelihood = −347.6. The likelihood ratio test rejects Model 1 (with no interaction terms) in favor of Model 2 (the calculated $\chi 2 = 15.8$, whereas the critical $\chi 2(3, 0.01) = 11.3$).

* $p < .10$, two-tailed significance levels.
** $p < .05$, two-tailed significance levels.
*** $p < .01$, two-tailed significance levels.

(Table A.2), the results obtained by analyzing this unbalanced panel data were quantitatively and qualitatively similar to the ones reported in Tables 4 and 5. However, there were a few minor changes: (i) The main effect of CEO regulatory focus on advertising intensity and the moderating effect of CEO power on the CEO regulatory focus-marketing controversy link (i.e., H1 and H4c, respectively) were now even more significant (i.e., they were now significant at 1% level), and (ii) the moderating effect of environmental dynamism on the CEO regulatory focus-advertising intensity link (i.e., H6a) now failed to achieve significance.[8]

4.8. Addressing potential concerns about endogeneity

Do certain conditions make it more likely that a predominantly promotion-focused CEO will be appointed by the firm, or facilitate the demonstration of promotion versus prevention goal pursuit by the CEO? To address this endogeneity concern, we conducted several supplementary analyses. First, we followed the endogeneity control approach recommended by Wooldridge (2002) that has been used by Chatterjee and Hambrick (2007), Chin et al. (2013), Kashmiri and Mahajan (2017), and other upper echelon researchers. According to this approach, the potential endogenous variable is regressed against a set of antecedent and contemporaneous explanatory variables. If any of these explanatory variables is found to be significantly predictive of the endogenous variable, the regression coefficients of these explanatory variables are used to calculate the predicted value of the endogenous variable, and this predicted value is then included as an endogeneity control in the main analysis. Following this approach, we regressed our measure of CEO's promotion focus predominance against a large set of antecedent and contemporaneous variables. We recorded the following antecedent variables in the year preceding the CEO's appointment year to capture firm-related characteristics at the time of the CEO's appointment and to rule out simultaneity and reverse causality: firm age, firm leverage, firms' intangible value (Tobin's q), firms' advertising intensity, firms' R&D intensity, marketing controversy (binary variable), and calendar year dummies. We also measured a set of contemporaneous variables, one year post the CEO's appointment year to record CEO-related characteristics that could be related to the CEO's regulatory focus: CEO age, CEO minority status (dummy variable, with nonwhite CEO recorded as 1), CEO duality (dummy variable, with CEOs also holding chairman position recorded as 1), CEO ownership, and CEO insider/outsider status (dummy variable, with CEO promoted from within the company recorded as 1). Finally, we included industry dummies (by one-digit SIC codes). We did not find any of these variables to be significantly related to CEO's promotion focus predominance (at $p < .05$), and therefore did not include the predicted value of CEO's promotion focus as an endogeneity control. Thus, it did not appear that our CEO's promotion focus predominance measure was an endogenous proxy for other CEO, firm, or industry factors (Wooldridge, 2002).

Second, to further investigate the assumption that our measure of CEO's promotion focus predominance primarily reflected an intrinsic psychological trait of the CEO, rather than persistent firm-specific tendencies, we compared the consistency in promotion focus predominance scores for the same CEO over time with the consistency in promotion focus predominance scores for successive CEOs of the same firm. The fact that our sample firms had experienced CEO turnover during the years 2003–2005 allowed us to conduct this analysis. We examined the correlation between each CEO's promotion focus predominance score in years 2006 and 2007 (averaged), and 2008 and 2009 (averaged). This correlation was 0.60, and was highly significant ($p < .01$). By contrast the correlation between the promotion focus predominance scores of our sample CEOs in years 2006 and 2007 (averaged) with the scores of their immediate predecessors in years 2001 and 2002 (averaged), was found to be only 0.11, and not significant. These results further supported our assumption that our measure of CEO's promotion focus predominance reflected innate CEO characteristics rather than persistent firm-specific factors.

Finally, we randomly selected a separate sample of 50 CEOs who remained the CEOs of their respective companies from at least 2001 to at least 2007. Using shareholder letters sent by these CEOs, we separately measured these CEOs' promotion focus predominance scores in years 2006 and 2007 (averaged) and in years 2001 and 2002 (averaged). We found the correlation of each CEO's promotion focus predominance scores between these two separate time periods was 0.53 and highly significant (0.01). This analysis provided further evidence that CEO regulatory focus is an innate psychological attribute of CEOs that tends to remains stable over time.

5. Discussion and implications

Our results suggest that firms whose CEOs are predominantly promotion-focused tend to have higher levels of advertising and R&D intensities. On the other hand, firms led by such CEOs are also more likely to get involved in marketing controversies. The impact of a CEO's regulatory focus is, on the whole, strengthened when the CEO has high

[8] How sensitive are our results to outliers and influential observations? We also answered this question by eliminating observations whose Cook's D value was > 3 times the mean and/or whose R-student value exceeded ± 2. Our results remained similar to those reported in the tables, suggesting that they were not sensitive to the presence of outliers and influential variables.

power and low stock option-compensation ratio, and when the firm operates under high environmental dynamism.

While we found support for most of our hypotheses, we did not find support for two of our hypotheses. First, although we found that CEO power moderates the impact of regulatory focus on firms' R&D intensity, we did not find CEO power moderating the impact of CEO regulatory focus on firms' advertising intensity. One possible explanation for this result is that since advertising decisions are functional ones taken mostly by the marketing department, a CEO is able to shape advertising intensity by influencing his or her marketing subordinates, regardless of the CEO's power. On the contrary, we expect multiple TMT members (e.g., chief technology officer, chief innovation officer) to have an important voice in R&D decisions; hence the impact of CEO regulatory focus on firms' R&D intensity is conditional on CEO power. Second, we did not find stock option-compensation ratio moderating the CEO regulatory focus-marketing controversies link. A possible explanation for this result is that while CEOs can easily change their firms' advertising and R&D intensities as their incentive structure changes (allowing prevention-focused CEOs to catch up with promotion-focused ones if the incentives are attractive), the factors related to avoiding marketing controversies (e.g., a cautious, risk-averse firm culture) have greater organizational inertia. Thus, firms led by promotion-focused CEOs are found to be more likely to encounter marketing controversies, regardless of CEOs' stock-option compensation ratios. Nevertheless, we encourage future research that sheds greater light on these unexpected results.

Our research contributes to the broader discussion of how senior managers inject their traits into their choices. The few articles that have investigated the effect of CEOs' psychological traits (e.g., Gamache et al., 2015; Zhu & Chen, 2015) have considered only such corporate strategy variables as level of diversification, capital structure, and acquisitions, with virtually no research investigating the impact of these traits on firms' marketing investment decisions or ethical marketing behavior. Thus, our research extends the scant literature on executives' psychological traits in general, and their regulatory focus in particular, to a critical set of firm outcomes that has remained largely unexplored by upper echelons theory researchers. In doing so, we highlight that future researchers need to take into account executives' regulatory foci in order to gain a better, more nuanced understanding of firms' marketing choices.

Our research helps integrate upper echelons perspective with literature on corporate citizenship (e.g., Brower, Kashmiri, & Mahajan, 2017; Lin-Hi & Müller, 2013), providing new insights about the antecedents of ethical marketing behavior that go beyond corporate governance mechanisms (Harris & Bromiley, 2007; Zhang, Bartol, Smith, Pfarrer, & Khanin, 2008), institutional pressures (Neubaum & Zahra, 2006) and stakeholder activism (David, Bloom, & Hillman, 2007). We reveal that the goal orientation of CEOs is also an important determinant of ethical marketing behavior, with firms led by predominantly prevention-focused CEOs significantly less likely to get involved in marketing controversies.

Research on myopic management (e.g., Deleersnyder, Steenkamp, Dekimpe, & Leeflang, 2009; Lamey, Deleersnyder, Dekimpe, & Steenkamp, 2007; Mizik, 2010) also highlights that firms tend to underinvest in R&D and advertising, than what is optimal from a value-maximization perspective. This practice negatively impacts long-term firm performance as it damages market assets such as brand equity and customer loyalty. What factors result in the practice of myopic management? Research that answers this question has been sparse, and has focused primarily on the role played by managers' incentive structures, their short tenures, and firms' limited use of marketing metrics as signals of performance (Lamey et al., 2007; Mizik, 2010). We provide important insights in this area by highlighting that myopic management is also driven by such CEO psychological traits as the tendency to focus on avoiding losses rather than on obtaining gains (i.e., a predominant prevention focus among CEOs). Thus, board members may be able to diminish myopic behavior in firms by appointing CEOs or senior executives with relatively high degrees of promotion focus relative to prevention focus.

We also extend literature on CEO power by highlighting how CEO power can interact with CEO psychological traits in shaping firms' marketing behavior. More specifically, we find that the impact of CEOs' regulatory focus on firms' R&D, and ethical marketing behavior is magnified when the CEOs' power in their firms is relatively high. Thus, our research suggests that CEO power is an effective lever that can be employed by board members to control the positive and negative effects of CEOs' regulatory focus on strategic marketing behavior.

Previous research in the area of upper echelons theory (e.g., Hutton et al., 2014), has primarily focused on the main effect of executive characteristics on firm outcomes. A separate area of research has focused on how executive compensation structures shape firm behavior (e.g., Milgrom & Roberts, 1992; Sanders, 2001). This body of work builds upon classic economic theories but provides little insight into how executives' personal characteristics may impact how they react to incentive arrangements. There is a need to advance our understanding of how CEO characteristics work in tandem with CEOs' reward systems to shape their choices. This research gap has led scholars to make a call for moving beyond investigating the overall impact of compensation structures on CEO choices, and highlighting instead, the interaction of executive compensation with CEO characteristics (Gamache et al., 2015; Hambrick, 2007). We answer the call of these scholars by highlighting how CEOs' stock option-compensation ratio can be used to moderate the impact of CEOs' regulatory focus on some key strategic marketing variables. Our research underscores that the marginal impact of stock-options on CEOs' propensity to make risky market investments (i.e., advertising and R&D) depends on CEOs' psychological traits. More specifically, we find that this marginal impact is higher for CEOs who are predominantly prevention-focused, with CEOs who are predominantly promotion-focused being relatively unconditional supporters of such risky investments. Thus, our work highlights to compensation committees the importance of considering the unique psychological traits of CEOs while designing an effective incentive structure.

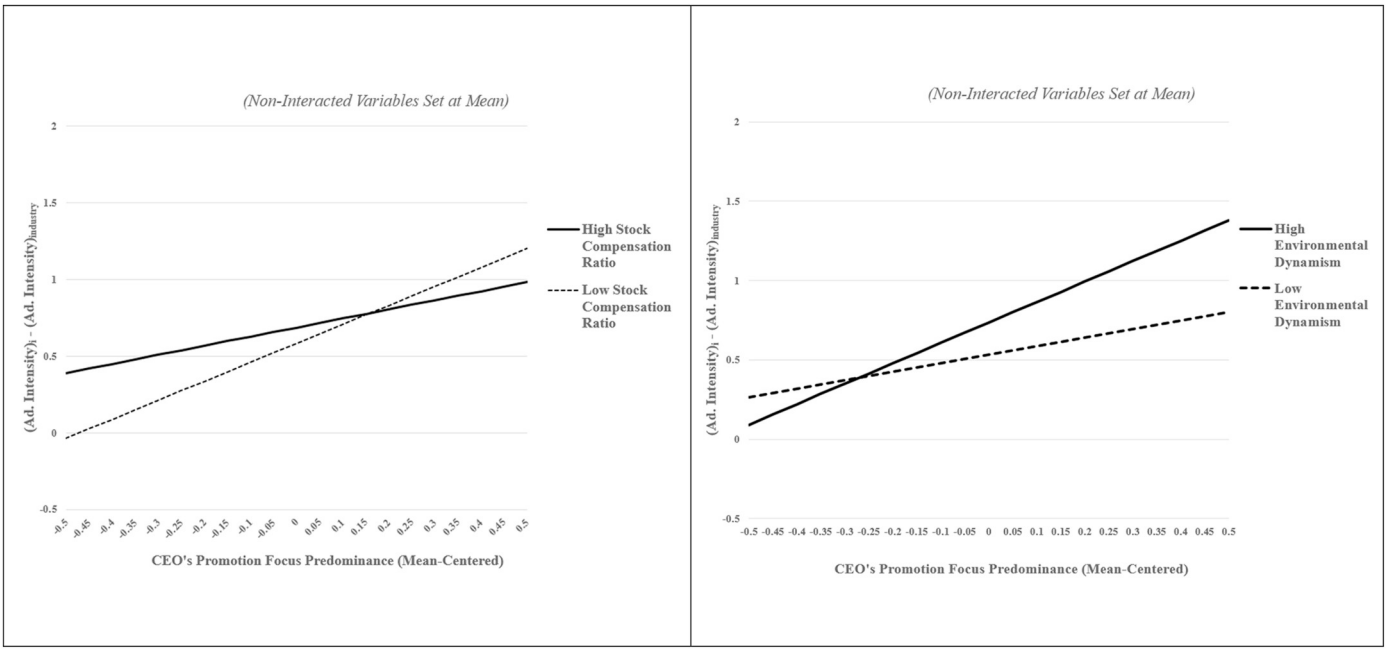
Our research also helps corporate boards consider the impact of a prospective CEO's regulatory focus in their hiring decisions. We reveal that an executive's regulatory focus is likely to have a strong impact on firms' marketing choices, particularly for firms operating under high environmental dynamism. We also suggest that the executive's regulatory focus, inferred from the words the executive uses, may help board members predict the executive's future strategic marketing choices before the executive is hired. Given that advertising, and R&D tend to have a positive impact on firms' stock prices (Hutton et al., 2014; Mizik & Jacobson, 2003), investors may also take into account CEOs' regulatory focus in their investment decisions. Investors may particularly benefit from using a CEO's regulatory focus as an effective signal when the CEO is newly appointed and there is considerable uncertainty about the CEO's future strategic decisions.

Our work also offers important practical implications for CEOs. CEOs may benefit by understanding their innate tendencies to focus on gains or losses, thereby taking advantage of the positive aspects of their regulatory focus and avoiding its negative consequences. More specifically, CEOs who realize that they are highly promotion-focused, particularly when they are leading firms under high environmental dynamism, may benefit by surrounding themselves with prevention-focused TMT members, to minimize their firms' likelihood of engaging in marketing controversies. Similarly, CEOs who realize their prevention-focused tendencies may benefit by having promotion-focused TMT members rein in their myopic marketing management with regard investments in such market-based assets as brand equity and customer loyalty.

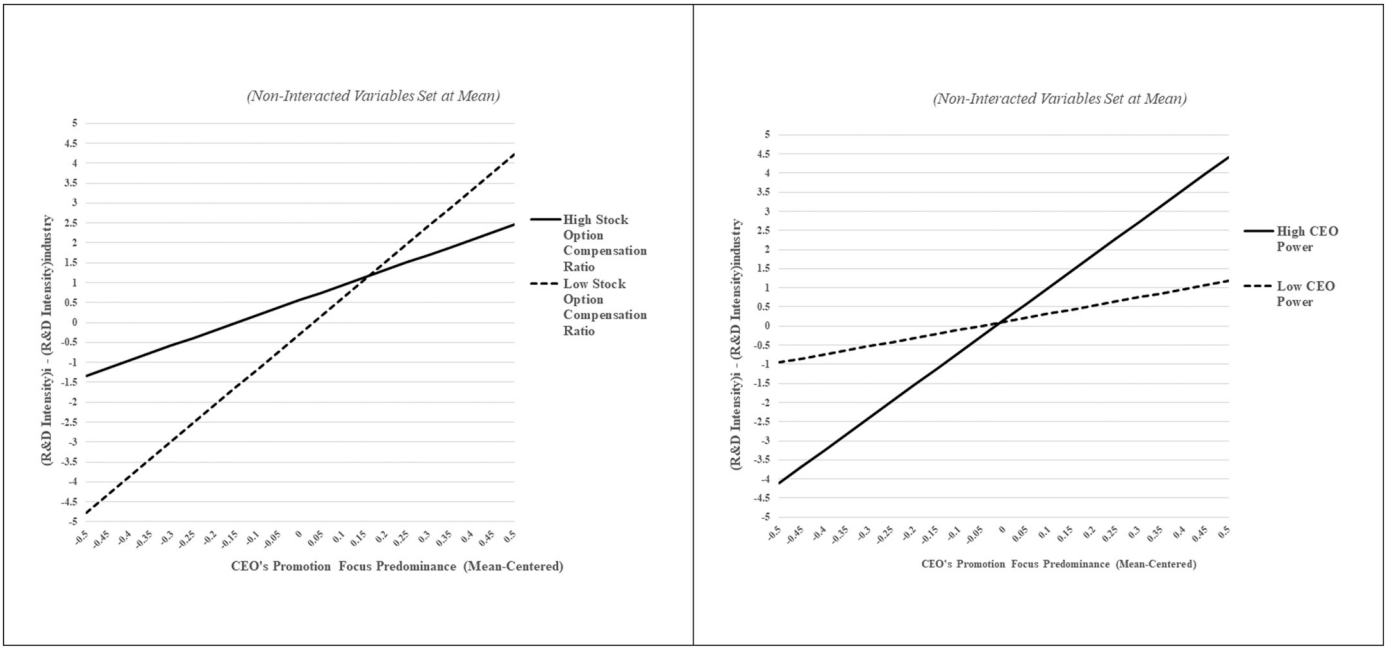
With private firms' secondary data being unavailable, we limited our analysis to publicly listed U.S. firms. We encourage research

exploring the generalizability of our study to privately held and non-US firms. Furthermore, we encourage future researchers to use direct measures of regulatory foci. Future researchers can also explore how the regulatory foci of other senior managers impact strategic marketing outcomes and how these foci interact with those of the CEO. We also encourage scholars to explore the impact of other psychological traits, executive values, experiential backgrounds, and biological characteristics on various additional strategic marketing outcomes. Do predominantly prevention-focused CEOs' greater R&D intensity, in turn, lead to greater number of R&D project failures? Are the social controversies of firms led by predominantly prevention-focused CEOs lower in their severity versus those of firms led by predominantly promotion-focused ones? Investigating the full range of the marketing impact of CEOs' regulatory focus promises to be a very exciting area of further research.

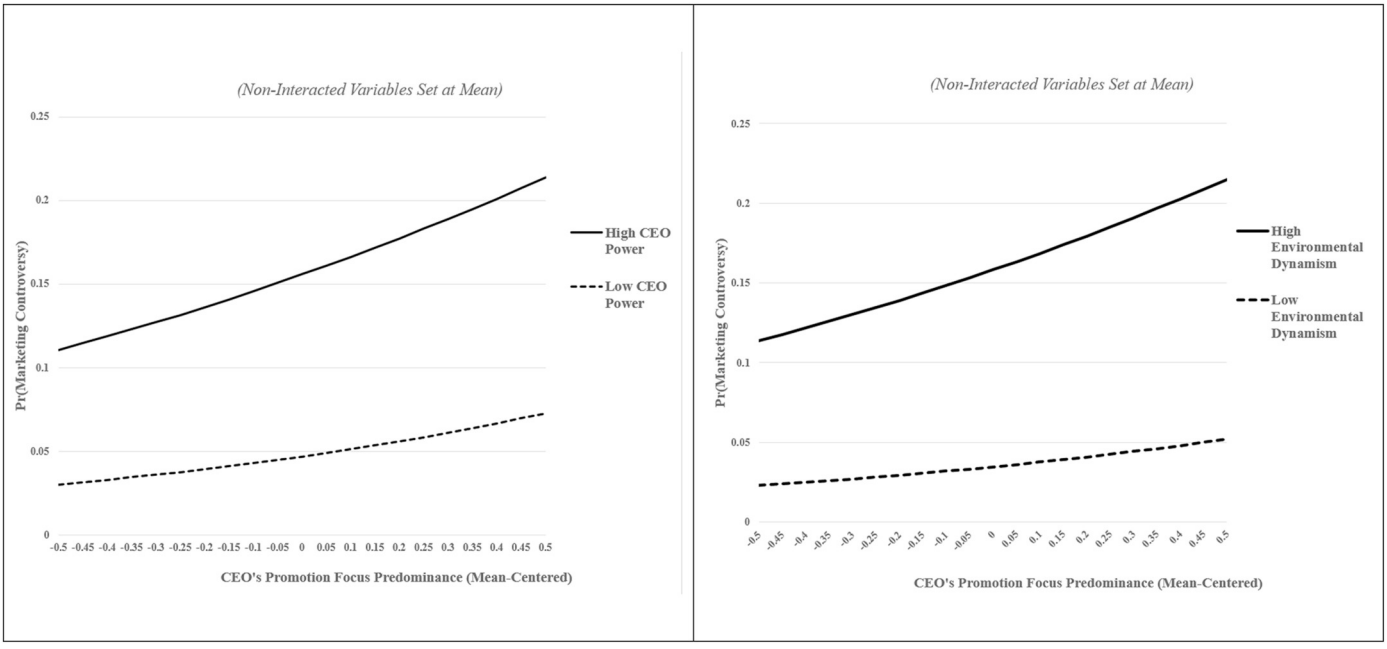
Appendix A. Appendix



Figs. A.1 and A.2. The impact of stock option compensation ratio and environmental dynamism on the link between CEO's promotion focus predominance and industry-adjusted advertising intensity.



Figs. A.3 and A.4. The impact of stock option compensation ratio and CEO power on the link between CEO's promotion focus predominance and industry-adjusted R&D intensity.



Figs. A.5 and A.6. The impact of CEO power and environmental dynamism on the link between CEO's promotion focus predominance and the simulated probability of involvement in marketing controversies.

Table A.1
Results of alternative regression techniques.

	GEE population-averaged regression with AR(1) serial correlation			Pooled cross-sectional regression with time-fixed effects and cluster-robust standard errors		
	Ad. intensity	R&D intensity	Marketing controversy	Ad. intensity	R&D intensity	Marketing controversy
Independent variable	Coefficient (z-value)	Coefficient (z-value)	Coefficient (z-value)	Coefficient (t-value)	Coefficient (t-value)	Coefficient (t-value)
CEO's promotion focus predominance	0.88(2.11)**	6.00(4.81)***	1.22(2.96)***	0.90(1.75)*	6.10(2.71)**	0.70(2.29)**
CEO power	0.01(0.33)	0.28(0.89)	0.06(0.79)	0.01(0.15)	0.25(1.36)	0.05(0.93)
CEO's promotion focus predominance * CEO power	2.49(1.44)	30.87(2.51)**	9.60(2.88)***	2.96(1.66)*	15.49(1.82)*	10.14(2.03)**
CEO's stock option-compensation ratio	0.12(0.70)	2.29(1.68)*	0.19(0.62)	0.03(0.23)	8.16(2.78)**	0.30(0.48)
CEO's promotion focus predominance * stock option-compensation ratio	−1.56(−3.09)***	−18.27(−4.50)***	2.03(1.47)	−0.84(−1.99)**	−19.63(−2.14)**	−1.18(−1.34)
Environmental dynamism	0.10(1.45)	2.42(4.28)***	1.18(3.40)***	0.58(1.35)	0.17(1.18)	1.23(2.12)**
CEO's promotion focus predominance * environmental dynamism	0.37(2.05)**	6.73(4.80)***	3.09(3.47)***	1.62(1.82)*	0.71(2.18)**	3.18(2.07)**
Firm age	−0.38(−2.31)**	−0.66(−1.26)	−0.41(−2.70)***	−0.17(−1.98)**	−0.63(−0.93)	−0.25(−1.76)*
Firm size	0.26(3.22)***	−2.73(−10.12)***	0.71(6.37)***	0.29(2.47)**	−2.77(−2.12)**	0.67(4.28)***
Globalization	0.18(0.60)	−6.05(−4.62)***	0.22(0.52)	0.52(1.17)	−6.48(−2.70)**	−0.04(−0.12)
Diversification	−0.41(−1.87)*	−0.82(−0.80)	0.24(0.89)	−0.38(−0.89)	−0.98(−0.85)	0.49(2.82)**
Leverage	0.31(0.99)	0.22(0.12)	0.13(0.23)	−0.15(−0.25)	−2.20(−1.10)	1.50(2.80)*
Inverse mills ratio	−1.22(−0.85)	−8.83(−1.95)*	−0.91(−0.65)	−1.34(−1.15)	−8.66(−2.16)**	−1.43(−1.30)
Constant	1.77 (3.00)***	10.18 (5.23)***	−2.14(−2.43)**	0.96 (1.18)	11.88 (2.99)**	−3.05(−2.14)**

In order to control for industry effects, the mean advertising intensity of the industry (by 2-digit SIC code) was subtracted from each firm-year's advertising and R&D intensity before employing them as the DV. For all models, N = 1975 observations (395 firms observed over a 5 year period from 2006 to 2010). For all models, we reject the null hypothesis of the coefficients in the model being simultaneously zero according to the Wald test. The models with marketing controversy as the DV included 7 SIC one-digit industry dummies.

* $p < .10$, two-tailed significance levels.
** $p < .05$, two-tailed significance levels.
*** $p < .01$, two-tailed significance levels.

Table A.2
Results of random effects regression with unbalanced panel data (including firms in sample whose CEOs experienced turnover in 2009 or 2010).

	Ad. intensity	R&D intensity	Marketing controversy
	GLS random effects	GLS random effects	Random effects logistic
Independent variable	Coefficient (z-value)	Coefficient (z-value)	Coefficient (z-value)
CEO's promotion focus predominance	1.31(3.53)***	5.17(4.57)***	1.91(2.58)**
CEO power	0.01(0.37)	0.18(0.64)	0.25(1.24)
CEO's promotion focus predominance * CEO power	2.00(1.33)	16.90(1.88)*	24.15(3.47)***
CEO's stock option-compensation ratio	0.27(1.75)*	2.35(1.87)*	0.69(1.28)
CEO's promotion focus predominance * stock option-compensation ratio	−1.75(−3.79)***	−13.72(−3.77)***	1.09(0.57)
Environmental dynamism	0.03(0.49)	2.42(4.65)***	2.08(3.16)***
CEO's promotion focus predominance * environmental dynamism	0.25(1.54)	7.37(5.81)***	5.53(3.41)***
Firm age	−0.71(−5.57)***	−0.96(−2.06)**	−0.77(−2.88)***
Firm size	0.26(3.96)***	−2.80(−11.45)***	1.72(7.83)***
Globalization	−0.14(−0.56)	−5.64(−4.79)***	−0.86(−1.19)
Diversification	−0.46(−2.69)***	−0.38(−0.42)	0.93(1.92)*
Leverage	0.12(0.48)	0.90(0.55)	1.75(1.83)*
Inverse mills ratio	−1.46(−1.12)	−11.92(−2.81)***	−6.31(−2.41)***
Constant	3.31 (6.00)***	11.29 (6.42)***	−4.67(−2.94)***

N = 2774 observations (617 firms observed over a minimum of 3 years and maximum of 5 year period from 2006 to 2010). For all models, we reject the null hypothesis of the coefficients in the model being simultaneously zero according to the Wald test. The model with marketing controversy as the DV included 7 SIC one-digit industry dummies.

* $p < .10$, two-tailed significance levels.
** $p < .05$, two-tailed significance levels.
*** $p < .01$, two-tailed significance levels.

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