

# **Chief Marketing Officers: A Study of Their Presence in Firms' Top Management Teams**

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**Abstract**

Not all firms choose to have a Chief Marketing Officer (CMO) in their top management teams (TMTs). This research investigates factors associated with this choice and whether CMO presence/absence in the face of these factors impacts firm performance. Findings based on a multi-industry sample of 167 firms over the five-year period of 2000 to 2004, show that innovation, differentiation, branding strategy, diversification, TMT functional experience in marketing, and the CEO being an outsider, are associated with the likelihood of CMO presence in the TMT. CMO presence in the TMT was found to have neither a positive nor a negative impact on firm performance. The authors discuss the implications of these findings for theory and practice.

## INTRODUCTION

Over the last three decades, marketing academics have voiced their concern over marketing's decreasing influence at the level of corporate strategy (Anderson 1982; Day 1992; Webster, Malter and Ganesan 2003; Varadarajan 1992; Wind and Robertson 1983). A firm's corporate strategy, which includes major resource allocations, organizational redesign, acquisitions, divestments, and entering or exiting major markets, is largely driven by the top management team<sup>1</sup> (Cyert and March 1963; Hambrick and Mason 1984; Varadarajan and Clark 1994). Consequently, prior researchers have referred to the presence of the Chief Marketing Officer (CMO) in the top management team (TMT) as an indicator of both the corporate status of marketing and corporate adoption of the marketing concept<sup>2</sup> (Hise 1965; Mann 1971; Piercy 1986; Webster 1981; Webster et al. 2003). However, a recent study by Booz Allen Hamilton estimates that only about fifty percent of the firms in the Fortune 1000 have a CMO (Hyde, Landry and Tipping 2004). This is in stark contrast to estimates of over eighty percent of firms in the Fortune 500 having a CFO as recent as year 2000 (Zorn 2004). There has been little prior research that has attempted to explore this phenomenon, a gap in the field that our research aims to fill.

Specifically, the research questions addressed in this research are (1) what are the factors associated with the likelihood of CMO presence, in firms' TMTs? and (2) what are the consequences of CMO presence for firm performance in the face of these factors? The conceptual model depicted in figure 1 (and explained in the next section) illustrates the thesis for this research with respect to the first research question, which is that the choice of CMO presence/absence is related to strategic, structural, and environmental factors that firms' TMTs face. Consequently, firm performance implications of CMO

presence are contingent on these factors<sup>3</sup>. Such a research endeavor is important given the implications that CMO presence has for marketing's role at the level where corporate strategy is formulated. For example, the CMO has been referred to as the voice of the customer or the customer advocate in the firm's upper echelons (McGovern, Court, Quelch and Crawford 2004). Kerin (2005), while documenting changes in the marketing landscape, refers to the CMO position as evidence of a "renaissance of sorts" for marketing, in "the corporate hierarchy" (p.12). Crosby and Johnson (2005) too suggest that "with the position of CMO, perhaps marketing can bring to the leadership table its strategic role" (p.13). Therefore, by exploring this phenomenon, our research provides academics and practitioners with an understanding of factors associated with differences in marketing's influence at the level of corporate strategy, adding to the body of knowledge on the role of marketing in the firm. Moreover, it provides a theoretical basis for a meaningful dialogue in this regard. Prior research efforts along similar lines have been at the level of the strategic business unit (for example, Homburg, Workman and Krohmer 1999; Ruekert, Walker and Roering 1985). This research expands the scope of this domain of inquiry to the corporate level, thereby providing TMTs with an understanding of central tendencies of firms with respect to the choice of CMO presence. Evidence of practices followed, and rationales used, by others in industry, would help TMTs make better informed decisions with respect to marketing at this level of the firm.

**\*\*\*\* Insert Figure 1 about here \*\*\*\***

To summarize the findings of our research, firms are more likely to have a CMO in the TMT when they have relatively high levels of innovation and differentiation, when they follow a corporate branding strategy, when the CEO is an outsider, and when TMT

marketing experience is relatively high. Further, as firms diversify, they are less likely to have a CMO when they are relatively smaller but are more likely when they are relatively larger. CMO presence has no impact on firm performance and firms with a CMO do not perform better or worse than those without one when faced with the preceding factors. In the following section, we elaborate on the conceptual model for this research illustrated in figure 1, and present hypotheses along with supporting arguments, for both the factors associated with, and the consequences of, CMO presence. In doing so, we draw on prior literature in marketing and organization theory, as well as on the role of the CMO, discussions of which are also included in this section. Given the scant empirical research on the CMO's role in the firm, this research included a qualitative stage for this purpose, details of which are also covered in the following section. The hypotheses are tested using secondary data. A subsequent section presents the methodology used for this purpose and includes descriptions of the sample, and the measures and sources of data for all the variables. This is followed by a section on the analysis of the data and results thereof. We conclude the paper with a discussion of the results and their implications for marketing theory and practice, along with limitations and future research directions.

## **THEORY AND HYPOTHESES**

In this section we elaborate on the conceptual model for the factors associated with CMO presence illustrated in figure 1, and provide arguments for the consequences of CMO presence on firm performance. As the model indicates, we argue that CMO presence is related to a range of factors that firms face. Rationales underlying their choice rely on contingency theory and theories of power dependence and homophily. We begin

by addressing each of these theories in the context of the TMT's structural choices. In order to apply these theories to the choice of a CMO, we then discuss the role of the CMO in the firm. These preceding sub-sections then provide the foundation for the choice of factors, and hypotheses for each. We conclude this section with a discussion of the hypotheses for firm performance.

### **Structural Choices in the TMT**

Contingency theory suggests that firms seek an optimal fit or match between their structural choices and strategic, structural, and environmental contingencies, since some choices may suit some firms better than others (Donaldson 2002; Lawrence and Lorsch 1967; Thompson 1967; Zeithaml, Varadarajan and Zeithaml 1988). Applications of this theory or framework in the context of TMTs have been to the structural choices made within the TMT in response to conditions that top executives face (for example, Hambrick and Cannella 2004; Keck and Tushman 1993; Zorn 2004).

Top executives perform multidimensional functions that include monitoring the environment, interpreting information, and making strategic choices (Finkelstein and Hambrick 1996; Hambrick and Mason 1984). At the same time, they are boundedly rational, being constrained by demands on their time and by limited processing abilities (Cyert and March 1963; March and Simon 1958). Consequently, top executives face conditions of complexity and uncertainty. In order to cope with such conditions, these executives make structural choices or adaptations that aid decision-making, especially when these conditions and decisions pertain to critical domains (Hickson, Hinings, Lee, Schneck and Pennings 1971). For example, Zorn (2004) finds that uncertainty due to

financial reporting requirements explains the increasing prevalence of CFOs in TMTs. As this example indicates, the choice made, is either in, or closely related to, the domain causing complexity and uncertainty (for example, a CFO to address complexity in, or as a result of, the financial domain).

The preceding discussion suggests that CMO presence should be related to contingencies that increase TMT complexity and uncertainty in critical aspects of the marketing domain. This inference also relies on the CMO's role being inextricably linked to the marketing domain, for which we provide evidence in the next section.

### **The Role of the CMO**

We identified the CMO's roles based on qualitative research that included analyzing press releases accompanying CMO appointments, CMO job descriptions on company websites, and 4 interviews. The interviews included one with a top executive of a public firm and one with the CMO of a private firm. Additionally, we were also able to interview one of the lead investigators of the Booz Allen Hamilton study and the executive director of the CMO Council.

Examples of CMO responsibilities included "leading the company's marketing organization"; "responsibility for global marketing resources"; "uniting and strengthening various departments' own marketing plans"; and "directing global marketing efforts including branding, product marketing, customer relationship marketing". Not surprisingly, it was evident that the CMO where present, was focused on the marketing domain. More broadly too it has been found that the function supervised accounts for a large part of the variation in managerial work (Mintzberg 1973). Additionally, Vorhies

and Morgan (2005) find the following eight capabilities suitable for benchmarking as marketing capabilities: product development, pricing, channel management, marketing communications, selling, market information management, marketing planning and marketing implementation. Most role descriptions of CMOs' roles included at least some, if not all, of these capabilities.

The scant prior empirical research with respect to the CMO's role also supports the preceding inference of the CMO's role with respect to the marketing domain. The Chief Marketing Executive's responsibilities have included advertising, new marketing staff selection, sales forecasting, new product development, marketing research, and marketing planning (Mann 1971; Piercy 1986). Hopkins and Bailey (1984) find that this executive's responsibilities are split between advising corporate management on marketing issues on one hand, and coordinating marketing activities and developing marketing skills at the divisional level, on the other. More recently, responsibilities of CMOs documented by Hyde et al. (2004) and McGovern and Quelch (2004) include monitoring the consumer landscape and developing consumer insights; directing brand strategy; marketing planning and coordination among business units; and managing marketing services like market research<sup>4</sup>. Finally, normative suggestions on the CMO's role also include functions in the marketing domain like interpreting extensive market data and providing insights on consumers (Gilliatt and Cuming 1986; Kerin 2005).

### **CMO Related Structural Choice in the TMT**

The preceding sections lay the foundation for identifying factors related to CMO presence. First we established that TMTs address complexity and uncertainty in critical

domains by making domain-related structural choices. We then provided evidence that the CMO's role, where such executives exist, is closely related to the marketing domain. Critical elements of the marketing domain include the firm's market based assets that are made up of relational and intellectual assets with respect to customers and channels (Day 1994; Vorhies and Morgan 2005; Srivastava, Shervani and Fahey 1998). Therefore, the CMO where present, is the constituency within the TMT that has significant responsibility for, and information about, these assets<sup>5</sup>. Armed with this knowledge, the CMO is expected to reduce the complexity and uncertainty that the TMT faces in the marketing domain or in critical decision-making areas affected by the marketing domain. Thus the factors that are identified to explain the choice of having/not having a CMO are those that affect such marketing related complexity for the TMT.

At the same time, having a CMO is also tantamount to giving up control over the marketing domain, which other top executives in the firm may be less willing to do. Their power within the firm draws from their control over these resources (Pfeffer 1981). Therefore, the factors that are identified are also those that have a bearing on the power dynamics in the TMT with respect to control over the marketing domain. Finally, since having a CMO has a bearing on the affiliations within the TMT, we also explore the factors linked to homophily, the phenomenon where people prefer others who are similar to them (Lazarsfeld and Merton 1954).

## **Strategic Factors Related to CMO Presence**

### **Innovation and Differentiation**

Strategies of innovation and differentiation, represented by the emphasis on R&D and advertising respectively, increase the need to quickly and correctly identify market opportunities. Top management is concerned with appropriate resource allocation across a diverse range of new product and positioning initiatives (Finkelstein and Hambrick 1992). This calls for skill and experience in segmentation, targeting and positioning at the corporate level, or what Hitt and colleagues call corporate level marketing competencies (Hitt and Ireland 1985; 1986). Varadarajan and Clark (1994) point out that these are areas where marketers can contribute to corporate strategy with their experience in business level segmentation, targeting, and positioning. As firms pursue new product-markets and segments, top executives are faced with greater amounts of diverse information. Further, the success of the strategies of innovation and positioning also rely heavily on successful development and deployment of marketing capabilities. Therefore, these conditions make it more likely that the TMT will have a CMO, who helps to reduce TMT complexity in the marketing domain while overseeing critical marketing resources.

In support of these arguments, we offer evidence from the qualitative stage of this research: the phrases of “growth”, “innovation”, and “differentiate” were commonly observed in the job descriptions of CMOs and press releases of their appointments.

Formally, we propose that:

**H<sub>1</sub>:** A firm’s level of innovation is positively related to the likelihood of CMO presence in its TMT.

**H<sub>2</sub>:** A firm’s level of differentiation is positively related to the likelihood of CMO presence in its TMT.

### Corporate versus Other Branding Strategies

Branding strategies of firms have been classified into corporate, mixed, and house-of-brands (Laforet and Saunders 1994; Rao, Agarwal and Dahlhoff 2004). A corporate branding strategy uses the corporate brand name for all the firm's products and services, while a house-of-brands strategy does not use the corporate brand name at all. A mixed branding strategy has some of the firm's products with the corporate brand name, while others are with other names. The corporate brand is a critical asset to all firms, but more so for firms that rely on it for all their products and services. Firms with a corporate branding strategy are therefore immensely concerned about monitoring how they build and deploy this asset (Rao et al. 2004). We argue that such a concern makes it more likely for TMTs in firms with a corporate branding strategy to have an executive accountable for the corporate brand. Branding clearly comes under the domain of marketing and consequently this executive is the CMO. As mentioned by one of the top executives interviewed, "the CMO has to own the metrics area about overall brand health". In firms with either mixed branding or house-of-brands strategies, it is more likely that brands have distinct images. Structurally, there is a greater possibility of senior brand managers who monitor and filter information on their brands to the TMT (Aaker and Jacobson 1994). This layer of senior management makes the task of interpretation of complex information on intangible marketing assets easier for the TMT. This argument may suggest that the absence of a CMO in firms without a corporate branding strategy has no bearing on marketing's influence in such firms. Note however that functional representation has been linked to functional importance (Chaganti and Sambharya 1987; Webster et al. 2003); and our interest is in the level of the TMT, and not the level of middle management, which is where senior brand managers are more

likely to be. Therefore, the greater criticality and complexity associated with a corporate branding strategy makes a CMO more likely than not.

While there is no prior research that has linked branding strategies to criticality and complexity for TMTs, we offer qualitative evidence in support of the arguments. The roles of CMOs were often linked to that of “brand management and marketing”, “driving the firm brand” and “brand steward – creating a consistent internal and external corporate brand voice”, themes that were recurrent across firms with corporate branding strategies. Based on the preceding discussion, we propose that:

**H<sub>3</sub>:** The likelihood of CMO presence in the TMT is higher in firms having a corporate branding strategy than in firms pursuing other branding strategies.

### Diversification

As firms diversify into multiple businesses, marketing activities get delegated to the business level (Varadarajan, Jayachandran and White 2000). Consequently, corporate strategy and its objectives get delineated from business strategy and its objectives. In fact diversification and the formation of a corporate strategic planning department were structural solutions to firm expansion (Markides 1995). Therefore, it is expected that complexity for the TMT decreases as firms diversify. Further, with diversification, businesses heads become independent powerful constituencies themselves. For them, retaining control over key resources becomes critical to maintaining and increasing power or influence (Doz and Prahalad 1991; Fligstein 1987). A CMO is therefore likely to be more valued in single business firms than in diversified firms. Note that it is not possible to identify which of the preceding two logics are at play, as they both suggest the same direction of relationship. Formally, we propose that:

**H<sub>4</sub>:** A firm's level of diversification is negatively related to the likelihood of CMO presence in its TMT.

### **Structural Factors Related to CMO Presence**

#### TMT's Functional Background in Marketing

Prior research has viewed functional experience or expertise in the TMT as a structural response to contingencies firms face (Chaganti and Sambharya 1987; Keck and Tushman 1993). The type of functional experience in the TMT is seen as relevant in addressing TMT complexity. Further it has also been shown to influence power dynamics within the TMT (Hambrick 1981). We therefore explore the role of the functional experience in the TMT as a factor related to CMO presence. Given that general management experience involves overseeing activities of multiple functions, including marketing, we offer similar hypotheses for both these types of functional experience. For example, Day and Nedungadi (1994) suggest that the managerial representations of marketing managers and general managers are most likely to be somewhat similar.

Two lines of reasoning suggest competing or alternate hypotheses. The first is the phenomenon of homophily in which people tend to like those similar to them (Lazarsfeld and Merton 1954; McPherson and Smith-Lovin 1987). Functional experience has been shown to discriminate fairly well between individuals (Dearborn and Simon 1958; Hambrick and Mason 1984). Homophily would then suggest that greater marketing or general management experience in the TMT would be related to a greater likelihood of a CMO. Related to the idea of homophily is that top executives with marketing or general management experience also recognize the importance of the voice of the customer in the TMT. For example, Webster et al. (2003) find this to be the case for firms with marketing

CEOs. We therefore propose the following hypotheses for marketing and general management experience:

- H<sub>5</sub>:** The proportion of a firm's TMT with marketing experience is positively related to the likelihood of CMO presence in its TMT.
- H<sub>6</sub>:** The proportion of a firm's TMT with general management experience is positively related to the likelihood of CMO presence in its TMT.

A second line of reasoning however would suggest an opposite effect. Similar functional backgrounds are associated with similar mental maps (Dearborn and Simon 1958; Hambrick and Mason 1984). Greater experience in the TMT in marketing or general management could lead to an overlap of cognitive strategies. Thus from a contingency point of view, a CMO may not be required if the TMT has executives with marketing or general management expertise. Additionally, a CMO's similar expertise may be viewed as a challenge to the other executives in the TMT (Pfeffer 1981). Note that both these rationales, one which draws on the contingency view and the other on power dependence, have the same effect. Based on the preceding discussion, we propose the following competing hypotheses for marketing and general management experience:

- H<sub>5Alt</sub>:** The proportion of a firm's TMT with marketing experience is negatively related to the likelihood of CMO presence in its TMT.
- H<sub>6Alt</sub>:** The proportion of a firm's TMT with general management experience is negatively related to the likelihood of CMO presence in its TMT.

#### CEO's Firm-Specific Operational Experience (Outsider vs. Insider CEOs)<sup>6</sup>

While the preceding discussion viewed the entire TMT's functional experience, it is also important to specifically focus on the CEO, given the CEO's integrative role

within the top management team (Calori, Johnson and Sarnin 1994). The CEO has multiple responsibilities (Mintzberg 1973); and it is expected that in an effort to discharge these effectively, the CEO attempts to address his/her own limitations. One CEO limitation that has been relevant to explaining TMT staffing decisions is the CEO's first hand experience of operational experience specific to the firm (Cannella and Lubatkin 1993). For example, Hambrick and Cannella (2004) find CEOs lacking this experience, also labeled as outsider CEOs, are more likely to have Chief Operating Officers (COOs), than insider CEOs who have risen through the ranks of the firm and are more familiar with firm's operations. We note that this logic would be relevant to all of the functions at the operational level and extend it to the marketing domain. We therefore hypothesize that:

**H<sub>7</sub>:** The likelihood of a CMO presence in the TMT is higher in firms with an outsider CEO than in firms with an insider CEO.

### **Environmental Factors Related to CMO Presence**

As market concentration increases, industries tend to be dominated by fewer and larger firms. Therefore the diversity of possible actions under the marketing domain is relatively greater in industries with low levels of concentration. For example, Kuester, Homburg and Robertson (1999) find that breadth of retaliatory behavior, in terms of the number of marketing instruments used, is higher in less concentrated industries. Such industries also tend to be associated with customer-oriented managerial representations, rather than competitor-oriented ones that are found in highly concentrated industries (Day and Nedungadi 1994). This is so because there are many bases of differentiation in the

former leading to a greater need to focus on customer needs, while a few large players drive the market in the latter (Porter 1980). Thus, it is more likely that there is greater complexity for the TMT in the marketing domain in less concentrated industries. This would suggest greater likelihood of CMO presence in such industries.

Note that there also exists some empirical evidence that may suggest that CMOs are less likely in markets with relatively low concentration. Anderson, Fornell and Mazvancheryl (2004) find that customer satisfaction's positive impact on shareholder value is weakened in less concentrated industries. Their rationale is that given the intense rivalry in such industries, customer satisfaction is not enough to hold back consumers (Kohli and Jaworski 1990). It is possible to stretch this rationale and argue that CMOs are less valued in less concentrated industries, given that a key marketing asset is relatively less critical. However, for this rationale to impact CMO presence, firms must make CMO related choices in response to the stock market's reaction, for which there is no evidence.

Overall, the arguments discussed in this section seem to suggest that low, rather than high, levels of market concentration are associated with the likelihood of CMO presence. Formally, we propose that:

**H<sub>8</sub>:** The degree of market concentration in a firm's primary industry is negatively related to the likelihood of CMO presence in its TMT.

### **Consequences of CMO presence**

The preceding sections have argued that firms CMO presence/absence is contingent on the level of strategic, structural, and environmental factors that firms face. The logic of contingency theory then suggests that the impact of CMO presence on firm

performance depends on the levels of these factors (Lawrence and Lorsch 1967; Zeithaml et al. 1988). To the extent that firms face conditions that argue for CMO presence (absence), CMO presence (absence), is expected to help such firms improve performance. Conversely, when firms make this choice in opposition to the logic of the conditions they face, CMO presence (absence) is expected to hamper firm performance. These interaction effects are hypothesized below for the all but two of the factors associated with CMO presence. It is not possible to offer similar hypotheses for TMT marketing and general management experience since alternative logics had suggested competing hypotheses for the effects of these factors on CMO presence. Therefore, we propose that:

**H<sub>9</sub>:** Firm performance is improved by CMO presence in the TMT, for firms pursuing (a) relatively high levels of innovation; (b) relatively high levels of differentiation; (c) a corporate branding strategy; and (d) relatively low levels of diversification; and for firms (e) with an outsider CEO and (f) in industries that are relatively less concentrated.

We note that our conceptual framework for the explaining CMO presence does not offer any guidance regarding the main effect of the presence or absence of a CMO on firm performance. Recent advocates of CMO presence suggest that having such an executive raises the importance of marketing issues at the corporate level and can only benefit firm performance (Kerin 2005; McGovern et al. 2004). At the same time, the presence of such an executive also adds administrative and bureaucratic costs (Taylor 2004). The only evidence we found in this regard was an inferred indirect association of TMT marketing experience with firm performance through sales growth (Weinzimmer, Bond, Houston and Nystrom 2003). Therefore, we do not offer a hypothesis for the main effect of CMO presence on performance. We do however explore whether firms that have CMOs perform better or worse than firms that don't.

## METHODOLOGY

### Sample

We chose to observe firms over a considerable duration rather than at any one point in time so that results did not reflect conditions or reporting idiosyncrasies of a particular year. The most recent year with secondary data available on TMTs of firms was 2004 at the time this research was initiated. Consequently, we chose to observe firms over the five year period, 2000-2004. All firms in the Compustat database with sales of at least \$250 million in the year 2002, the mid-point of our period of observation, were identified. Limiting the research to larger firms was seen as an empirical necessity given the low prevalence of CMOs even in the Fortune 1000 as indicated by the Booz Allen Hamilton study. Further, a similar cut-off has also been used by Hambrick and Cannella (2004). From this set, only those firms without missing data on the various factors were retained. In order to test the hypothesis on innovation, firms in industries that did not report R&D expenditures (for example, retailing) were dropped. As a result of these filters, the final sample had 167 firms that represent a cross-section of industries<sup>7</sup>.

The percentage of firms with a CMO remained around 40 percent each year. Specifically, this percentage was 41, 42, 44, 41, and 39, in 2000, 2001, 2002, 2003 and 2004 respectively. These proportions were not significantly different from each other. Approximately 25 percent of the firms had a CMO, while 41.32 percent did not have a CMO, in all the years of observation. An additional 17.37 percent of the firms had a CMO, while 16.17 percent did not have a CMO, for more than half of the period of observation. We also note that 19.6 percent of the CMOs across all years in the sample had the actual title of Chief Marketing Officer, with the trend for the title increasing over

time. As an aside, 97.2 percent of the firms' TMTs had a finance executive (of these 96.8 percent had the title of Chief Financial Officer) across all years of observation.

### **Data Sources and Measures**

Data collection was done using secondary sources. Unless specifically mentioned, most measures were collected annually, over the period 2000 to 2004. We now describe the measures and sources of data for the various dependent and independent variables.

#### Operationalization of the TMT

The TMT has been operationalized in various ways by prior researchers depending on the research purpose, methodology used, and data availability [see table 1 of Carpenter, Geletkanycz and Sanders (2004), pp.754-58, for a list of these operationalizations]. These include Vice President or Senior Vice President and above (Chaganti and Sambharya 1987; Keck and Tushman 1993; Michel and Hambrick 1992; Weinzimmer et al. 2003), the top 2 levels (Wiersema and Bantel 1992) and inside directors (Finkelstein 1992). Few researchers have also used key informants like the CEO to identify the TMT (for example, Bantel and Jackson 1989). We use the most inclusive of operationalizations that allows consistency across firms, and with more recent prior research (for example, Hambrick and Cannella 2004). Specifically, in this research, the TMT is the list of executive officers specified by a firm in the 10-K or proxy, its annual filings with the Securities Exchange Commission or SEC. The mean size of the TMT in the sample of firms was 9.65 and the standard deviation was 3.71, which is consistent with prior research using broader or more inclusive operationalizations.

### Dependent Variable: CMO Presence

10-Ks or proxy statements, which were used to operationalize the TMT, were also used to identify the dependent variable of interest – the presence (or absence) of a CMO in the firm’s TMT, coded as 1 (or 0). An executive in the TMT with marketing in his/her title constitutes CMO presence; a TMT without such an executive represents CMO absence. The actual titles included Vice President (VP) Marketing, Senior VP Marketing, or Executive VP Marketing. Few cases where the title had “Branding” or “Corporate Marketing” were also encountered. The title of CMO when present was typically in addition to these other titles (McGovern and Quelch 2004). CMO presence coded from the 10-K/proxy was also checked against the list of officers provided in annual reports.

### Independent Variables: Strategic, Structural, and Environmental Factors

All measures and data sources have been used in prior research. Innovation and differentiation were captured by the ratios of Research and Development (R&D) to Sales and Advertising to Sales, or R&D intensity and advertising intensity respectively (Bettis and Mahajan 1985). This data is available through S&P’s Compustat. A graduate research assistant and one of the researchers separately coded the branding strategies of firms drawing on definitions of Rao et al. (2004). If the firm had a corporate branding strategy, this variable was coded as 1; otherwise the variable was coded as 0. Four sources of information – Competitive Media reports, Datamonitor reports, 10-Ks, and company websites – were used for this purpose. The degree of agreement between the two coders was 80.5%. After discussion, the degree of agreement improved to 93.4%,

with the remaining cases of disagreement being assigned codes by the researcher. In line with Rao et al. (2004), we assumed that the firm's branding strategy was constant over the observation period. Diversification was computed using the entropy measure based on 4- and 2-digit level segment sales available through Compustat (Palepu 1985). We calculated measures of total, related, and unrelated diversification, and tested the hypotheses on diversification using each separately. A large proportion of the sample had diversification measures of zero by this method. Consequently, a dummy variable coded as 0 or 1, to indicate non-diversified versus diversified firms respectively, was also used for each measure of diversification.

In order to determine the proportion of the TMT with marketing and general management experience and whether a CEO is an outsider or an insider, we collected biographical information on the executives using multiple sources. These included the 10-Ks, Bloomberg's People Directory, Dun & Bradstreet's Register of Corporations, and company websites. The method of classification of functional experience is fairly well established in prior research (see Finkelstein and Hambrick 1996 for a review). Functional experience in marketing and/or marketing related functions that included sales, advertising, brand management, and customer service, was coded as marketing functional experience. Experience as a head of a division, or a region, or as a top management executive without any specific functional responsibilities was coded as general management experience. The coding was fairly straightforward and carried out by graduate research assistants, trained by the researchers. Some information was publicly available on approximately 95 percent of the executives in the TMTs of the firms in the sample. The mean and median of years of available biographical information

on these executives was 13.88 and 12 respectively. When there was no information available on an executive, this executive was dropped from the TMT for purpose of analysis. Consequently, 75 percent of the firms had some biographical information on all executives in the TMT and 95 percent of the firms had some biographical information on at least 75 percent of the executives in the TMT. The measures we used were either the proportion of the executives in the TMT with experience in marketing or general management or the proportion of the total years of experience in the TMT in marketing or general management, after excluding the CMO from the TMT<sup>8</sup>. As an alternative to using the entire TMT for determining marketing experience, we also used a dummy measure that equaled 1 when the CEO of the firm had marketing experience. Recent research by Webster et al. (2003) has suggested that CMOs are more likely, and marketing is more valued, in firms with CEOs with a marketing background. A dummy variable for outsider (insider) CEO was coded as 1 (0) if the executive had spent zero (greater than zero) years in the firm before being appointed as a CEO. We tried using other cut-offs in line with prior research on outsider CEOs (e.g. Cannella and Lubatkin 1993); results do not differ across alternatives. We also tried using the number of years instead of the preceding categorical operationalization; we do not report the results since they were significantly weaker.

The environmental factor of market concentration was calculated using the Herfindahl-Hirschmann index (HHI), which is the sum of the square of market shares at the 2-digit SIC level, of all firms listed in Compustat. As alternatives to the HHI, we also used the 4-firm and 8-firm concentration ratios, which add the market shares of the 4 and 8 firms, with largest market shares respectively, at the 2-digit SIC level.

### Dependent Variable for Model of Consequences: Firm Performance

We used various measures of firm performance that have been used extensively in prior research – sales growth, a market-based measure of firm’s performance that, with adequate controls, captures the notion of market share; Return on Assets (ROA) and Return on Sales (ROS), which are accounting-based performance measures; and Tobin’s q, a market-based measure that reflects the value of a firm as perceived by its shareholders. Sales growth was calculated as the increase in sales as a proportion or percentage of the sales in the preceding year. ROA was calculated as the ratio of profits to assets; ROS as the ratio of profits to sales. Tobin’s q was calculated using the Chung and Pruitt (1995) approximation, namely the ratio of the sum of market value of the firm and book value of its debt to its total assets (see p. 183 of Anderson et al. 2004 for details). Researchers prefer Tobin’s q since it is forward-looking and is not affected by accounting standards that may differ across industries (Anderson et al. 2004). All required data for the calculation of these variables were obtained from Compustat.

### Controls

Since the sample of firms is drawn from multiple industries, we controlled for industry effects by using median measures for the variables at the 2-digit SIC level, to the extent that data was available<sup>9</sup> (Hambrick and Cannella 2004). These were subtracted from the firm’s measure on that variable. For R&D intensity, advertising intensity, sales growth, ROA, ROS, and Tobin’s q, all firms in each SIC, with available data in S&P’s Compustat, were used for this purpose. Alternatively, dummy variables for industries at

the 2-digit SIC level were also used. Additionally, we controlled for the size of the firm measured through the natural log of the number of employees, reported in Compustat. Firm size controls for explanations that draw on the tendency of leading firms being initiators of structural choices such as having a CMO; following prior research, we also control for size in the model of performance. We also controlled for the CEO's tenure as CEO; the presence/absence of a Chief Operating Officer (COO), coded as a dummy variable (1/0); and the extent of divisionalization in the firm, measured as the proportion of executives in the TMT who are divisional heads; information that we collected using the 10-Ks. The CEO's tenure as CEO was included to control for the possibility of CMO presence/absence being part of a TMT shakeup that usually accompanies new CEO appointments. We needed to control for COO presence since it has been shown to be related to outsider CEOs for reasons similar to those that we hypothesize for CMO presence (Hambrick and Cannella 2004). Divisionalization was controlled for since a preponderance of such executives may imply CMOs at the divisional level rather than at the corporate level. We also included prior performance, measured as either sales growth, or ROA, or ROS, as a control measure in the event that CMO presence/absence was a response to either poor or superior performance. Finally, we controlled for the consumer profile of the firm, in terms of whether the firm was a pure B2C (business-to-consumer) player, or a pure B2B (business-to-business) one, or one that sold to both ultimate and organizational consumers (Mixed), since the propensity to have a CMO may differ across these contexts. Firms were coded as one of these based on the description of the firm's business and its customers, as reported in the 10-K. In line with Rao et al. (2004), we assumed that the firm's consumer profile was constant over the observation period. Only

9% of our firms were pure B2C firms. We therefore combined B2C and Mixed firms and coded them as 1; B2B firms were coded as 0. In the model of firm performance, in addition to most of the preceding control variables, we also controlled for relevant performance variables drawing on prior research – for e.g., with Tobin’s Q as a measure of performance, we controlled for prior profitability and sales growth, since these have been shown to impact this measure of performance.

## **ANALYSIS AND RESULTS**

Table 1 presents descriptive statistics and correlations for all measures, pooled over the period of observation. None of the correlations exceeded 0.5. For all models discussed, none of the variation inflation factors were above 4, and none of the condition indexes associated with the eigenvalues of the variable matrix exceeded 15. These tests imply the absence of significant multicollinearity problems (Johnston 1991, p.250).

Longitudinal data allowed us to perform two types of analyses for testing the hypotheses explaining CMO presence. In the first analysis, we assumed that the decision to have a CMO is revisited every year. Here, CMO presence in the years 2001 to 2004 is modeled as a function of the hypothesized variables and controls, with those that vary over time being lagged by a year, except for firm size, outsider CEO, CEO’s Tenure as CEO, COO presence, and divisionalization, which were not lagged. Empirically, lagging the time-varying independent variables, allowed us to rule out reverse causality, especially in the case of the strategic factors. We also included the year as an additional control in case CMO presence varied over time. Given that our dependent variable of CMO presence is binary and that we repeatedly observe the same firms over a period of

time, we use the generalized estimating equations (GEE) approach developed by Zeger and Liang (1986). GEE accounts for serial correlations in repeated observations by estimating them, and weighting the data with these estimates, when estimating regression coefficients and standard errors. It also allows the specification of various distributions for the dependent variable and has consequently been used to model binary outcomes in prior research (Hambrick and Cannella 2004; Law 2002). Results from this analysis, using Stata (2005), are shown as models 1 and 2, in the first two columns of table 2; model 2 introduces two-digit SIC dummy variables instead of using industry level variables as controls.

In the second analysis, we study a firm's propensity for a CMO over the entire period of observation. Here, for a CMO to be considered present/absent in a firm, the firm should have had/not had this executive in the TMT for a significant portion of the period of observation. In the interest of space, we only report results for CMO presence (absence), when firms had (did not have) a CMO in the TMT for more than half the period of observation. Results are fairly similar across other specifications, though the useable sample for analysis decreases in size in them; for example, it reduces to 106 from 167, when we include only those firms that have/don't have a CMO throughout the period of observation. Time-varying independent variables are averaged over the period of observation and the control of prior performance refers to the performance in the year prior to the period of observation. This second analysis is provided as a support for the results for the results from the longitudinal analysis, especially in the event that the decision to have a CMO is not an annual one. Results from this analysis, using logistic regression, are shown as model 3, in the last column of table 2.

Analysis to test the hypotheses related to consequences of CMO presence on firm performance, also uses averages so as to avoid the complexity of trying to interpret short-term effects of CMO presence and separate cause and effect. Results from this analysis, using OLS, are shown in the table 3. In the interest of space, we only present results using two of the measures of performance – Tobin’s Q in model 1 and sales growth in model 2. Results were not significantly different when ROA and ROS were used. In general, the preceding analyses follow Hambrick and Cannella (2004) who study factors associated with COO presence and the consequences of COO presence for firm performance.

**\*\*\*\* Insert Table 1 about here \*\*\*\***

### **Results of the Model of Factors Associated with CMO Presence**

As shown in table 2, we find support for the hypothesized positive association between the innovation and CMO presence ( $H_1$ ) ( $p < .05$  in models 1 and 3;  $p < .10$  in model 2).  $H_2$ , the positive association between differentiation and CMO presence is also strongly supported ( $p < .01$  in model 2;  $p < .05$  in models 1 and 3). As hypothesized in  $H_3$ , CMO presence is more likely in firms with a corporate branding strategy ( $p < .01$  in model 1;  $p < .05$  in model 2;  $p < .10$  in model 3). We do not obtain a main effect for diversification in line with  $H_4$ . However, post hoc we do find a significant interaction with firm size, after mean-centering both variables ( $p < .05$  in model 2;  $p < .10$  in models 1 and 3). This interaction suggests support for  $H_4$ , namely a decrease in likelihood of CMO presence as diversification increases, in relatively small firms. In relatively large firms, we observe an effect in the direction opposite to what was hypothesized. This interaction effect is illustrated in figure 2 and discussed in detail in the next section. We

find partial support for the hypothesized effects of TMT marketing and general management experience. These variables are significant only in model 3. Competing hypotheses were presented for these structural factors. In line with H<sub>5</sub>, CMO presence is more likely as TMT marketing experience increases ( $p < .05$ ). Conversely, CMO presence is more likely as the general management experience in the TMT decreases, in weak support of H<sub>6Alt</sub> ( $p < .10$ ). We find strong support for hypothesis H<sub>7</sub> that outsider CEOs are more likely to have CMOs ( $p < .01$  in model 3;  $p < .05$  in models 1 and 2). H<sub>8</sub>, regarding the environmental factor of market concentration was not supported.

We note that we obtain similar results with all the alternative measures of market concentration. The partial support for TMT experience is not achieved when we use the alternative measure of the years of experience in marketing and general management. Results for total diversification are not replicated with measures of related and unrelated diversification. In the model using dummy variables to capture industry effects, none of the dummy variables were significant. Finally, CEO with a marketing background was not significantly related to CMO presence.

**\*\*\*\* Insert Table 2 about here \*\*\*\***

### **Results of the Model of Consequences of CMO Presence**

As shown in models 1a and 2a of table 3, we find no main effect for CMO presence/absence on firm performance<sup>10</sup>. We introduced separately, all interactions between CMO presence and the various factors associated with CMO presence. None of these interactions were significant. In the interest of space, we do not present all these

non-significant interactions, but demonstrate one of them, in models 1b and 2b of table 3. Thus, none of the hypotheses H<sub>9a</sub> to H<sub>9f</sub> were supported.

**\*\*\*\* Insert Table 3 about here \*\*\*\***

## **DISCUSSION AND IMPLICATIONS**

The purpose of this research was to address the following two questions: (1) what are the factors associated with the likelihood of Chief Marketing (CMO) presence, in firms' Top Management Teams (TMTs)? and (2) what are the consequences of CMO presence for firm performance in the face of these factors? We were able to identify a mix of strategic and structural factors that are associated with the choice of having a CMO (see table 2 for a summary of hypotheses supported). CMO presence is related to innovation, differentiation, branding strategy, the CEOs operational experience in the firm, the diversification strategy and size of a firm, and to some extent, the TMT's functional experience. CMO presence has no direct impact on firm performance and having a CMO does not translate into higher levels of performance in the face of factors that are associated with CMO presence. In this section we discuss implications for theory and practice, limitations, and suggestions for future research. We also present some illustrative examples of firms from our sample while discussing implications for theory.

### **Implications for Theory**

To the best of our knowledge we know of only one study that has identified factors related to CMO presence, as part of a Conference Board report on corporate marketing (Hopkins and Bailey 1984). These authors studied a set of multi-business firms

and identified diversification as a key factor that explained CMO likelihood. Our study expands the scope of inquiry to include many more factors, studies firms over a period of time, and also updates the field on this phenomenon by looking at data that is two decades since the aforementioned report. We identified the gaps addressed by our study as important to the field given the efforts to understand marketing's role in the firm, especially at the level of corporate strategy. Notwithstanding other dimensions that capture marketing's importance to a firm, this CMO related choice clearly represents an important facet of marketing's influence in the TMT. This is evident in recent accounts of the CMO's role in the firm – that of the customer advocate at the strategy table. For example, Joseph Tripodi, CMO of Allstate Insurance Company defines his role as “the voice of the customer...particularly at the senior management table” (Crosby and Johnson 2005, p.12). That not all TMTs have CMOs then begs the question of why firms differ on this structural choice.

In exploring these phenomena, this research contributes to the dialogue on the role of marketing in the firm (Anderson1982; Day 1992; Varadarajan 1992; Webster 1992; Wind and Robertson 1983; Workman, Homburg and Gruner 1998). It does so by providing evidence of rationales for differences in marketing's influence at the corporate level of the firm. In the context of this research, these rationales helped identify specific strategic and structural factors like branding, innovation, diversification, and top executive experience, which are related to CMO presence. The rationale for the effect of the firm's branding strategy was that the criticality and complexity associated with building and protecting the corporate brand would make it more likely for firms with a corporate branding strategy to have a CMO. As an illustration of this rationale, consider

the following two firms from our sample that are in the same industry, in this case semiconductors: Advanced Micro Devices (AMD) which has a corporate branding strategy in that it sells all its product under the AMD brand name, and Micron Technology which does not have a corporate branding strategy in that it sells products under the brand names Micron, Spectek, and Crucial. In line with the preceding rationale, we find that AMD has a CMO in all the years of observation while Micron does not have a CMO in four out of those five years. To the best of our knowledge, there is no prior research in the TMT literature that has incorporated a firm's branding strategy in a framework of TMT's structural choices. Evidence of the effect of this variable therefore also marks a contribution of this research to organization theory.

The rationale of complexity in the marketing domain for the TMT also appears in the association between the strategic factors of innovation and differentiation, and CMO presence. As firms pursue a strategy of innovation and differentiation, the need for a CMO seems to increase as he/she is able to allay the TMT's resultant marketing related uncertainty. Again, as an illustration of this rationale with respect to innovation, which we measure using the R&D/sales ratio, consider two firms in the same two-digit SIC 73: Oracle, whose average ratio between 2000 and 2004, was .12, and PeopleSoft, whose ratio was higher at .18. Similarly, with respect to differentiation, which we measure using the advertising/sales ratio, consider the following two firms that belong to the pharmaceutical industry: Abbott Laboratories, whose average ratio over the observation period was .01 and Bristol-Myers Squibb, whose ratio was higher, at .08. In line with the rationales for these two factors, both Oracle and Abbott did not have a CMO in all the five years of observation, while PeopleSoft had a CMO throughout this period and

Bristol-Myers Squibb had one for four out of the five years. Marketing complexity also finds its way into explaining why outsider CEOs are more likely to have CMOs. We had expected this effect to be heightened for a new CEO but the interaction between outsider CEO and the CEO's tenure as a CEO was not significant<sup>11</sup>.

CMO presence is also explained by the firm's level of diversification contingent on the size of the firm, as shown in figure 2. As firms diversify they most likely adopt structures that reduce the TMT's complexity of managing diverse businesses. As a result, a CMO is seen to be less essential in diversified firms. It is also likely that heads of the diversified businesses are reluctant to cede their power over decisions in the marketing domain to a CMO. However, this effect is more evident in firms that are relatively smaller in size. For example, if we compare Plantronics, an undiversified manufacturer of communication equipment with Technitrol, a diversified manufacturer of electronic components, both with sales not exceeding 600 million dollars, we find that Plantronics has a CMO, while Technitrol does not, for the entire period of observation. Across relatively large firms the effect of diversification seems to be reversed. For example, if we compare a large firm like Pfizer which is undiversified, to another large firm like Procter & Gamble (P&G) which is highly diversified, we find that Pfizer does not have a CMO for four out of the five years of observation, while P&G has a CMO throughout this period. We suggest that this counter-intuitive result is on account of size and diversity of businesses together confronting the TMT with increased complexity. As a result, the rationales of power and existing structures in small diversified firms are overcome in larger diversified firms. We note that this counter-intuitive component of our results differs from the finding of Hopkins and Bailey (1984) that unrelated

diversification decreases CMO likelihood. We suggest that this may be because of the change in context in the last two decades and the result of deconglomeration which has reduced the number of firms diversifying into unrelated areas (Varadarajan et al. 2000).

**\*\*\*\* Insert Figure 2 about here \*\*\*\***

The amounts of marketing and general management experience in the TMT were both found to be associated with CMO presence, though we did not find consistent support for these relationships. The rationale of homophily was supported given the positive relationship found for marketing experience. It seems that marketing experience is required in the TMT for a CMO's role to be consistently appreciated. We also find evidence of the competing rationales of contingency theory and/or power dependence given the negative relationship that general management experience has with CMO presence. As we had indicated in the discussion building up to this alternative hypothesis, it is not possible to determine whether only one or both of the logics of contingency theory and need for power are at play. Firms that take a contingency view consider general management experience in their top executives as being sufficient to address the tasks of a CMO. Alternatively, it might also be the case that top executives with this experience are reluctant to let go of responsibilities in the marketing domain, as these are bases for their power and influence within the TMT.

To summarize, we find evidence of the rationales of: (1) marketing related complexity for the executives in the TMT; (2) criticality in the marketing domain; (3) structural arrangements within the TMT and the firm; (4) power dynamics within the TMT; and (5) homophily. Future research in the domain of marketing's role in the firm and at the level of the TMT will thus be better informed given this evidence.

## **Implications for Practice**

As firms evaluate their TMT compositions, we hope that this research aids firms in making decisions in the context of CMO presence. Admittedly, the results of our research do not provide conclusive evidence of the benefits of a CMO, given non-significant effects in the model of performance. Notably however, CMO presence shared a significantly positive correlation with the Tobin's q measure of performance. Specifically, for the set of firms with/without a CMO across all years in the period of observation (N = 106), this correlation is .22 ( $p < .05$ ). When this specification is relaxed to allow CMO presence to include firms with a CMO for more than half the period of observation (N = 134), this correlation is .21 ( $p < .05$ ). These effects however are dominated by other variables in the model of performance. Regardless, it is important to note that CMOs do not have a negative impact on performance.

However, firms can still benefit from the results of the model of CMO presence. Optimality of choices is implied or assumed in rationales that draw on the contingency view (Zeithaml et al. 1988). Under this assumption, CMO presence would be optimal for firms that aggressively pursue innovation and differentiation, for firms with corporate branding strategies, for firms with outsider CEOs, and for large diversified firms. On the other hand, choices that are influenced by the rationale of power dependence may lead to sub-optimal choices. Either of these two preceding rationales may be operating in the case of diversification in small firms. The power rationale suggests that CMO absence may be sub-optimal for small diversified firms, though the contingency logic based on existing structural arrangements suggests that it might be optimal. Similarly, given these

two rationales, it is not clear if CMO absence is optimal when TMTs have high levels of general management experience. In this context it is interesting to note that conceptual articles have argued that this experience is still not a substitute for an executive in the TMT explicitly focused on the marketing domain (Gilliatt and Cuming 1986). We hope that for these factors, the identification of the underlying rationales and their implied outcomes would still be of value to TMTs. The decision to have a CMO is a complex one, which is why probably less than 50 percent of the firms have such a role in place. In making top executives aware of the mechanisms that drive this choice in firms, this research has endeavored to take away the complexity that might be associated with it.

### **Limitations and Further Research**

First, the nature of our sample does not allow a systematic exploration of institutional effects, specifically those of imitation. One of the logics of institutional theory is that early adopters of a structural adaptation or innovation in an environment do so using contingency rationales and are therefore rewarded with performance gains; later adopters on the other hand seek legitimacy, and in imitating other firms in their environment, do not achieve similar performance gains (DiMaggio and Powell 1983; Tolbert and Zucker 1983; Westphal, Gulati and Shortell 1997). An exploration of institutional effects would, apart from providing evidence of imitation in CMO adoption, therefore also shed light on the non-significance of the relationship between CMO presence and performance that we find in our study. However, in order to make any inferences regarding imitation, we must observe an entire population, or at the least a substantially large set, of firms belonging to a similar environment, in this case the same

industry, over a considerable period of time. The sample in this study is made up of firms drawn from multiple industries and across the five year period of observation in our study, we do not observe significant changes in CMO prevalence over this period, with 66.5 percent of the firms consistently having/not having a CMO. We are therefore unable to comment on the presence or absence of institutional effects and suggest focusing on one industry over a longer period of time as an area for future research.

Second, we note that our hypotheses for market concentration were not supported. A possible explanation might lie in a suggestion we made in the theory section, that while industries with low concentration have high marketing complexity, arguing in favor of CMO presence, marketing assets like customer satisfaction may not be critical enough to warrant a CMO. In doing so, we drew on Anderson et al.'s (2004) finding of customer satisfaction's weakened impact on shareholder value in such industries. Possibly, this tension is also reflected in firms' CMO related choices. For example, CMO presence was about 21 and 56 percent in SICs 28 and 73 respectively, which are both industries with relatively low values of concentration (HHIs of .02 and .04 respectively)<sup>12</sup>. However, the lack of significant effects may also be due to the limited range of industries and concentration values thereof (HHI values range from 0.02 to 0.18). Therefore, expanding the scope of this research to include additional industries could possibly provide a clearer understanding of the role of market concentration. We note however that, in analyses not shown here, we also found that several other environmental factors that are likely related to marketing complexity, like industry sales growth, performance, and volatility, did not explain any additional variance in CMO presence, at both two-digit and three-digit SIC levels. Again, one explanation may be that imitative forces are at play, in which case it

would be beneficial to observe firms over a longer period of observation. Prior research has found that factors that influence structural adaptations may be strong or weak depending on the stage of institutionalization of that adaptation (Tolbert and Zucker 1983; Zorn 2004). It might also be the case that the CMO position has been institutionalized in firms (Hannan and Freeman 1984); we see evidence of this given the significant positive correlations between CMO presence across the years of observation. Another possible explanation is that the response to environmental marketing complexity is already captured in the firms' strategic and structural choices (Donaldson 2002).

Two other limitations in our research have to do with the exclusion of firms with sales less than \$250 million and firms that don't report R&D expenses. Given the lack of a significant correlation between size and CMO presence and the wide range of firm sizes that we do include in our analysis, we suspect that the former is not a serious limitation, and that our results should hold even for relatively smaller firms. We accept the latter as a limitation of this research and submit that our results cannot be generalized to firms in industries, like retailing, that don't report R& D expenses.

Finally, we offer two more suggestions for future research. The first is to explore the effect of CMO presence on domains closely linked to the role of the CMO, like brand equity. The second is to examine the characteristics of a successful CMO. There has been some concern in the field with respect to the phenomenon of CMO churn (Spencer Stuart 2004). Estimates put the tenure of a CMO at 2 years; in comparison a CEO's tenure is 5 years. Reasons offered include a gap between the expectations and delivery from a CMO and the CMO's lack of strategic and/or line experience. Research that is able to shed light on this phenomenon will be of immense value to top executives and CMOs.

**Table 1: Descriptive Statistics and Correlation Coefficients**

	Mean (Std. Dev.)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 CMO Presence <sub>t</sub>	.42(.50)															
2 Innovation <sub>t-1</sub> <sup>1</sup>	-.03(.09)	.20***														
3 Differentiation <sub>t-1</sub> <sup>1</sup>	.01(.03)	.16***	-.05													
4 Corporate Branding <sup>2</sup>	.53(.50)	.26***	.31***	-.09**												
5 Total Diversification <sub>t-1</sub> <sup>3</sup>	.30(.42)	-.09	-.15***	.06*	-.33***											
6 TMT Mktg.Experience <sub>t-1</sub> <sup>4</sup>	.15(.14)	.14***	.07*	.15***	.03	-.15***										
7 TMT Gen. Mgmt. Exp. <sub>t-1</sub> <sup>4</sup>	.53(.18)	-.14***	-.13***	.03	-.10***	.04	.04									
8 Outsider CEO <sub>t</sub>	.32(.47)	.14***	.01	.12***	.05	.04	-.05	-.01								
9 Market Concentration <sub>t-1</sub> <sup>5</sup>	.04(.02)	-.00	.20***	.03	-.06	.16***	.01	-.01	.15***							
10 Log(No. of Employees) <sub>t</sub>	8.65(1.37)	-.06	-.15***	.07*	-.32***	.43***	-.07*	.17***	-.05	.08**						
11 Year	2002.5(1.12)	-.02	.08*	.04	.00	.03	.04	-.05	-.00	.11**	.01					
12 CEO's Tenure as CEO <sub>t</sub>	6.72(7.71)	-.08**	-.07*	-.12***	.11***	-.13***	-.04	.05	-.05	-.08**	-.10**	.02				
13 COO Presence <sub>t</sub>	.29(.45)	-.08**	-.09**	.08*	.06	-.07*	.03	.05	.03	-.12**	.05	-.03	.13***			
14 TMT Divisionalization <sub>t</sub>	.19(.17)	-.06*	.04	.02	-.08**	.21***	.08**	.27***	.02	.06	.19***	.03	-.08**	-.09**		
15 Prior Performance <sub>t-1</sub> <sup>6</sup>	.06(.35)	.04	.04	.12**	.07*	-.13***	.10**	-.12	.00	-.05	-.08**	-.13***	-.02	.07*	-.08**	
16 B2C/Mixed vs. B2B firm <sup>2</sup>	.43(.49)	-.07*	-.24***	.43***	-.42***	.19***	.13**	.04	.08**	.06	.26***	.00	-.18***	.02	.05	-.03

Table shows correlations between measures pooled across 167 firms and four years. N=668 firm years.

\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$

<sup>1</sup> Ratios of R&D (innovation) and advertising (differentiation) to firm sales respectively, minus industry median ratios.

<sup>2</sup> Assumed to be constant over the period of observation.

<sup>3</sup> Entropy measure of total diversification.

<sup>4</sup> Proportion of executives in the TMT (excluding the CMO from time  $t$  if present in the TMT in time  $t-1$ ) with marketing or general management experience.

<sup>5</sup> Herfindahl-Hirschmann Index.

<sup>6</sup> Sales growth minus industry median values.

**Table 2: Results of Logistic Regressions with Chief Marketing Officer (CMO) Presence as the Dependent Variable**

Independent Variables	Model 1 <sup>1</sup>		Model 2 <sup>2</sup>		Model 3 <sup>3</sup>		Support for Hypotheses across Models 1, 2, and 3
Constant	138.95	(125.56)	55.45	(119.98)	-.14	(.74)	-
Innovation <sup>4</sup> (H <sub>1</sub> )	2.79	(1.51)**	2.52	(1.49)*	5.97	(2.56)**	Yes
Differentiation <sup>4</sup> (H <sub>2</sub> )	12.62	(5.12)**	13.18	(5.07)***	15.34	(7.75)**	Yes
Corporate Branding (H <sub>3</sub> )	.93	(.33)***	.87	(.37)**	.75	(.45)*	Yes
Diversification (H <sub>4</sub> )	-.45	(.42)	-.39	(.44)	-.47	(.61)	No (Main effect)
TMT Marketing Experience (H <sub>5</sub> /H <sub>5Alt</sub> )	-.25	(.71)	-.42	(.70)	3.33	(1.55)**	Partial (H <sub>5</sub> )
TMT General Management Experience (H <sub>6</sub> /H <sub>6Alt</sub> )	-.34	(.58)	-.43	(.59)	-2.06	(1.24)*	Partial (H <sub>6Alt</sub> )
Outsider CEO (H <sub>7</sub> )	.49	(.19)**	.47	(.19)**	1.27	(.46)***	Yes
Market Concentration (H <sub>8</sub> )	-8.72	(6.70)	-		-9.90	(9.18)	No
Firm Size	.03	(.12)	.07	(.12)	.24	(.17)	-
Diversification x Firm Size (H <sub>4</sub> - Post-Hoc)	.43	(.21)*	.44	(.22)**	.58	(.33)*	Yes (Interaction effect)
Year	-.07	(.06)	-.03	(.06)	-		-
CEO's Tenure as CEO	-.01	(.01)	-.01	(.01)	-.02	(.03)	-
COO Presence	-.12	(.21)	-.10	(.21)	-.49	(.55)	-
TMT Divisionalization	.25	(.53)	.20	(.53)	-1.50	(1.44)	-
Prior Performance <sup>4</sup>	-.05	(.21)	-.05	(.21)	-.15	(.24)	-
B2C/Mixed vs. B2B firm	-.06	(.36)	-.02	(.36)	-.52	(.49)	-
9 Industry Dummies <sup>5</sup>	-		Included		-		-

Table shows parameter estimates along with standard estimates in parenthesis.

\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$

<sup>1,2</sup> Pooled logistic regression using GEE, over the period 2001 to 2004. CMO presence coded as 1 (0) for firms with (without) a CMO in time  $t$ , and with all time-varying independent variables measured in time  $t-1$ , except for outsider CEO, firm size, COO, CEO's Tenure as CEO, and divisionalization, which are measured in time  $t$  [N=645 firm-years; CMO presence: 42.05%; Model 1  $\chi^2(16) = 45.73$  ( $p < 0.001$ ); Model 2  $\chi^2(24) = 50.22$  ( $p < 0.01$ )].

<sup>3</sup> Logistic regression with CMO presence coded as 1 (0) for firms with (without) a CMO for more than half the period of observation of 2000 to 2004, with time-varying independent variables averaged over this period [N=167; CMO presence: 42.52%; Model  $\chi^2(15) = 44.51$  ( $p < 0.001$ ); Nagelkerke  $R^2 = .31$ ].

<sup>4</sup> In models 1 and 3, innovation, differentiation, and firm performance, are the raw values minus the median values at the two-digit SIC level.

<sup>5</sup> None of the industry dummy estimates were significant.

**Table 3: Results of OLS Regressions with Firm Performance as the Dependent Variable**

Independent Variables	Dependent Variable: Tobin's Q <sup>1</sup>		Dependent Variable: Sales Growth <sup>1</sup>	
	Model 1a <sup>2</sup>	Model 1b <sup>2</sup>	Model 2a <sup>3</sup>	Model 2b <sup>3</sup>
Constant	.59 (.13)***	.60 (.13)***	.04 (.02)**	.04 (.02)**
Innovation <sup>1</sup>	5.56 (1.00)***	5.52 (1.00)***	.11 (.13)	.12 (.13)
Differentiation <sup>1</sup>	10.25 (2.82)***	10.59 (2.86)***	.56 (.37)	.52 (.37)
Corporate Branding	-.08 (.18)	-.07 (.17)	-.01 (.02)	-.01 (.02)
Diversification	-.20 (.23)	-.20 (.23)	-.08 (.03)***	-.08 (.03)***
TMT Marketing Experience	-.48 (.65)	-.53 (.66)	.02 (.08)	.03 (.08)
TMT General Management Experience	.33 (.46)	.35 (.46)	.02 (.06)	.01 (.06)
Outsider CEO	-.59 (.18)***	-.46 (.25)*	.01 (.02)	-.01 (.03)
Market Concentration	-.16 (3.27)	-.13 (3.27)	-.66 (.45)	-.66 (.45)
Firm Size	.23 (.07)***	.23 (.07)***	-.00 (.01)	-.00 (.01)
CEO's Tenure as CEO	.02 (.01)	.02 (.01)	.00 (.00)	.02 (.01)
COO Presence	.26 (.22)	.25 (.22)	.02 (.03)	.02 (.03)
Prior Performance <sup>1,4</sup>	.02 (.01)**	.02 (.01)**	.09 (.01)***	.09 (.01)***
Profitability (ROA) <sup>1</sup>	2.44 (.49)***	2.46 (.50)***	-.22 (.01)***	-.22 (.06)***
Sales Growth <sup>1</sup>	2.85 (.61)***	2.91 (.62)***	-	-
CMO Presence <sup>5</sup>	.08 (.16)	.07 (.16)	.01 (.02)	.01 (.02)
Outsider CEO x CMO Presence <sup>6</sup> (H <sub>9c</sub> )	-	-.26 (.36)	-	.04 (.05)

Table shows parameter estimates along with standard estimates in parenthesis.

All time-varying variables averaged across period of observation (2000 to 2004).

\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$

<sup>1</sup> Tobin's Q, sales growth, innovation, differentiation, prior performance, and profitability are the raw values minus the median values at the two-digit SIC level.

<sup>2</sup> N=156. Model 1a: Adj. R<sup>2</sup> = 0.46; F<sub>(15,140)</sub> = 9.73 ( $p < 0.001$ ). Model 1b: Adj. R<sup>2</sup> = 0.46; F<sub>(16,139)</sub> = 9.13 ( $p < 0.001$ ).

<sup>3</sup> N=165. Model 1a: Adj. R<sup>2</sup> = 0.32; F<sub>(14,150)</sub> = 6.50 ( $p < 0.001$ ). Model 1b: Adj. R<sup>2</sup> = 0.32; F<sub>(15,149)</sub> = 6.12 ( $p < 0.001$ ).

<sup>4</sup> Prior Performance is the value of the dependent variable in the year before the period of observation.

<sup>5</sup> CMO presence coded as 1 (0) for firms with (without) a CMO for more than half the period of observation of 2000 to 2004.

<sup>6</sup> Sample interaction between factor associated with CMO presence and CMO presence. All other similar interactions were also non-significant.

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<sup>1</sup> The top management team (TMT) is defined as the executive officers as specified by the firm.

<sup>2</sup> The Chief Marketing Officer (CMO) refers to an executive in the TMT explicitly responsible for marketing. Titles of these executives include, but are not limited to, CMO and Vice President Marketing.

<sup>3</sup> The model for CMO presence implies multiple two-way interactions between CMO presence and the factors associated with it, in the model of firm performance. For simplicity we do not present the latter.

<sup>4</sup> The prior empirical research that we refer to has also demonstrated that CMOs can vary in their roles. For example, Piercy (1986) finds that CMOs vary in the extent to which they are responsible for selling, product policy, marketing services, corporate strategy, and physical distribution. Hyde et al. (2004) distinguish between three emerging CMO models which, in the order of increasing strategic (versus tactical) responsibility, are Marketing Service Providers, Marketing Advisors, and Drivers of Growth. We are unable to distinguish between these models in our research given the use of secondary data. However, we expect CMOs identified in our study to have a primarily strategic role with respect to the marketing domain, since unlike these studies, we include as CMOs, only those executives listed in the TMT (no such criterion for inclusion is mentioned in these aforementioned studies).

<sup>5</sup> It might be argued that TMT executives with marketing backgrounds may also play this role. However, they, regardless of functional backgrounds, are not explicitly focused on this role, given constraints of their own roles as CEO, COO, or heads of divisions, regions, or other functions (Gilliatt and Cuming 1986).

<sup>6</sup> We thank an anonymous JM reviewer for suggesting a thorough exploration of the CEO’s role.

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<sup>7</sup> The break-up of the sample by industry (2-digit SIC) was: 38 firms in Business Services (SIC 73); 37 in Industrial Machinery & Equipment (SIC 35); 29 in Electrical and Electronic Equipment (SIC 36); 21 in Chemicals and Allied Products (SIC 28); 19 firms in Instruments and Related Products (SIC 38); 7 firms in Rubber and Miscellaneous Plastic Products (SIC 30); 6 firms in Fabricated Metal Products (SIC 34); 4 firms in Furniture and Fixtures (SIC 25); 3 firms in Paper and Allied Products (SIC 26); and 3 firms in Primary Metal Industries (SIC 33).

<sup>8</sup> We thank an anonymous JM reviewer for pointing out the importance of excluding the CMO while calculating the TMT's experience in marketing and general management.

<sup>9</sup> Since the distributions were skewed, it is more appropriate to use the median, and not the mean, as a measure of central tendency or as a control (Hambrick and Cannella 2004; Rao et al. 2004).

<sup>10</sup> We checked for any possible endogeneity by introducing the residual, from a logistic regression of CMO presence on variables from the model of CMO presence and from the model of performance, into the model of performance. The estimate for this residual was not significant suggesting that endogeneity was not an issue (Woolridge 2003).

<sup>11</sup> We also checked other CEO-related variables like whether the CEO was also Chairman, whether the CEO had been a COO of the firm, whether the CEO's dominant experience was in output functions (which included marketing, manufacturing and R&D) or in finance/law. None of these variables were significant. It is possible that the observation period of five years is a limitation in this regard since we observed a change in CEO in only 10.6% of the firm-years in this period. Any CEO related influence on the decision to have a CMO may be relevant only in the year the CEO gets appointed.

<sup>12</sup> CMO presence in SIC industries was: 56% in SIC 73; 41% in SIC 35; 39% in SIC 36; 21% in SIC 28; 52% in SIC 38; 34% in SIC 30; 30% in SIC 34; 30% in SIC 25; 33% in SIC 26; and 33% in SIC 33.