

D. ERIC BOYD, RAJESH K. CHANDY, and MARCUS CUNHA JR.*

Recent discussions in academic literature and the business press often paint an unflattering picture of the contributions of chief marketing officers (CMOs) to the financial value of their firms. Some even suggest that CMOs, despite being the marketing leaders in firms, have little or no effect on firm performance. However, formal empirical research on the impact of CMOs on financial performance is scarce. This article presents conceptual arguments and empirical evidence about this controversial issue. The authors suggest that CMOs are far from irrelevant to the financial performance of firms. However, the impact of CMOs on financial performance is highly contingent on the managerial discretion available to them. Focusing on the role of customer power in limiting the managerial discretion available to CMOs, this study identifies individual and firm-specific conditions in which CMOs contribute more or less to firm value. Analyses of abnormal stock returns associated with the appointment of CMOs provide support for the hypothesized effects of customer power and managerial discretion.

Keywords: chief marketing officer, customer power, event study methodology, firm value, marketing function

When Do Chief Marketing Officers Affect Firm Value? A Customer Power Explanation

To aspiring marketing graduates of today's business schools, the chief marketing officer (CMO) embodies the highest position of leadership within the marketing function of a corporation. It is a job in great demand. As a recent issue of *Advertising Age* (McLane and Selby 2007, p. 7) put it, "So, you want to become a chief marketing officer? Get in line." As the primary functional executive with responsi-

bility over marketing strategy, CMOs help orchestrate activities that are central to their firms. Because the CMO is the most direct steward of a firm's customers, and customers are among the few stakeholders who actually provide the revenues that keep a firm running, the CMO has great responsibility (Court 2007).

However, it is also a job that seems to be in great peril. Some observers have noted that the most serious challenge facing CMOs may be justifying their own existence—both within the firm and to Wall Street (Wheaton 2007). For example, a recent survey indicates that the average tenure of CMOs in large firms is only 23 months (McGirt 2007). Furthermore, CMOs have variously been described as the "dead man (or woman) walking" (Kiley and Helm 2007, p. 63) and as holding "the most dangerous job in business" (McGirt 2007, p. 33). Publicly held firms are particularly difficult places for CMOs, given the intense pressures from Wall Street to demonstrably create value (Wheaton 2007).

Despite the concern with and controversy surrounding the CMO position, much of what is known about their impact on firm performance is based on anecdotal information (cf. Nath and Mahajan 2008). Part of the challenge is empirical.

*D. Eric Boyd is the Wampler-Longacre Professor of Marketing and Associate Professor of Marketing, College of Business, James Madison University (e-mail: boydde@jmu.edu). Rajesh K. Chandy is Tony and Maureen Wheeler Chair in Entrepreneurship, Professor of Marketing, and Academic Director of the Institute for Innovation and Entrepreneurship, London Business School (e-mail: rchandy@london.edu). Marcus Cunha Jr. is the Michael G. Foster Associate Professor of Marketing, Foster School of Business, University of Washington (e-mail: cunhamv@uw.edu). The authors thank Alina Sorescu for her useful suggestions and are grateful for the helpful feedback of the three anonymous *JMR* reviewers. The first author acknowledges the research grant support provided by the James Madison University College of Business. The second author acknowledges the financial support of the Center for Marketing at London Business School. Leigh McAlister served as associate editor for this article.

The CMO operates as part of a larger management team, and he or she is unlikely to be solely responsible for driving performance up or down. As such, it is difficult to isolate the impact of the CMO on the firm relative to the impact of other managers in the firm. Thus, because marketing outcomes cannot always be easily quantified, CMOs may end up getting less credit, and more blame, than they deserve.

The uncertainty surrounding the role of the top marketing executive in the firm has important implications for marketing practice and theory. On the practice side, the uncertainty could cause some chief executive officers (CEOs) to conclude that marketing does not deserve a formal place at the corporate table. Such a conclusion would greatly reduce marketing's strategic influence within firms and weaken the ability of managers to acquire the resources needed to carry out marketing activities. On the theory side, a lack of empirical evidence relating CMOs to firm performance could lead researchers to question whether marketing's role in top management deserves further attention. Such a viewpoint would greatly limit the scope of marketing's contribution to advancing the understanding of firm strategy.

This research examines the conditions under which CMOs affect firm value. With this article, we make three contributions. First, we add to nascent academic literature on the role of CMOs in driving firm performance. In one of the few systematic studies on this topic, Nath and Mahajan (2008) suggest that the absence or presence of a CMO does not affect firm performance (see also Weinzimmer et al. 2003). As a next step in the evolution of this research area, we want to go beyond the question whether CMOs affect firm performance. Instead, we argue and demonstrate empirically that individual CMOs vary considerably in their contribution to firm performance. Thus, we move toward a more nuanced understanding of the likely impact of CMOs on firm performance.

Second, we propose an explanation for why some CMOs have a greater impact on firm value than others. We begin by outlining the roles of CMOs in the firms they help manage. We then draw on well-established literature on top management performance (Hambrick and Finkelstein 1987; Hambrick and Mason 1984) to introduce managerial discretion as a basis to understand differences in performance among top managers. Next, we apply the general management concept of managerial discretion to the specific marketing context of CMOs by linking CMOs' effects on firm value to customer power (Christensen and Bower 1996; Gaski and Nevin 1985). Our focus on customer power—or the ability of a customer to cause a selling firm to undertake actions it would not have undertaken otherwise—recognizes a trend toward consolidation on a global basis, which has resulted in the emergence of a few giant players in many industries (Farris and Ailawadi 1992). Firms increasingly rely on individual customers for larger and larger shares of their revenue; indeed, research indicates that the sales made by the average firm to its largest customer rose from 10% in 1989 to more than 26% in 1997 (Gosman and Kelly 2002). We argue that as customers become more powerful, so does their impact on the discretion that CMOs have in fulfilling their roles: Powerful customers give CMOs less discretion. However, not all CMOs find customer power debilitating. The effects of customer power can be enhanced or mitigated depending on the particular background the CMO brings to

the job and the organizational context in which the firm operates.

Third, we examine how the stock market reacts to CMOs. The precarious tenure of many CMOs is often attributed to Wall Street's apparent impatience and its insistence on tangible proof of the effectiveness of marketing activities. We attempt to provide some guidelines to aspirants for top marketing positions, as well as to firms considering prospective candidates for such positions, about attributes to develop in themselves and in those they consider that increase the odds of creating shareholder value. Our approach, which examines abnormal stock returns due to CMO appointments, enables us to isolate empirically the effect of the CMO on firm performance and, thus, to separate the impact of the CMO from that of all other executives who might also affect firm performance. Isolating the CMO's impact is an important step in making the case for marketing's role in driving firm performance.

In the next section, we develop a conceptual framework and hypotheses that link CMOs to firm value. We then test our arguments empirically, explaining variation in stock returns associated with CMO appointments across firms. We find strong support for our hypothesized model and discuss the theoretical and managerial implications of our findings. We conclude by identifying limitations to the research and providing directions for further research.

CONCEPTUAL BACKGROUND

The Role of the CMO

The CMO is a member of the top management team responsible for providing strategic leadership regarding the marketing activities of a firm. As a leader with responsibility over marketing, the CMO can play at least three roles that provide the opportunity to influence firm performance. First, the CMO can play an *informational* role by helping identify new market opportunities for a firm to pursue and threats to guard against. The informational role of CMOs can enhance firm value by providing new revenue streams from existing and new customers. Second, the CMO can play an important *decisional* role by helping determine the level and type of investments to be made in activities associated with the marketing function. Even when others on the management team make key decisions, the CMO can contribute a customer perspective to these decisions. Third, the CMO can play a *relational* role by developing and managing a firm's relationships with external stakeholders, such as customers, advertising agencies, and alliance partners. The informational, decisional, and relational roles of the CMO, at least in theory, help firms increase their competitive capabilities in ways that enhance firm value.

In practice, however, not all CMOs contribute much to firm value. For example, Nath and Mahajan (2008) find that neither the absence nor the presence of a CMO in the top management team of a firm had any effect on a metric related to firm value, Tobin's *q*. Whereas Weinzimmer and colleagues (2003) report a positive effect of CMOs on sales growth, Nath and Mahajan (2008) report no effect. Taken together, these studies suggest that the effect of CMOs on firm value is a mixed bag. In some circumstances, CMOs may contribute a great deal to firm value. In others, they may actually reduce firm value. In still other situations, they may have no effect at all on firm value. Our current state of

knowledge begs the question, When do CMOs create firm value? Prior literature is silent on this crucial question. Thus, to address this question, we first review general literature on top management performance and highlight the concept of managerial discretion as a crucial factor in explaining the impact of top managers on firm value.

Managerial Discretion and CMO Performance

Top managers vary in their impact on the firms they lead. A key explanation for the variation in the extent to which top managers affect firm performance is the concept of managerial discretion, as proposed by Hambrick and Finkelstein (1987). Managerial discretion refers to the strategic latitude of top managers and captures their ability and freedom to make decisions and take actions that, in their judgment, are most likely to yield successful performance outcomes (see Crossland and Hambrick 2007).

The literature on managerial discretion provides a theoretical framework to explain differences in the performance impacts of top managers. First, a significant stream of work emphasizes the role of external stakeholders in increasing or reducing the discretion available to managers by pressuring managers to take or preventing them from taking certain actions (Greening and Gray 1994; Peteraf and Reed 2007). As a voice for the customer, the CMO is responsible for understanding the concerns and interests of customers and ensuring that the voice of this critical stakeholder group is disseminated throughout the organization. However, customers are not inert actors, and this has implications for the CMO's managerial discretion.

Second, the literature on managerial discretion emphasizes the role of individual-specific and firm-specific contingencies in explaining the performance of top managers. Individual-specific moderating factors include the experiences and skills that top managers bring to their positions (Magan and St-Onge 1997; Preston, Chen, and Leidner 2008). In line with this literature stream, we expect that the experience CMOs bring to their jobs—both in their roles as CMOs and with the firms they help lead—moderates the relationship between customer power and CMO contributions to firm value. Firm-specific moderating factors include the resources available to the firm and the scope of the firm (Finkelstein and Boyd 1998; Magnan and St-Onge 1997). Accordingly, we expect firm-level factors, such as firm size, firm performance (which, as we note subsequently, suggests greater resources), and firm scope, to moderate the relationship between customer power and CMO contributions to firm value. These contingencies ensure that discretion varies substantially across CMOs and across the contexts in which they manage (Crossland and Hambrick 2007; Hambrick and Abrahamson 1995).

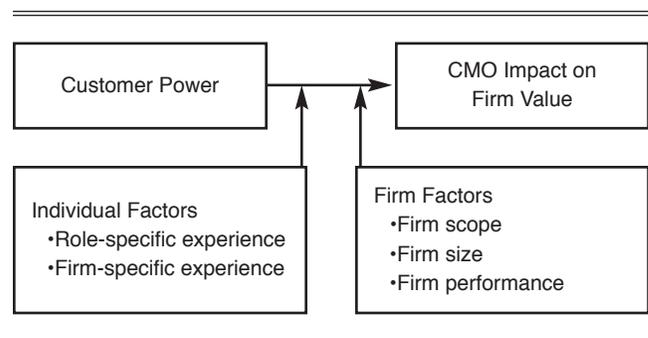
Figure 1 provides a pictorial overview of our arguments. In the following section, we elaborate on the relationships in Figure 1 by describing the conditions in which CMOs are likely to have the managerial discretion to perform their informational, decisional, and relational roles.

HYPOTHESES

Customer Power and CMO Discretion

According to the literature on power and dependence, customers and the sales they provide represent valued resources in the firm environment that are essential for the

Figure 1
CMO EFFECTS AND FIRM VALUE



firm's survival (Pfeffer and Salancik 1978). Staying true to the definition of power offered in the marketing literature (e.g., Gaski and Nevin 1985), we define customer power as the ability of a customer to cause a selling firm to undertake actions it would not have undertaken otherwise. We note that individual customers who represent a substantial revenue stream for a firm can gain power over the firm's actions and decisions because of their economic importance in determining the firm's performance (Pfeffer and Salancik 1978). Although power is generally defined as an ability rather than a behavior, anecdotal evidence indicates that customers often exert their power. For example, Wal-Mart, with its clout as a major customer of many consumer packaged goods firms, and General Motors, a major customer of many auto parts suppliers, consistently exert power over suppliers to force price concessions and product modifications. Similarly, large U.S. airlines, such as Delta, Continental, and United, are major customers of feeder airlines, such as ExpressJet, Pinnacle, Atlantic Southeast, Mesaba, and Comair, and exert their power over these airlines to wring cost cuts and schedule changes from them. Substantiating this anecdotal evidence is research that reveals a proclivity for major customers to exercise their power through tactics such as requiring price concessions (Balakrishnan, Linsmeier, and Venkatachalam 1996) and investment in their interests at the expense of other existing and potential customers (Christensen and Bower 1996). This response to the possession of power is captured more generally in Gaski and Nevin's (1985) work, which reveals that the more a customer possesses power, the more likely it is to exercise that power in its relationships with sellers.

Responding to a powerful customer can affect a CMO's managerial discretion in ways that have important consequences for the CMO's contribution to firm value. According to Christensen and Bower (1996), firms feel pressures from powerful customers to undertake more limited information searches by limiting their environmental scanning activities to the interests of the powerful customer. In such cases, customer power limits a CMO's managerial discretion associated with performing the informational role involving the identification of new market opportunities. The push by powerful customers to focus on their interests also affects the flow of resources within a firm by resulting in the investment of the firm's financial, human, and capital resources in activities that focus on the current needs of the powerful customer. As a result, the decisional role of a

CMO becomes more constrained and short-term oriented in the presence of a powerful customer. In addition, fear about losing the resources provided by a powerful customer can cause a firm to become risk averse and escalate its commitment along strategic paths focused solely on the powerful customer's interests. As Christensen and Bower (1996) demonstrate, this focus can cause the firm to ignore important technological trends that can eliminate the firm's competitive advantage. A CMO's ability to forge a broad set of relationships, and thus his or her relational role, is also limited by the strain that powerful customers place on investment resources. For example, prior research has demonstrated that powerful customers can bargain away efficiency benefits associated with investments made to increase productivity, leaving few resources to invest in relational activities (Balakrishnan, Linsmeier, and Venkat-achalam 1996).

Overall, we expect that customer power limits a CMO's focus and attention in performing his or her informational role, limits the focus of the CMO's investment activity associated with his or her decisional role, and limits the CMO's latitude in forming strategic relationships. Together, the effect of customer power on CMO managerial discretion should limit the CMO's contribution toward creating value. This leads us to the following hypothesis:

H₁: CMOs create less (versus more) market value in firms that are exposed to more (versus less) customer power.

With these arguments, we expect that, all else being equal, customer power has a negative effect on the extent to which CMOs create value. However, not all CMOs are equally debilitated by the effects of customer power. Therefore, we note the role of individual- and firm-level factors in affecting the discretion of CMOs facing powerful customers in performing their informational, decisional, and relational roles.

Individual Factors and the Effect of Customer Power

Role-specific experience. Role-specific experience describes a person's depth of experience in performing activities associated with a given role. Role-specific experience as a CMO should limit the effect of customer power on managerial discretion for several reasons. First, prior experience enables the CMO to perform his or her roles more quickly and accurately (Melone 1994). For example, top management experience should aid a CMO in performing the informational role by enabling him or her to exploit the limited amount of attention that powerful customers allow to consider activities and events unrelated to the interests of the powerful customer. Second, experts are more productive in general. Role-specific experience can offset the limiting effect of powerful customers on CMOs' discretion in their decisional role by helping them manage the resources devoted to activities unrelated to the interests of a powerful customer. Third, the legitimacy associated with prior experience provides CMOs with a source of power that they can use to acquire a greater share of limited resources than otherwise would be available in the presence of a powerful customer. Fourth, role experience should assist a CMO in performing the relational role by enabling him or her to overcome a powerful customer's drain on managerial attention and more quickly identify and forge relationships with

other firms. On the basis of these arguments, we propose the following:

H₂: The negative effect of customer power on the market value a CMO creates is lower (versus greater) when the CMO has more (versus less) role-specific experience.

Firm-specific experience. Firm-specific experience describes a person's depth of experience in operating within the firm for which he or she currently works. A common distinction in accounting for the firm-specific experience of top managers is the designation of a person as an insider (i.e., who worked for the focal firm before taking a top management position) or an outsider (i.e., who did not previously work for the firm). In contrast with the positive effect of role-specific experience, firm-specific experience is likely to exacerbate the negative impact of customer power for several reasons.

First, the appointment of an insider is generally viewed as an endorsement of the firm's status quo, whereas the appointment of an outsider is viewed as an attempt to break from the past (Finkelstein and Hambrick 1996). This difference suggests that insiders who serve a powerful customer will experience internal resistance to performing their informational role in any ways that are unrelated to the interests of the powerful customer. Outsiders will be permitted greater discretion to engage in search activity that is less focused on a powerful customer. Outsiders will also be less committed to follow past investments in their decisional role, because they bring new perspectives and behaviors that call into question the routines and norms that have supported the firm's focus on the interests of a powerful customer (Peteraf and Shanley 1997). Second, self-justification or managerial hubris can increase insiders' commitment to past investments, and this can exacerbate commitment to the interests of a powerful customer at the expense of other market opportunities. Third, the network of contacts outside a firm that an outsider brings to the CMO position provides opportunities that otherwise may not have been evident in the presence of a powerful customer that demands high levels of managerial attention. As such, we argue the following:

H₃: The negative effect of customer power on the market value a CMO creates is greater (versus lower) when the CMO is an insider (versus an outsider).

Firm Factors and the Effect of Customer Power

There is also reason to expect that firm-level factors play a role in moderating the impact of powerful customers on CMOs' managerial discretion with respect to their informational, decisional, and relational roles. A review of the literature suggests that three factors have special importance for the impact of customer power on the discretion of CMOs: firm scope, firm size, and prior firm performance.

Firm scope. Firms with greater scope compete in more markets. We expect that the number of markets in which a firm competes moderates the effect of customer power in a positive manner. A reason for this expectation is that each market provides a link between a firm and the environment in general. These linkages serve as conduits, through which a broad array of information about the environment enters into the firm; this conduit can enhance CMOs' ability to perform their informational role of staying abreast of environ-

mental changes, despite pressures from powerful customers to focus solely on their interests.

Competing in multiple markets also enhances a CMO's managerial discretion relative to his or her decisional role. Typically, each market requires managing different channel member relationships, supporting past and present customers, and working with different suppliers. These activities create a set of preexisting market obligations that CMOs must support with resources, and these obligations create resistance that counters the flow of resources toward a powerful customer. Furthermore, the market-sensing connection that each market provides enhances the CMO's decisional role because each connection alerts the CMO to investment opportunities that otherwise may have been overlooked because of his or her focus on the powerful customer. These connections also alert the CMO to external events that can trigger a reassessment of past investments related to customer power. Finally, competing in multiple markets enhances the CMO's relational role because each unique market provides a conduit for unique information about opportunities for alliances and other exchange relationships. As such, CMOs in firms with large scope can better fulfill their relational roles, despite the presence of powerful customers. Overall, these arguments suggest the following hypothesis:

H₄: The negative effect of customer power on the market value a CMO creates is lower (versus greater) when the CMO's firm has a larger (versus smaller) firm scope.

Firm size. The size of a firm may moderate the effect of customer power on a CMO's managerial discretion, but the direction of this is not clear from a literature review. There is reason to expect that the negative impact of a powerful customer on the managerial discretion of a CMO is greater in larger versus smaller firms. According to Workman, Homburg, and Gruner (1998, p. 33), when a firm's customer base includes a major customer, "it is more common for marketing activities to be dispersed across organizational units" because of the time and resource demands a major customer places on a firm (Bowman and Narayandas 2004). A result of this dispersion is that the informational, decisional, and relational roles performed by the CMO get distributed throughout the organization rather than residing primarily in the corporate marketing function; in turn, this dispersion lowers the level of autonomy that the CMO, who sits at the corporate level, enjoys. The dispersion of marketing activities across organizational units is likely to be greater in larger than smaller firms (Workman, Homburg, and Gruner 1998).

Yet larger firms also may create conditions that limit the effect of customer power on managerial discretion. From a relational perspective, partnering with a large firm confers legitimacy on the partnering firm; as a result, firms often seek out larger firms for partnering opportunities. Large size might aid a CMO in performing his or her relational role by providing a consistent flow of partnering opportunities, even in the presence of powerful customers. The greater network of partners available to a large firm can also aid a CMO in his or her informational role. Each network linkage serves as a channel of information about opportunities and threats. Thus, these linkages can provide a CMO with important information that may not have been gathered in

the presence of a powerful customer. Finally, large firms provide a large resource base internally, have easier access to external resources such as investment funding, and may be less resistant to change (Chandy and Tellis 2000); each of these factors potentially offsets the limiting effects of customer power on the decisional role of the CMO. Given the competing arguments on the role of firm size, we offer the following competing hypotheses:

H₅: The negative effect of customer power on the market value a CMO creates is (a) lower (versus greater) when the CMO's firm is larger (versus smaller) in size or (b) greater (versus lower) when the CMO's firm is larger (versus smaller) in size.

Firm performance. A final factor that should affect the extent to which a CMO influences firm value is the past performance of the firm to which the CMO is appointed. Prior research suggests that a CMO is more likely to undertake a limited search of the environment if performance does not deviate below preestablished aspiration levels (Baum and Dahlin 2007). A key factor determining a CMO's aspiration level is the firm's past performance (Cyert and March 1963; Levinthal and March 1981). For CMOs at firms with greater past performance, achieving the aspiration level is more difficult, which makes it more likely that the CMO will scan the environment in search of opportunities beyond those provided by the major customer to support performance equal to that in prior years. Thus, the CMO will have more discretion in performing his or her informational role. In addition, greater past performance provides marketing with greater legitimacy. A key role for marketing is to link customers to sales outcomes (Moorman and Rust 1999). Because of the importance of sales to a firm's survival, generating sales from customers enables marketing to achieve greater legitimacy. This legitimacy serves as a power base that increases the CMO's influence within the firm and his or her ability to acquire resources in support of his or her decisional role performance (Homburg, Workman, and Krohmer 1999). Finally, past performance is an important criterion that other firms look for when choosing a partner for strategic relationships. Thus, firms with greater past performance will be sought out by other firms, and this should enhance CMO discretion related to a relational role.

H₆: The negative effect of customer power on the market value a CMO creates is lower (versus greater) when the CMO's firm has experienced greater (versus lower) past performance.

METHOD

As we noted previously, an empirical challenge in studying the impact of the CMO on firm value is that CMOs are not alone in influencing firm performance. Other top executives affect performance, and our empirical approach needs to isolate the effect of the CMO compared with other executives. To isolate the impact of CMOs, we focus on a context that naturally permits a calculation of the marginal impact of CMOs on firm value: new CMO appointments. We conduct an event study to calculate the abnormal returns associated with the announcement of the appointment of new CMOs. Our measure of financial performance captures investors' expectations regarding the future cash flows expected by the appointment of the CMO, after accounting

for all other effects due to the firm and the market (Brown and Warner 1985). After calculating the financial outcomes associated with the appointment of the CMO, we regress these outcomes on the independent variables in our hypotheses.

Sample

To test the relationship between CMOs and firm value, we first identified all announcements of CMO appointments in major daily newspapers and wire services such as the *Wall Street Journal*, PR Newswire, and Dow Jones Newswire between 1996 and 2005. To preserve comparability across all appointments considered in the analysis and ensure consistency with the objectives of the study, we only included an appointment in our sample if it specifically classified the person as being appointed to the position of CMO.

We did not restrict the industries sampled; however, we limited the sample to publicly traded firms because our focus is on firm value, as measured by changes in the stock price of a firm. We removed from the sample any CMO appointments that involved confounding events, which we identified by following recommendations from prior event study research (McWilliams and Siegel 1997); that is, we examined daily newswires and newspapers for a five-day window around the announcement date. The final sample consists of 88 CMO announcements made by publicly traded firms. The size of our sample is similar to that of prior research examining top management appointments (e.g., Chatterjee, Richardson, and Zmud 2001).

To ensure that the inferences we drew from the data were reliable, we conducted extensive analyses to check for leverage, outliers, and influential points, as Belsley, Kuh, and Welsch (2004) recommend. We found no cases that met the standard thresholds for leverage, outliers, or influential points, which suggested that one or two cases were not driving the results alone. Given the contingent nature of several hypotheses, we checked whether the expected values in each cell involving the contingency variables were higher than those needed to make reliable statistical inferences. Specifically, we checked whether the expected values in each cell were greater than the conservative value of 5 recommended by Cochran (1954) or the updated values recommended by Hogg and Tanis (2009). The expected values in all cases were greater than the most conservative recommended values, suggesting that the statistical inferences drawn from these tables are reliable.

Dependent Variable

There is a long history of research examining top management performance according to stock price reactions related to the appointment and/or dismissal of key executives. Consistent with this research, we used the event study methodology from the finance literature to measure the financial effect of CMOs by assessing how their appointment affected the stock price of the appointing firm (Brown and Warner 1985; McWilliams and Siegel 1997). The event study method identifies abnormal movement in the appointing firm's stock price on the day the firm announces the appointment of a CMO. The market model associated with the event study method defines the event of interest as k and the event announcement day as t , and it estimates the rate of return on the stock price of firm i on day t according to the following equation:

$$(1) \quad R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it},$$

where R_{it} denotes the rate of return on the stock price of firm i on day t , R_{mt} denotes the corresponding daily returns on the value-weighted Standard & Poor 500 on day t , α_i denotes the intercept term, β_i denotes the systematic risk of stock i , and ε_{it} denotes the residual of the estimation (assumed to be distributed i.i.d. normal). We then used the estimates obtained from the market model to estimate abnormal returns (AR) for each announcing firm using the following equation:

$$(2) \quad \varepsilon_{it} = AR_{it} = R_{it} - (\alpha_i + \beta_i R_{mt}),$$

where we obtain the ordinary least squares parameter estimates by regressing R_{it} on R_{mt} over an estimation period of 250 days before the event k . We can also obtain cumulative abnormal returns by summing the individual abnormal return for each firm across time to account for information leakage before the event day or information dissemination after the event day.

Our choice of the market model is consistent with prior research examining the financial impact of various top management appointments (e.g., Ang, Lauterbach, and Yu 2003; Fich 2005), as well as with prior work (e.g., Brown and Warner 1985; Srinivasan and Hanssens 2009), which suggests that the market model is appropriate for measuring short-term abnormal returns. In addition, Brown and Warner (1985, p. 25) state that "methodologies based on the [ordinary least squares] market model and using standard parametric tests are well specified under a variety of conditions." Consistent with prior research (Chaney, Devinney, and Winer 1991), we chose the event time frame with the most significant abnormal stock return for analysis purposes; in our data, that window was the event day window. Using the event day also offers power advantages and aligns with recent recommendations (Srinivasan and Bharadwaj 2004). In their review of event study methodology, McWilliams and Siegel (1997) suggest that the event window should be set equal to 1 (i.e., the event day) if the information in the event announcement is unanticipated and the event occurs on the announcement date. As we discuss subsequently, our results are robust to the use of alternative event windows. A review of trade periodicals, newspapers, and daily wire services suggests no discussion of the CMO appointments in the sample during the announcement window.

We also analyzed the event day abnormal returns using a Wilcoxon sign-rank test. The Wilcoxon sign-rank test statistic was negative but not significant ($p = .49$). The low level of significance for the event day window reflects the wide variation in stock price reactions (positive 46%; negative 54%) within the sample. The average abnormal stock return on the event day was .003, with a standard deviation of .052. Following prior research (e.g., Srinivasan and Bharadwaj 2004), we used the standardized abnormal returns on the event day in the analyses we report to minimize the potential for heteroskedasticity in our results.

Independent Variables

We used secondary data to construct the independent variables employed to test the hypotheses. Table 1 provides an overview of the measures and the data sources from which we collected the data to measure each variable.

Table 1
SUMMARY OF MEASURES AND DATA SOURCES

<i>Conceptual Variables</i>	<i>Measure</i>	<i>Data Source</i>
Customer power	Presence of a major customer	10-Ks, annual reports
Role-specific experience	Appointee had prior experience as a CMO	Hoovers, annual reports, Factiva
Firm-specific experience	Appointee had prior experience with appointing firm	Hoovers, annual reports, Factiva
Firm scope	Number of market segments reported by appointing firm	10-Ks, annual reports
Firm size	Number of employees within appointing firm	COMPUSTAT
Firm performance	Average five-year sales growth for appointing firm	10-Ks, annual reports
Industry research and development (R&D)	Average five-year R&D-to-sales ratio for firms in industry of appointing firm	COMPUSTAT, 10-Ks
Industry advertising	Average five-year advertising-to-sales ratio for firms in industry of appointing firm	COMPUSTAT, 10-Ks
Industry capital intensity	Average five-year ratio of property, plant, equipment to number of employees for firms in industry of appointing firm	COMPUSTAT, 10-Ks
Industry sales volatility	Average five-year change in sales level for firms in industry of appointing firm	COMPUSTAT, 10-Ks
CMO new position	Appointing firm had no CMO before appointment	Hoovers, annual reports, 10-Ks
Book-to-market value	Book-value-to-market-value ratio for appointing firm	COMPUSTAT, 10-Ks
High-tech	Appointing firm within a high-technology industry	Bureau of Labor Statistics
CMO top 5 compensation	Appointee one of the top five highest paid officers within appointing firm	10-Ks, annual reports

Customer power. Our primary measure of customer power assesses the absence or presence of a major customer. We chose this measurement approach for several reasons. First, prior marketing research has recognized the power that major customers wield. For example, Heide and John (1992, p. 36) note that “[b]uyers who account for larger proportions of a supplier’s output may acquire more control because of their influence and prominence.” Second, this measurement approach is consistent with prior research examining customer power (Anderson, Daly, and Johnson 1999). Third, this approach recognizes a growing trend within marketing, namely, the increasing prevalence of major customers; average sales percentages by firms to their largest customers rose from 10% in 1989 to 26% in 1997 (Gosman and Kelly 2002). Fourth, top managers recognize that major customers drive the activities undertaken by firms. For example, in a study of senior management decision making, Sharma and Henriques (2005, p. 167) quote a senior manager who describes the reason for operational changes as the desire to “reassure our major customers.”

We measured customer power dichotomously (presence or absence of major customers) for several reasons. First, data on the presence or absence of major customers were available for all publicly held firms. The Financial Accounting Standards Board (1997) requires firms to report in their 10-K filings the name of any customer representing 10% or more of firm sales. However, for competitive reasons, few firms report sales information for individual customers, so those data were unavailable and potentially unreliable for many firms (Botosan and Stanford 2005). Second, the dichotomous measure has been used consistently in prior research on top managers; therefore, our use of this measure allows for greater comparability with existing research (see Balakrishnan, Linsmeier, and Venkatachalam 1996). Third, the results from a more continuous measure of customer power, which we describe in the Appendix, yielded similar results to those using the dichotomous measure.

Role-specific experience. We measured an appointed CMO’s role-specific experience according to whether the appointee had served as a CMO before the appointment.

This approach is consistent with prior research that recognizes the distinctive nature of experience in the upper echelons of a firm. Ideally, we wanted to measure the number of years of CMO-related experience for an appointed CMO. However, the availability of these data varied considerably across CMOs within the sample. To retain an adequate sample of CMO appointments, we used a dummy variable, such that we assigned a value of 1 when the appointed CMO had CMO or higher role experience and a value of 0 if he or she did not. We describe the results from an alternative (more continuous) measure of role-specific experience in the Appendix.

Firm-specific experience. The level of firm-specific experience of a CMO reflects whether an appointed CMO had prior work experience with the appointing firm. We reviewed annual reports to and financial filings (e.g., 10-K, 8-K) with the Securities and Exchange Commission and discussions in trade journals to ascertain the tenure of each CMO appointee at the time of his or her appointment. Consistent with prior research (Worrel, Davidson, and Glascock 1993), we used a dummy variable to capture the firm-specific experience of an appointee. We coded all CMO appointees not employed by the appointing firm at the time of the appointment as 0 (less firm-specific experience/outsider) and all other appointees as 1 (more firm-specific experience/insider). As we did for the other dichotomous measures in our analyses, we also considered an alternative (more continuous) measure of firm-specific experience, as we discuss in the Appendix.

Firm scope. We measured firm scope with a count of the number of market segments managed by the appointing firm. In SFAS No. 131 (see Financial Accounting Standards Board 1997, p. 4), which we drew on to measure firm scope, companies must report disaggregated information about all operating segments of the firm “about which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.” Our segment-based measure provided a conceptual fit with our discretion-based arguments. We used the natural log of the segment

measure because the measure demonstrated high levels of kurtosis and skewness.

Firm size. We measured firm size as the number of employees in the appointing firm. We used the natural log of the firm size measure because it demonstrated high levels of kurtosis and skewness. We obtained the number of employees from the COMPUSTAT database. Our use of the number of employees as a measure of firm size is consistent with prior research examining top management's contribution to market value (Rajagopalan and Datta 1996).

Firm performance. Our discussion of the role of prior performance focused on how prior performance increases CMO discretion by setting aspiration levels, making resources available for CMOs, and enhancing CMOs' legitimacy within firms. One measure of past performance pertaining to all three of these outcomes is sales growth. From an aspiration perspective, sales growth is the most common objective mentioned by senior managers and provides a visible point of reference to motivate managerial activity (Brush, Bromiley, and Hendrickx 2000). Sales also represent the lifeblood of an organization, so sales growth represents an important means for resources to enter an organization. Finally, generating sales is a responsibility that falls primarily on the marketing domain. Therefore, the legitimacy of marketing should rise and fall as sales levels grow and contract (Homburg, Workman, and Krohmer 1999). Consistent with prior research (e.g., Finkelstein and Boyd 1998), we measured sales growth as the average five-year sales growth for each firm in the sample.

Control variables. Additional factors may influence investors' expectations about how the appointment of a CMO affects an appointing firm's future economic performance. From an industry perspective, managerial discretion should be higher in industries characterized by higher average industry research and development and advertising spending because of the greater opportunities for differentiated strategies in such industries (Hambrick and Finkelstein 1987). Alternatively, higher average capital intensity within an industry tends to motivate firms to adopt strategies based on economies of scale, which limits the discretion available to managers (Hambrick and Finkelstein 1987). Finally, industries with greater variability in sales are more dynamic and better able to support a wider array of strategic options (Boyd 1995). All these measures reflect the industry average over the five years before a CMO appointment.

At the firm level, we included a measure indicating whether the appointing firm was a high-tech firm, with the expectation that CMOs' managerial discretion would be lower in such firms (Workman, Homburg, and Gruner 1998). We also included a variable indicating whether the appointment involved the establishment of the CMO position within a firm or the replacement of a previous CMO. The establishment of a CMO position would increase the heterogeneity of the top management team, and prior research has suggested that greater top management team heterogeneity influences firm performance (e.g., Carpenter 2002). We dummy-coded all CMO appointments that involved the replacement of a former CMO as 0 and all other appointments as 1. We included the book-to-market-value ratio for each appointing firm as a control variable to proxy for investors' perceptions of the riskiness associated with stock returns (Fama and French 1992; Van Eaton 1999;

Zhang 2005). Finally, CMOs in some firms are members of influential firm-level committees, whereas those in other firms are not. We included a variable indicating whether each CMO was (22%) or was not (78%) one of the five highest paid executives to capture differences in the influence of CMOs, in line with prior research that has linked compensation to influence (Finkelstein 1992).¹

We provide the correlation matrix and descriptive statistics for the independent and control variables in Table 2. The correlations involving customer power, role-specific experience, and firm-specific experience were biserial correlations because the measures were dichotomous. We also indicate the means and standard deviations for each measure in Table 2. We used the following model specification to test our hypotheses:

$$\begin{aligned} (3) \text{ AbnormalReturn} = & \beta_0 + \beta_1 \text{CustPower} + \beta_2 \text{CustPower} \\ & \times \text{RoleExperience} + \beta_3 \text{CustPower} \\ & \times \text{FirmExperience} + \beta_4 \text{CustPower} \\ & \times \text{FirmScope} + \beta_5 \text{CustPower} \\ & \times \text{FirmPerformance} + \beta_6 \text{CustPower} \\ & \times \text{FirmSize} + \beta_7 \text{RoleExperience} \\ & + \beta_8 \text{FirmExperience} + \beta_9 \text{FirmScope} \\ & + \beta_{10} \text{FirmPerformance} + \beta_{11} \text{FirmSize} \\ & + \beta_{12} \text{IndustryR\&D} \\ & + \beta_{13} \text{IndustryAdvertising} \\ & + \beta_{14} \text{IndustryCapitalIntensity} \\ & + \beta_{15} \text{IndustryGrowth} + \beta_{16} \text{CMONew} \\ & + \beta_{17} \text{Book-to-MarketRatio} \\ & + \beta_{18} \text{High-tech} \\ & + \beta_{19} \text{CMOTop5Compensation} + \varepsilon. \end{aligned}$$

RESULTS

Table 3 provides the results from regressing each firm's abnormal stock price return on the day in which it announced the appointment of a CMO on the hypothesized and control variables. The model is significant ($F = 5.04$, $p < .001$) and explains 47% of the variance in an appointing firms' shareholder returns on the event day. We also calculated the variance inflation factors (VIFs) for the variables in our model. The highest VIF (Table 3) was well below the recommended threshold of 10. Thus, multicollinearity does not appear to be an issue in our model.

Customer power had a negative impact, as we hypothesized in H_1 . Figure 2 depicts the mean abnormal return for firms that experience high/low customer power. On average, the appointment of a CMO in the presence of high customer power actually reduced firm value, whereas the appointment

¹We reran the analysis using CMOs' membership in their respective firms' board of directors as an alternative metric of their role on influential committees. Only four CMOs in the sample were members of the board of directors for their firms; including this variable in the analysis yielded similar results to those reported herein.

Table 2
CORRELATION MATRIX

Covariate	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Industry research and development (IRD)	1													
2. Industry advertising (IA)	.22*	1												
3. Industry capital intensity (ICI)	-.15	-.13	1											
4. Industry sales volatility (ISV)	-.11*	.2	.02	1										
5. CMO new position (CMON)	.19	.01	-.13	.09	1									
6. Book-to-market value (BM)	-.16	-.09	-.06	.06	.01	1								
7. CMO top 5 compensation	.01	-.01	.1	-.05	-.08	-.14	1							
8. High-tech (HT)	.66**	.21	-.09	-.17	.11	-.18	.11	1						
9. Role-specific experience (RSE)	.01	-.06	-.05	-.01	-.09	-.14	-.08	.14	1					
10. Firm-specific experience (FSE)	-.14	-.04	.13	-.09	-.15	.08	.17	-.05	-.01	1				
11. Firm scope (FSC)	-.03	-.15	.11	.24*	-.14	.42**	.01	-.24*	-.06	.09	1			
12. Firm size (FSZ)	-.31**	-.16	.15	.04	-.32**	.29**	.09	-.39**	-.12	.18	.33**	1		
13. Firm performance (FP)	.15	.18	.1	.2	.15	.08	.02	.11	-.21*	-.23*	.12	-.15	1	
14. Customer power (CP)	.19	-.04	-.07	-.2	.01	-.12	.01	.19	-.08	-.12	-.21*	-.29*	-.1	1
M (frequency)	.03	.08	73.85	17.14	0 = 34%	1.992	0 = 78%	0 = 62%	0 = 66%	0 = 73%	.55	.21	.59	0 = 80%
SD	.04	.10	163.86	119.69	1 = 66%	6.258	1 = 22%	1 = 38%	1 = 34%	1 = 27%	.58	1.99	.62	1 = 20%
					N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

*p < .05.

**p < .001.

Notes: N.A. = not applicable.

Table 3
DRIVERS OF ABNORMAL RETURNS ASSOCIATED WITH CMO APPOINTMENTS

Hypothesized Variables	Control Variables Only			Control Variables + Main Effects			Hypothesized Model		
		p-Values	VIF		p-Values	VIF		p-Values	VIF
H ₁ : Customer power							-.84	.00	4.74
H ₂ : Customer power × role-specific experience							.25	.03	2.14
H ₃ : Customer power × firm-specific experience							-.29	.01	2.12
H ₄ : Customer power × firm scope							.30	.01	2.21
H ₅ : Customer power × firm size							-.64	.00	2.41
H ₆ : Customer power × firm performance							.45	.00	2.68
Role-specific experience				.00	.97	1.15	-.08	.39	1.43
Firm-specific experience				-.07	.55	1.17	-.04	.64	1.39
Firm scope				.09	.51	1.52	-.02	.82	1.74
Firm size				-.33	.01	1.53	-.23	.04	1.85
Firm performance				.10	.42	1.29	-.06	.54	1.63
Industry research and development	.16	.29	1.87	.12	.45	2.08	.14	.22	2.13
Industry advertising	.04	.70	1.08	.01	.93	1.15	.00	.98	1.19
Industry capital intensity	.00	.99	1.06	.01	.96	1.14	.03	.69	1.16
Industry sales volatility	-.02	.85	1.02	-.02	.83	1.05	.08	.33	1.21
CMO new position	.21	.06	1.06	.12	.31	1.21	.09	.30	1.31
Book-to-market value	.01	.9	1.07	.05	.67	1.42	.09	.34	1.46
High-tech	-.11	.47	1.84	-.18	.25	2.22	-.16	.17	2.27
CMO top 5 compensation	.03	.77	1.06	.08	.50	1.31	.04	.63	1.19
Adjusted R ²	.00			.02			.47		
F-value	.75			1.16			5.04		
F change				1.77			11.32		
Sample size	88			88			88		

Notes: Standardized coefficients reported. Dependent variable = standardized abnormal stock return of appointing firm.

of a CMO when customer power was low created firm value. This effect alludes to the insight gained by investigating CMOs' contributions across contexts.

The two individual variables that we argued would moderate the effect of customer power on the CMO's impact on firm value were also significant with the expected signs. The CMO's role-specific experience lessened the effect of customer power, as indicated by the positive interaction term in Table 3 and in support of H₂. Figure 3 illustrates the predicted effect of CMO role experience, based on Equation 3; the abnormal stock return when a firm faced high customer power was higher if the appointee had prior CMO experience. Investors appear to recognize that role-

specific experience can aid a CMO in addressing the limiting effect of customer power on managerial discretion, and this effect accounted for the positive moderating impact of CMO role-specific experience in Figure 3.

The most striking of the individual factors was the effect of firm-specific experience. The negative interaction between firm-specific experience and customer power in Figure 4 provides support for H₃. Furthermore, the returns from a CMO appointment when a firm faced high customer power were lower if the appointee had prior experience working for the appointing firm. Thus, investors penalized firms for appointing insiders to the CMO position in high

Figure 2

CUSTOMER POWER AND CMOs' IMPACT ON FIRM VALUE

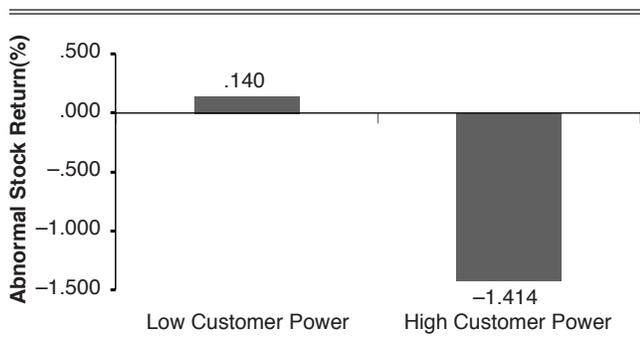


Figure 3

CUSTOMER POWER AND CMO ROLE EXPERIENCE

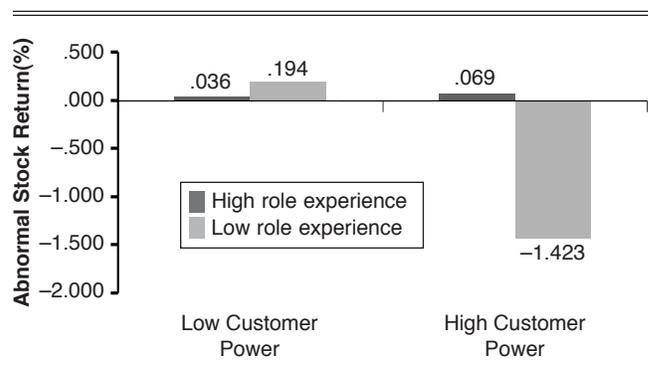
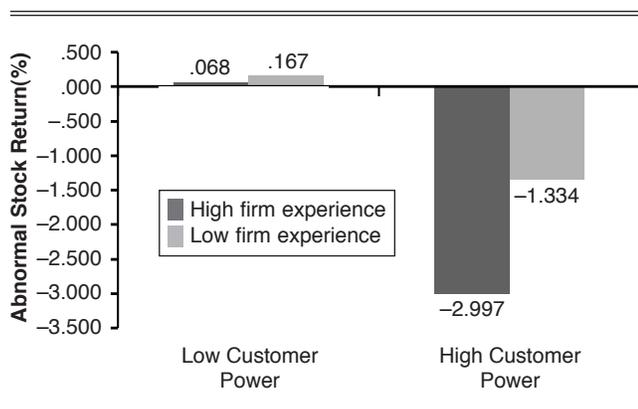


Figure 4

CUSTOMER POWER AND CMO FIRM-SPECIFIC EXPERIENCE



customer power conditions, perhaps because CMOs steeped in the firm were likely to be susceptible to customer power in a way that would limit their managerial discretion.

We also hypothesized that firm-level factors would moderate the effect of customer power. According to the results in Figure 5, as we hypothesized in H_4 , the effect of customer power was less when a CMO's firm had a larger scope. We also illustrate the predicted moderating effect (Equation 3) of firm scope in Figure 5: The return associated with the appointment of a CMO when a firm faced high customer power was higher if the appointing firm had an above-average scope.

In H_5 , we argued that the effect of customer power may be negative or positive. Figure 6 shows the negative interaction between customer power and firm size. In high customer power contexts, CMO appointments by larger firms created less value than those by smaller firms, perhaps because investors factored in the resistance to change and low level of individual autonomy in larger firms and perhaps because these factors potentially exacerbated the effect of customer power.

Finally, Table 3 reveals that the interaction between firm performance and customer power was positive and significant, in support of H_6 . The predicted moderating effect of prior performance on customer power, illustrated in Figure 7, reveals that when faced with high customer power, an appointing firm creates less value if its performance before the appointment is lower.²

DISCUSSION AND IMPLICATIONS

This research provides some initial answers to the question, When do CMOs affect firm value? The CMOs' contributions to firm value, we argue and show, are far from uniform. In 46% of the cases in our sample, the stock market

²It is theoretically possible that the announcement of a CMO provides a good sign for firms performing well but a sign of desperation for firms performing poorly. To examine whether firm performance drove our results, we checked whether firm performance had a significant effect on the stock market's reaction to CMO appointments. The results in Table 3 indicate that the actual effect, after controlling for our hypothesized and control variables, was not significantly different from 0. Moreover, the results in Table 2 indicate that the pairwise correlation between firm performance and abnormal returns to CMO appointments was also not significantly different from 0.

Figure 5

CUSTOMER POWER AND FIRM SCOPE

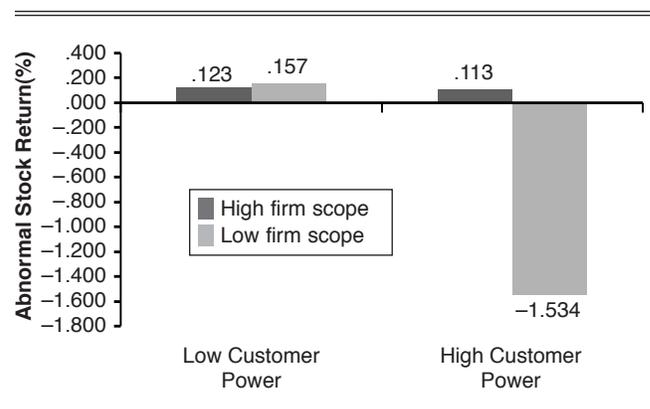


Figure 6

CUSTOMER POWER AND FIRM SIZE

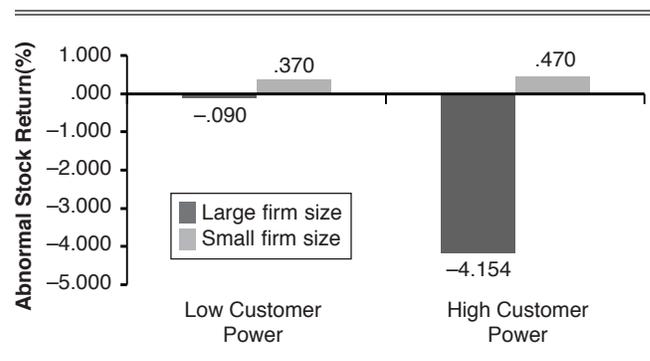
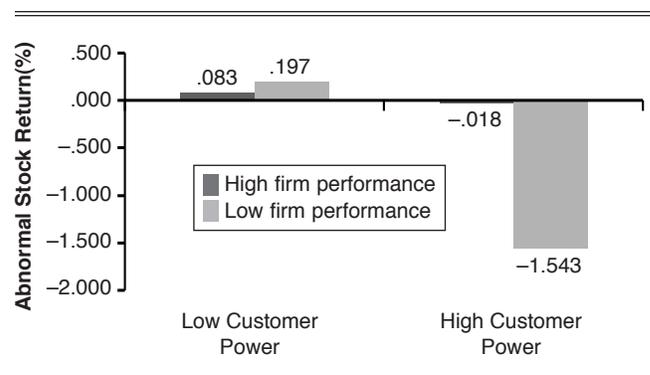


Figure 7

CUSTOMER POWER AND PRIOR PERFORMANCE



response to the appointment of a CMO was positive, whereas in 54% of the cases, the response was negative. We argue that the contributions of CMOs to firm value are highly contingent on the managerial discretion available to them in performing their informational, decisional, and relational roles. Using managerial discretion as an overarching framework, we highlight several factors that drive the financial impact of CMOs. A primary driver is the customer power the CMO faces. Some CMOs find that customer power debilitates their role performance, whereas others prevail and even thrive despite it. These differences across

CMOs are not random; rather, they can be systematically explained by the experience CMOs bring to the firms they join and the firm context in which they manage. Our analysis of CMO appointments reveals strong support for these assertions.

Theoretical Implications

This research has several implications for theory building. The research findings illustrate the important contribution of managerial discretion for expanding marketers' understanding of the financial impact of CMOs. This study represents an early application of managerial discretion literature to marketing. Although managerial discretion literature recognizes customers as an external stakeholder that may affect strategic decision making, no studies have examined customers specifically from a managerial discretion perspective. We show that the presence of powerful customers reduces the managerial discretion available to CMOs in performing their informational, decisional, and relational roles.

By studying CMOs, we also address calls in top management literature to study individual members of the top management team. Chatterjee, Richardson, and Zmud (2001) provide an early glimpse into the effects of individual top management team members with their study of chief information officers. More recently, Nath and Mahajan (2008) focused on CMOs. The findings from our research differ from this small but growing body of research in two ways. First, the effect of firm-specific experience appears to vary across top management team members. Chatterjee, Richardson, and Zmud (2001) find no difference in investors' reactions to differences in the firm-specific experience of chief information officers. Our analysis instead suggests that firm-specific experience is relevant to investors in the context of CMO appointments. In particular, firm-specific experience is detrimental to CMOs' ability to counteract the impact of customer power. Second, Nath and Mahajan's (2008) finding that the presence of a CMO has neither positive nor negative effects on firm performance only tells one part of the CMO story. The role of CMOs in driving performance may be more nuanced than previously thought. Whether a CMO matters to firm value appears to depend on the managerial discretion available to that CMO. Customer power, a variable that Nath and Mahajan (2008) do not specifically explore, helps determine the CMO's managerial discretion. By examining the contingencies under which CMOs create more or less value, this study points to a more complex set of relationships between CMOs and value creation.

We also respond to calls for marketers to study corporate-level issues in marketing strategy (e.g., Raju 2005). Our research addresses the movement toward corporate-level marketing by combining marketing's role with top manager research. Viewing marketing solely from the perspective of the middle manager can cause researchers to view top management as separate from marketing and actually diminish the role of marketing in the firm. By highlighting marketing's role at the very top of organizations, we hope to contribute to an expansion of the domain of research in marketing.

Managerial Implications

This research also has several implications for contemporary practice. First, current thinking (as described by the

business press) and current practice (as implemented in today's firms) seem to be driven by the assumption that the effectiveness of CMOs is idiosyncratic across the particular CMOs or specific firms involved. Few frameworks exist to guide thinking and practice in a general manner. Moreover, current thinking and practice may be overlooking the role of customer power in affecting CMO performance. People who consider accepting a CMO position could better understand the obstacles and opportunities presented by the position if they had a better sense of the impact of powerful customers on their plans and initiatives.

Second, the findings provide an early attempt to explain recent concerns about the loss in influence experienced by the CMO position in recent years (e.g., Webster, Malter, and Ganesan 2005). These concerns appear to have risen just as the move toward close relationships with a few customers has gained steam (Gosman and Kelly 2002). One conjecture that aligns with our findings is that the influence of CMOs may have declined because of the escalating presence of major customers in a firm's customer base. Marketers often play an important role in developing strong economic ties between firms and their customers, but the results from this research ironically show that a move toward strong economic ties with a few customers may actually limit the effectiveness of top marketers in driving firm value.

Perhaps most important, the findings address the need identified in the marketing literature for research that helps management at the corporate level of the organization (Raju 2005). An important responsibility of a CEO is to determine the composition of the firm's top management team. With respect to the inclusion of marketing, this study reinforces for CEOs that a CMO can have a positive influence on firm performance in the appropriate circumstances. Thus, CEOs (and their headhunters and recruiting committees) who consider hiring a CMO might better understand the likelihood of a successful hire if they have a better sense of the contingencies involved in CMO success. In general, our findings suggest that CEOs should consider appointing a CMO when customer power is low. However, if a firm faces considerable customer power, a CMO should provide the right background and experience. The results from this study suggest that role-specific experience is most important in situations in which the candidates are likely to face strong customer power. Moreover, CMOs will be more successful in firms with a larger scope and size and greater past performance. Recruiters should investigate the experiences of prospective CMOs when they consider whom to pick for the job, and CMO candidates should carefully assess the level of discretion that would be available to them before they plunge into a new CMO job.

Limitations and Directions for Further Research

A potential limitation of this study is our use of market value as a measure of financial performance. Although the potential for biased investor response exists, market value is a generally accepted measure of financial performance in research on top management appointments (e.g., Chatterjee, Richardson, and Zmud 2001; Worrell, Davidson, and Glascock 1993).

Our use of market value as a dependent variable may have biased our sample frame by limiting our examination of CMOs to publicly traded firms. As a result, our sample

may be biased away from smaller or younger firms that typically are not publicly traded. Our sample also may be biased because we focused solely on CMO appointments rather than the appointments of other officers. Although our investigation provides evidence with respect to the importance of considering customer-related factors when examining top management appointments, researchers would be wise to consider the robustness of our findings across different types of appointments and different customer characteristics. Additional research should consider whether the presence of customer power plays an important role in moderating the financial impact of other types of appointments, such as that of a CEO, chief financial officer, or chief operating officer.

This study provides some initial insights into the circumstances under which CMOs contribute to firm value. Nevertheless, the CMO remains a rather enigmatic creature in academic literature. Given the importance of CMOs to firms, and to the marketing function in particular, the scarcity of systematic research about them is lamentable. Further research on top managers in marketing would be both useful and welcome.

APPENDIX: TESTS OF ROBUSTNESS

How Sensitive Are the Results to Changes in the Event Window?

The results in Table 3 are based on abnormal returns associated with the actual date of appointment. We reestimated the models using three alternative event windows: (1) a two-day event window consisting of the announcement day and the day immediately preceding the announcement day; (2) a two-day event window consisting of the announcement day and the day immediately following the announcement day; and (3) a three-day window consisting of the announcement date, the day immediately preceding the announcement date, and the day immediately following the announcement date. All results from the reestimation remain substantively unchanged with respect to the effect of the independent variables in Table 3. However, the variance explained by the model falls significantly below that associated with the event day as we expand the event window. This result is to be expected because the opportunity for noise to enter into our sample returns increases as we increase the event window (Srinivasan and Bharadwaj 2004). Overall, our results appear robust to the choice of event window.

Does Endogeneity Drive the Results?

It is possible that the appointment of a person with firm-specific experience is related to the presence of customer power, and this relationship could create endogeneity in our model. Firms facing more customer power may be more likely to appoint an insider with experience with the influential customer and avoid any disruption caused by the appearance of a new CMO into the firm's relationship with the influential customer. We checked for this possibility by running a logistic regression analysis with firm-specific experience (i.e., insider versus outsider status) as the dependent variable and all other independent variables from Equation 3 as the independent variables. We found no evidence of a significant relationship between these variables. This result suggests that though it is conceptually possible for them to do so, firms facing customer power are not in

practice any more likely to appoint insiders as CMOs than other firms.

It is also possible that customer power is endogenous with respect to firm size. Large firms might be less likely to have any one customer representing a substantial portion of sales. To check for a relationship between firm size and the presence of a major customer, we ran a logistic regression analysis in which the dependent variable was the absence or presence of a major customer and the independent variables included the control variables and the firm size measure. The analysis reveals that firm size is significantly related to the presence of a major customer in the expected direction.

To examine whether our hypothesis tests are driven by endogeneity, we ran a two-stage least squares regression that simultaneously estimates abnormal stock returns and the likelihood of having a major customer. The results from the analysis reveal no material differences relative to those in the results reported in Table 3. Thus, we find no evidence that our hypothesis tests are driven by endogeneity.

Do Alternative Measures of Customer Power, Role-Specific Experience, and Firm-Specific Experience Yield Similar Results?

We could question whether our dichotomous measures of customer power, role-specific experience, and firm-specific experience accurately capture these variables or whether alternative measures might provide different results. We report results from using alternative measure of each of these variables.

Customer power. Ideally, we wanted to measure customer power by using the actual percentage of sales represented by each customer, with the expectation that sales percentage accounted for by a major customer could proxy for customer power. However, only a small fraction (25%) of firms report this figure. The reporting requirement associated with major customers leaves it to the discretion of the reporting firm whether to report the actual percentage. For competitive reasons, firms may be reluctant to release this level of detail.

As an alternative, we have variation in the number of major customers reported by firms that have at least one major customer (average = 2.20, SD = 1.39; minimum = 1, maximum = 5). We expected that customer power would increase as a firm served an increasingly larger set of major customers. We substituted the number of major customers for our dichotomous measure and reran the analysis. There was no material change in the results, suggesting that our results are robust to the measure of customer power employed in the analysis.

CMO experience. We collected more continuous measures of CMO role-specific experience by calculating the number of years of CMO experience and of firm-specific experience by calculating the number of years of tenure in the firm. Using these variables reduced the sample size (years of CMO experience was available for only 20% of the CMOs in the sample; tenure was available for only 75%). Nevertheless, these results are consistent with those using the dichotomous measures.

Are the Effects of CMO Appointments Evident in Long-Term Stock Return Measures?

To test the possibility of a long-term stock return effect associated with the CMO appointments in our sample, we

calculated a one-year buy-and-hold return for each firm in our sample by calculating the percentage return associated with buying a share of stock in an appointing firm and retaining ownership of that share for one year after the appointment date. We used this buy-and-hold return as our dependent variable and retested the model (Barber and Lyon 1997; Gompers and Lerner 2003). The model failed to reach statistical significance with regard to its explanatory power, and none of the hypothesized variables reached statistical significance. Thus, information regarding the effect of a CMO appears to manifest in a firm's market value very quickly after the announcement of the appointment. The absence of a long-term effect could be attributable to many factors. For example, a CMO appointment represents only one of a multitude of actions a firm undertakes over time, and other actions may obscure the long-term effect of a CMO appointment. If the stock market is efficient, the effect of a CMO should be reflected quickly in the stock price, unless the CMO performs in a manner inconsistent with investor expectations (Swaminathan and Moorman 2009).

Does the Appointment of a New CMO Change Firm Strategy?

To check whether the appointment of a new CMO changes firm strategy, we performed a paired-comparison t-test of the differences between marketing strategy measures two years before a CMO appointment and marketing strategy measures two years after the CMO appointment. Specifically, we examined three measures of changes in firm strategy before versus after each CMO appointment: (1) the firm's relative mix of advertising and research-and-development spending, (2) the firm's average annual percentage change in advertising spending, and (3) advertising spending relative to the industry, calculated as advertising spending by the focal firm relative to average advertising spending for firms in the industry. The effects of CMOs on the strategies of their firms are multifaceted and clearly go beyond advertising measures. Moreover, the impact of CMOs on advertising measures need not be positive; for example, some CMOs alter their firms' strategy by cutting wasteful advertising. Nevertheless, these measures provide reasonable and measurable proxies for some of the potential effects of CMOs on their firms. We used a two-year time lag before and after the CMO appointment, so that the pre-appointment data were less biased by the firm's strategy leading immediately up to the CMO appointment, and the postappointment data provided adequate time for the CMO to affect a firm's strategy. The results from this analysis of changes in marketing strategy all reflect a change in marketing strategy (research-and-development versus advertising spending: preappointment = -11%, postappointment = -13%; firm advertising-to-sales ratio: preappointment = 3.9%, postappointment = 4.1%; firm advertising spending relative to the industry: preappointment = 71%; post-appointment = 104%), but only the difference in the appointing firm's advertising spending relative to the industry is statistically significant ($p = .03$). Although the data were not conclusive, they suggest that marketing strategy, according to the metrics of marketing spending, change after the appointment of a new CMO, especially in relative terms when compared with strategies used by competitors.

This finding seems reasonable considering the decisional role of CMOs.

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