Hui Feng, Neil A. Morgan, & Lopo L. Rego

Marketing Department Power and Firm Performance

This study empirically investigates marketing department power in U.S. firms throughout 1993–2008 and assesses its impact on firm performance. Using a new objective measure of marketing department power and a cross-industry sample of 612 public firms in the United States, the results reveal that, in general, marketing department power increased during this time period. Furthermore, the analyses show that a powerful marketing department enhances firms' longer-term future total shareholder returns beyond its positive effect on firms' short-term return on assets (ROA). The findings also reveal that a firm's long-run market-based-asset-building and short-run market-based-asset-leveraging capabilities partially mediate the effect of a firm's marketing department power on its longer-term shareholder value performance and fully mediate the effect on its short-term ROA performance. This research provides new insights for marketing scholars and managers with regard to both marketing's influence within the firm and how investments in building a powerful marketing department affect firm performance.

Keywords: marketing department power, marketing capabilities, shareholder value, firm performance

Although the literature has shown a perception of a decline in marketing department power within firms over time (e.g., Verhoef and Leeflang 2009; Webster, Malter, and Ganesan 2005), little clear empirical evidence exists for such a belief (Homburg, Workman, and Krohmer 1999; Merlo and Auh 2010). For example, in a recent study, Homburg et al. (2015) find a decline in marketing departments' decision influence between two points in time (1996 and 2013) in two samples of similar German firms. However, other recent studies have reported evidence of increasing marketing department power (e.g., Lamberti and Noci 2009; Merlo, Lukas, and Whitwell 2012). Furthermore, irrespective of whether marketing department power is rising or declining, no clear understanding exists of whether it really matters because the few empirical studies examining its relationship with firm performance have also reported conflicting results. For example, Moorman and Rust (1999) and Homburg et al. (2015) report a positive relationship between marketing department power and firm performance. In contrast, Götz, Hoelter, and Krafft (2013) find a negative relationship, and Verhoef and Leeflang (2009) and Merlo and Auh (2009) report no relationship.

A key problem with existing knowledge is that the few empirical studies of marketing department power use cross-sectional survey data from relatively small samples of firms. Although surveys are an appropriate way to measure departmental power within firms (e.g., Finkelstein 1992; Pfeffer 1981), their use in this context creates two particular problems. First, the difficulty of collecting repeated survey data over long periods of time from the same firms means that there have been no large-sample longitudinal survey studies of marketing department power. This has limited researchers' ability to examine changes in marketing department power over multiple points in time in generalizable samples. Second, although cross-sectional survey data allow correlations to be observed, it is difficult to assess causality in examining marketing department power–firm performance relationships and to isolate intervening mechanisms that may explain any such relationship.

To address these problems, this study develops and validates a new objective measure of marketing department power using multiple indicators from publicly available data. We use this measure to examine marketing department power and its relationship with firm performance across a large, multi-industry sample of firms in a longitudinal setting (612 public firms in the United States across 16 years). Specifically, this research addresses three important questions. First, how—if at all—has marketing department power within U.S. firms changed over this time period? Second, is a powerful marketing department beneficial or detrimental to firm performance? Third, what is the mechanism that may explain any relationship between marketing department power and firm performance?

In addressing these key questions, this study offers several contributions to the literature. First, we develop and validate a new objective measure of marketing department power. Our measure uses multiple objective indicators to capture the complexity of the department power construct (e.g., Finkelstein 1992; Welbourne and Trevor 2000) as well as data from publicly available secondary data sources, which makes the measure inherently replicable. In addition, although our focus is on marketing department power, the

Hui Feng is Assistant Professor of Marketing, College of Business, Iowa State University (e-mail: huifeng@iastate.edu). Neil A. Morgan is PetSmart Distinguished Professor of Marketing, Kelley School of Business, Indiana University (e-mail: namorgan@indiana.edu). Lopo L. Rego is Associate Professor of Marketing, Kelley School of Business, Indiana University (e-mail: lrego@indiana.edu). Christine Moorman served as area editor for this article.

ISSN: 0022-2429 (print), 1547-7185 (electronic)

Journal of Marketing
Vol. 79 (September 2015), 1–20

measurement approach we adopt is equally applicable to other functional departments. Managers and researchers can therefore use these measures to calibrate marketing (or other functional) department power and further develop empirical understanding of whether, how, and with what consequences it may be associated with various firm and marketplace phenomena.

Second, using this new measure in a large panel of public U.S. firms, we find that, on average, marketing department power increased over the 1993–2008 period, which suggests that any perception of an apparent decline in marketing department power during this period is unfounded. In addition, we show that marketing department power does matter from the perspective of firm performance outcomes. Specifically, we find a positive relationship between a firm's marketing department power and both its short-term future financial efficiency (return on assets [ROA]) and its longer-term future shareholder value effectiveness (total shareholder returns [TSR]). This finding provides the strongest and most comprehensive evidence to date showing that marketing department power is a driver of superior firm performance.

Third, building on theorizing regarding subunit power in organization theory, this study identifies two firm-level marketing capabilities as key mechanisms in explaining how marketing department power affects firm performance outcomes. We show that marketing department power is positively related to firm-level ability to (1) build long-run market-based assets (MBAs) and (2) leverage these MBAs in the short run to deliver cash flows. Furthermore, we find that these two marketing capabilities fully mediate the effect of marketing department power on short-term ROA and partially mediate its effect on longer-term TSR. We also provide the first empirical evidence to suggest that such firm-level marketing capabilities may not always enhance all aspects of firm performance.

In the next section, we present the theoretical framework for our study and develop testable research hypotheses. Next, we describe the research method adopted, measures of key constructs and variables, data set assembled, and analysis approach used to test the hypotheses. We then present and discuss the results of the analyses and hypothesis testing and consider their implications. Finally, we examine the study's limitations and present ideas for further research.

Theory and Hypotheses

The Role and Impact of Department Power

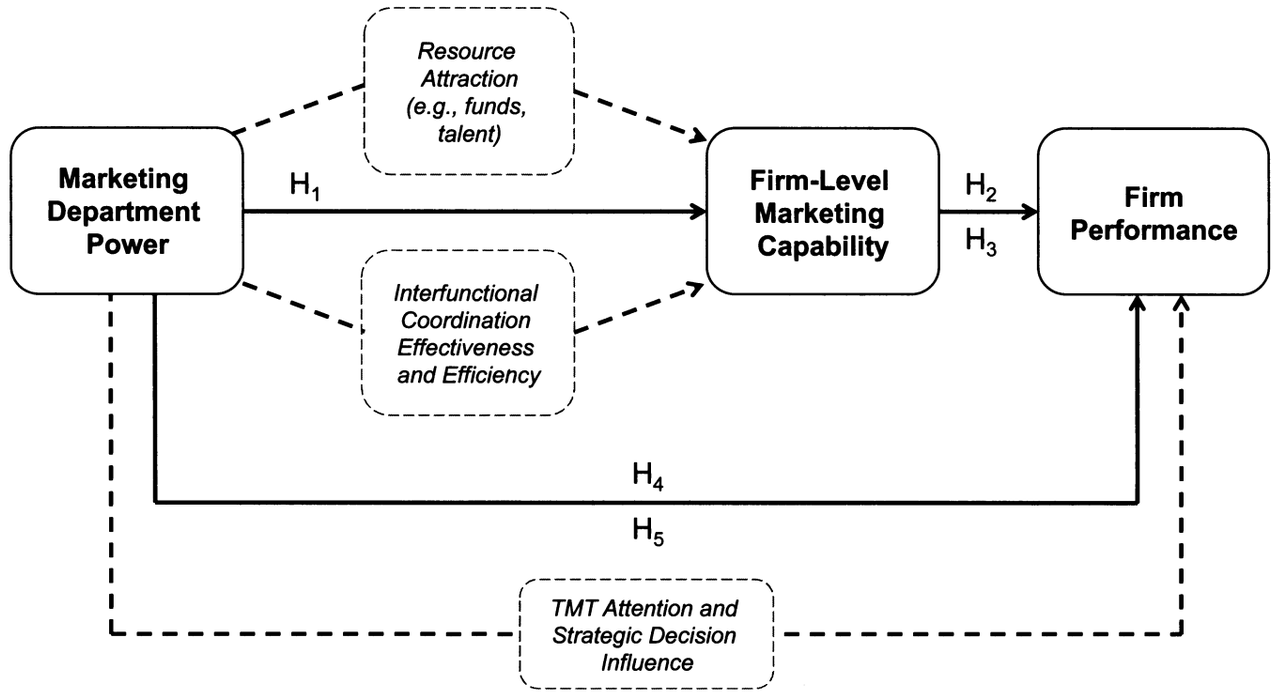
Functional departments are a common way that firms organize activities, in which people working on similar tasks that require related knowledge and skills are grouped together (e.g., Finkelstein 1992; Kenny and Wilson 1984). However, allocating resources across a firm's functional departments is not a simple matter because firm resources are limited, functions have differing objectives and resource requirements, and each department may be differentially important in achieving the firm's overall objectives (e.g., Astley and Zajac 1991; Boeker 1989). As a result, firms can be characterized as groups of departments, each with its own agenda, that may be more or less well aligned both with one another and with the firm's overall goals (e.g., Cyert and March 1963; Greenwood and Hinings 1996). Organization theory indicates that this leads to the emergence and exercise of department power, which becomes a key determinant of negotiations, bargaining, and decisions, including those involving resource allocation (e.g., Perrow 1970; Pfeffer 1981).

The power of a functional department (e.g., a marketing department) is defined as its ability to influence other people and departments in the firm (Hickson et al. 1971; Pfeffer 1981). The power literature in organization theory has viewed department power as deriving from its position in the organizational structure and hierarchical authority rather than from the individual characteristics of departmental managers and employees (Astley and Sachdeva 1984; Welbourne and Trevor 2000). Irrespective of its source, functional departments with higher power have greater authority and control over the decisions and actions of other people and departments within the firm (Brass and Burkhardt 1993; Finkelstein 1992).

Organization theory suggests that a department's power may influence a firm's performance through three basic mechanisms. The first is resource attraction: more powerful departments receive not only more and higher-quality resources but also more promotions, higher pay raises, and so on, enabling them to attract superior talent relative to both other departments within the firm and rival firms (e.g., Welbourne and Trevor 2000). This gives a powerful department enhanced resources and superior skills with which to perform its activities (e.g., Salancik and Pfeffer 1974). The second mechanism is interfunctional coordination: department power provides an efficient conflict resolution mechanism, enabling powerful departments to more effectively and efficiently coordinate their activities with those of other departments (e.g., Perrow 1970; Salancik and Pfeffer 1974). This may be particularly important for departments such as marketing that often require inputs and cooperation from other departments to accomplish required functional tasks. The third mechanism is top management team (TMT) attention and strategic decision influence: more powerful departments are better able to direct the TMT's attention to internal issues and areas of the external environment affecting the department's ability to accomplish its tasks and influence TMT strategic decisions to be more aligned with the orientation and interests of the department (e.g., Child 1997; Delmas and Toffel 2008). To the extent that the tasks performed by a particular department are important in enabling a firm to achieve its objectives, all three of these mechanisms may lead the department's power to influence firm performance.

The impact of a powerful marketing department on firm performance through these three mechanisms is difficult to directly measure and assess over time across large samples of firms. However, as we depict in Figure 1, two of these mechanisms—resource attraction and interfunctional coordination—should allow for the building of stronger firm-level marketing capabilities that are easier to assess over

FIGURE 1
Conceptual Model



Notes: Solid lines represent measured constructs and empirically tested relationships; dotted lines represent theorized constructs and untested relationships.

time using existing measurement approaches (e.g., Dutta, Narasimhan, and Rajiv 2005). In addition, any firm performance impact of marketing department power beyond its effect through firm-level marketing capabilities is an indication that the third mechanism—directing the attention and strategic decisions of senior managers—may also be present. We summarize these expectations in Figure 1 and develop testable hypotheses in the following subsections.

Marketing Department Power and Firm-Level Marketing Capabilities

Firm-level marketing capability pertains to a firm's ability to use its available resources to perform marketing and other related tasks in ways that achieve a desired marketing outcome (e.g., Bahadir, Bharadwaj, and Srivastava 2008; Krasnikov and Jayachandran 2008). The most fundamental desirable outcomes of firms' marketing efforts have been identified as generating short-term cash flows and building and maintaining the MBAs required to produce longer-term future cash flows (Ambler and Roberts 2006; Srivastava, Shervani, and Fahey 1998). These two outcomes may often conflict and involve trade-offs, but both are required for firms to achieve and sustain superior performance over time (Ambler and Roberts 2006). Thus, we specify two firm-level marketing capabilities: (1) long-run MBA- (LR MBA-) building capability, a firm's ability to use available resources to build and maintain its MBAs such as brand equity and customer relationships (Morgan, Slotegraaf, and Vorhies 2009; Ramaswami, Srivastava, and Bhargava 2009), and (2) short-run MBA- (SR MBA-) leveraging capability, a firm's ability to use its resources to generate short-term cash flows from its current MBAs (Dutta, Narasimhan, and Rajiv 1999; Dutta, Zbaracki, and Bergen 2003).

The literature has suggested two main reasons to believe that marketing department power has a positive effect on these two firm-level marketing capabilities.[1] First, in terms of resource attraction, a powerful marketing department should attract more and better-quality resources to support its LR MBA-building- and SR MBA-leveraging-related activities (Moorman and Rust 1999). For example, a powerful marketing department should obtain a greater and higher-quality share of the firm's internal resources (e.g., budget, employees) (e.g., Homburg, Workman, and Krohmer 1999; Verhoef and Leeflang 2009) to allocate to its LR MBA-building-related activities (e.g., brand building) and SR MBA-leveraging-related activities (e.g., running promotions). In addition, firms with a powerful marketing department will be not only more attractive to

[1]Although, theoretically, expertise can also be a source of power, here we conceptualize and operationalize the structural power of the marketing department. In addition, we assess firm-level rather than department-level marketing capabilities (e.g., Verhoef and Leeflang 2009). Thus, we expect marketing department power to drive firm-level marketing capabilities and not vice versa. Nonetheless, we do also test for and rule out the possibility of reverse causality in our subsequent robustness tests.

potential new hires but also able to offer greater rewards and are therefore better able to attract higher-quality external resources such as talented and experienced marketers and salespeople (e.g., Piercy 1987).

Second, in terms of interfunctional coordination, a powerful marketing department is better placed to gain cooperation from other departments, which may be required to perform firm-level marketing activities well. For example, the literature has shown that interfunctional cooperation is needed for both effective firm-level pricing (Dutta, Zbaracki, and Bergen 2003) and new product development (e.g., Atuahene-Gima 2005) processes. Cooperation from others is more forthcoming to departments with higher levels of power (e.g., Hinings et al. 1974; Homburg, Workman, and Krohmer 1999). Such cooperation may also help enhance firms' LR MBA-building and SR MBA-leveraging capabilities by providing access to needed inputs controlled by other departments (e.g., operations, research and development [R&D]) (Day 1994; Dutta, Zbaracki, and Bergen 2003). For example, appropriate and high-quality training programs developed by the human resources department may help enhance salespeople's selling and customer relationship management skills. Thus, we hypothesize the following:

H_1: Marketing department power has a positive effect on a firm's (a) LR MBA-building capabilities and (b) SR MBA-leveraging capabilities.

Marketing Capabilities and Firm Performance

Firm performance is a complex phenomenon, and managers often face trade-off decisions with respect to different performance metrics and time frames (e.g., Ambler and Roberts 2006; Morgan, Slotegraaf, and Vorhies 2009). Here, we focus on short-term ROA, a key profitability indicator, and longer-term TSR, a core measure of shareholder value. These firm performance metrics are widely monitored by managers and investors and commonly used by researchers (e.g., Lehmann and Reibstein 2006). The literature has suggested that, in general, marketing capabilities are positively related with firm performance because they enable firms to acquire and use market knowledge to deliver superior customer value (Krasnikov and Jayachandran 2008). However, we suggest that LR MBA-building and SR MBA-leveraging capabilities will likely have different effects on a firm's short-term profitability versus longer-term shareholder value.

First, we expect a firm's LR MBA-building capabilities to have a positive relationship with longer-term shareholder value. This is because strong LR MBA-building capabilities should enable firms to better generate and apply market knowledge to create and maintain positive customer relationships and higher brand equity than rivals. Investors value such MBAs highly because they enable firms to maintain and grow future cash flows (e.g., Gupta, Lehmann, and Stuart 2004; Srivastava, Shervani, and Fahey 1998) and lower the risk to future cash flows (e.g., Gruca and Rego 2005). In addition, such intangible assets make up an increasingly large proportion of firms' market capitalizations, and MBAs such as brands have been shown to have a high residual market value (e.g., Wiles, Morgan, and Rego 2012). Thus, investors should highly value a superior ability to build MBAs.

Second, we suggest that a firm's LR MBA-building capabilities may have a negative effect on its short-term profitability. This is because MBAs such as brand equity and customer relationships are built over time, requiring substantial investments each year that may take time to pay off (e.g., Lodish and Mela 2007). As a result, engaging in activities to build and maintain MBAs requires investments in the short run for which there may be relatively little immediate payback (Dekimpe et al. 2005; Joshi and Hanssens 2010). Thus, investments in LR MBA-building capabilities may hurt a firm's short-term profitability compared with firms that do not make such investments. For example, the literature has suggested that brand-building efforts such as image-building advertising and sponsorship usually incur considerable costs and may result in a relatively limited short-term sales response and even negative short-term financial returns; however, over longer periods, such efforts can have a positive effect on firms' shareholder value (e.g., Joshi and Hanssens 2010; Lodish et al. 1995). Thus, we hypothesize the following:

H_2: LR MBA-building capabilities have (a) a positive effect on a firm's longer-term shareholder value and (b) a negative effect on a firm's short-term profitability.

In contrast, we expect that a firm's SR MBA-leveraging capability will have a positive effect on short-term profitability. This is because strong SR MBA-leveraging capabilities mean that a firm is better at efficiently using its resources to generate short-term demand from its existing MBAs than rivals (e.g., Lodish and Mela 2007; Srivastava and Reibstein 2005). Thus, short-term leveraging capabilities increase the firm's short-term cash flows from its existing MBAs—and the investments in these existing MBAs have already been accounted for. In addition, SR MBA-leveraging capabilities themselves may require less investment compared with those required to build and maintain the firm's MBAs. As a result, all else being equal, firms that have stronger SR MBA-leveraging capabilities should be able to generate short-term profits more efficiently than those with weaker SR MBA-leveraging capabilities.

However, a firm's SR MBA-leveraging capability could also have a negative effect on its long-term shareholder value. This is because SR MBA-leveraging activities focused on increasing short-term cash flows run the risk of weakening the MBAs that they leverage (Pauwels et al. 2004). This may be particularly true of firms that are less concerned about the long-term health of their MBAs, and yet such firms will likely demonstrate the greatest short-term cash flow returns to their existing MBAs (and thus exhibit strong SR MBA-leveraging capabilities). This is because they may "milk" their MBAs to extract the maximum possible short-term cash inflows from them and also minimize short-term cash outflows by reducing investments in building and maintaining the MBAs. Thus, firms aggressively pursuing short-term cash flows may become very efficient at leveraging existing MBAs but do so at the cost

of weakening their MBAs in the process. This may reduce long-term shareholder returns because investors value a firm's stock not only on current cash flows but also on the likely levels, timing, and risks to future cash flows and expected residual value of the firm's assets (e.g., Srivastava, Shervani, and Fahey 1998). These future cash flow and asset value expectations are typically a much larger fraction of a firm's stock price than its current earnings (e.g., Gupta, Lehmann, and Stuart 2004). Thus, investors may view firms with strong SR MBA-leveraging capabilities positively on the basis of current cash flows but negatively in terms of the likely future strength and market value of the MBAs required to generate future cash flows. Therefore, we hypothesize the following:

H_3: SR MBA-leveraging capabilities have (a) a negative effect on a firm's longer-term shareholder value and (b) a positive effect on a firm's short-term profitability.

Marketing Department Power and Firm Performance Beyond Marketing Capabilities

Organization theory suggests that marketing department power may also have positive effects on firms' shareholder value beyond its effect through these firm-level marketing capabilities as a result of the department's greater ability to influence the firm's TMT. First, a strong marketing department is likely to influence the firm's TMT in ways that better align its strategic decisions with the marketplace (Delmas and Toffel 2008; Provan 1989). This is because marketing departments typically have a stronger marketplace orientation and focus than other functional areas (e.g., Day 1994). For example, theory- and practice-based evidence has suggested that firms' marketing departments have a unique external marketplace perspective, focused primarily but not exclusively on customers, that provides the department with a differentiated knowledge base (Moorman and Rust 1999).

Second, a powerful marketing department is more likely to direct the TMT's focus and attention to the firm's long-term goals in the face of competing short-term demands (Webster, Malter, and Ganesan 2005). The literature has suggested that marketers tend to focus on medium- and long-term effectiveness (Homburg and Jensen 2007; Verhoef and Leeflang 2009). Top management teams in firms with a weaker marketing department "voice" are likely to be more influenced by the relatively shorter-term emphasis of other functional departments (e.g., finance, operations) and stakeholders (e.g., analysts, channel partners). The TMTs in such firms are therefore more likely to engage in myopic behaviors such as reducing R&D investments to "meet their numbers" (Verhoef and Leeflang 2009). Thus, we hypothesize the following:

H_4: Marketing department power is positively associated with a firm's longer-term shareholder value beyond its effect through firm-level marketing capabilities.

The literature has suggested that a powerful marketing department may also similarly enhance firms' short-term financial efficiency (e.g., ROA). From a TMT perspective, a powerful marketing department can direct strategic decision makers to do the "right" things from a product-market and customer perspective. This may enable firms to avoid misguided investments (or overinvestment), thus wasting fewer resources and enhancing overall financial efficiency. For example, a powerful marketing department could help improve a firm's R&D and manufacturing efficiency by guiding senior managers to choose more marketable new product designs that best fit customer preferences (Srinivasan, Lovejoy, and Beach 1997). It may also help avoid overengineering of products with features that are relatively unimportant to customers or overinvesting in cutting-edge technologies with little market demand (Dutta, Narasimhan, and Rajiv 1999).

However, there are also reasons to believe that marketing department power may be negatively associated with a firm's short-term financial efficiency. For example, marketers tend to emphasize goal achievement (effectiveness), with less of a focus on operational efficiency than on other functions, such as accounting and operations (e.g., Calantone, Dröge, and Vickery 2002). In addition, marketers also tend to have a greater emphasis on medium- and long-term goals (Homburg and Jensen 2007; Verhoef and Leeflang 2009) than many other functions. This greater focus on effectiveness (vs. efficiency) and medium-/long-term (vs. short-term) goals, when combined with a powerful marketing department that is more influential in TMT attention and decision making, may lead to firm-level investment and expenditure decisions that are less focused on maximizing short-term profitability. In light of this notion, we propose the following competing hypotheses:

H_5: Beyond its indirect effect through firm-level marketing capabilities, marketing department power is (a) positively associated with a firm's short-term profitability or (b) negatively associated with a firm's short-term profitability.

Methodology

Research Design

We adopt a secondary data–based research design, which enables us to test the hypotheses in a large sample of firms, over a long time period, with multiple observations for each firm over time. However, we acknowledge that using secondary data has some drawbacks. For example, there are well-established primary measures of department power that allow more direct observation of the phenomenon. Secondary data require the use of indirect indicators, and there are no existing validated secondary data–based measures of department power. In addition, because secondary data are reported at the firm level, they preclude analyses at the strategic business unit (SBU) level for firms with multiple SBUs.[2] However, although marketing in multi-SBU firms may be organized at the SBU level, most firms also have

[2]Several primary data–based studies have also focused on marketing department power and related phenomena at the firm level (e.g., Verhoef and Leeflang 2009) or included both firm-level and SBU-level data (e.g., Moorman and Rust 1999); however, collecting data at the SBU level is not an option for researchers using secondary data.

corporate-level marketing functions (e.g., General Electric, Procter & Gamble). Even if this is not the case, organization theory suggests that powerful SBU-level marketing departments are likely to be reflected in greater marketing representation in the firm's corporate-level TMT, which can be observed in firm-level marketing department power measures. Nonetheless, to account for possible differences in such multi-SBU firms, we include the number of SBUs in the firm as a control variable in our hypothesis-testing analyses and address this issue in our robustness checks.

Data

An initial random sample of 1,000 public firms was drawn for the 1993–2008 period from Compustat's ExecuComp Database, which provides TMT[3] information from annual proxy statements for 2,872 U.S. firms starting from 1992. Firms in ExecuComp constitute approximately 25% of the firms in Compustat and, on average, are relatively large and profitable firms with stable cash flows. We used these data to operationalize our marketing department power measure. The Compustat Fundamentals Database provided accounting and operating data for these firms, which we used to compute firms' ROA and firm-specific controls, calibrate a set of industry and competitive context control variables, and provide inputs required to compute firm-level marketing capability measures. We used data from the Center for Research in Security Prices to compute firms' shareholder value performance. Finally, the U.S. Patent and Trademark Office Database provided patent and trademark data needed to estimate our firm-level marketing capabilities measures.

After combining data from these various sources, missing data for one or more variables resulted in a final hypothesis-testing sample containing data from 612 firms over 16 years (1993–2008), for a total of 7,977 firm-year observations. However, we lose one year of data to allow for the use of first-differencing, leaving a maximum of 7,365 firm-year observations for hypothesis testing. Our final sample includes only firms that have at least four consecutive years of data available, reducing our hypothesis-testing sample size to 7,114 firm-year observations. We added three years of firm-year Compustat-dependent variable data (2009–2011) to allow for the calculation of future financial performance–dependent variables (because these data are forward-only observations of the dependent variables, they do not affect our sample size). The 612 firms in our sample represent 60 Standard Industrial Classification (SIC) two-digit industries (165 SIC three-digit industries) (see Appendix A). The average firm in our sample has $8.4 billion in assets and has been operating for 57 years.

Variable Measurement

Marketing department power. Although a department's power within the firm is not directly observable, it can be inferred from measurable power determinants and consequences (Hills and Mahoney 1978; Pfeffer 1981). However, because each measurable power correlate is an imperfect indicator, researchers have advocated constructing measures that demonstrate convergence among multiple indicators of different power determinants and consequences (Finkelstein 1992; Pfeffer 1981). Accordingly, we combine marketing department power indicators in four important areas identified in organization theory to create our measure and, as we describe subsequently, then assess the measure's validity at a single point in time using alternative primary survey measures.

First, we capture power as it manifests in the representation of the marketing department in firms' key policy and resource allocation committees (e.g., Hills and Mahoney 1978; Pfeffer and Moore 1980). Organization theorists have argued that such representational indicators of department members in critical organizational roles, including formal positions, should be included in any objective measure of department power (e.g., Pfeffer 1981). The most important decision-making and resource allocation forum in our context is the firm's TMT (e.g., Finkelstein and Hambrick 1990; Hambrick, Cho, and Chen 1996). Firms with powerful marketing departments will have greater marketing representation in the firm's TMT. In addition to reflecting the power of the marketing department, such representation also facilitates department power by providing influence over how the firm's resources are allocated, which policies and strategies are adopted, which criteria are used in decision making, and to which issues the TMT may pay attention (e.g., Finkelstein 1992; Pfeffer 1981).

Thus, we use the proportion of a firm's TMT executives with marketing-related job titles to indicate the marketing department's representational power. We calculated this proportion by first listing all of the job titles of all managers in each firm's TMT for each year, resulting in 50,631 titles. From this list, two coders independently identified and coded 835 marketing-related titles (those including key activity terms, e.g., "marketing," "brand," "advertising"; see Appendix B).[4] Interrater agreement between the two coders in identifying marketing-related (vs. not) job titles was greater than 80%, and all disagreements were resolved after discussion. We subsequently verified the face validity of the common marketing-related activity terms in the job titles identified and agreed on by the coders using two experts with extensive experience of working with chief marketing officers and marketing organizations across firms.

Second, we also capture department power as reflected in rewards. Rewards are indicative of a department's centrality to accomplishing a firm's mission, with greater rewards being made available to attract and retain higher-quality executives to fulfill more central roles (e.g., Pfeffer and Davis-Blake 1987; Welbourne and Trevor 2000). Firms' compensation committees set pay scales both across and within hierarchical levels, creating pay differentials that

[3]The TMT is the list of the firm's most important executives specified by a firm on its 10-K form or proxy statement as required by the Securities Exchange Commission. The mean size of the TMT in the sample of firms was 6.06 (SD = 1.38), which is consistent with prior research using these data.

[4]Because sales may be organized as a separate functional department, we do not include titles that only contain sales-related terms as indicators of marketing department representation in the TMT.

provide information on relative power (e.g., Mande and Son 2012). Thus, rewards in the form of compensation can be considered an important indicator of formal power (Hambrick and D'Aveni 1992). We therefore include the compensation paid to members of a firm's TMT holding marketing-related positions (as indicated by their job titles) relative to the total TMT compensation within the firm as an indicator in our measure.

Third, we assess departmental power as reflected in positions in the firm's hierarchy. Hierarchical level or formal authority is viewed as the "crystallization of earlier power patterns" (Hambrick 1981, p. 267) and "the most easily recognizable, legitimate structural position" (Brass and Burkhardt 1993, p. 462). Research has shown that staff members with higher pay-grade positions indicate increased departmental ability to solve problems critical to the firm (e.g., Pfeffer 1981). Thus, departmental staff grades are both determinants of a department's power and a consequence of its power to place members in influential positions (Welbourne and Trevor 2000). Accordingly, we include indicators of TMT marketing executives' hierarchical rank in our marketing department power measure by coding the hierarchical level associated with all marketing TMT executive job titles and then assigning a ranking score to each level. Specifically, president = 6, executive vice president = 5, senior vice president = 4, vice president = 3, other = 2, and no marketing executives = 1. We then computed two indicator variables: (1) the hierarchical ranking score for the highest-ranked TMT marketing executive and (2) the cumulative hierarchical level ranking scores of the all marketing executives in the firm's TMT.

Fourth, we assess departmental power as reflected in the department's responsibilities—that is, the scope of activities within the domain of the department's control. A larger number of departmental responsibilities implies control over resources and decision making across a broader scope of activities (e.g., Piercy 1989), which has been closely related to departmental power in prior research (Hambrick 1981; Ronchetto, Hutt, and Reingen 1989). The organization theory literature has suggested that areas of departmental responsibility can be captured by examining formal titles (Finkelstein 1992). Therefore, we capture the number of responsibilities of marketing executives in the firm's TMT as reflected in their job titles (e.g., Nath and Mahajan 2011).

Thus, the five items that compose our measure of a firm's marketing department power are (1) the number of marketing executives in the TMT, divided by the total number of TMT executives, (2) marketing TMT executives' compensation relative to the total TMT executives' compensation, (3) the hierarchical level of the highest-level marketing TMT executive's job title, (4) the cumulative hierarchical level of all the marketing executives in the TMT, and (5) the number of responsibilities reflected in marketing TMT executives' job titles. Because department power can be dependent on industry context, for our hypothesis-testing analyses we scaled all items relative to each year's industry average (using the primary SIC industry listed by the firm). We then combined these five indicants using principal component factor analysis. The indicants were highly correlated (ranging from .83 to .97) and loaded onto a single factor, explaining 92% of the total variance, with the lowest item loading at .93. We then rescaled the saved Bartlett factor score between 1 and 100 to indicate the marketing department power in each firm-year.

To assess the face validity of our measure, we conducted initial checks by comparing firms and industries within our sample known to have high versus low marketing department power (determined from financial analysts' reports, the business press, and interviews with executives and headhunters) with our marketing department power measure. The results (see Appendix C) suggest face validity for our marketing department power measure.

We also conducted a follow-up survey to further assess the validity of our measure by comparing it with perceptual marketing department power measures for the final year in our data set. A questionnaire was sent to 175 top managers in 80 firms in our sample asking them to rate different aspects of perceived marketing department power in their firms using measures from prior research. We received survey responses from 72 managers in 43 firms (a response rate of 41%). For 15 firms, we received surveys from two or more respondents, and a two-sample t-test (Respondent 1 vs. Respondent 2) revealed no significant differences across the two respondents for various measures of marketing department power.

We separated these survey responses into high versus low marketing department power groups according to the firm's marketing department power score using our new measure. In our survey sample, 9 firms fell into the high (above the median score on our measure) and 34 firms fell into the low (below the median score on our measure) marketing department power groups. We then used two-sample t-tests with unequal variances to assess group differences using the perceptual power measures contained within our survey. These tests revealed that firms classified in the high power group using our new measure had significantly higher perceptual marketing department power than firms in the low power group across all five perceived power measures (see Appendix D). This finding provides additional evidence of the validity of our objective measure of marketing department power.

Firm-level marketing capabilities. Following prior research, we operationalized both firms' LR MBA-building capabilities and SR MBA-leveraging capabilities with an input–output approach, using stochastic frontier estimation (SFE) (e.g., Bahadir, Bharadwaj, and Srivastava 2008; Dutta, Narasimhan, and Rajiv 1999). The SFE calculates an inefficiency score on the basis of how well a firm is able to transform available resource inputs into a desirable performance output relative to the best firms in an industry and is therefore directly aligned with the conceptualization of marketing capabilities.

To estimate firms' LR MBA-building capabilities, we follow Wiles, Morgan, and Rego (2012) and use the firm's current and previous year sales, general, and administrative (SG&A) expenses-to-sales and advertising-to-sales investments and the number of trademarks owned as the available

resource inputs. The desired performance output variable for an LR MBA-building capability is the firm's MBA. To proxy this, we follow Simon and Sullivan (1993) and Wiles, Morgan, and Rego (2012) and use the intangible asset value of the firm (Tobin's q) minus the variance accounted for by the firm's technology, industry membership, and management quality (for details, see Appendix E).

We estimate firms' SR MBA-leveraging capability similarly, using the aforementioned resource inputs (i.e., the firm's current and previous year SG&A-to-sales and advertising-to-sales investments and the number of trademarks owned) plus the firm's MBA (i.e., the intangible asset value of the firm not explained by its technology investments, industry membership, and management quality). We use short-term cash flow as the desired marketing output variable for our SR MBA-leveraging capability measure (e.g., Bahadir, Bharadwaj, and Srivastava 2008). Both capabilities are estimated relative to the best possible frontier within an industry for each year (for details, see Appendix E).

We assessed convergent validity by comparing firms shown to have high versus low LR MBA-building and SR MBA-leveraging capabilities using other indicators with our estimated marketing capability measures. Because brand equity is a key LR MBA (Srivastava, Shervani, and Fahey 1998), we identified firms believed to have high LR MBA-building capability using Interbrand's "Best Global Brands" list as a proxy. All else being equal, firms in our sample that appear on the list should have higher LR MBA-building capability scores than similar firms in the same industry that are not on the list. Likewise, because selling is a key SR MBA-leveraging activity, we evaluated the validity of our measure by comparing the scores of firms in our sample on the "Best Sales Force" list compiled annually by SellingPower.com with similar firms from the same industry and year but not on the list. As Appendix F shows, the results of a two-sample t-test demonstrate that "on-the-list" firms in our sample have significantly higher LR MBA-building capability ($t = -7.00$, $p < .001$) and SR MBA-leveraging capability ($t = -7.37$, $p < .001$) scores than "off-the-list" firms of similar sizes in the same industry. This result provides evidence of the convergent validity of our measures. In addition, the low correlation between the two capabilities (.277) and dissimilar correlations with other constructs and variables revealed in Table 1 provide evidence of the divergent validity of our marketing capability measures.

Firm performance measures. We use ROA and TSR as indicators of different aspects of firm performance because both have been used extensively in the marketing, management, accounting, and finance literature streams (e.g., Rust et al. 2004; Srinivasan and Hanssens 2009). Return on assets, computed as the ratio of the firm's income before extraordinary items to the firm's total assets, is a historical and backward-looking accounting metric that captures a firm's financial efficiency. Total shareholding returns is a forward-looking financial market–based metric that captures the firm's long-term future prospects and is the most commonly used stock market–based measure in evaluating and compensating senior executives. Following Srinivasan and Hanssens (2009), we assess the impact of changes in marketing department power and marketing capabilities on "abnormal" stock returns, using the Fama–French–Carhart four-factor benchmark model (Carhart 1997; Fama and French 1993) to calculate TSR.[5]

Because we are interested in predicting future performance and also trying to avoid any simultaneity and reverse-causality concerns, we calculate short-term ROA using next year's financial-accounting data ($ROA_{(t+1)}$); we compute longer-term $TSR_{(t+1\sim3)}$ as a future three-year average TSR_{it} for years (t + 1), (t + 2), and (t + 3). In addition to giving us a more long-term indicator of shareholder value in line with our theorizing, this three-year averaging also minimizes the impact of year-specific volatility in stock prices.

Control variables. We include several firm- and industry-specific covariates to control for other factors that are commonly known to affect firm performance. We control for competitive intensity using the Hirschmann–Herfindahl index (HHI) measure of industry concentration (the sum of the squared market shares for all firms in each industry). We also control for firm size (dollar value of total assets) to

[5] $TSR_{it} = (R_{it} - R_f) + [b_{0it} + b_{1i}(R_t^m - R_f) + b_{2i}R_t^{SMB} + b_{3i}R_t^{HML} + b_{4i}R_t^{UMD}]$, where R_{it} is stock i at time t return, R_f is the risk-free return rate, R_t^m is the average return on the market portfolio, R_t^{SMB} is size-related stock exposure, R_t^{HML} is growth-related stock exposure, and R_t^{UMD} is the momentum-related stock exposure. We use this four factor-adjusted TSR_{it} as a more precise measure of a firm's stock return, which can be interpreted as the abnormal return after controlling for market, size, growth, and momentum-specific returns. Model parameters (b_{0it}, b_{1it}, b_{2it}, b_{3it}, and b_{4it}) are estimated using factor data available from French's data library (http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html).

TABLE 1
Correlation Matrix

	1	2	3	4	5	6	7	8
1. Marketing department power	1.000							
2. LR MBA-building capabilities	.035	1.000						
3. SR MBA-leveraging capabilities	.071	.277	1.000					
4. ROA	.004	.098	−.072	1.000				
5. TSR	.029	.003	.004	−.108	1.000			
6. Firm size	−.038	−.019	−.167	−.004	−.010	1.000		
7. Number of SBUs	−.072	.021	−.143	−.013	.067	.166	1.000	
8. Competitive intensity (HHI)	−.000	.019	−.181	.028	−.048	.087	.022	1.000

Notes: Correlations with an absolute value greater than .021 are significant at $p < .05$.

control for scale economies and the number of business units (from Compustat's business segment database) to control for possible effects of SBU-level versus corporate-level differences in marketing organization (e.g., Arrfelt et al. 2014; Misangyi et al. 2006). Tables 1 and 2 summarize correlations and descriptive statistics for each of the variables in our data set.

Model Specification

We test our hypotheses using panel data (i.e., 612 firms across 16 years); this introduced several concerns, all of which were addressed using preliminary econometric tests. First, Breusch–Pagan and Wooldridge tests confirm that both heteroskedasticity and serial correlation are present in our data. Second, the Breusch–Pagan Lagrange multiplier test indicates that unobserved firm-specific heterogeneity (unit-specific error) is likely present, suggesting that an error-component model is appropriate (Baltagi 2001). Finally, endogeneity (i.e., omitted variable bias, measurement error, simultaneity bias, and dynamic endogeneity) is also likely to be of concern. To test our hypotheses in a way that addresses these concerns, we begin by estimating the following model specification (Baltagi 2001):

$$(1a)\ ROA_{i(t+1)} = \beta_0 + \beta_1 ROA_{it} + \beta_2 MDP_{it} + \Sigma_{k=1}^{2}\beta_{3k} MC_{kit} + \beta_4 Firm\ Size_{it} + \beta_5 SBUs_{it} + \beta_6 HHI_{it} + \Sigma_{k=1993}^{2008}\beta_{7k} Year\ Dummy_{ki(t+1)} + \eta_i + \varepsilon_{i(t+1)},\ and$$

$$(1b)\ TSR_{i(t+1)} = \beta_{r0} + \beta_{r1} TSR_{it} + \beta_{r2} MDP_{it} + \Sigma_{k=1}^{2}\beta_{r3k} MC_{kit} + \beta_{r4} ROA_{it} + \beta_{r5} Firm\ Size_{it} + \beta_{r6} SBUs_{it} + \beta_{r7} HHI_{it} + \Sigma_{k=1993}^{2008}\beta_{r8k} Year\ Dummy_{ki(t+1)} + \varphi_i + \zeta_{i(t+1)},$$

where i stands for firm and t for time (year); MDP_{it} represents marketing department power; $\Sigma_{k=1}^{2} MC_{kit}$ represents the vector of k different marketing capabilities (in this case, LR MBA-building and SR MBA-leveraging capabilities); Firm Size, SBUs, and HHI are control variables as described previously; $\Sigma_{k=1993}^{2008} Year\ Dummy_{ki(t+1)}$ represents a set of mutually exclusive year dummies; η_i and φ_i are time-invariant unobservable factors; and $\varepsilon_{i(t+1)}$ and $\zeta_{i(t+1)}$ are i.i.d. errors.

This model specification has several benefits. First, it accounts for time-invariant unobserved firm-specific heterogeneity (η_i and φ_i). Second, it directly addresses simultaneity endogeneity concerns by jointly estimating both equations and rules out reverse causality by estimating the effect of current marketing department power and marketing capabilities on future firm performance. In addition, it alleviates serial correlation concerns by including one-period lagged dependent variables (Kennedy 2003; Wooldridge 2006). Finally, including ROA_{it} as a predictor (Equation 1b) addresses firm-level endogeneity potentially introduced by efficiencies (ROA) when assessing marketing department power and firm-level marketing capabilities' impact on firms' long-term effectiveness (TSR).

Although the model specifications detailed in Equations 1a and 1b alleviate unobserved firm-specific heterogeneity and serial correlation concerns, they may not fully resolve these concerns. Therefore, we estimate a first-differences model specification, summarized in Equations 2a and 2b (Arellano and Bond 1991; Mizik and Jacobson 2004; Tuli, Bharadwaj, and Kohli 2010):

$$(2a)\ \Delta ROA_{i(t+1)} = \beta_1 \Delta ROA_{it} + \beta_2 \Delta MDP_{it} + \Sigma_{k=1}^{2}\beta_{3k}\Delta MC_{kit} + \beta_4 \Delta Size_{it} + \beta_5 \Delta SBUs_{it} + \beta_6 \Delta HHI_{it} + \Delta\varepsilon_{i(t+1)},\ and$$

$$(2b)\ \Delta TSR_{i(t+1)} = \beta_{r1}\Delta TSR_{it} + \beta_{r2}\Delta MDP_{it} + \Sigma_{k=1}^{2}\beta_{3rk}\Delta MC_{kit} + \beta_{r4}\Delta ROA_{it} + \beta_{r5}\Delta Size_{it} + \beta_{r6}\Delta SBUs_{it} + \beta_{r7}\Delta HHI_{it} + \Delta\zeta_{i(t+1)},$$

where $\Delta ROA_{i(t+1)} = ROA_{i(t+1)} - ROA_{it}$ and $\Delta TSR_{i(t+1)} = TSR_{i(t+1)} - TSR_{it}$.

Model notation and all remaining variables remain as described previously, except that all variables have been first-differenced.[6] Although a first-differences specification reduces the potential influence of autocorrelation and time-invariant unobservable factors, it does not directly address any remaining endogeneity concerns. However, because we use panel data, we can empirically address such concerns

[6]We follow standard notation (e.g., Tuli, Bharadwaj, and Kohli 2010) and do not list year dummies in the changes equations. Because system generalized method of moments (GMM) jointly uses levels and changes specifications, year dummies are used in the estimation procedure as IV-style instruments for the changes equations.

TABLE 2
Descriptive Statistics

	M	SD	SE	Min	Mdn	Max
Marketing Power and Capabilities						
Marketing department power	9.895	9.003	.101	1.000	9.895	100.000
LR MBA-building capabilities	63.918	4.467	.051	1.000	64.645	100.000
SR MBA-leveraging capabilities	53.269	15.945	.183	1.000	53.187	100.000
Firm Performance						
ROA	3.849%	17.977%	.203%	−584.485%	5.329%	52.903%
TSR	−10.410%	67.660%	.785%	−144.249%	−170.633%	1,581.944%
Controls						
Firm size (total assets in $ millions)	8,428.935	44,594.500	499.300	7.547	1,055.056	1,020,934
Number of SBUs	2.832	2.353	.026	1.000	2.000	23.000
Competitive intensity (HHI)	.184	.117	.001	.000	.156	.788

by identifying likely sources of endogeneity: (1) correlated lagged dependent variables and the error terms[7] ($\Delta\varepsilon_{i(t+1)}$ and $\Delta\zeta_{i(t+1)}$) in Equations 2a and 2b and (2) the firm's investments directed toward marketing department power and marketing capabilities, which may create endogeneity by simultaneously influencing marketing department power, marketing capabilities, and firm performance.

To empirically address these endogeneity concerns, we estimate the proposed model specification using system GMM. This estimation method yields unbiased and efficient estimates and empirically addresses all aforementioned potential sources of endogeneity (Arellano and Bover 1995; Blundell and Bond 1998). Specifically, we use the first two-period or earlier lagged values of the potentially endogenous variables and industry and year dummies as instruments for their first-differences (Mizik and Jacobson 2004; Tuli, Bharadwaj, and Kohli 2010). We then use these instruments to generate unbiased and efficient parameter estimates (e.g., Arellano and Bond 1991). We confirm that these instruments are consistent with serially uncorrelated disturbances, using the second-order autoregressive (AR[II]) test (Arellano and Bond 1991; Roodman 2009). In addition, the insignificant Hansen J and difference-in-Hansen C test statistics suggest that the model's specification is correct and the instruments used are valid. Finally, the Angrist–Pischke first-stage F-statistics, the Cragg–Donald weak-identification F-statistic, and associated Stock–Yogo critical values are all consistent with instrument relevance and exogeneity, indicating that the instruments used are valid and strong (see Table 3).

We addressed remaining estimation concerns (normality, outlier influence, etc.) by log-transforming variables with skewed distributions and Winsorizing the data at the 1% level to ensure that extreme observations do not improperly influence the findings (e.g., Tuli, Bharadwaj, and Kohli 2010). Finally, negligible variance inflation statistics suggest that multicollinearity is not a concern for the proposed model specification.

Results

Change in Marketing Department Power over Time

Before testing our hypotheses, to assess whether and how overall marketing department power has been changing in firms across industries over time in the United States, we computed an "absolute" version of our marketing department power measure in which each of the five indicators was not first normalized relative to the year's industry average. Figure 2 plots the growth curve of observed marketing department power using this absolute measure for the 612 firms over the 16-year period in our data set. This plot shows that, on average, the power of marketing departments has increased over the 16-year period through 2008.

[7]System GMM assumes that the untransformed error terms in Equations 1a and 1b are i.i.d. Although no requirements are assumed regarding the multivariate distribution of the error terms in Equations 2a and 2b (except that the error terms exist), the several transformations by the system GMM yield spherical multivariate error terms (Roodman 2009).

To assess the significance of this change in marketing department power across our sample over time, we estimated the following multilevel mixed-effects growth-model specification:

$$(3)\quad MDP_{it} = c_{0i} + c_{1i}Year_{it} + c_{2i}MBC_{it} + c_{3i}MLC_{it} + \ldots + \varepsilon_{it},$$

where $c_{0i} = \gamma_{00} + \zeta_{0i}$, $c_{1i} = \gamma_{10} + \zeta_{1i}$, $c_{2i} = \gamma_{20} + \zeta_{2i}$, and $c_{3i} = \gamma_{30} + \zeta_{3i}$ to capture each firm's unique growth coefficient. MDP_{it} is the level of marketing department power for firm i in year t, while MBC represents LR MBA-building capabilities and MLC represents SR MBA-leveraging capabilities, all as defined previously.

The estimated overall average growth coefficient (c_1 = .506, $p < .01$) indicates that the growth in marketing department power observed in Figure 2 has been positive and significant over the 16 years analyzed. Thus, concerns regarding decline in the influence and power of marketing departments within firms (at least in the United States for the time period we observe) seem to be unfounded, particularly because our measures are calibrated across a large, representative panel of firms over an extensive time period.

Marketing Department Power and Firm-Level Marketing Capabilities

In terms of hypothesis testing, Table 3 summarizes the main effects and mediation estimates of expected relationships. The Wald test confirms that the proposed model specification fits the data well. In addition, the AR(II) test verifies that second-order serial correlation is not present in our data, confirming the appropriateness of the system GMM methodology. Notably, the estimates for the direct effect model specification (M1) in Table 3 indicate that absent any inclusion of our hypothesized "mechanism" firm-level marketing capability constructs, marketing department power is positively associated with both firms' short-term future profitability (ROA) (β = .164, $p < .05$) and longer-term future shareholder value (TSR) (β = .483, $p < .01$) performance. These results suggest that after controlling for firm size, number of SBUs, and competitive intensity, overall marketing department power is associated with superior firm performance.

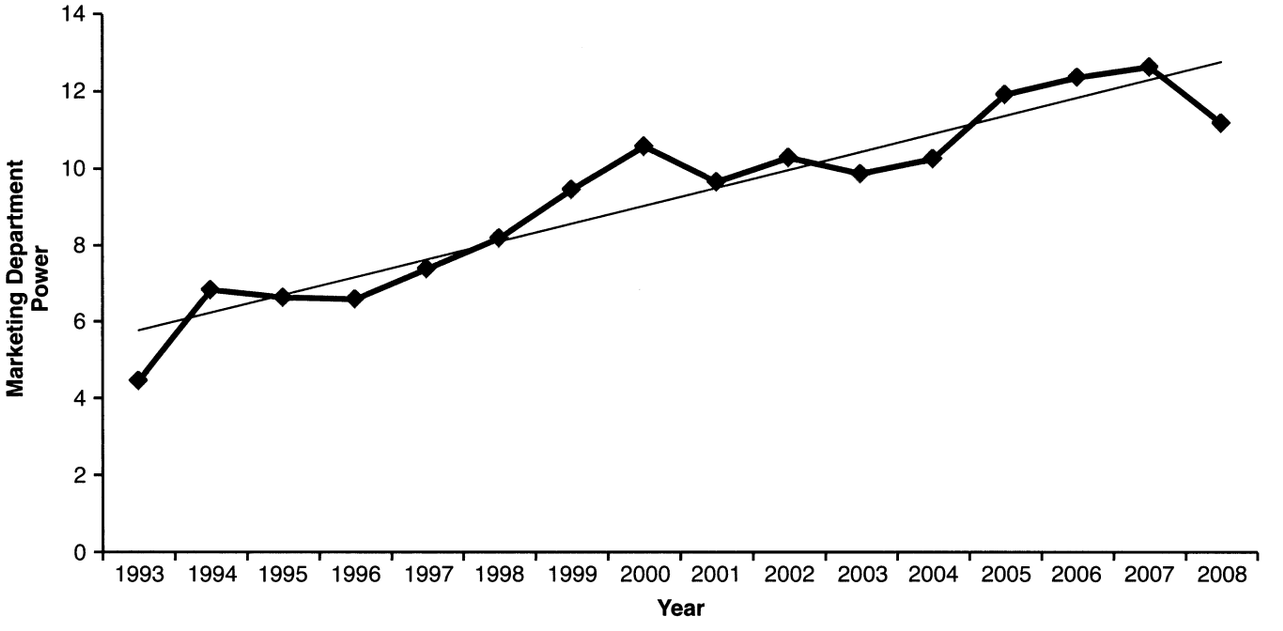
In terms of the primary hypothesized relationships of interest, the M2 model estimates in Table 3 indicate that a firm's marketing department power has a positive effect on both its LR MBA-building capabilities (β = .123, $p < .01$) and SR MBA-leveraging capabilities (β = .104, $p < .01$). To investigate possible reverse causality, we first conducted a Granger causality test, which revealed that marketing department power Granger-causes firm-level marketing capabilities and not vice versa. We then supplemented the Granger causality tests by investigating longer lag structures, as suggested by Tuli, Bharadwaj, and Kohli (2010). These findings are aligned with the Granger test, suggesting that marketing capabilities do not predict marketing department power and refuting the possibility of reverse causality. Overall, these analyses show that a powerful marketing department is a structural antecedent of superior firm-level marketing capabilities, in support of both H_{1a} and H_{1b}.

TABLE 3
Effects of Marketing Department Power on Firm Performance

	M1: Marketing Department Power and Firm Performance		M2: Marketing Department Power and Marketing Capabilities		M3: Marketing Department Power, Marketing Capabilities, and Firm Performance	
	$\Delta ROA_{(t+1)}$	$\Delta TSR_{(t+1 \sim 3)}$	ΔLR MBA-Building Capabilities$_t$	ΔSR MBA-Leveraging Capabilities$_t$	$\Delta ROA_{(t+1)}$	$\Delta TSR_{(t+1 \sim 3)}$
Direct Effect						
ΔMarketing Department Power$_t$	.164**	.483***	.123***	.104***	.057	.452**
+ Indirect Effect						
ΔLR MBA-Building Capabilities$_t$					−.146***	.554**
ΔSR MBA-Leveraging Capabilities$_t$					.418**	−.380
Controls						
ΔROA_t	.442***	−.004			.374***	−.009
ΔTSR_t		.339***				.364***
ΔFirm Size$_t$	−.013	.194	.094	−.451***	.248**	−.912*
ΔNumber of SBUs$_t$	.141	.192	−.045	.002	−.122**	.566**
ΔCompetition Intensity (HHI)$_t$	−.050	−.548***	.016	−.138***	.526***	−.785***
Specification Tests						
Number of observations	7,114	7,114	7,114	7,114	7,114	7,114
Wald χ^2 (d.f.)	896.79 (5)***	96.66 (6)***	323,512.74 (5)***	13,093.74 (5)***	424.30 (7)***	151.22 (8)***
AR(II) test (z-score)	−.14	.99	−1.59	−1.38	.27	.32
Hansen J (p-value)	.36	.52	.83	.53	.53	.31
Hansen C (p-value)	.60	.66	.80	.39	.50	.95
Angrist–Pischke F-statistic range	216.80–370.39	232.32–396.07	357.67	357.67	65.01–222.85	45.75–265.24
Cragg–Donald overall F-statistic	162.60	227.79	357.67	357.67	26.47	23.02
Stock–Yogo critical value (5% bias)	11.04	11.04	13.91	13.91	14.38	12.20
Stock–Yogo critical value (10% bias)	7.56	7.56	9.08	9.08	8.88	7.77

*$p < .1$.
**$p < .05$.
***$p < .01$.

FIGURE 2
Marketing Department Power Growth over Time



Notes: This chart plots the absolute version of the marketing department power measure in which each of the five power indicators was not normalized relative to industry/year. The coefficient for year of the growth curve using maximum likelihood estimation in the unconditional growth model is c_{year} = .506 ($p < .01$). Because this absolute version of the measure contains items on different scales that are not first standardized relative to industry/year average, as a robustness check we compared this measure with a measure containing the same items but computed using a polychoric correlation matrix for the factor analysis to handle using items on different scales. The correlation between the two measures is .991, and plots of the growth trajectories using both the original and polychoric measures are essentially identical. In addition, this trajectory remains significantly positive (c_{year} = .097, $p < .01$) even if we rescale the absolute power relative to industry average.

Marketing Capabilities and Firm Performance

The M3 model estimates in Table 3 indicate that firms' LR MBA-building capabilities have a positive effect on longer-term shareholder value (TSR) (β = .554, $p < .05$) and a negative effect on short-term profitability (ROA) (β = –.146, $p < .01$). Conversely, firms' SR MBA-leveraging capabilities have a positive effect on their short-term profitability (ROA) (β = .418, $p < .05$) and an insignificant effect on their longer-term shareholder value (TSR) (β = –.380, $p > .10$). These results support H_{2a}, H_{2b}, and H_{3b} but not H_{3a}. Overall, the M3 model results suggest that firms with superior MBA-related capabilities—specifically, the ability to build MBAs for the long run while leveraging existing MBAs into shorter-term cash flows—enjoy superior performance over time. However, given LR MBA-building's negative impact on short-term ROA, managers aiming only to maximize short-term profits may need to allocate fewer resources to MBA building and increase investments in the firm's MBA-leveraging capabilities.

Marketing Department Power and Firm Performance Beyond Marketing Capabilities

We test H_4 and H_5 using Baron and Kenny's (1986) logic that if marketing capabilities mediate the effect of marketing department power on future firm performance, we will observe that (1) marketing department power predicts marketing capabilities, (2) marketing capabilities predict future firm performance, and (3) the direct effect of marketing department power on future firm performance is weaker when the effect of marketing capabilities are accounted for. As Table 3 shows, M2 and M3 results reveal that (1) marketing department power positively predicts LR MBA-building and SR MBA-leveraging capabilities, with coefficients of .123 ($p < .01$) and .104 ($p < .01$), respectively; (2) LR MBA-building and SR MBA-leveraging capabilities predict future ROA, with coefficients of –.146 ($p < .01$) and .418 ($p < .05$), respectively, and LR MBA-building capabilities also predict future TSR with a coefficients of .554 ($p < .05$), though SR MBA-leveraging capabilities do not predict future TSR with a coefficient of –.380 ($p > .10$); and (3) the direct effect of marketing department power on future ROA is weaker when the effects of the two marketing capabilities are accounted for, with an insignificant coefficient of .057 ($p > .10$). However, the direct effect of marketing department power on future TSR is still positive and significant at .452 ($p < .05$), even when indirect effects through the two marketing capabilities are accounted for.

We also tested the statistical significance of the indirect effects of marketing department power on firm performance through the two firm-level marketing capabilities with Preacher and Hayes's (2008) bootstrap approach (Zhao,

Lynch, and Chen 2010). From 5,000 bootstrap runs and 95% confidence intervals, the results indicate that the indirect effects of marketing department power on ROA through LR MBA-building and SR MBA-leveraging capabilities are both significant, with coefficients of –.03% ($p < .05$) and .04% ($p < .05$), respectively. The indirect effects of marketing department power on TSR through LR MBA-building and SR MBA-leveraging capabilities are also both significant, with coefficients of .58% ($p < .05$) and –.30% ($p < .05$), respectively.

These results are all consistent with partial mediation for the impact of marketing department power on TSR through firms' marketing capabilities and provide support for H_4. This leaves open the possibility that a powerful marketing department may also contribute to longer-term shareholder value through its influence on the firm's TMT by focusing TMT attention on longer-term performance and helping the TMT make and execute strategic decisions in ways that better match external market conditions. In support of this possibility, in our validation survey data we find that firms with high versus low marketing department power have a stronger market orientation ($t = -2.61$, $p < .01$) and a longer-term time orientation ($t = -2.41$, $p < .05$). In addition, Appendix D shows that marketing departments in firms with high marketing department power also have significantly greater respect in the TMT ($t = -3.39$, $p < .01$) and greater influence over strategic decision making within the firm ($t = -1.99$, $p < .05$).

In contrast, the mediation test results do not indicate partial mediation for the effect of marketing department power on firms' short-term future ROA and thus fail to support H_5. These results indicate that a powerful marketing department affects firms' short-term profitability mainly through its effect in creating superior firm-level marketing capabilities.

Robustness checks. To establish the robustness of our findings, we conducted several sensitivity analyses. First, we used a Roy–Zellner test to ensure that our data are poolable (because heteroskedastic and autocorrelated errors are present in our data). These analyses confirm that our data are poolable across industry and time, as indicated by the joint Wald chi-square test of coefficient equality (Vaona 2008). Second, we performed wider outlier influence tests by Winsorizing the data up to the fifth and tenth percentiles. Substantively, the findings remain unchanged. Third, we observe no support for alternative nonlinear model specifications through two spline regressions (the top and bottom 40%) of marketing department power, finding no significant differences between the spline coefficients for the ROA or TSR model specifications. Fourth, to ensure that our findings are not influenced by the corporate versus SBU level of analysis, we also used the number of SBUs included as a control variable in our hypothesis-testing analyses to create a single versus multiple SBU dummy. We then examined the interaction of this dummy variable with marketing department power in our hypothesis-testing models and found the interaction term to be insignificant, indicating that our corporate-level analysis does not materially affect the results. Overall, these analyses confirm the robustness of the reported hypothesis-testing findings.

Implications for Theory and Practice

This research presents the first comprehensive examination of marketing department power over time in a large sample of publicly traded U.S. firms. The findings make three main contributions to the literature. First, this research contributes to the marketing organization literature by developing and validating a new measure of marketing department power and providing the first evidence regarding changes in marketing department power at multiple points in time, over a long time period, in a large sample of firms. We show that despite concerns voiced at various times in the literature, on average marketing department power has been gradually rising in large U.S. firms over the time period we examine. In addition, and perhaps more importantly, we show that the level of marketing department power matters significantly in predicting firm performance. Using objective performance measures and econometric models and tests that give a high degree of confidence in assessing causality, we provide strong evidence that marketing department power predicts firms' short-term profitability and, beyond this effect, directly predicts longer-term shareholder value.

Second, intraorganizational power research in organization theory has mainly focused on department-level outcomes. Here, we show that marketing department power has important firm-level effects, and we provide evidence consistent with theorized mechanisms concerning access to high-quality external and internal resources, which enables necessary cooperation from other functional areas to accomplish marketing tasks that are required to develop, maintain, and enhance firm-level marketing capabilities. This finding provides important new empirical insights to support theorized firm-level department power effects and also identifies department power as a new source of organizational capabilities.

Third, this study also contributes new insights to the marketing capabilities literature. Much of the prior literature has focused on single "overall" marketing capability measures and has typically established positive performance associations with such measures (e.g., Krasnikov and Jayachandran 2008). Here, we distinguish between two types of marketing capabilities—LR MBA-building capabilities and SR MBA-leveraging capabilities—and show that these capabilities have different effects. This finding suggests a need for further research to focus more on multiple rather than single marketing capabilities. Prior research on marketing capabilities has also primarily focused on single performance outcome indicators and short time frames. Our findings that LR MBA-building capabilities have negative effects on short-term ROA and positive effects on longer-term TSR suggest that further marketing capability research should assess multiple performance outcomes over different time periods to ensure that marketing capabilities' effects can be comprehensively captured and evaluated.

From a managerial perspective, this research shows that senior managers should want a powerful marketing department because it contributes to a firm's short-term profitability and longer-term shareholder value (even beyond its effect through marketing capabilities). This finding suggests that chief executive officers (CEOs) should actively try to ensure that marketers are represented in the firm's TMT. Furthermore, CEOs would be well advised to ensure that these marketing executives are influential in the work of the TMT.

In addition, we find that the positive effect of marketing department power on firm performance manifests mainly through stronger firm-level capabilities in the LR building and SR leveraging of MBAs. Therefore, managers should be particularly motivated to develop and enhance the firm's ability to build and leverage MBAs. However, because LR MBA-building capability has a negative effect on short-term ROA and a positive effect on longer-term TSR (even when controlling for ROA), managers who are focused only on short-term profit maximization should be aware of the potential trade-offs in making their resource allocation decisions. Yet our results also clearly show that longer-term shareholder returns require no such trade-offs and that managers should invest in both their LR MBA-building and SR MBA-leveraging efforts to maximize future shareholder value.

Limitations and Further Research

When considering our results, several limitations should be kept in mind, which offer future research opportunities. First, we assume that the TMT executives with marketing-related job titles we identified represent the firm's marketing department rather than some other department. Discussions with chief marketing officers suggested strong face validity for our "marketing department" interpretation of the job titles used in our measure. Nonetheless, some of the executives captured in our measure may not represent formally organized marketing departments. In addition, firms with multiple SBUs may organize marketing at the SBU level, whereas our data are at the corporate level. Organization theory suggests that firms with powerful SBU-level marketing departments should also have stronger corporate-level TMT marketing representation. Nonetheless, we empirically control for this by including the number of SBUs in our analyses, and a subsequent robustness check showing an insignificant interaction between a single- versus multiple-SBU dummy and marketing department power also indicates that the corporate-level analysis does not affect our results. Furthermore, our survey validity assessment data also indicate that our measure successfully distinguishes between firms in which marketing departments are more versus less powerful. Yet because some executives captured in our measure may not represent marketing departments, and SBU-level marketing department power may not be fully represented in our corporate-level data, our measure may be somewhat "noisy." Further research supplementing our measure with survey measures to establish (1) the departmental membership of executives with the marketing-related titles we identify and (2) the organizational level at which marketing is planned will help further purify our measure.

Second, we do not directly control for firms' market orientation in our analyses because of data unavailability. However, we do indirectly capture manifestations of market orientation because the literature has suggested that a strong market orientation culture may lead to, and result from, marketing department power (Verhoef and Leeflang 2009), and market orientation is also reflected in how well firm-level marketing activities are performed (Morgan, Vorhies, and Mason 2009). In addition, our measure validation survey data also show stronger market orientation in firms with high versus low marketing department power. Further research could potentially examine and control for any effect of market orientation beyond its manifestation in firms' marketing capabilities and marketing department power; perhaps researchers could capture effects of market orientation using text analysis of firms' shareholder letters or CEO interviews.

Third, we do not investigate the functional background of TMT members to examine whether and how it may affect our results. However, as a further robustness check we did control for the CEO's marketing background for half the sample and found no significant effect of CEO marketing background on our results. Further research could explore the performance impact of marketing through "Big M" (formal department power) versus "little m" ("part-time marketer") perspective taking. For example, is it more efficient and effective to have a powerful marketing department or to have a greater number of TMT members with marketing experience and backgrounds?

This study also reveals several important new avenues for further research. First, if marketing departments are becoming more powerful, is this a zero-sum game? If so, who is losing power within these same firms? Although most of our marketing department power indicator items are calibrated relative to the total TMT, our measure is absolute in the sense that, for logistical reasons (i.e., the vast number of different job titles across all functional departments), we do not also calibrate the power of other functional areas within the firm for comparative purposes. However, future researchers could use our measurement approach to calibrate the power of other functional departments and explore the existence and performance effect of the interplay between the power of marketing departments and that of other functional departments.

Second, what predicts marketing department power, and is it more or less valuable under different conditions? We show that during the 1993–2008 period, marketing department power gradually increased in a large sample of U.S. firms—but why is that the case? There is a rich organization theory literature on sources of intraorganizational power (including strategic contingencies, institutional forces, and resource dependence) that has yet to be explored in the context of predicting marketing department power. In addition, controlling for a wide range of firm and industry factors, we show that marketing department power is valuable in a large cross-industry sample. However, we do not explore

whether marketing department power may be more or less valuable to certain types of firms or in different market environments. For example, is marketing department power more valuable for firms pursuing a differentiation strategy or for firms in consumer-focused industries?

Third, our partial-mediation TSR results, along with data from our validation survey, provide evidence consistent with an additional mechanism through which department power may affect firm performance by influencing TMT attention and strategic decision making. Our survey validation data suggest that this may be not only in terms of increasing firms' market orientation but also potentially by influencing the time horizon of senior managers' decision-making focus. Traditionally, the market orientation literature has concentrated on the firm-level benefit of focusing managers' (including the TMT's) attention on customers and the product marketplace. Though not directly measured in our study, our results indicate the possibility that an additional value-creating mechanism may also operate by focusing the framing of TMT decisions on longer-term effectiveness in ways that counterbalance the shorter-term efficiency focus of other functional departments. This suggests a potential new avenue through which marketing may contribute to firm performance for future researchers to explore.

Conclusion

Using longitudinal annual data and a newly developed measure of marketing department power, this research is the first to empirically examine marketing department power over time in a large sample of U.S. firms. Our results indicate that marketing department power increased over the 1993–2008 period. Furthermore, we find evidence that this increase matters significantly; our results show that marketing department power predicts firms' future financial performance. In addition, this study illuminates an important new mechanism for this relationship. We show that firms' LR MBA-building capabilities and SR MBA-leveraging capabilities partially mediate the effect of a firm's marketing department power on future TSR and fully mediate marketing department power's effect on firms' short-term ROA.

APPENDIX A
Industries Included in the Sample

SIC Code	SIC Industry Label	SIC Code	SIC Industry Label
01	Agriculture Production—Crops	48	Communications
07	Agriculture Services	49	Electric, Gas & Sanitary Services
10	Metal Mining	50	Durable Goods
12	Coal/Lignite Mining	51	Non-Durable Goods
13	Oil & Gas Extraction	52	Building Materials, Hardware, Garden
14	Forestry		Supplies & Mobile Home Dealers
15	General Building Contractors	53	General Merchandise Stores
20	Food & Kindred Products	54	Food Stores
21	Tobacco Manufacturing	55	Automobile Dealers & Gasoline Service
22	Textile Mill Products		Stations
23	Apparel & Other Textile Products	56	Apparel & Accessory Stores
24	Lumber and Wood Products	57	Home Furniture, Furnishings & Equipment
25	Furniture & Fixtures		Stores
26	Paper & Allied Products	58	Eating & Drinking Places
27	Printing & Publishing	59	Miscellaneous Retail
28	Chemicals & Allied Products	60	Depository Institutions
29	Petroleum & Coal Products	61	Non-Depository Credit Institutions
30	Rubber/Misc. Plastic Products	62	Security & Commodity Brokers, Dealers,
31	Leather & Leather Products		Exchanges & Services
32	Stone, Clay, Glass & Concrete Prod.	63	Insurance Carriers
33	Primary Metal Industries	64	Insurance Agents, Brokers & Service
34	Fabricated Metal Products	67	Holding & Other Investment Offices
35	Industrial & Commercial Machinery	70	Hotels, Rooming Houses, Camps & Other
	& Computer Equipment		Lodging Places
36	Electrical Equipment & Components	72	Personal Services
37	Transportation Equipment	73	Business Services
38	Measurement Analyzing, Control	75	Automotive Repair Services & Parking
	Instrument & Related Products	78	Motion Pictures
39	Misc. Manufacturing Industries	79	Amusement & Recreation Services
40	Railroad Transportation	80	Health Services
42	Motor Freight Transportation	82	Educational Services
44	Water Transportation	87	Engineering, Accounting, Research
45	Transportation by Air		Management & Related Services
47	Transportation Services	99	Non-Classifiable Establishments

APPENDIX B
Titles Used to Identify Marketing Executives in the TMT

Hierarchical Designation (Description)	Functional Marketing Related Area	Marketing Executive Role Designation (from Title Descriptions)	Title (Actual Examples)
President	Integrated (Chief xyz Officer)	Chief marketing/(multi-) brand(s/ing)/media/communications/ merchandising/customer (development)/growth officer	Chief Marketing and Strategy Officer
Executive Vice President	Marketing	Marketing, corporate marketing, enterprise marketing, (world-wide) strategic marketing, global/worldwide marketing, direct marketing, retail marketing, merchandising marketing, (global) product marketing, automotive marketing, energy marketing, solutions marketing, display marketing, imaging marketing, financial marketing, original equipment manufacturer marketing, technical marketing, medical marketing (services), northeast marketing, marketing operations, marketing services	Executive VP & Manager—Strategic Marketing; Executive VP—Marketing & Logistics
Senior Vice President	Brand	Brand, multibranding, brand management, brand solutions, global/worldwide brands, premium brands, store brands, brand development/building, brand operation	Senior VP—Brand Development
Vice President	Advertising and communication	Advertising, Internet advertising, media, public affairs, public relations, corporate affairs, corporate relations, communication, external relations, investor relations	VP—Advertising
	Customer relations	Customer(s), customer development, customer management, relationship management, customer relations, customer group, customer strategy and insight, customer (and enterprise) solutions, customer success, shopper(s), loyalty, customer operations	VP—Global Customer Management
	Product/market	Product/market/business/customer/corporate/trend development, (global) product management, product and service operations, store and product development, strategic business development, branded products packaging, product design, national consumer markets, new business, demand	VP—Marketing & Product Development
	Channel	Channel partners, international trade channels, dealer relations, merchandising, retail	VP—Dealer Relations

Notes: Often, individual job titles contain combinations of the various terms (see actual title examples). Titles are from all 612 firms from 1993 to 2008.

APPENDIX C
Marketing Department Power Measure Face Validity Assessment

A: Firm Level

Industry (SIC Code)	Known Higher Marketing Department Power Player	Marketing Department Power Score	Known Lower Marketing Department Power Player	Marketing Department Power Score
Programming & Data Processing (7370)	Google	28.41	Yahoo	3.37
Personal Computers (3571)	Apple	37.58	Dell	3.49
Food & Kindred Products (2000)	Kellogg	24.82	ConAgra	9.90
Retailers (5331)	Target	41.92	Wal-Mart	3.49

B: Industry Level

Known Higher Marketing Department Power Industry (SIC Code)	Marketing Department Power Score	Known Lower Marketing Department Power Industry (SIC Code)	Marketing Deparment Power Score
Motion Picture (78)	46.62	Agricultural Production Crops (01)	1.00
Home Furniture (57)	19.43	General Contractors (15)	1.00
Tobacco (21)	19.23	Rubber & Miscellaneous Plastics Products (30)	1.00
Engineering, Accounting, Research, Management & Related Services (87)	19.55	Water Transportation (44)	1.00
Advertising (73)	11.18	Electric, Gas & Sanitary Services (49)	4.14

Notes: Firm-level marketing department power is relative to industry average and scaled between 1 and 100; industry-level marketing department power is scaled between 1 and 100.

APPENDIX D
Survey Data Validation Assessment of Marketing Department Power Measure

	Marketing Department Power Mean	Marketing Department Power Rank (Piercy 1987) Mean	Marketing Executive Power (Finkelstein 1992) Mean	Perceived Marketing Department Power (Verhoef and Leeflang 2009) Mean	Marketing Department TMT Respect (Verhoef and Leeflang 2009) Mean	Marketing Department Decision Influence (Verhoef and Leeflang 2009) Mean
Low marketing department power	5.52	5.38	4.64	3.95	4.26	5.08
High marketing department power	33.59	6.45	5.89	5.29	5.08	5.50
Mean difference t-test	–4.69***	–3.95***	–3.97***	–3.76***	–3.39***	–1.99**

**$p < .05$.
***$p < .01$.
Notes: Marketing department power rank scores are reversed so that higher scores indicate higher department power.

Appendix E: LR MBA-Building and SR MBA-Leveraging Capability Measures

The general function of SFE is $Output_{it} = \alpha_0 + \alpha_1 \times input_{1it} + \alpha_2 \times input_{2it} + \ldots + \varepsilon_{it} - \eta_{it}$, where ε_{it} represents the stochastic error in the output and η_{it} is the inefficiency score that captures a firm's inefficiency in converting resources into the output. Assuming that $\varepsilon_i \sim N(0, \sigma_\varepsilon^2)$, $\eta_i \sim N(\mu, \sigma_\eta^2)$ with $\mu > 0$, $E[\varepsilon_{it}\eta_{it}] = 0$ (μ is the mean of ηit, and σ_ε and σ_η are standard variance of ε_{it} and η_{it}), and the two error components are independently distributed of the independent variables, we follow Dutta, Narasimhan, and Rajiv (1999, 2005) and derive a consistent estimate for the inefficiency term η_{it} and use the inverse of η_{it} to measure a firm's capability on the basis of the maximum likelihood estimates of the parameters μ, σ_ε, and σ_η.

More specifically, to estimate a firm's LR MBA-building capability for firm i in year t,

$$\ln(MBA_{it}) = \alpha_0 + \alpha_1\ln(ADS_{it}) + \alpha_2\ln(ADS_{i(t-1)}) + \alpha_3\ln(SGAS_{it}) + \alpha_4\ln(SGAS_{i(t-1)}) + \alpha_5\ln(TRM_{it}) + \alpha_6 IND_i + \varepsilon_{it} - \eta_{it},$$

where

ε_{it} = the random shock;
η_{it} = the inefficiency score;
ADS_{it} = advertising expenses relative to sales of firm i in year t;
$ADS_{i(t-1)}$ = advertising expenses relative to sales of firm i in year t – 1;
$SGAS_{it}$ = SG&A expenses relative to sales of firm i in year t;
$SGAS_{i(t-1)}$ = SG&A expenses relative to sales of firm i in year t – 1;
TRM_{it} = number of trademarks of firm i in year t;
IND_i = industry dummies (two-digit SIC code) for firm i; and
MBA_{it} = MBA value of firm i in year t, estimated as the residual (λ_{it}).

$$\ln(Q_{it}) = \beta_0 + \beta_1\ln(RDS_{it}) + \beta_2\ln(PAT_{it}) + \beta_3\ln(MQ_{it}) + \beta_4 IND_i + \lambda_{it},$$

where

Q_{it} = Tobin's q of firm i in year t,
RDS_{it} = R&D expenses relative to sales of firm i in year t,
PAT_{it} = number of patents of firm i in year t,
MQ_{it} = management quality of firm[8] i in year t, and
IND_i = industry dummies (two-digit SIC code) for firm i.

Similarly, to estimate a firm's SR MBA-leveraging capability, for firm i in year t, we follow

$$\ln(CF_{it}) = \gamma_0 + \gamma_1\ln(AD_{it}) + \gamma_2\ln(AD_{i(t-1)}) + \gamma_3\ln(SGA_{it}) + \gamma_4\ln(SGA_{i(t-1)}) + \gamma_5\ln(TRM_{it}) + \gamma_6 MBA_{it} \times \text{Firm Size}_{it} + \gamma_7 IND_i + \varepsilon_{1it} - \eta_{1it},$$

where

ε_{1it} = the random shock;
η_{1it} = the efficiency score;
CF_{it} = cash flow of firm i in year t;
AD_{it} = advertising expenses of firm i in year t;
$AD_{i(t-1)}$ = advertising expenses of firm i in year t – 1;
SGA_{it} = SG&A expenses of firm i in year t;
$SGA_{i(t-1)}$ = SG&A expenses of firm i in year t – 1;
TRM_{it} = number of trademarks of firm i in year t;
IND_i = industry dummies (two-digit SIC code) for firm i; and
MBA_{it} = MBA value of firm i in year t, estimated as detailed previously.

[8]Following Wiles, Morgan, and Rego (2012), management quality is captured as the "management quality" variable from the America's Most Admired Companies database for the firm-years for which we have these data and proxied by TMT total compensation for those for which we do not have these data. The correlation between the MBA variable calculated using either management quality indicator is .98.

After deriving the inefficiency score η using the parameter estimates of the input–output SFE equation by industry and year, we calculated the inverse of the inefficiency score η (higher inefficiency means lower marketing capability) by rescaling it from 1 to 100 [$(\eta_{it}$ – max)/min – max) × (100 – 1) + 1] to obtain the firm-year marketing capabilities scores (Bahadir, Bharadwaj, and Srivastava 2008).

APPENDIX F
Face Validity Assessment of Marketing Capabilities Measures

	MBA-Building Capability Score Mean		MBA-Leveraging Capability Score Mean
Firms on Interbrand's "World's Most Valuable Brands" list	61.52	Firms on SellingPower.com's "Best Sales Force" list	38.26
Matched sample not on Interbrand's "World's Most Valuable Brands" list	55.30	Matched sample not on SellingPower.com's "Best Sales Force" list	30.40
Group mean difference two-sample t-test	–7.00***		–7.37***

***$p < .01$.
Notes: Marketing capabilities are scaled between 1 and 100, from lowest to highest.

REFERENCES

Ambler, Tim and John Roberts (2006), "Beware the Silver Metric: Marketing Performance Measurement Has to Be Multidimensional," MSI Working Paper, Report #06-113.

Arellano, Manuel and Stephen Bond (1991), "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations," *Review of Economic Studies*, 58 (2), 277–97.

—— and Olympia Bover (1995), "Another Look at the Instrumental Variable Estimation of Error-Components Models," *Journal of Econometrics*, 68 (1), 29–51.

Arrfelt, Mathias, Robert M. Wiseman, Gerry McNamara, and G. Tomas M. Hult (2014), "Examining a Key Corporate Role: The Influence of Capital Allocation Competency on Business Unit Performance," *Strategic Management Journal*, 36 (7), 1017–34.

Astley, W. Graham and Paramjit S. Sachdeva (1984), "Structural Sources of Intraorganizational Power: A Theoretical Synthesis," *Academy of Management Review*, 9 (1), 104–113.

—— and Edward J. Zajac (1991), "Intraorganizational Power and Organizational Design: Reconciling Rational and Coalitional Models of Organization," *Organization Science*, 2 (4), 399–411.

Atuahene-Gima, Kwaku (2005), "Resolving the Capability–Rigidity Paradox in New Product Development," *Journal of Marketing*, 69 (October), 61–83.

Bahadir, Cem, Sundar G. Bharadwaj, and Rajendra K. Srivastava (2008), "Financial Value of Brands in Mergers and Acquisitions: Is Value in the Eye of the Beholder?" *Journal of Marketing*, 72 (November), 49–64.

Baltagi, Badi H. (2001), *Econometric Analysis of Panel Data*. Chichester, UK: John Wiley & Sons.

Baron, Reuben M. and David A. Kenny (1986), "The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173–82.

Blundell, Richard and Stephen Bond (1998), "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models," *Journal of Econometrics*, 87 (1), 115–43.

Boeker, Warren (1989), "The Development and Institutionalization of Subunit Power in Organizations," *Administrative Science Quarterly*, 34 (3), 388–410.

Brass, D.J. and M.E. Burkhardt (1993), "Potential Power and Power Use: An Investigation of Structure and Behavior," *Academy of Management Journal*, 36 (3), 441–70.

Calantone, Roger, Cornelia Dröge, and Shawnee Vickery (2002), "Investigating the Manufacturing–Marketing Interface in New Product Development: Does Context Affect the Strength of Relationships?" *Journal of Operations Management*, 20 (3), 273–87.

Carhart, Mark M. (1997), "On Persistence in Mutual Fund Performance," *Journal of Finance*, 52 (1), 57–82.

Child, John (1997), "Strategic Choice in the Analysis of Action, Structure, Organizations and Environment: Retrospect and Prospect," *Organization Studies*, 18 (1), 43–76.

Cyert, Richard M. and James G. March (1963), *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice Hall.

Day, George S. (1994), "The Capabilities of Market-Driven Organizations," *Journal of Marketing*, 58 (October), 37–52.

Dekimpe, Marnik G., Dominique M. Hanssens, Vincent R. Nijs, and Jan-Bendict Steenkamp (2005), "Measuring Short- and Long-Run Promotional Effectiveness on Scanner Data Using Persistence Modeling,"*Applied Stochastic Models in Business and Industry*, 21 (4/5), 409–416.

Delmas, Magali A. and Michael W. Toffel (2008), "Organizational Responses to Environmental Demands: Opening the Black Box," *Strategic Management Journal*, 29 (10), 1027–55.

Dutta, Shantanu, Om Narasimhan, and Surendra Rajiv (1999), "Success in High-Technology Markets: Is Marketing Capability Critical?" *Marketing Science*, 18 (4), 547–68.

——, ——, and —— (2005), "Conceptualizing and Measuring Capabilities: Methodology and Empirical Application," *Strategic Management Journal*, 26 (3), 277–85.

——, Mark J. Zbaracki, and Mark Bergen (2003), "Pricing Process as a Capability: A Resource-Based Perspective," *Strategic Management Journal*, 24 (7), 615–30.

Fama, Eugene F. and Kenneth R. French (1993), "Common Risk Factors in the Returns on Stocks and Bonds," *Journal of Financial Economics*, 33 (1), 3–56.

Finkelstein, Sydney (1992), "Power in Top Management Teams: Dimensions, Measurement, and Validation," *Academy of Management Journal*, 35 (3), 505–538.

—— and Donald C. Hambrick (1990), "Top-Management-Team Tenure and Organizational Outcomes: The Moderating Role of Managerial Discretion," *Administrative Science Quarterly*, 35 (3), 484–503.

Götz, Oliver, Ann-Kristin Hoelter, and Manfred Krafft (2013), "The Role of Sales and Marketing in Market-Oriented Companies," *Journal of Personal Selling & Sales Management*, 33 (4), 353–71.

Greenwood, Royston and C.R. Hinings (1996), "Understanding Radical Organizational Change: Bringing Together the Old and New Instituitionalism," *Academy of Management Review*, 21 (4), 1022–54.

Gruca, Thomas S. and Lopo L. Rego (2005), "Customer Satisfaction, Cash Flow, and Shareholder Value," *Journal of Marketing*, 69 (July), 115–30.

Gupta, Sunil, Donald R. Lehmann, and Jennifer Ames Stuart (2004), "Valuing Customers," *Journal of Marketing Research*, 41 (February), 7–18.

Hambrick, Donald C. (1981), "Environment, Strategy, and Power Within Top Management Teams," *Administrative Science Quarterly*, 26 (2), 253–76.

——, Theresa Seung Cho, and Ming-Jer Chen (1996), "The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves," *Administrative Science Quarterly*, 41 (4), 659–84.

—— and Richard A. D'Aveni (1992), "Top Team Deterioration as Part of the Downward Spiral of Large Corporate Bankruptcies," *Management Science*, 38 (10), 1445–66.

Hickson, David J., Christopher R. Hinings, Charles A. Lee, Rodney E. Schneck, and Johannes M. Pennings (1971), "A Strategic Contingencies Theory of Intraorganizational Power," *Administrative Science Quarterly*, 16 (2), 216–29.

Hills, Frederick S. and Thomas A. Mahoney (1978), "University Budgets and Organizational Decision Making," *Administrative Science Quarterly*, 23 (3), 454–65.

Hinings, Christopher R., David J. Hickson, Johannes M. Pennings, and Rodney E. Schneck (1974), "Structural Conditions of Intraorganizational Power," *Administrative Science Quarterly*, 19 (1), 22–44.

Homburg, Christian and Ove Jensen (2007), "The Thought Worlds of Marketing and Sales: Which Differences Make a Difference?" *Journal of Marketing*, 71 (July), 124–42.

——, Arnd Vomberg, Margit Enke, and Philipp H. Grimm (2015), "The Loss of the Marketing Department's Influence: Is It Really Happening? and Why Worry?" *Journal of the Academy of Marketing Science*, 43 (1), 1–13.

——, John P. Workman Jr., and Harley Krohmer (1999), "Marketing's Influence Within the Firm," *Journal of Marketing*, 63 (April), 1–17.

Joshi, Amit and Dominique M. Hanssens (2010), "The Direct and Indirect Effects of Advertising Spending on Firm Value," *Journal of Marketing*, 74 (January), 20–33.

Kennedy, Peter (2003), *A Guide to Econometrics*, 5th ed. Cambridge, MA: MIT Press.

Kenny, Graham K. and David C. Wilson (1984), "The Interdepartmental Influence of Managers: Individual and Sub-Unit Perspectives," *Journal of Management Studies*, 21 (4), 409–425.

Krasnikov, Alexander and Satish Jayachandran (2008), "The Relative Impact of Marketing, Research-and-Development, and Operations Capabilities on Firm Performance," *Journal of Marketing*, 72 (July), 1–11.

Lamberti, Lucio and Giuliano Noci (2009), "Marketing Power and CMO Power: Could Market Orientation Break the Link? An Exploratory Case Study," *Journal of Strategic Marketing*, 17 (5), 327–43.

Lehmann, Donald R. and David J. Reibstein (2006), *Marketing Metrics and Financial Performance*. Cambridge, MA: Marketing Science Institute.

Lodish, Leonard M., Magid M. Abraham, Jeanne Livelsberger, Beth Lubetkin, Bruce Richardson, and Mary Ellen Stevens (1995), "A Summary of Fifty-Five In-Market Experimental Estimates of the Long-Term Effects of TV Advertising," *Marketing Science*, 14 (3), G133–40.

—— and Carl F. Mela (2007), "If Brands Are Built over Years, Why Are They Managed over Quarters?" *Harvard Business Review*, 85 (7/8), 104–112.

Mande, Vivek and Myungsoo Son (2012), "CEO Centrality and Meeting or Beating Analysts' Earnings Forecasts," *Journal of Business Finance & Accounting*, 39 (1/2), 82–112.

Merlo, Omar and Seigyoung Auh (2009), "The Effects of Entrepreneurial Orientation, Market Orientation, and Marketing Subunit Influence on Firm Performance," *Marketing Letters*, 20 (3), 295–311.

—— and —— (2010), "Marketing's Strategic Influence in Australian Firms: A Review and Survey," *Australasian Marketing Journal*, 18 (2), 49–56.

——, Bryan A. Lukas, and Gregory J. Whitwell (2012), "Marketing's Reputation and Influence in the Firm," *Journal of Business Research*, 65 (3), 446–52.

Misangyi, Vilmos F., Heather Elms, Thomas Greckhamer, and Jeffrey A. Lepine (2006), "A New Perspective on a Fundamental Debate: A Multilevel Approach to Industry, Corporate, and Business Unit Effects," *Strategic Management Journal*, 27 (6), 571–90.

Mizik, Natalie and Robert Jacobson (2004), "Are Physicians 'Easy Marks'? Quantifying the Effects of Detailing and Sampling on New Prescriptions," *Management Science*, 51 (12), 1704–1715.

Moorman, Christine and Roland T. Rust (1999), "The Role of Marketing," *Journal of Marketing*, 63 (Special Issue), 180–97.

Morgan, Neil A., Rebecca Slotegraaf, and Douglas W. Vorhies (2009), "Linking Marketing Capabilities with Profit Growth," *International Journal of Research in Marketing*, 26 (4), 284–93.

——, Douglas W. Vorhies, and Charlotte H. Mason (2009), "Market Orientation, Marketing Capabilities, and Firm Performance," *Strategic Management Journal*, 30 (8), 909–920.

Nath, Pravin and Vijay Mahajan (2011), "Marketing in the C-Suite: A Study of Chief Marketing Officer Power in Firms' Top Management Teams," *Journal of Marketing*, 75 (January), 60–77.

Pauwels, Koen, Jorge Silva-Risso, Shuba Srinivasan, and Dominique M. Hanssens (2004), "New Products, Sales Promotion, and Firm Value: The Case of the Automobile Industry," *Journal of Marketing*, 68 (October), 142–56.

Perrow, Charles (1970), "Departmental Power and Perspective in Industrial Firms," in *Power in Organizations*, M. Zald, ed. Nashville, TN: Vanderbilt Press, 59–89.

Pfeffer, Jeffrey (1981), *Power in Organizations*. Marshfield, MA: Pitman Publishing.

—— and Alison Davis-Blake (1987), "Understanding Organizational Wage Structures: A Resource Dependence Approach," *Academy of Management Journal*, 30 (3), 437–55.

—— and William L. Moore (1980), "Power in University Budgeting: A Replication and Extension," *Administrative Science Quarterly*, 25 (4), 637–53.

Piercy, Nigel F. (1987), "The Marketing Budgeting Process: Marketing Management Implications," *Journal of Marketing*, 51 (October), 45–59.

—— (1989), "The Power and Politics of Sales Forecasting: Uncertainty Absorption and the Power of the Marketing Department," *Journal of the Academy of Marketing Science*, 17 (2), 109–120.

Preacher, Kristopher J. and Andrew F. Hayes (2008), "Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models," *Behavior Research Methods*, 40 (3), 879–91.

Provan, Kenneth G. (1989), "Environment, Department Power, and Strategic Decision Making in Organizations: A Proposed Integration," *Journal of Management*, 15 (1), 21–34.

Ramaswami, Sridhar, Rajendra Srivastava, and Mukesh Bhargava (2009), "Market-Based Capabilities and Financial Performance of Firms: Insights into Marketing's Contribution to Firm Value," *Journal of the Academy of Marketing Sciences*, 37 (2), 97–116.

Ronchetto, John R., Michael D. Hutt, and Peter H. Reingen (1989), "Embedded Influence Patterns in Organizational Buying Systems," *Journal of Marketing*, 53 (October), 51–62.

Roodman, David (2009), "How to Do Xtabond2: An Introduction to Difference and System GMM in Stata," *Stata Journal*, 9 (1), 86–136.

Rust, Roland T., Tim Ambler, Gregory S. Carpenter, V. Kumar, and Rajendra K. Srivastava (2004), "Measuring Marketing Productivity: Current Knowledge and Future Directions," *Journal of Marketing*, 68 (October), 76–89.

Salancik, Gerald R. and Jeffrey Pfeffer (1974), "The Bases and Use of Power in Organizational Decision Making: The Case of a University," *Administrative Science Quarterly*, 19 (4), 453–73.

Simon, Carol J. and Mary W. Sullivan (1993), "The Measurement and Determinants of Brand Equity: A Financial Approach," *Marketing Science*, 12 (1), 28–52.

Srinivasan, Shuba and Dominque Hanssens (2009), "Marketing and Firm Value: Metrics, Methods, Findings, and Future Directions," *Journal of Marketing Research*, 46 (June), 293–312.

Srinivasan, V., William S. Lovejoy, and David Beach (1997), "Integrated Product Design for Marketability and Manufacturing," *Journal of Marketing Research*, 34 (February), 154–63.

Srivastava, Rajendra K. and David J. Reibstein (2005), "Metrics for Linking Marketing to Financial Performance," MSI Working Paper, Report # 05-200.

——, Tasadduq A. Shervani, and Liam Fahey (1998), "Market-Based Assets and Shareholder Value: A Framework for Analysis," *Journal of Marketing*, 62 (January), 2–18.

Tuli, Kapil R., Sundar G. Bharadwaj, and Ajay K. Kohli (2010), "Ties That Bind: The Impact of Multiple Types of Ties with a Customer on Sales Growth and Sales Volatility," *Journal of Marketing Research*, 47 (February), 36–50.

Vaona, Andrea (2008), "STATA Tip: A Quick Trick to Perform a Roy–Zellner test for poolability in STATA," University of Lugano Working Paper, Quaderno N.08-04.

Verhoef, Peter C. and Peter S.H. Leeflang (2009), "Understanding the Marketing Department's Influence Within the Firm," *Journal of Marketing*, 73 (March), 14–37.

Webster, Frederick E., Alan J. Malter, and Shankar Ganesan (2005), "The Decline and Dispersion of Marketing Competence," *Sloan Management Review*, 46 (4), 35–43.

Welbourne, Theresa M. and Charlie O. Trevor (2000), "The Roles of Departmental and Position Power in Job Evaluation," *Academy of Management Journal*, 43 (4), 761–71.

Wiles, Michael A., Neil A. Morgan, and Lopo L. Rego (2012), "The Effect of Brand Acquisition and Disposal on Stock Returns," *Journal of Marketing*, 76 (January), 38–58.

Wooldridge, Jeffrey (2006), *Introductory Econometrics*. Mason, OH: Thompson Higher Education.

Zhao, Xinshu, John G. Lynch, and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths About Mediation Analysis," *Journal of Consumer Research*, 37 (4), 197–206.