Article

Despite Efficiencies, Mergers and Acquisitions Reduce Firm Value by Hurting Customer Satisfaction

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Abstract

Most researchers focus on the effect of mergers and acquisitions (M&As) on investor returns and overlook customer reactions, despite the fact that customers are directly impacted by these corporate transformations. Others suggest that in M&A contexts, a dual emphasis of customer satisfaction and firm efficiency is both likely and beneficial. In contrast, the authors demonstrate that M&As not only do not yield a dual emphasis but also cause a decline in customer satisfaction to the extent that they eclipse any gain in firm value from an increase in firm efficiency. A quasiexperimental difference-in-differences analysis and an instrumental variable panel regression provide robust evidence for the dark side of M&As for customers. The authors use the attention-based view of the firm to demonstrate that post-M&A customer dissatisfaction occurs because of a shift in executive attention away from customers and toward financial issues. In line with the related upper echelons theory, they find that marketing representation on a firm's board of directors helps maintain executive attention on customers, which mitigates the dysfunctional effect of M&As on customer satisfaction. This research identifies a negative M&A–customer satisfaction relationship and highlights executive attention to customer issues and marketing leadership as factors that mitigate this negative relationship.

Firms engage in mergers and acquisitions (M&As) to obtain assets, grow, reduce costs, and stave off competition (Bahadir, Bharadwaj, and Srivastava 2008; Swaminathan, Murshed, and Hulland 2008). Yet, many M&As fail to generate positive results (Renneboog and Vansteenkiste 2019; Sorescu, Chandy, and Prabhu 2007). Although prior research has explained the underperformance of M&As with deal- and firm-related factors, the role of customer reactions has largely been neglected. This is alarming given that customer growth is a key motivation for M&As (Deloitte 2019) and customers are directly impacted by M&A-based changes to product lines, brands, prices, innovation, and frontline employees.

The sheer enormity of M&A activity (e.g., more than 48,000 deals with a value of $3.7 trillion were transacted globally in 2019, and despite the COVID-19 pandemic, M&A activity declined by only 3% in 2020) suggests that M&As must be rewarding; otherwise, firms would not engage in them. M&As allow firms to reduce prices (Focarelli and Panetta 2003) and

innovate (Prabhu, Chandy, and Ellis 2005), both of which should satisfy customers. Further, M&As enable firms to become more efficient through improvements in scale, scope, and cost savings (Cummins and Xie 2008; Maksimovic and Phillips 2001). As a result, M&As are posited to enable a "dual emphasis" in which firms achieve both customer satisfaction and firm efficiency (Swaminathan et al. 2014).

While the link between M&As and firm efficiency is more straightforward, research has not systematically examined the effect of M&As on customer satisfaction. Experimental (Thorbjørnsen and Dahlén 2011) and anecdotal (Thornton,

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Arndt, and Weber 2004) evidence suggests that M&As may in fact harm customers. Thus, we question whether M&As actually enable a dual emphasis of firm efficiency and customer satisfaction. Instead, we argue that although M&As might generate firm efficiency, they upset customers considerably, which, in turn, will lower firm value to an extent that any gain in efficiency will be outweighed. We theorize that this is because M&As cause executives to pay more attention to financial issues than to customer ones, which will dissatisfy customers. We contend that marketing representation on the board (MROB) of directors will direct executive attention toward customers during an M&A, which will then lessen a decline in customer satisfaction.

To test our expectation that there is a tension between M&A activity and firm value via competing processes of lower customer satisfaction and higher firm efficiency, we collected data on a panel of firms from 1995 to 2017 from the American Customer Satisfaction Index (ACSI) database. First, we estimated a system of equations to demonstrate that (1) M&A activity is associated with a decrease in customer satisfaction, (2) M&A activity is associated with an increase firm efficiency, and (3) the net effect of a decrease in customer satisfaction and an increase in firm efficiency on firm value is negative. Thus, M&As lower customer satisfaction to the extent that it overshadows any gain in firm value from firm efficiency. Second, to solidly establish a negative effect of M&As on customer satisfaction, we conducted (1) a quasiexperimental differences-in-differences (DID) analysis of a treatment group of firms that engaged in M&As and several control groups of firms that did not, (2) a conventional panel regression analysis, and (3) a long-term analysis. We find strong evidence for a negative M&A–customer satisfaction relationship, which persists for two years post-M&A. Finally, we content-analyzed letters to shareholders to measure executive attention and collected data on MROB. Our instrumental variable panel moderated-mediation analysis provides support for a mediating role of executive attention to customers (vs. finance) and a positive moderating role of MROB.

We contribute to the literature in multiple ways. First, previous research has focused on the effect of M&As on investor returns (e.g., Fuller, Netter, and Stegemoller 2002; Moeller, Schlingemann, and Stulz 2004) and has largely overlooked customer reactions. In fact, a meta-analytic review of 25 years of customer satisfaction research does not report a single result with M&A activity as a driver (Otto, Szymanski, and Varadarajan 2020). The few studies that have focused on customers (e.g., Swaminathan et al. 2014) have suggested that in M&A contexts, a dual emphasis of customer satisfaction and firm efficiency is both likely and beneficial. In contrast, we demonstrate that M&As not only do not yield a dual emphasis but also cause a decline in customer satisfaction to the extent that they surpass any gain in firm value from an increase in firm efficiency. Although researchers in finance have highlighted the negative ramifications of M&As for acquirers (e.g., Agrawal, Jaffe, and Mandelker 1992; Loughran and Vijh 1997), we are the first to empirically establish the negative ramifications of M&As for customers, which we show lowers firm performance.

Second, we verify a negative M&A–customer satisfaction relationship with a DID analysis with multiple control groups. As a result, we add to emerging research (e.g., Gill, Sridhar, and Grewal 2017) on the use of observational inference to document the causal effects of strategic decisions. We also confirm this negative relationship with an instrument variable panel regression with a larger sample and a long-term analysis. Our multimethod approach offers future research a template with which to improve the reliability and validity of findings from secondary research.

Third, to study M&A outcomes, work in finance has relied on the efficient market theory, and work in marketing has relied on the resource-based view (RBV) of the firm. Rather, in a novel direction, we draw on the attention-based view (ABV) of the firm to argue the impact of M&A activity. Thus, we add to recent work on the marketing–finance interface (e.g., Edeling, Srinivasan, and Hanssens 2020) by showing that when faced with boundary-altering strategic decisions, executives tend to focus more on financial issues than on customer issues, which then indirectly lowers performance.

Finally, marketing researchers have typically overlooked board of director composition, despite the fact that marketers on the board help shape a firm's strategic direction (Whitler, Krause, and Lehmann 2018). We address this gap by complementing the ABV of the firm with the upper echelons theory to demonstrate that firms with (vs. without) marketers on their board of directors help channel executive attention to customers (vs. financial issues). This, in turn, helps minimize customers' post-M&A dissatisfaction. Here, we identify marketing leadership's important role in the marketing–finance interface during disruptive strategic transformations such as M&As. As a result, we are the first to incorporate marketing's role on the board into theories about M&As and customer satisfaction.

In terms of our practical contributions, we caution executives against pursuing M&As to gain efficiencies without considering how customers may be harmed. This is because the negative effect of M&As on customer satisfaction lasts for at least two years. In particular, we show that during an M&A, firms that pay greater attention to their customers relative to financial issues experience a 45% reduction in loss of firm value. As a solution, we recommend that firms have at least one marketer on their boards of directors to retain executive attention on customers, which translates into a gain in firm value of 4.28%.

Theoretical Background and Hypotheses

As we show in our literature review in Table 1, we distinguish our research from prior work in four important ways. First, although prior work has investigated the effect of M&As on firm efficiency, we are the first to also consider the effect of M&As on customer satisfaction to determine their overall effect on firm value. Second, we examine the effect of M&As on customer satisfaction with multiple data structures and models across multiple industries and years to make causal inferences. Third, while previous research in finance has overwhelmingly relied on the efficient market hypothesis and

Table 1. A Review of the Literature on M&As.

Research	M&A → Firm Efficiency	M&A → Customer Satisfaction	Net Effect of M&A on Performance	Board Representation	Multiple Industries	Sample Size	Time Period	Analysis	Underlying Theory
Vennet (1996)	Yes	No	No	No	No	492	1988–1993	Univariate comparison of pre- and post-M&A	Managerial efficiency theory
Agrawal, Jaffe, and Mandelker (1992)	Yes	No	No	No	Yes	937	1955–1987	Event study	Efficient market theory
Loughran and Vijh (1997)	Yes	No	No	No	Yes	947	1970–1989	Event study	Efficient market theory
Avkiran (1999)	Yes	No	No		No	4	1985–1995	Case study	Traditional merger theory
Capron and Hulland (1999)	No	No	No	No	No	253	Survey in 1994	OLS	RBV of the firm
Maksimovic and Phillips (2001)	Yes	No	No	No	No	NA	1972–1992	OLS	Neoclassical model of firm organization
Fuller, Netter, and Stegemoller (2002)	Yes	No	No	No	Yes	3,135	1990–2000	Event study	Efficient market theory
Moeller, Schlingemann, and Stulz (2004)	Yes	No	No	No	Yes	12,023	1980–2001	Event study	Efficient market theory
Homburg and Bucerius (2005)	Yes	No	Yes	No	Yes	232	Survey in 2002	LISREL	RBV of the firm
Prabhu, Chandy, and Ellis (2005)	No	No	No	No	No	157	1988–1997	Error-component regression	Knowledge-based view of the firm
Sorescu, Chandy, and Prabhu (2007)	Yes	No	No	No	No	238	1992–2002	OLS	RBV of the firm
Bahadir, Bharadwaj, and Srivastava (2008)	No	No	No	No	Yes	133	2001–2005	Heckman two-step	RBV of the firm
Cummins and Xie (2008)	Yes	No	No	No	No	150	1994–2003	Malmquist analysis	Corporate control theory
Swaminathan, Murshed, and Hulland (2008)	Yes	No	No	No	Yes	206	1990 to 2001	OLS	RBV of the firm
Thorbjørnsen and Dahlén (2011)	No	No	No	No	Yes	around 1,000	Hypothetical experiments	OLS	Perceived reactance
Wiles, Morgan, and Rego (2012)	Yes	No	No	No	Yes	572	1994–2008	Event study	RBV of the firm
Swaminathan et al. (2014)	Yes, only as a moderator	Yes, only as a moderator	No	No	Yes	429	1995–2003	Random-effects GLS	RBV of the firm
Rao, Yu, and Umashankar (2016)	No	No	No	No	No	1,979	1992–2008	Matching model	RBV of the firm
Saboo et al. (2017)	Yes	No	No	CEO background	No	319	1995–2013	Event study	RBV of the firm
Bommaraju et al. (2018)	No	No	No	No	No	2,512	Longitudinal survey	DID	Internal marketing theory
This article	Yes	Yes	Yes	Yes	Yes	2,152	1995–2017	SUR, Instrument variable panel regression, DID	ABV of the firm, upper echelons theory

Notes: RBV = resource-based view; ABV = attention-based view; OLS = ordinary least squares; GLS = generalized linear model; DID = difference-in-differences; SUR = seemingly unrelated regression.
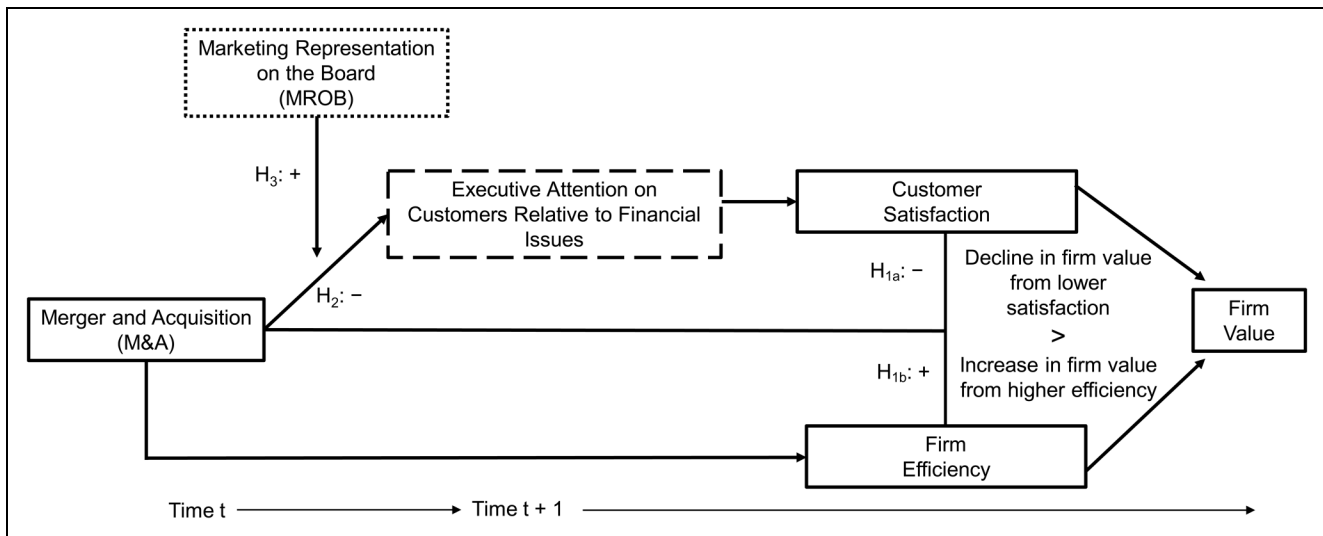
Figure 1. Conceptual framework.
Notes: The dashed line indicates the mediator and the dotted line indicates the moderator.

those in marketing have relied on the RBV of the firm, we introduce the ABV of the firm to an M&A context. Finally, those who have used upper echelons theory have overlooked the role of marketing leadership in managing M&As and driving customer satisfaction. We address these gaps by proposing and demonstrating that MROB weakens the negative impact of M&As on executive attention to customer (vs. financial) issues. We depict our conceptual framework in Figure 1.

M&A Activity and a Dual Emphasis of Customer Satisfaction and Firm Efficiency

Although there is sparse formal research on M&As and customer satisfaction, some work suggests a positive relationship. M&As can expand firms' product portfolios to provide customers with a larger set of choices (Capron, Dussauge, and Mitchell 1998) and higher-quality products (Krishnan, Joshi, and Krishnan 2004). This supports Swaminathan et al.'s (2014) assertion that M&As are associated with higher customer satisfaction. In contrast, other research suggests that M&As may dissatisfy customers. In particular, M&As can result in price increases (Kim and Singal 1993) and poor customer service (Sikora 2005). For example, the recent sale of DirecTV by AT&T to the private equity firm TPG for a third of the acquired price in 2015 was largely attributed to the loss of dissatisfied customers postacquisition (Lee and Koblin 2021). Moreover, anecdotes from the ACSI reveal that even two years after M&As, customers are less satisfied than they had been before (ACSI 2020). In particular, M&As may cause customers to lose access to their favorite brands. A recent survey by PwC shows that as firms become larger after an M&A, they tend to lose grip of their customers' feelings, and, as a result, customer experience suffers (Potter and Sutton 2019). This is detrimental because customer dissatisfaction lowers firm value and increases firm risk (Fornell, Morgeson, and Hult 2016;

Malshe, Colicev, and Mittal 2020; Mittal et al. 2005; Otto, Szymanski, and Varadarajan 2020; Tuli and Bharadwaj 2009). Thus, we expect that M&As will dissatisfy customers.

The strategy literature suggests that a primary motivation for firms to engage in M&As is to gain efficiencies (Maksimovic and Phillips 2001). M&As increase firm efficiency by spreading fixed costs over more output and eliminating redundancies (Capron, Dussauge, and Mitchell 1998). Specifically, M&As result in economies of scale and scope, asset and employee rationalization, a reduction in transaction costs (Coate 2005), and a reallocation of intangible assets (Motis, Neven, and Seabright 2006). These extra resources allow firms to reallocate their savings to other valuable projects, which, in turn, increases firm value (Mittal et al. 2005). Thus, consistent with prior research, we expect that M&As will increase firm efficiency. This brings us to two competing outcomes of M&A activity:

H₁: M&As are associated with (a) a decrease in customer satisfaction but (b) an increase in firm efficiency.

A logical follow-up question is, what is the total effect of M&As on firm value given our opposing expectations of a decline in customer satisfaction but an increase firm efficiency? We expect that M&As will cause a steeper drop in customer satisfaction than an increase in firm efficiency for the following reasons. First, M&As often result in layoffs to reduce redundancies, which—while beneficial from an efficiency perspective— harms customer experience. The remaining employees that are not laid off are likely to be stressed (Brockner et al. 1987), and stressed employees and their dissatisfaction with a major corporate shake-up negatively affect customers and the service they experience (Potter and Sutton 2019). Second, firms may either change or consolidate procedures such as credit policies, payment terms, and loyalty programs during an M&A to minimize the complexity of managing two separate

systems. While these actions may be efficient, customers are likely to see their hard-earned privileges curtailed or, in the extreme, taken away (Thorbjørnsen and Dahlén 2011), which results in relationship uncertainty (Homburg and Bucerius 2005). In fact, customers defect even before they know exactly how an M&A will affect them (Miles and Rouse 2011). Thus, customers who face poorer service and a loss of privileges will feel negatively about their relationship with a post-M&A firm. Third, customer dissatisfaction attracts short sellers, whose trading hurts firm value (Malshe, Colicev, and Mittal 2020). Thus, we expect that a decline in customer satisfaction will be larger than an increase in efficiency, and as a result, firm value will decline. We test this notion in our estimation.

M&A Activity, Executive Attention, and Customer Satisfaction

So far, we have argued that although M&As generate efficiencies, their negative impact on customer satisfaction is significant and noteworthy, yet underresearched. Next, we focus on the negative M&A–customer satisfaction relationship and aim to uncover a mechanism that drives this relationship. The marketing literature has often adopted the RBV of the firm view to examine M&A activity (Table 1). This research stream argues that a firm's ability to acquire and deploy marketing resources during an M&A can strengthen performance. Although the RBV provides a valuable strategic lens with which to examine M&A activity, another theoretical process may also be at play. We use the ABV to argue why M&As lower customer satisfaction.

The ABV highlights the importance of executives' information-processing capacity and their distribution of attention. "Attention" refers to as a focus of time and effort with making sense of a firm's environment and how to respond to it (Ocasio 1997). A key premise is that executives' attention is finite, so they are selective in what they notice and interpret. Further, how they respond to stimuli depends on what they notice and interpret in the first place. Thus, what executives pay attention to affects their resource allocation (Bower 1970), which suggests that executives will invest resources in what they pay attention to at the expense of what they ignore. Further, attention drives executives to match their firms' resources with opportunities in their environment (Vadakeppatt et al. 2021; Yadav, Prabhu, and Chandy 2007). We draw on the ABV to argue that M&A activity directs executives' attention away from customers and toward financial issues, which, in turn, reduces the extent of resources allocated toward satisfying customers.

M&As are incredibly expensive, complex, and heavily scrutinized by investors. As a result, executive attention is likely to be diverted to the price of the deals, capital requirements, paying back debt providers, and appeasing investors. In the process, customer experience might be underinvested in or even overlooked. In fact, managers know that there is a trade-off between serving customers and serving shareholders/debtholders such that creating value for one can detract from the other, and vice versa (Rubera and Kirca 2017). For example, H.J. Heinz purchased Kraft Foods for nearly $36 billion in 2015. At the behest of investors, the merged company slashed $1.8 billion in overhead, which included a purge of nearly 2,500 jobs. Then, after Kraft Heinz's post-M&A sales slowed,[1] investors pressured it to acquire a large consumer products company to gain market share (Reed 2018). Firms clearly face considerable financial pressure after an M&A, which can cause executives to focus on appeasing investors at the expense of customers.

Further, M&As are often paid for by corporate debt. Recent examples of extensive borrowing for M&As include established companies such as CVS, IBM, Campbell's, Bayer, and Sherwin-Williams (Cohan 2018). Debt can turn executives' attention toward loan-servicing obligations, conserving cash rather than investing (Almeida, Campello, and Weisbach 2011), and cost cutting (Malshe and Agrawal 2015). Debt also limits investments in advertising (Grullon, Kanastas, and Kumar 2006) and product quality (Matsa 2011). Thus, executives at indebted M&A firms may focus on satisfying debtholders over customers. Therefore, we hypothesize,

> **H₂:** M&As are associated with less executive attention to customers (vs. financial issues), which is associated with lower customer satisfaction.

The Moderating Role of Marketing Representation on the Board of Directors (MROB)

A key premise that the upper echelons theory (Hambrick and Mason 1984) and the ABV (Ocasio 1997) share is that the focus of executives' attention drives firm strategy and resource allocation. We use these complementary theories to examine how MROB influences executive attention toward customer-related issues during M&As. If executives pay more attention to, for example, innovation, then they allocate more resources toward innovation-related activities to drive success (Yadav, Prabhu, and Chandy 2007; Zhong et al. 2020). Similarly, we argue that MROB will direct executive attention toward building organizational resources and processes, directing capabilities, and mobilizing employees to meet customers' needs during M&As.

A firm's board of directors is a key body of leadership at its apex. It is both a governance body and a strategic body that sets a firm's goals and advises executives on how to pursue these goals (Bommaraju et al. 2019). While executives are responsible for formulating strategies given a set of objectives, they do not determine these objectives (Germann, Ebbes, and Grewal 2015). Rather, such objectives, which include growth or cost cutting, are usually made at the board level. As a

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[1] Kraft Heinz's customer satisfaction ACSI score declined by five points, which is a 6.3% decrease.

result, a board of directors is heavily involved in the M&A process due to its transformative corporate consequences (Huang et al. 2014). A less researched, but critically important, type of board member is one who has a marketing title. Given their expertise in customer orientation, they provide marketing-related advice to other members on the board and the executive team, which ensures that firm strategies are customer-centric (Whitler, Krause, and Lehmann 2018). We examine how MROB influences the relationship between M&As and customer satisfaction through a shift in executive attention.

The upper echelons theory states that the characteristics of a firm's top leaders influence its strategic decisions and outcomes (Hambrick and Mason 1984). Leaders' backgrounds create a lens through which they view business challenges and determine the strategies needed to address them (Dearborn and Simon 1958). In particular, executive attention is (1) channeled toward issues of greater value or legitimacy for the firm, (2) evaluated through the lens of an executive's functional role, and (3) influenced by the environment (Fu, Tang, and Chen 2020). Given that financial issues dominate executives' attention during M&As, we contend that marketers on the board will serve as "customer attention custodians" to channel resources toward addressing any challenges faced by customers. They will do so by diffusing a customer-focus throughout the organization to mobilize employees to proactively attend to customers that face a disruptive context. Given that firms perform poorly in areas in which their board members have limited expertise (McDonald, Westphal, and Graebner 2008), if there is no MROB, then customer-related issues are likely to be ignored or possibly mismanaged by others (Bommaraju et al. 2019; Whitler, Krause, and Lehmann 2018). Thus, we expect that marketers on the board will make customers a part of the conversation M&As largely because they are trained to do so.

Scholars have typically relied on a resource-based perspective when they examine the board of directors' impact on firm strategy (e.g., Bommaraju et al. 2019). We contend that the functional role of a board member influences not only whether role-related resources are conferred to the rest of the board and the firm but also what the board member interprets in the environment and encourages others to pay attention to. In other words, we expect that during an M&A, MROB will minimize a depletion of executive attention on customers and marketing-related issues. Therefore,

> **H₃:** The negative effect of M&As on executive attention to customers (vs. financial issues) is smaller when there is (vs. is not) MROB, which is associated with less customer dissatisfaction.

Data and Method

Sample

We drew our estimation sample from the ACSI database, which is a credible source for our primary outcome, customer satisfaction (Fornell, Morgeson, and Hult 2016; Mittal et al. 2005; Tuli and Bharadwaj 2009). We based our main analysis on a cross-

sectional time series data set of 1,359 firm-year observations for 141 firms from 1995 to 2017. To identify the impact of M&As on customer satisfaction, we transformed this panel to a clean four-year rolling-window data structure, which we detail subsequently. Similar to prior research with multimethod studies (e.g., Panagopoulos, Mullins, and Avramidis 2018), our sample sizes differ across different data structures and model specifications.

Measures

We summarize our variables and data sources in Table 2.

Dependent variables. Similar to prior research (e.g., Mittal et al. 2005), when multiple brands were represented in the ACSI database, we averaged their scores to create a firm-level annual score of customer satisfaction, or CSAT. We measured firm efficiency by dividing a firm's annual sales by its number of employees (Anderson, Fornell, and Rust 1997). We measured firm value with market value, or a firm's number of outstanding shares multiplied by its share price, which represents investors' expectations of a firm's profit potential (Edeling, Srinivasan, and Hanssens 2020).

Independent variable. Consistent with previous research (e.g., Rao, Yu, and Umashankar 2016; Yu, Umashankar, and Rao 2015), if a firm-year was present in the SDC Platinum database, then we designated that firm-year as having M&A activity (i.e., 100% ownership). If a particular firm-year was not present, then we assumed that this firm did not engage in M&A activity that year, and we used this information to create a group of non-M&A firms. Thus, we coded M&A activity as 1 if a firm engaged in M&A activity that year and 0 if it did not (for our list of M&A firms, see Web Appendix A).

Mediator. We followed prior research (e.g., Panagopoulos, Mullins, and Avramidis 2018) to assess executives' attention directed at theoretically relevant issues with a count of specific types of words from their letters to shareholders. To compile a dictionary of customer-related words, we began with Yadav, Prabhu, and Chandy's (2007) dictionary of external focus and expanded their list based on a review of popular press announcements of M&As. To compile a dictionary of finance-related words, we reviewed popular press articles, finance M&A papers, and finance textbooks (we present our dictionary in Web Appendix B). We counted the number of words from these two dictionaries and created a ratio, attention to customers (vs. finance), by dividing the total number of customer words by the total number of finance words.

Moderator. To measure MROB, we created a list of marketing titles in top management based on research by Nath and Mahajan (2008) and Whitler, Krause, and Lehmann (2018). We then counted the total number of people with marketing titles on the board and divided this by the total size of the board for each firm-year.

Table 2. Operationalization of Variables.

Variable	Measure	Data Source
Firm Value	Number of shares outstanding × Share price	Center for Research in Security Prices
Firm Efficiency	Sales/Number of employees	Compustat
Customer Satisfaction (CSAT)	ACSI scores, which range from 0 to 100	ACSI Database
M&A Activity	1 = firm engaged in an M&A in year t, 0 = firm did not	SDC Platinum
M&A Count	Number of M&As that a firm engaged in in year t	SDC Platinum
Executive Attention to Customers (vs. Finance)	Number of customer-related words/Number of finance-related words in letters to shareholders	Annual Reports (EDGAR)
Marketing Representation on the Board (MROB)	Number of board members with a marketing title/Board size. Variables for selection model for MROB: • Peer Firm Mean MROB: average number of MROB members for all firms in the focal firm's industry • Mean Board Age: average age of board members • CMO on TMT: CMO listed among TMT = 1, 0 otherwise • Mean Board Tenure: average years board members have served on the focal board • Board Size: Total number of board members • CEO Duality: CEO holds title of board chair = 1, CEO and board chair are separate = 0 • Female Percentage: percent of female board members	S&P Capital IQ Professional Database
Market Share$_{(t)}$	Firm sales$_{(t)}$/(Total industry sales at the four-digit SIC-level)$_{(t)}$	Compustat
Advertising/Sales$_{(t)}$	Advertising expenditures$_{(t)}$/Sales$_{(t)}$	Compustat
R&D/Sales$_{(t)}$	R&D Expenditures$_{(t)}$/Sales$_{(t)}$	Compustat
Firm Size$_{(t)}$	Natural logarithm of total assets$_{(t)}$ in CSAT models and natural logarithm of employees$_{(t)}$ in other models	Compustat
Segments$_{(t)}$	Natural logarithm of number of different four-digit SIC industries in which the firm operates	Compustat
ROA$_{(t)}$	Operating income before depreciation$_{(t)}$/Total assets$_{(t-1)}$	Compustat
Market Growth$_{(t)}$	Average of four-digit SIC industry year-over-year sales growth over four years preceding year t	Compustat
Competitive Intensity$_{(t)}$	Reciprocal of the Herfindahl–Hirschman index	Compustat
Industry ROA$_{(t)}$	Four-digit SIC-level operating income before depreciation$_{(t)}$/Total assets$_{(t-1)}$	Compustat
Restructuring Charges	The sum of restructuring charges in years t and t − 1 scaled by market capitalization of a firm in year t	Compustat
Firm Scope	The number of distinct four-digit SIC business segments that a firm operates in	Compustat/Segment Database

Notes: R&D = research and development; ROA = return on assets; SIC = Standard Industrial Classification.

Control variables. In the CSAT model, we included market share, profitability, advertising intensity, R&D intensity, firm size, number of segments, and market growth (Malshe and Agarwal 2015; Rego, Morgan, and Fornell 2013). In the firm efficiency and firm value models, we included restructuring charges, firm scope, competitive intensity, industry profitability, firm size, market share, firm size, and market growth (Lee et al. 2015).

Estimation Method

We used three steps to test our hypotheses. First, we estimated a seemingly unrelated regression (SUR) model to test the effect of M&A activity on customer satisfaction (H_{1a}) and firm efficiency (H_{1b}) and the overall effect of M&A activity on firm value via customer satisfaction and firm efficiency. Second, we tested the

negative M&A–customer satisfaction relationship (H_{1a}) with (1) a quasiexperimental DID approach (Goldfarb and Tucker 2014) with multiple control groups, (2) an instrumental variable panel regression, and (3) a long-term analysis. Third, we implemented a moderated-mediation SUR model to test whether the negative M&A–customer satisfaction relationship is mediated by executive attention to customers (vs. financial issues) (H_2) and whether MROB shifts executive attention back toward customers (H_3).

A Test of H_{1a-b}

We created clean four-year rolling windows to include firms that had no M&A activity two years before an M&A and no M&A activity one year after. This enabled us to isolate the effect of M&A activity without confounding it with previous

activity, because the effect of M&As tends to spill over to subsequent years (Valentini 2012). For example, in our first window for the M&A group, we included firms that engaged in M&As in 1997 but did not engage in M&As in 1995, 1996, and 1998. In the next window, for the M&A-year of 1998, we included firms that engaged in M&A activity in 1998 but not in 1996, 1997, and 1999. If a firm did not engage in any M&A activity during the four years (e.g., 1995–1998), then we included this firm in a non-M&A group. Overall, we had 119 firms in this sample.

We estimated the following three models: (1) the effect of M&As on customer satisfaction (H_{1a}), (2) the effect of M&As on firm efficiency (H_{1b}), and (3) the effects of customer satisfaction and firm efficiency on firm value. We used the natural logarithmic values of our continuous variables of customer satisfaction, firm efficiency, and firm value to produce elasticities, which enabled us to compare the relative effects of customer satisfaction and firm efficiency on firm value. We included control variables that have been shown to influence CSAT (Malshe and Agarwal 2015; Rego, Morgan, and Fornell 2013), firm efficiency, and firm value (Lee et al. 2015). We winsorized the continuous variables before estimating the model to remove the potential effect of outliers and included fixed effects to account for unobservable firm characteristics. Given that M&A activity may simultaneously affect both customer satisfaction and firm efficiency, we estimated these relationships as a system of equations with SUR. We estimated the following system of equations for firm i at time t:

$$
\begin{aligned}
CSAT_{i(t)} = \; & \varphi_0 + \varphi_1 M\&A\ Group_j + \varphi_2 Post\text{-}M\&A_t \\
& + \varphi_3(M\&A\ Group_j \times Post\text{-}M\&A_t) \\
& + \varphi_4 Market\ Share_{i(t-1)} + \varphi_5 ROA_{i(t-1)} \\
& + \varphi_6 Firm\ Size_{i(t-1)} \\
& + \varphi_7 Advertising\ /\ Sales_{i(t-1)} \\
& + \varphi_8 R\&D\ /\ Sales_{i(t-1)} + \varphi_9 Segments_{i(t-1)} \\
& + \varphi_{10} Market\ Growth_{it} \\
& + \varphi_{(t=2,3)} Time\ Effects \\
& + \varphi_{(firm\ count)} Firm\ Fixed\ Effects + \varepsilon_{it}, \quad (1.1)
\end{aligned}
$$

$$
\begin{aligned}
Firm\ & Efficiency_{i(t)} \\
= \; & \beta_0 + \beta_1 M\&A\ Group_j + \beta_2 Post\text{-}M\&A_t \\
& + \beta_3(M\&A\ Group_j \times Post\text{-}M\&A_t) \\
& + \beta_4 Market\ Share_{i(t-1)} + \beta_5 ROA_{i(t-1)} \\
& + \beta_6 Firm\ Size_{i(t-1)} + \beta_7 Competitive\ Intensity_{i(t-1)} \\
& + \beta_8 Industry\ ROA_{(t-1)} + \beta_9 Restructure_{i(t-1)} \\
& + \beta_{10} Firm\ Scope_{i(t-1)} + \beta_{11} Market\ Growth_{it} \\
& + \beta_{(t=2,3)} Time\ Effects \\
& + \beta_{(firm\ count)} Firm\ Fixed\ Effects + \varepsilon_{it}, \quad (1.2)
\end{aligned}
$$

$$
\begin{aligned}
Firm\ Value_{i(t)} = \; & \Theta_0 + \Theta_1 CSAT_{it} + \Theta_2 Firm\ Efficiency_{it} \\
& + \Theta_3 Market\ Share_{i(t-1)} + \Theta_4 ROA_{i(t-1)} \\
& + \Theta_5 Firm\ Size_{i(t-1)} \\
& + \Theta_6 Competitive\ Intensity_{i(t-1)} \\
& + \Theta_7 Industry\ ROA_{(t-1)} + \Theta_8 Restructure_{i(t-1)} \\
& + \Theta_9 Firm\ Scope_{i(t-1)} + \Theta_{10} Market\ Growth_{it} \\
& + \Theta_{(t=2,3,4)} Time\ Effects + \Theta_{(firm\ count)} \\
& \quad Firm\ Fixed\ Effects + \varepsilon_{it}, \\
& \hspace{6cm} (1.3)
\end{aligned}
$$

where the M&A Group variable, j, has a value of 1 for the M&A group and 0 for the non-M&A group, and the Post-M&A$_t$ variable has a value of 1 in the fourth year of each window (i.e., the post-M&A year). The interaction between M&A Group and Post-M&A has a value of 1 for the M&A firms and a value of 0 for the non-M&A firms in the post-M&A year. Therefore, φ_3 (β_3) represents the statistical effect of M&As on CSAT (firm efficiency). Finally, Θ_1 (Θ_2) is the effect of CSAT (firm efficiency) on firm value.

H_{1a-b} Results

We first present model-free evidence of the effect of M&As on customer satisfaction and firm efficiency. For the M&A firms, customer satisfaction decreases a year after the M&A, whereas for the non-M&A firms, it increases (Figure 2, Panel A). In contrast, for the M&A firms, firm efficiency increases a year after the M&A, whereas for non-M&A firms, it remains steady (Figure 2, Panel B). Further, the average change in CSAT ($\Delta Non\text{-}M\&A\ CSAT_{(t+1, t-1)} = .43$; $\Delta M\&A\ CSAT_{(t+1, t-1)} = -.14$, $p < .05$) and firm efficiency ($\Delta Non\text{-}M\&A\ Firm\ Efficiency_{(t+1, t-1)} = 13.39$; $\Delta M\&A\ Firm\ Efficiency_{(t+1, t-1)} = 71.83$, $p < .05$) between the two groups are different.

We present the descriptive statistics and correlations of our variables in Web Appendix C. Our SUR estimation results (Table 3) of Equations 1.1–1.3 demonstrate that M&As are associated with a decrease in customer satisfaction ($\varphi_3 = -.010$, $p < .05$; H_{1a} is supported) and an increase in firm efficiency ($\beta_3 = .070$, $p < .01$; H_{1b} is supported).

The Net Effect of M&As on Firm Value

Given the asymmetric findings of a decline in customer satisfaction but an increase in firm efficiency from M&A activity, we next focus on the net effect of M&As on firm value through customer satisfaction and firm efficiency. From Table 3, we see that the positive association between customer satisfaction and firm value ($\Theta_1 = 2.214$, $p < .01$) is greater than the positive association between firm efficiency and firm value ($\Theta_2 = .838$, $p < .01$). To calculate the net effect of M&A activity on firm value via customer satisfaction and firm efficiency, we used the results from Equations 1.1 and 1.2. On average, the customer satisfaction of the M&A firms was 1.14% lower than
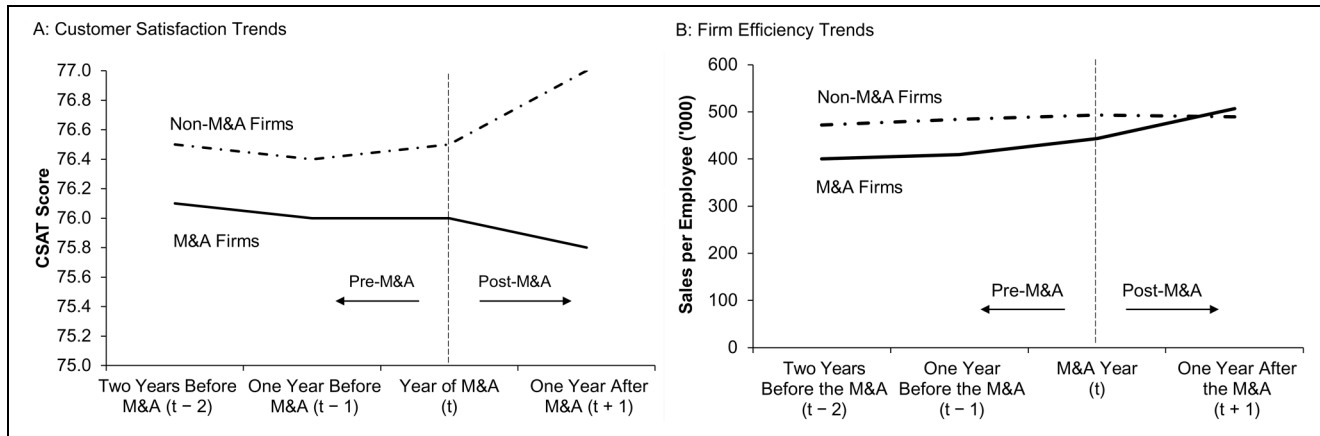
Figure 2. M&A customer satisfaction and firm efficiency trends.
Notes: We present the average customer satisfaction scores (Panel A) and firm efficiency (Panel B) of M&A and non-M&A firms before and after an M&A. One year after an M&A, M&A firms experience a decline in customer satisfaction and an increase in firm efficiency. We present firm efficiency as sales in millions ($) per thousand employees.

the non-M&A firms ($\varphi_{M\&A} = \varphi 1 + \varphi 3 = -.0114 = -.0012 + -.0102$) and the firm efficiency of the M&A firms was .29% higher than the non-M&A firms ($\beta_{M\&A} = \beta 1 + \beta 3 = .0029 = -.0668 + .0697$). We multiplied the M&A firms' customer satisfaction and firm efficiency elasticities for firm value from Equation 1.3 with the differences between the M&A and non-M&A firms in the post-M&A year from Equations 1.1 and 1.2. Then, we summed the products and found a net effect of $-.0243$. Therefore, compared with non-M&A firms, M&A firms' value decreased by 2.43% one year after an M&A, and as a result, the net-negative effect of M&As on firm value is due to a decrease in customer satisfaction.

An In-Depth Analysis of the Negative Effect of M&As on Customer Satisfaction

Because we found that, despite gains in firm efficiency, M&As decrease firm value due to a decline in customer satisfaction, we aimed to validate the latter effect more systematically with several approaches. First, we estimated a quasiexperimental DID model with alternate non-M&A firm groups. Second, we created a panel of firms without imposing restrictions on which firms to include (i.e., we included all of the firms from the ACSI database). Third, we tested for the long-term negative effect of M&As on customer satisfaction.

DID approach. We used with the same four-year rolling window data structure that we previously described. We assigned firms to an M&A treatment group if they engaged in M&A activity in the third year of a four year window and assigned all firms that did not engage in any M&As during those four years to a non-M&A control group (control group 1). For greater reliability, we created two alternative control groups by (1) matching the M&A and non-M&A firms on similar predictors of customer satisfaction (control group 2)

and (2) matching the M&A and non-M&A firms on their propensity to engage in an M&A (control group 3) (for more information, see Tables D.1–D.3 in Web Appendix D). We specified the following model with a fixed-effects error component (Bommaraju et al. 2018):

$$
\begin{aligned}
\text{CSAT}_{it} = {} & \beta_0 + \gamma \text{M\&A Group}_j + \beta_1 \text{Post-M\&A}_t \\
& + \beta_2 (\text{M\&A Group}_j \times \text{Post-M\&A}_t) \\
& + \beta_3 \text{Market Share}_{i(t-1)} \\
& + \beta_4 \text{ROA}_{i(t-1)} + \beta_5 \text{Firm Size}_{i(t-1)} \\
& + \beta_6 (\text{Advertising / Sales})_{i(t-1)} \\
& + \beta_7 (\text{R\&D / Sales})_{i(t-1)} + \beta_8 \text{Segments}_{i(t-1)} \\
& + \beta_9 \text{Market Growth}_{it} + \upsilon_i + \varepsilon_{it},
\end{aligned}
\tag{2}
$$

where υ_i captures unobserved time-invariant firm characteristics. The M&A Group variable, j, has a value of 1 for the treatment group and a 0 for the control group. The Post-M&A$_t$ variable has a value of 1 in the fourth year of each window (i.e., one year post-M&A). We used a fixed-effects within estimator to eliminate all time-invariant variables, such as υ_i and M&A Group$_j$. The interaction between M&A Group and Post-M&A has a value of 1 for the M&A firms and a 0 for the non-M&A firms the year after the M&A. Therefore, β_2 is the statistical effect of M&As on CSAT.

Conventional panel data structure. We created a conventional panel data setup to test the effect of M&As on customer satisfaction without a four-year rolling-window data restriction; as a result, our sample increased to 2,152 observations for 204 firms, of which 153 engaged in M&A activity. Because this sample includes firms for which there are several years of data (e.g., more than ten years), we used a one-year change in CSAT as our dependent variable. We created two versions of M&A activity: (1) a dummy variable that had a value of 1 if a firm engaged in M&A activity in year t

Table 3. Effect of M&As on CSAT, Firm Efficiency, and Firm Value.

Dependent Variable	CSAT$_t$	Firm Efficiency$_t$	Firm Value$_t$
Focal Variables			
Constant	3.929***	.599***	−1.194
	(.024)	(.205)	(1.375)
CSAT$_t$			2.214***
			(.325)
Firm Efficiency$_t$			.838***
			(.062)
M&A Group	−.001	−.067***	
	(.004)	(.017)	
Post-M&A Year	.005**	.045***	
	(.002)	(.015)	
M&A Group × Post-M&A Year (H$_{1a-b}$)	−.010**	.070**	
	(.004)	(.030)	
Covariates			
Restructuring Charges$_{(t-1)}$		−.263***	−3.564***
		(.095)	(.806)
Firm Scope$_{(t-1)}$		.082***	.009
		(.020)	(.048)
Competitive Intensity$_{(t-1)}$		.256***	−.043
		(.033)	(.049)
Industry Profitability$_{(t-1)}$		−.002**	−.004
		(.001)	(.005)
Market Share$_{(t-1)}$	−.073***	.350*	−.313
	(.012)	(.192)	(.347)
Firm Profitability$_{(t-1)}$	.169***	−.451***	1.837***
	(.019)	(.160)	(.394)
Firm Size$_{(t-1)}$	.025***	−.200***	.493***
	(.003)	(.038)	(.077)
Market Growth$_{(t)}$	−.063***	−.526***	−.147
	(.015)	(.075)	(.211)
Advertising/Sales$_{(t-1)}$	.021**		
	(.010)		
R&D/Sales$_{(t-1)}$	−.091***		
	(.016)		
Segments$_{(t-1)}$	−.010***		
	(.003)		
Firm fixed effects	Included	Included	Included
Time effects	Included	Included	Included
Model Information			
χ^2	$\chi^2(130) = 7{,}918.48$***	$\chi^2(131) = 61{,}482.97$***	$\chi^2(131) = 15{,}867.32$***
R^2	.761	.961	.865
Number of firms	119	119	119
Observations	2,468	2,468	2,468

*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: We report parameter estimates with bootstrapped standard errors in parentheses.

and 0 if it did not and (2) the natural logarithm of the number of M&As a firm engaged in in year t.

We estimated a selection equation in which our dependent variable was a firm's decision to engage in an M&A (0/1) and our predictors were factors that relate to M&A decisions (e.g., debt-to-equity ratio, competitors' M&A activity) but not to customer satisfaction (see Equation D.3 and Table D.5 in Web Appendix D). Thus, we achieved identification in Equation 3 and our subsequent Equation 4 based on our separation of factors that drive M&A decisions versus those that drive customer satisfaction. Based on this selection model, we included an inverse Mills ratio (IMR) in Equations 3 and 4 and estimated the following model with a fixed-effects within estimator to account for unobservable firm

Table 4. A Comparison Between M&A and Non-M&A Groups.

A: Comparison of Drivers of Customer Satisfaction Between M&A and Non-M&A Groups

	M&A Group (Treatment) (n = 91)	Non-M&A Group (Control) (n = 619)	t-Test of Equality of Means
Comparison of Pre-M&A Averages of Drivers of CSAT			
Market Share	.15	.16	t = .96, p > .10
ROA	.14	.14	t = .52, p > .10
Firm Size ($ million)	44,598.20	47,568.90	t = .29, p > .10
Advertising/Sales	.03	.04	t = 2.23, p < .05
R&D/Sales	.04	.03	t = −1.14, p > .10
Segments	1.39	1.37	t = −.24, p > .10
Market Growth	.08	.05	t = −2.80, p < .01
Comparison of Pre-M&A Changes in Drivers of Customer Satisfaction			
Pre-M&A Change in Market Share$_{(t, t-2)}$	−.001	.001	t = .28, p > .10
Pre-M&A Change in ROA$_{(t, t-2)}$	−.009	−.002	t = 1.29, p > .10
Pre-M&A Change in Firm Size$_{(t, t-2)}$	1,154.27	1,344.63	t = .12, p > .10
Pre-M&A Change in Advertising/Sales$_{(t, t-2)}$	−.004	−.005	t = −.29, p > .10
Pre-M&A Change in R&D/Sales$_{(t, t-2)}$	−.011	.007	t = 1.25, p > .10
Pre-M&A Change in Segments$_{(t, t-2)}$	.008	.004	t = −.11, p > .10
Pre-M&A Change in Market Growth$_{(t, t-2)}$	−.024	−.008	t = 1.49, p > .10

B: Comparison of Customer Satisfaction Between M&A and Non-M&A Groups

	M&A Group (Treatment) (n = 91)	Non-M&A Group (Control) (n = 619)	t-Test of Equality of Means
Pre-M&A Periods			
Customer Satisfaction$_{(t-2)}$	76.1	76.5	t = .39, p > .10
Customer Satisfaction$_{(t-1)}$	76.0	76.4	t = 1.00, p > .10
Average Customer Satisfaction$_{(t-1, t-2)}$	76.1	76.5	t = .71, p > .10
Change in Customer Satisfaction$_{(t, t-2)}$	−.28	.19	t = 1.31, p > .10
Post-M&A Period			
Customer Satisfaction$_{(t+1)}$	75.8	77	t = 2.24, p < .05

Notes: t denotes the year of the M&A activity.

characteristics for firm i in year t:

$$\begin{aligned}
CSAT_{i(t+1)} - CSAT_{it} = {} & \alpha_0 + \alpha_1 M\&A\ Activity_{it} \\
& + \alpha_2 Market\ Share_{it} + \alpha_3 ROA_{it} \\
& + \alpha_4 Firm\ Size_{it} \\
& + \alpha_5 (Advertising\,/\,Sales)_{it} \\
& + \alpha_6 (R\&D\,/\,Sales)_{it} + \alpha_7 Segments_{it} \\
& + \alpha_8 Market\ Growth_{i(t+1)} \\
& + \alpha_9 M\&A\ IMR_{it} \\
& + \upsilon_i + \varepsilon_{i(t+1)}.
\end{aligned}$$

(3)

Long-term effect of M&As on customer satisfaction. We investigated the long-term effect of M&As on customer satisfaction with a conventional panel data structure. We computed a change in CSAT from calendar year t + 4 to t as our dependent variable and included firms' M&A activity at t + 1, t + 2, and t + 3

as our independent variables. We included an IMR for each year in the model to control for selection bias. We estimated this panel data model with a fixed-effect within estimator:

$$\begin{aligned}
CSAT_{i(t+4)} - CSAT_{it} = {} & \gamma_0 + \gamma_1 M\&A_{i(t+3)} \\
& + \gamma_2 M\&A_{i(t+2)} + \gamma_3 M\&A_{i(t+1)} \\
& + \gamma_4 Market\ Share_{i(t+3)} + \gamma_5 ROA_{i(t+3)} \\
& + \gamma_6 Firm\ Size_{i(t+3)} \\
& + \gamma_7 (Advertising\,/\,Sales)_{i(t+3)} \\
& + \gamma_8 (R\&D\,/\,Sales)_{i(t+3)} \\
& + \gamma_9 Segments_{i(t+3)} \\
& + \gamma_{10} Market\ Growth_{i(t+4)} \\
& + \gamma_{11} M\&A\ IMR_{i(t+3)} \\
& + \gamma_{12} M\&A\ IMR_{i(t+2)} \\
& + \gamma_{13} M\&A\ IMR_{i(t+1)} + \upsilon_i + \varepsilon_{i(t+4)}.
\end{aligned}$$

(4)

Table 5. DID Results of M&As and Customer Satisfaction with Multiple Control Groups.

Dependent Variable: CSAT$_t$

Models	(1) Control Group 1: Only M&A Treatment	(2) Control Group 1: Only covariates	(3) Control Group 1: Full Model	(4) Control Group 2	(5) Control Group 3
Focal Variables					
Constant	76.428***	76.622***	76.411***	76.565***	77.915***
	(.095)	(.605)	(.565)	(.996)	(1.234)
Post-M&A Year	.467***		.466***	.356*	.576**
	(.114)		(.104)	(.207)	(.262)
M&A Group × Post-M&A Year (H$_{1a}$)	−.635**		−.754***	−.622**	−.688**
	(.316)		(.290)	(.312)	(.344)
Covariates					
Market Share$_{(t-1)}$		−2.315	−1.991	−1.285	−2.561
		(1.599)	(1.493)	(2.218)	(1.952)
ROA$_{(t-1)}$		3.682*	3.762**	1.362	−4.577**
		(1.932)	(1.748)	(2.904)	(1.948)
Firm Size$_{(t-1)}$		−.000**	−.000*	−.000	−.000
		(.000)	(.000)	(.000)	(.000)
Advertising/Sales$_{(t-1)}$		.351	.371	2.458	.834
		(.779)	(.636)	(5.847)	(1.138)
R&D/Sales$_{(t-1)}$		−3.571***	−3.671***	−4.424**	−1.157
		(1.175)	(1.082)	(1.854)	(2.513)
Segments$_{(t-1)}$		.163	.200	−.001	−.188
		(.311)	(.284)	(.528)	(.649)
Market Growth$_t$		−1.197	−.893	.259	.597
		(1.149)	(1.084)	(2.141)	(1.442)
Model Information					
Wald χ^2	$\chi^2(2) =$ 17.09***	$\chi^2(7) =$ 24.62***	$\chi^2(9) =$ 57.42***	$\chi^2(9) =$ 19.90**	$\chi^2(9) =$ 15.62*
R^2	.01	.02	.03	.03	.03
Number M&A Firms	67	67	67	67	67
Total Number of Firms	141	141	141	106	98
Observations	2,840	2,840	2,840	932	728

*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: CSAT = customer satisfaction; ROA = return on assets; R&D = research and development. We report parameter estimates with bootstrapped standard errors in parentheses.

Results

In line with DID requirements (Goldfarb and Tucker 2014), we compared the observable drivers of customer satisfaction between the M&A treatment group and the non-M&A control group two years before the M&A and found that for five of the seven drivers of M&As, the two groups were statistically similar (Table 4, Panel A; we present this graphically in Figures D.1–D.3 in Web Appendix D). We also tested the equality of changes in the drivers of customer satisfaction two years before the M&A through the M&A year and did not find any differences between the two groups. Thus, any distinction in post-M&A customer satisfaction between the two groups was not likely to be caused by firm-level differences, and the parallelness assumption was satisfied for the observable drivers of customer satisfaction. Next, we compared the two-year average customer satisfaction of the M&A and non-M&A groups

before the M&A (t = .54, $p > .10$) and the equality of changes in customer satisfaction two years before the M&A through the M&A year to satisfy the parallelness assumption (t = 1.31, $p > .10$) and did not find any significant differences (Table 4, Panel B). Finally, the M&A firms' customer satisfaction was lower than the non-M&A firms' customer satisfaction a year after the M&A (t = 2.24, $p < .05$). We replicated these results for our alternate control groups (Table D.4 in Web Appendix D).

DID model estimation results. We present the estimation results of Equation 2 in Table 5. When we estimated Equation 2 with only the post-M&A variable and its interaction with M&A Group, we find that M&As caused a decline in customer satisfaction ($\beta_2 = -.635$, $p < .05$; Model 1), which remained consistent with the inclusion of our control variables ($\beta_2 = -.754$, $p < .01$; Model 3). We also estimated a model with only control variables (Model 2).

Table 6. Effect of M&As on Customer Satisfaction Over Time.

	M&A Dummy		M&A Number	
	Model 1a $CSAT_{(t+1)} - CSAT_{(t)}$	**Model 1b** $CSAT_{(t+4)} - CSAT_{(t)}$	**Model 2a** $CSAT_{(t+1)} - CSAT_{(t)}$	**Model 2b** $CSAT_{(t+4)} - CSAT_{(t)}$
Dependent Variables:				
Focal Variables				
Constant	.634*	1.515	.203	.876
	(.363)	(1.077)	(.324)	(.966)
$M\&A_{(t)/(t+3)}$ (H_{1a})	−2.438***	−2.032**	−.589***	−.727*
	(.551)	(.807)	(.203)	(.384)
$M\&A_{(t+2)}$ (H_{1a})		−2.743***		−1.092***
		(.755)		(.329)
$M\&A_{(t+1)}$ (H_{1a})		.100		−.426
		(.686)		(.310)
Covariates				
Market Share$_{(t)/(t+3)}$	−.202	−1.981	−.500	−1.996
	(.756)	(2.346)	(.767)	(2.138)
ROA$_{(t)/(t+3)}$	.947	2.194	.839	2.052
	(1.594)	(2.808)	(1.603)	(2.815)
Firm Size$_{(t)/(t+3)}$	−.000***	−.000***	−.000***	−.000***
	(.000)	(.000)	(.000)	(.000)
Advertising/Sales$_{(t)/(t+3)}$	2.337**	3.252**	2.414**	3.227**
	(1.175)	(1.645)	(1.173)	(1.608)
R&D/Sales$_{(t)/(t+3)}$	−1.327	−5.431***	−1.367	−5.765***
	(1.146)	(1.954)	(1.139)	(1.928)
Segments$_{(t)/(t+3)}$	.123	.686	.083	.659
	(.212)	(.618)	(.210)	(.620)
Market Growth$_{(t+1)/(t+4)}$	−.177	−1.641	−.713	−2.455
	(1.005)	(1.934)	(1.006)	(1.993)
Decision to M&A IMR$_{(t)/(t+3)}$	1.361***	1.172**	.271*	.387*
	(.333)	(.490)	(.151)	(.232)
Decision to M&A IMR$_{(t+2)}$		1.632***		.634***
		(.437)		(.197)
Decision to M&A IMR$_{(t+1)}$		−.015		.297
		(.416)		(.206)
Model Information				
F-statistic	$F(9, 203) = 4.83^{***}$	$F(13, 174) = 3.47^{***}$	$F(9, 203) = 3.28^{***}$	$F(13, 174) = 3.49^{***}$
R^2	.013	.046	.007	.044
Number of firms	204	175	204	175
Observations	2,152	1,722	2,152	1,722

*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: CSAT = customer satisfaction; IMR = inverse Mills ratio; ROA = return on assets; R&D = research and development. We report parameter estimates with cluster robust standard errors in parentheses. In Models 1a and 2a, the M&A variable, the IMR, and the control variables have the subscript (t), except for the market growth variable, which has the subscript (t + 1). In Models 1b and 2b, the M&A variables and their corresponding IMRs have the subscripts (t + 3), (t + 2), and (t + 1). In these models, the control variables have the subscript (t + 3), except for the market growth variable, which has the subscript (t + 4).

While we accounted for time-invariant unobservable factors with a firm fixed-effects estimator, we tested whether time-varying unobservable factors altered our inference about the M&A treatment effect. We followed a procedure by Oster (2019) and used the PSACALC program in STATA. The result of this procedure suggests that our main analysis performed well because when we matched on time-varying unobservable variables, the coefficient estimate of β_2 in Equation 2 only changed from −.75 to −.76.

Alternate control group results. We analyzed Equation 2 with two alternative control groups and report their results in Table 5.

When we only included firms that were similar to the focal firm in terms of predictors of customer satisfaction (control group 2), we find that M&As lowered customer satisfaction ($\beta_2 = -.622$, $p < .05$; Model 4). When we used the propensity to engage in M&As scores (control group 3), we still find that M&As caused a decline in customer satisfaction ($\beta_2 = -.688$, $p < .05$; Model 5). Thus, we find consistent support for a negative effect of M&As on customer satisfaction (H_{1a}) with two alternative control groups.

Conventional panel data results. We present our estimation results of Equation 3 in Models 1a (with a dummy variable for M&A activity) and 2a (number of M&As) in Table 6.

Table 7. Summary Statistics and Correlations.

A: Summary Statistics

Variable	Observations	Mean	SD
CSAT$_{(t)}$	2,468	75.93	5.26
Executive Attention$_{(t)}$	2,468	.28	.18
MROB$_{(t)}$	2,468	.02	.04
M&A Group	2,468	.12	.33
Market Share$_{(t-1)}$	2,468	.16	.20
ROA$_{(t-1)}$	2,468	.14	.106
Total Assets$_{(t-1)}$	2,468	45,271.44	213,000
Advertising Intensity$_{(t-1)}$	2,468	.04	.08
R&D Intensity$_{(t-1)}$	2,468	.04	.09
Ln(Segments)$_{(t-1)}$	2,468	1.36	.47
Market Growth$_{(t-1)}$	2,468	.04	.08

B: Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. CSAT$_{(t)}$										
2. Executive Attention$_{(t)}$	−.10*									
3. MROB$_{(t)}$	.13*	.03								
4. M&A Group	−.08*	.03	.03							
5. Market Share$_{(t-1)}$	.23*	−.11*	.09*	−.03						
6. ROA$_{(t-1)}$	.08*	−.10*	−.07*	−.00	.10*					
7. Total Assets$_{(t-1)}$	−.14*	−.02	−.01	−.01	−.04*	−.15*				
8. Advertising Intensity$_{(t-1)}$	.05*	.05*	.07*	−.06*	−.03	.05*	−.04			
9. R&D Intensity$_{(t-1)}$	−.17*	.20*	−.03	−.00	−.13*	−.15*	−.04*	.08*		
10. Ln(Segments)$_{(t-1)}$	.14*	.15*	.14*	.01	.19*	−.01	−.25*	.06*	.13*	
11. Market Growth$_{(t-1)}$	−.07*	.014	−.14*	.09*	−.09*	.10*	−.05*	−.04	.13*	.02

*$p < .10$.
Notes: CSAT = customer satisfaction; MROB = marketing representation on the board; ROA = return on assets; R&D = research and development.

We find that M&A activity lowers customer satisfaction ($\alpha_{1M\&A\ Dummy} = -2.438$, $p < .01$; $\alpha_{1M\&A\ Number} = -.589$, $p < .01$). Thus, we provide additional support for H_{1a} and show that the negative M&A–customer satisfaction relationship is not sensitive to sampling and modeling approaches. The IMR coefficient is significant ($\alpha_8 = 1.361$, $p < .01$), which suggests that it is necessary to account for firms' propensity to engage in M&As.

Long-term results. We present the estimation results of Equation 4 in Models 1b (M&A dummy variable) and 2b (number of M&As) in Table 6. The negative impact of M&A activity on customer satisfaction persists for two years ($\gamma_{1M\&A\ Dummy} = -2.032$, $p < .05$; $\gamma_{2M\&A\ Dummy} = -2.743$, $p < .01$; $\gamma_{1M\&A\ Number} = -.727$, $p < .10$; $\gamma_{2M\&A\ Number} = -1.092$, $p < .01$). Thus, we find support for H_{1a} even two years after an M&A.

A Test of H_2 and H_3

Given that we have established that M&As lower customer satisfaction with multiple methods, we aimed to test whether this

decline is due to a shift in executive attention away from customers and toward financial issues (H_2) and whether MROB moderates the M&A–executive attention relationship (H_3). We used a four-year rolling window data structure and a SUR modeling approach to test these hypotheses. We present the descriptive statistics for this sample in Table 7, Panels A and B.

Identification strategy for executive attention and MROB. After collecting data on executive attention and MROB, we had a sample of 122 firms. Arguably, executive attention to customers (vs. finance) is endogenous because executives may strategically pay attention to issues that result in better outcomes, such as customer satisfaction. To address this, we used a latent instrumental variable approach (Kanuri, Chen, and Sridhar 2018; Lee et al. 2015). Specifically, we used a binary unobserved instrument to separate the observed endogenous predictor into correlated versus uncorrelated components with an error term in Equation 6.2 (for further details, see Web Appendix E).

It is also plausible that MROB is endogenous such that there are systematic differences between firms that appoint a marketer to their boards and those that do not. We estimated a firm's

decision to have MROB (Whitler, Krause, and Lehmann 2018) and used board-related variables (peer firm mean MROB, mean board age, chief marketing officer [CMO] on the top management team [TMT], mean board tenure, board size, chief executive officer [CEO] duality, and female percentage) as our exclusion restrictions. We estimated the following random-effects probit model to produce an MROB IMR to include in our main estimation (for the results of Equation 5, see Table E.1 in Web Appendix E):

$$
\begin{aligned}
\text{Presence of MROB}_{it} = {} & \delta_0 + \delta_1 \text{Peer Firm Mean MROB}_{it} \\
& + \delta_2 \text{Mean Board Age}_{it} + \delta_3 \text{CMO on TMT}_{it} \\
& + \delta_4 \text{Mean Board Tenure}_{it} + \delta_5 \text{Board Size}_{it} \\
& + \delta_6 \text{CEO Duality}_{it} + \delta_7 \text{Female Percentage}_{it} \\
& + \delta_8 \text{Advertising/Sales}_{it} + \delta_9 \text{R\&D/Sales}_{it} \\
& + \delta_{10} \text{Firm Size}_{it} + \delta_{11} \text{Industry Growth}_{it} \\
& + \delta_{12} \text{Market Share Growth}_{it} \\
& + \delta 13\text{--}34 \text{Year Dummies}_t + \upsilon_i + \varepsilon_{it}.
\end{aligned}
$$

$$(5)$$

To test H_2 and H_3, we estimated a SUR model with moderated mediation by estimating the effect of an M&A on attention to customers (vs. finance) (Equation 6.1) and the effect of the latent instrumental variable, Attention to Customers (vs. Finance), on CSAT (Equation 6.2). We included time dummies and firm fixed effects to account for unobservable characteristics and an MROB IMR to control for selection bias. We winsorized our continuous variables and estimated the following models:

$$
\begin{aligned}
& \text{Attention to Customers (vs. Finance)}_{it} \\
& = \beta_0 + \beta_1 \text{M\&A Group}_j \\
& \quad + \beta_2 \text{Post-M\&A}_t + \beta_3 (\text{M\&A Group}_j \times \text{Post-M\&A}_t) \\
& \quad + \beta_4 \text{MROB}_{it} + \beta_5 (\text{MROB}_{it} \times \text{M\&A Group}_j \times \text{Post-M\&A}_t) \\
& \quad + \beta_6 \text{MROB IMR}_{it} + \beta_7 (\text{MROB}_{it} \times \text{M\&A Group}_j) \\
& \quad + \beta_8 (\text{MROB}_{it} \times \text{Post-M\&A}_t) + \beta_9 \text{Market Share}_{i(t-1)} \\
& \quad + \beta_{10} \text{ROA}_{i(t-1)} + \beta_{11} \text{Firm Size}_{i(t-1)} \\
& \quad + \beta_{12} (\text{Advertising/Sales})_{i(t-1)} + \beta_{13} (\text{R\&D/Sales})_{i(t-1)} \\
& \quad + \beta_{14} \text{Segments}_{i(t-1)} + \beta_{15} \text{Market Growth}_{it} \\
& \quad + \beta_{(\text{firm count})} \text{Firm Fixed Effects} + \beta_{(t\,=\,2,\,3)} \text{Time Effects} \\
& \quad + \varepsilon_{it},
\end{aligned}
$$

$$(6.1)$$

$$
\begin{aligned}
\text{CSAT}_{it} = {} & \pi_0 + \pi_1 \text{M\&A Group}_j + \pi_2 \text{Post-M\&A}_t \\
& + \pi_3 (\text{M\&A Group}_j \times \text{Post-M\&A}_t) \\
& + \pi_4 \overbrace{\text{Attention to Customers (vs. Finance)}}_{it} + \pi_5 \text{MROB}_{it} \\
& + \pi_6 (\text{MROB}_{it} \times \text{M\&A Group}_j \times \text{Post-M\&A}_t) \\
& + \pi_7 \text{Attention to Customers (vs. Finance) Residual}_{it} \\
& + \pi_8 \text{MROB IMR}_{it} + \pi_9 (\text{MROB}_{it} \times \text{M\&A Group}_j) \\
& + \pi_{10} (\text{MROB}_{it} \times \text{Post-M\&A}_t) + \pi_{11} \text{Market Share}_{(t-1)} \\
& + \pi_{12} \text{ROA}_{i(t-1)} + \pi_{13} \text{Firm Size}_{i(t-1)} \\
& + \pi_{14} (\text{Advertising/Sales})_{i(t-1)} + \pi_{15} (\text{R\&D/Sales})_{i(t-1)} \\
& + \pi_{16} \text{Segments}_{i(t-1)} + \pi_{17} \text{Market Growth}_{it} \\
& + \pi_{(\text{firm count})} \text{Firm Fixed Effects} \\
& + \pi_{(t\,=\,2,\,3)} \text{Time Effects} + \varepsilon_{it},
\end{aligned}
$$

$$(6.2)$$

where β_3 captures the impact of M&As on executive attention to customers (vs. finance) a year after the M&A and π_4 captures the impact of executive attention to customers (vs. finance) on CSAT, which allows us to test H_2. β_5 captures the moderating impact of MROB on the relationship between the M&A activity and executive attention to customers (vs. finance), which allows us to test H_3.

Results

We present model-free evidence of the relationship between M&A activity and executive attention to customers (vs. finance) in Figure 3. M&A firms experience a decline in executive attention to customers relative to financial issues. For example, from our sample we see that for United Airlines, executive attention to customers (vs. finance) declined 38% because of its acquisition of Continental Airlines and its customer satisfaction declined 8.2%.

When we compared a change in executive attention to customers (vs. finance) from two years before an M&A with the
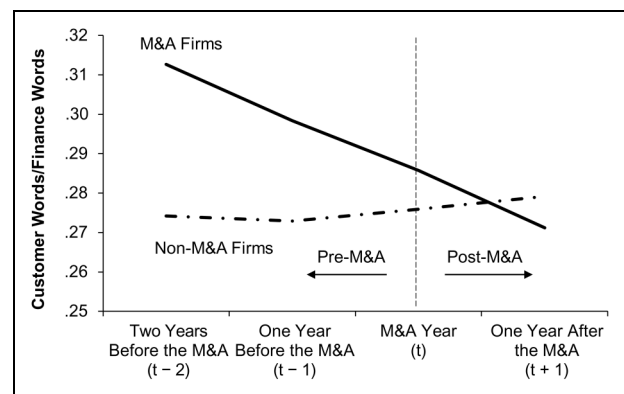

Figure 3. Executive attention to customer versus finance trends.
Notes: We present average executive attention to customer (vs. finance) for M&A and non-M&A firms before and after an M&A. One year after an M&A, M&A firms experience a decline in executive attention to customers.

year before, the difference between the M&A and non-M&A groups was not significant (t = 1.54, p > .10). In contrast, when we compared a change from a year before the M&A with the year after, the M&A firms experienced a decline in executive attention to customers (vs. finance), whereas the non-M&A firms experienced a slight increase (ΔM&A Attention to Customers [vs. Finance]$_{[t+1,\ t-1]}$ = −.03; ΔNon-M&A Attention to Customers [vs. Finance]$_{[t+1,\ t-1]}$ = .01, p < .01). For the M&A firms with MROB, they experienced an increase in executive attention to customers (vs. finance) from the year before an M&A to the year after, whereas for those without MROB, they experienced a decrease (ΔM&A with MROB Attention to Customers [vs. Finance]$_{[t+1,\ t-1]}$ = .01; ΔM&A without MROB Attention to Customers [vs. Finance]$_{[t+1,\ t-1]}$ = −.04, p < .05). Consistent with this trend is the fact that for one of our sample firms, Macy's, it engaged in M&As in 2015 while having MROB. Macy's executive attention to customers (vs. financial issues) increased by 5.86% from the year before the M&As to the year after. Not surprisingly, Macy's did not experience any decline in customer satisfaction during this period.

We present the estimation results for executive attention to customers (vs. finance) (Model 1a) and customer satisfaction (CSAT; Model 1b) in Table 8. We find that M&A activity is associated with lower executive attention to customers (vs. finance) (β_3 = −.032, p < .05, Model 1a) and executive attention to customers (vs. finance) is associated with higher customer satisfaction (π_4 = 1.423, p < .01, Model 1b). Still, the effect of M&As on customer satisfaction persists with the inclusion of the mediator, executive attention to customers (vs. finance) (π_3 = −.764, p < .05, Model 1b), which suggests partial mediation. Its mediating impact persists when we incorporate the MROB interaction terms (Model 2b). Based on Model 2b, the indirect effect of M&As on customer satisfaction through executive attention to customers (vs. finance) is negative and significant (β_3[Post-M&A Year and M&A group] × π_4[Executive attention to customers (vs. finance)] = −.046, confidence interval = [−.144, −.000]). Thus, in support of H$_2$, customer dissatisfaction from M&As is due, in part, to a shift in executive attention away from customers and toward financial issues.

MROB is associated with more executive attention to customers (vs. finance) (β_4 = .756, p < .01; Model 1a) and higher customer satisfaction (π_5 = 48.292, p < .01; Model 1b). Further, in support of H$_3$, MROB reduces the negative impact of M&As on executive attention to customers (vs. finance) (β_5 = .623, p < .01, Model 2a) and executive attention to customers (vs. finance) is associated with an increase in customer satisfaction (π_4 = 1.447, p < .01, Model 2b).[2]

Robustness tests (Web Appendix F). We reestimated Equations 6.1 and 6.2 by adding an industry-level control variable to capture business-to-business versus business-to-customer membership, and our results do not change (Tables F.1 and F.2). We estimated firm value, firm efficiency, CSAT, and executive attention to customers (vs. finance) as a system of equations (Table F.3). Our effects of interest stay consistent when we use a four-equation model. We find robust support for our hypotheses.

Discussion

While there has been significant research on customer satisfaction and a stream of research on M&As and financial performance, prior studies have not connected these two streams. We situate our research on this intersection and draw on the two complementary theories of the ABV of the firm and the upper echelons theory to examine the influence of M&A activity on a key, but often overlooked, stakeholder: customers.

Theoretical Contributions

Prior marketing strategy research has largely overlooked how disruptive corporate transformations can be for customers. Further, it has overlooked a key pathway between M&A activity and firm value: customer satisfaction. Some empirical work (e.g., Swaminathan et al. 2014) has examined the interplay between M&A activity and customer satisfaction by treating customer satisfaction as a moderator and speculated (but not formally tested) that M&As enable a dual emphasis of firm efficiency and customer satisfaction. In contrast, we show that M&As not only do not enable a dual emphasis but also cause a decline in customer satisfaction to the extent that they outweigh any gain in firm value from firm efficiency. Thus, we add to previous work on firms' dual emphasis (e.g., Mittal et al. 2005) but show that M&A activity works against a dual emphasis of firm efficiency and customer satisfaction.

We examine heterogeneity in the decline in customer satisfaction with novel conceptual additions to the M&A and customer satisfaction literature streams: executive attention to customers versus finance and MROB. We address ongoing calls to increase marketing's profile in the C-suite and higher (e.g., Germann, Ebbes, and Grewal 2015; Marketing Science Institute [MSI] 2020; Whitler, Krause, and Lehmann 2018) by examining how marketing leadership at the top of a firm redirects executive attention to customer issues, which explains differences in customer outcomes of M&As. In doing so, we add to the limited research on marketing presence in the upper echelons (e.g., Bommaraju et al. 2019; Whitler, Krause, and Lehmann 2018) by examining its role in channeling executive attention during M&As.

Existing research in marketing has overwhelmingly used the RBV of the firm to examine outcomes of M&As. This view, which emphasizes capabilities, fails to consider executive attention (Zhong et al. 2020); however, executive attention is a

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[2] Although we did not hypothesize this, we tested the interaction effect between MROB and M&As on customer satisfaction, and the result is nonsignificant (π_6 = −2.617, p > .10). Therefore, the interaction between MROB and M&A indirectly affects customer satisfaction through its effect on executive attention to customers (vs. finance), which is evidence of indirect moderated mediation (Zhao, Lynch, and Chen 2010).

Table 8. Executive Attention to Customers (vs. Finance) and MROB.

Dependent Variables	(1a) Executive Attention to Customers (vs. Finance)$_t$	(1b) CSAT$_t$	(2a) Executive Attention to Customers (vs. Finance)$_t$	(2b) CSAT$_t$
Focal Variables				
Constant	.301***	67.024***	.300***	67.218***
	(.033)	(.929)	(.032)	(.899)
M&A Group	.007	−.310	.012	−.581**
	(.007)	(.223)	(.009)	(.263)
Post-M&A Year	.004	.452***	.006	.461**
	(.004)	(.157)	(.005)	(.199)
M&A Group × Post-M&A Year	−.032** (H$_2$)	−.764**	−.043***	−.716**
	(.014)	(.342)	(.016)	(.311)
Executive Attention to Customers (vs. Finance)		1.423***		1.447***
		(.541)		(.554)
Marketing Representation on the Board (MROB)	.756***	48.292***	.838***	43.301***
	(.094)	(8.202)	(.118)	(8.300)
MROB × M&A Group × Post-M&A Year			.623*** (H$_3$)	−2.617
			(.241)	(12.285)
Covariates				
Executive Attention to Customers (vs. Finance) Residuals		1.430***		1.486***
		(.434)		(.452)
MROB IMR	−.005**	−.396***	−.006**	−.399***
	(.003)	(.048)	(.003)	(.048)
MROB × M&A Group			−.312	24.956***
			(.257)	(7.398)
MROB × Post-M&A Year			−.130	−.655
			(.181)	(3.430)
Market Share$_{(t − 1)}$	−.449***	−3.134***	−.449***	−3.229***
	(.055)	(1.040)	(.056)	(1.016)
ROA$_{(t − 1)}$	.322***	12.470***	.328***	12.105***
	(.073)	(1.461)	(.074)	(1.517)
Firm Size$_{(t − 1)}$	.000	.000***	.000	.000***
	(.000)	(.000)	(.000)	(.000)
Advertising/Sales$_{(t − 1)}$	.032	−.124	.032	−.129
	(.020)	(.573)	(.020)	(.573)
R&D/Sales$_{(t − 1)}$	.024	−3.888***	.022	−3.837***
	(.042)	(1.131)	(.043)	(1.129)
Segments$_{(t − 1)}$	.035***	−.699**	.035***	−.710**
	(.013)	(.300)	(.013)	(.302)
Market Growth$_t$	−.065**	−2.502***	−.062**	−2.493***
	(.032)	(.731)	(.031)	(.736)
Firm fixed effects	Included	Included	Included	Included
Time effects	Included	Included	Included	Included
Model Information				
χ^2	$\chi^2(135) = 9,330.54$***	$\chi^2(137) = 8,150.45$***	$\chi^2(138) = 9,351.80$***	$\chi^2(140) = 8,195.91$***
R^2	.791	.768	.791	.769
Number of firms	122	122	122	122
Total observations	2,468	2,468	2,468	2,468

*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: CSAT = customer satisfaction; ROA = return on assets; R&D = research and development. We report parameter estimates with bootstrapped standard errors in parentheses.

precursor to resource investments. Further, although the ABV considers executive attention, it has primarily focused on the effect of supply-side (vs. demand-side) factors that influence managerial attention (e.g., Ocasio 1997; Zhong et al. 2020). In contrast, we extend the ABV to study marketing strategy phenomena in general, and a crucial demand-side stakeholder—customers—in particular. This aligns with newer research (e.g., Vadakkepatt et al. 2021) that aligns this theory with customer outcomes.

We contribute work on the marketing–finance interface. We introduce executive attention to customers versus financial issues as a mediator of the relationship between firm strategy (M&As) and a market-based asset (customer satisfaction). We find that during M&As, executives focus on financial issues at the cost of customer issues but that MROB can help mitigate this. Thus, we add a nuanced understanding the role of top leadership in navigating the marketing–finance interface.

We contribute to the literature on firm-level drivers of customer satisfaction (e.g., Otto, Szymanski, and Varadarajan 2020; Rego, Morgan, and Fornell 2013) by examining a previously ignored antecedent: M&A activity. By showing that M&As negatively impact customer satisfaction, we shed light on how higher-level strategic actions that are often motivated by shareholder motives can risk the marketing function's most prized asset, its customer relationships. Finally, we add to growing research in marketing on the use of observational inference to document the causal effects of strategic decisions.

Managerial Contributions

M&As have, on average, been shown to produce adverse financial effects. This has been attributed to overpayments as a result of optimism regarding synergies and cost efficiencies. However, we suggest that firms pay a price for dissatisfying customers during the M&A process, and in fact, this effect persists two years post-M&A. This finding is critical given that a recent survey of managers suggests that expanding a firm's customer base is a primary motivation for M&As. Thus, ignoring the dysfunctional effect of M&As on customers has serious long-term financial consequences and is inconsistent with firms' M&A objectives. To demonstrate the financial impact of the M&As due to a decline in customer satisfaction, we compared the firm value of M&A and non-M&A firms due to differences in customer satisfaction and firm efficiency with the estimation results from Table 3. Compared with that of non-M&A firms, the customer satisfaction of M&A firms was 1.14% lower a year after the M&A. In contrast, compared with that of non-M&A firms, the efficiency of M&A firms was .29% higher in the same period. When we incorporated these estimates in the firm value model (Equation 1.3), we found that the value of M&A firms was 2.43% lower than the non-M&A firms a year after the M&A. To calculate a change in firm value, we multiplied the percentage difference in value between M&A and non-M&A firms by the average firm value of the firms one year after an M&A. We find M&A firms'

market value was worth $481 million less than that of the non-M&A firms. Although firms may be motivated to pursue an M&A to exploit scale-related synergies that provide cost-benefits, we show that efficiency gains fail to compensate for customer dissatisfaction-related financial losses. Thus, it is critical for managers responsible for M&As and industry consultants to include a consumer impact assessment in their M&A checklists.

Although there are several competing needs that require executives' attention during an M&A process, it is essential for them to allocate some of their attention to customer-related issues. The financial payoff of such attention is meaningful. To demonstrate the impact of executives of M&A firms paying attention to customers despite their tendency to focus on financial issues, we computed the percentage difference in customer satisfaction between M&A firms whose executives pay more attention to customers (vs. finance) (1 SD above the mean) and M&A firms whose executives pay less attention to customers (1 SD below the mean) with the results from Table 8 (Column 2b). Then, we used this percentage difference in customer satisfaction (.46%) to calculate a difference in firm value with the estimates from Table 3. We find that M&A firms that pay more attention to customers relative to financial issues experience 45% reduction in loss in firm value from the M&A (−1.34% vs. −2.43%). Thus, executive attention to customers can help firms significantly reduce M&As' damaging effects on customer satisfaction and firm value.

Moreover, MROB can attenuate a decline in customer satisfaction and, thus, increase firm value. In our data, 27.34% of the firms had MROB at some point during the 1995–2017 sample period. To illustrate, we calculated the firm value impact of adding one marketing title to the board with the estimation results from the moderated-mediation analysis that we report in Table 8. First, we computed the percentage difference in customer satisfaction between M&A firms with no MROB and M&A firms with just one person with a marketing title on the board in the post-M&A year with the results from Column 2b of Table 8, which is 2.85%. We then used this increase in customer satisfaction from MROB to calculate firm value with the estimates from Table 3 and find that the value of a firm with just one person with a marketing title on the board in the post-M&A year was 4.28% higher compared with firms that did not have any MROB. Adding these board positions is not trivial, especially during an M&A process. However, the financial consequence of not having MROB during M&As is severe. Thus, we make the case for marketing's voice in the C-suite, which is an important MSI Tier 1 Research Priority for 2020–2022.

Limitations and Directions for Future Research

Limiting dissatisfaction from M&As is a complex task, and multiple antecedents, including deal and integration-related factors and firm-level variables that speak to other functions of the firm, should be considered. Recent research has also found that customer satisfaction has a direct positive effect on firm efficiency (Bhattacharya, Morgan, and Rego 2020), and

future research could explore this pathway in the context of M&As. Further, our sample size was limited to what the ACSI database of customer satisfaction could provide. Future studies could identify alternative data sets (Malshe, Colicev, and Mittal 2020) to enlarge their sample to extend the time frame of the panel and data frequency to examine changes in satisfaction several years after the M&As. In addition, we study customer satisfaction with the ACSI scores of acquirer firms and not target firms. This seems reasonable given that target firms are subsumed in acquiring firms, so any post-M&A ACSI score should reflect customers of both firms. Still, future research might benefit from assessing changes in satisfaction for the target firm. The challenge is that most Compustat and ACSI data are unavailable for the target firm after it has been acquired. Alternative data sources, which include primary data on customer satisfaction at the business unit level could be a solution. Finally, we empirically show that the ABV of the firm is a viable theoretical mechanism to explain the effect of M&As on customer satisfaction and how MROB moderates this relationship. Still, a change in executive attention is one of many potential pathways from M&A activity to customer satisfaction. Future research could consider how the RBV compares with the ABV in explaining these effects.

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