Can Advertising Investments Counter the Negative Impact of Shareholder Complaints on Firm Value?

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Abstract
Shareholder complaints put pressure on publicly listed firms, yet firms rarely directly address the actual issues raised in these complaints. The authors examine whether firms respond in an alternative way by altering advertising investments in an effort to ward off the financial damage associated with shareholder complaints. By analyzing a unique data set of shareholder complaints submitted to S&P 1500 firms between 2001 and 2016, supplemented with qualitative interviews of executives of publicly listed firms, the authors document that firms increase advertising investments following shareholder complaints and that such an advertising investment response mitigates a postcomplaint decline in firm value. Furthermore, results suggest that firms are more likely to increase advertising investments when shareholder complaints are submitted by institutional investors, pertain to nonfinancial concerns, and relate to topics that receive high media attention. The findings provide new insights on how firms address stock market adversities with advertising investments and inform managers about the effectiveness of such a response.

Keywords
advertising investments, firm value, market impact, marketing strategy, shareholder proposals, stock

While the nature and management of customer complaints is well understood in marketing literature (e.g., Fornell and Westbrook 1984; Homburg and Fürst 2007; Luo 2009; Luo and Homburg 2008), much less is known about the management of complaints from another key stakeholder group—the firm’s shareholders. Shareholders dissatisfied with the firm’s strategy can file complaints with the firm, which are then discussed at the firm’s next annual general meeting (AGM). Such complaints can pertain to a broad range of perceived firm deficiencies, including poor financial performance and governance, insufficient new product introductions, incoherent strategy, or turnover in leadership (Strategy& 2015). The lack of shareholder complaint research in marketing is surprising given that shareholders have emerged as a key stakeholder to the marketing function, which should be regarded “as a customer in its own right” (Hanssens, Rust, and Srivastava 2009, p. 115), and as an “input into marketing decision-making” (Srivastava, Shervani, and Fahey 1998, p. 2). The paucity of attention to this topic in marketing research is also surprising because shareholder complaints often directly address issues that are highly relevant to marketing executives, such as a firm’s product portfolio, communications, or consumer welfare.

Regardless of their content, shareholder complaints typically inflict substantial financial damage on firms because they tarnish the firm’s reputation, undermine investor confidence, and impose administrative costs that divert management attention from running the business (e.g., Prevost and Rao 2000; Woidtke 2002). Despite these stakes, marketing and other executives seem unprepared regarding how to respond to shareholder complaints (Cyriac, De Backer, and Sanders 2014; Strategy& 2015). What we do know, based on finance, corporate governance, and management literature, is that managers typically do not respond by actually implementing the changes...
that shareholders request in their complaints (e.g., Gillan and Starks 2007). What we do not know is whether managers respond in alternative ways and whether such responses mitigate the complaints’ financial harm on firm value. In this article, we propose that a marketing response in the form of advertising investments is such an alternative.

Anecdotal evidence suggests that firms respond to shareholder complaints by adjusting their advertising investments, but the direction and magnitude of such adjustments are unclear. The chief executive officer of advertising agency WPP, for instance, notes that “many of the world’s largest consumer goods companies are slashing costs . . . amid pressure from [complaining] investors . . . . And when it comes to cutting costs, advertising is one of the first places companies look to trim” (Bond, Nicolaou, and Daneshkhu 2017). By contrast, PepsiCo, “after earlier [complaint] pressure from investors . . . increased advertising and marketing spending on its biggest brands” (Bond 2013).

Academic literature that documents and advises how effectively configure advertising investments in response to shareholder complaints is missing. A review of the few studies that examine how shareholder behavior (other than shareholder complaints) affects marketing investments suggests that firms reduce marketing investments when facing challenging conditions in the stock market. For instance, this research finds that firms reduce marketing investments when their stock price falls (Chakravarty and Grewal 2011), when they need additional equity financing (Mizik and Jacobson 2007), or when investor sentiment is low (Mian, Sharma, and Gul 2018).

Our research complements these previous studies in two ways. First, by examining shareholder complaints, we focus on a different, yet no less serious, type of stock market adversity. Second, contrary to the common view that firms cut marketing investments when challenged by the stock market, we turn to an investor perception management perspective and propose that firms have incentives to increase their advertising investments when receiving shareholder complaints. The rationale stems from prior research that recognizes that firms use advertising “not only to promote their products and services to customers but also as a communication channel to their current and potential future investors” (Fehle, Tsyplakov, and Zdorovtsov 2005, p. 626).

Against this backdrop, we offer a conceptual framework through which we examine three research questions. First, do firms increase advertising investments in response to shareholder complaints? We focus on advertising investments as the focal marketing response because these investments are likely to be visible to shareholders and account for the bulk of marketing budgets (e.g., Conchar, Crask, and Zinkhan 2005; Liu, Shankar, and Yun 2017). Furthermore, Chakravarty and Grewal (2011) document that firms are more willing to alter advertising investments than other marketing activities in response to shareholder behavior. We argue that to offset the financial damage from shareholder complaints, firms increase advertising investments—a strategy we label “advertising investment response.”

Second, how does shareholder complaint salience moderate a firm’s advertising investment response? Borrowing from stakeholder theory, we predict that complaints are more likely to induce a firm response if they are more salient by involving more power, legitimacy, or urgency (Mitchell, Agle, and Wood 1997). Specifically, we examine whether firms are more responsive to shareholder complaints that are submitted by institutional investors (and thus are more powerful), relate to nonfinancial concerns (and thus affect the firm’s legitimacy among a larger body of stakeholders), and receive greater media attention for their underlying topics (and thus are more urgent).

Third, if firms increase advertising investments in response to shareholder complaints, is such a strategy effective in protecting firm value? We focus on firm value, proxied by Tobin’s q measure of intangible firm value, as our performance metric because it is a widely adopted and managerially important measure to assess the effectiveness of firm strategies in general (Malshe and Agarwal 2015) and advertising investments in particular (Pauwels et al. 2004). Given the established negative effect that shareholder complaints have on firm value (e.g., Prevost and Rao 2000; Woidtke 2002), we examine whether an advertising investment response mitigates such a decrease.

We investigate these questions using a data set covering shareholder complaints submitted to S&P 1500 firms from 2001 until 2016. Results indicate that firms indeed increase advertising investments after receiving shareholder complaints. In line with our theorizing, we also find that firms are more likely to increase advertising investments when complaints are more salient—that is, when they are submitted by institutional investors, when they pertain to nonfinancial concerns, and when media attention to their topics is high. Finally, we show that increased advertising investments mitigate the negative effects of shareholder complaints on firm value.

The insights from our analyses are important from both theoretical and practitioner viewpoints. First, in response to Currim, Lim, and Kim’s (2012) call for more empirical work on the effects of shareholder behavior on firms’ marketing investments, we introduce shareholder complaints as a stock market challenge relevant to the marketing field but that has been thus far unaddressed by prior research. Second, in doing so, we offer a conceptual framework that examines the strategic role of advertising investments in responding to shareholder complaints. Relying on the investor perception management perspective and stakeholder theory, we argue that firms will take stronger action when shareholder complaint salience is high. Specifically, our study is the first to introduce, operationalize, and empirically test how shareholder complaint submitter, complaint type, and media attention about the complaint’s topic influence a firm’s advertising investment response. Third, our results show that advertising investments are an effective strategy for mitigating the financial damage caused by shareholder complaints. Post hoc analyses show that the majority of firms still underinvest in advertising when facing shareholder
complaints, which highlights the need for corrective action by managers.

The Firm Challenge of Shareholder Complaints

A publicly listed firm is owned by shareholders who do not directly control its strategic or operational decisions but have delegated these tasks to the firm’s managers. If shareholders believe that managers’ decisions are detrimental, they can file formal complaints with the firm, which are registered as shareholder proposals. Once a proposal is submitted, U.S. Securities and Exchange Commission (SEC) rules require the firm to put it up for vote at the next AGM, unless the shareholder withdraws it or the SEC provides permission to exclude it from consideration.¹ Proposals are generally confrontational and negative in tone, but voting results are nonbinding, which means they are intended as a complaint mechanism rather than a coercion mechanism.

Despite lacking legal enforcement, shareholder complaints are impactful because they publicly point out perceived shortcomings in the firm’s strategy and management and signal degraded investor confidence (David, Hitt, and Gimeno 2001). Two types of adverse effects emanate from shareholder complaints. First, complaints can threaten a firm’s stock market performance because shareholders motivated to file complaints may also be inclined to sell their shares and thus depress the firm’s stock price. This action might, in turn, persuade other current shareholders to sell their stocks and dissuade prospective investors from buying the firm’s stock.

Second, complaints can compromise firm value if they spill over to nonfinancial stakeholders of the firm (David, Bloom, and Hillman 2007). The implications can be severe given that nonfinancial stakeholders make consumption and employment decisions that directly affect firm performance (e.g., Malshe and Agarwal 2015; Subrahmanyam and Titman 2001). Such spillovers are possible given that many shareholder complaints relate to domains that affect nonfinancial stakeholders. For example, shareholder complaints can alert prospective employees about a firm’s flawed strategy and governance (Turban and Greening 1997), or customers may learn about problems with a firm’s product strategy (David, Bloom, and Hillman 2007). In one public controversy, for instance, McDonald’s shareholders criticized the company for ignoring childhood obesity and diet-related diseases in its product portfolio strategy (Morrison 2012). Shareholder complaints also attract significant attention from consumer advocacy groups and media outlets (Davidson et al. 2004), especially with the rise of social media and the growing influence of user-generated content. Because complaints “tend to be played out on the front pages of the business press,” spillover effects onto consumers and other stakeholders become a real threat, and the resulting “public-relations toll can be devastating” (Strategy & 2015, p.11).

These adversities illustrate that shareholder complaints place substantial burdens on an afflicted firm and reduce investors’ expectations about the size and stability of its future cash flows. Indeed, numerous studies empirically document how shareholder complaints reduce firm value (e.g., Del Guercio and Hawkins 1999; Gillan and Starks 2000; Karpoff, Malatesta, and Walkling 1996; Prevost and Rao 2000; Wagster and Prevost 1996; Wahal 1996; Woidtke 2002).

While previous research has focused on the antecedents and outcomes of shareholder complaints (e.g., Cai and Walkling 2011; Gillan and Starks 2007; Goranova and Ryan 2014), systematic research on firm response to shareholder complaints is scarce. A few existing studies find that, in general, firms do not address shareholder complaints by improving the criticized issues (e.g., Gillan and Starks 2007). However, it is not clear whether firms respond in alternative ways. We are aware of only three studies that investigate such alternative responses in firms’ operational activities. David, Hitt, and Gimeno (2001) show that firms marginally increase research-and-development investments following shareholder complaints. Smith (1996) examines whether firms manipulate capital expenditures in response to complaints but does not find an effect. Del Guercio and Hawkins (1999) report an increase in combined firm asset sales, asset spin-offs, restructuring efforts, and employee layoffs following shareholder complaints.

These studies are limited in three regards relevant to this research. First, they rely on small samples of complaints (ranging from 78 to 522 complaints) that are submitted by institutional investors only. Furthermore, the types of investment responses studied are relatively inflexible and costly to manipulate because they involve installing, customizing, or disposing of assets and staff. Finally, these studies measure the change in firm operating activities for a period of up to four years after receiving the complaint (Del Guercio and Hawkins 1999; Smith 1996) and thus capture a gradual policy change over time rather than a direct remedial firm response. However, in today’s fast-paced markets where information spreads at unprecedented speeds, firms are searching for strategies that can provide immediate defense to shareholder complaints. Increased advertising investments might be one such response strategy. We next develop a conceptual framework that outlines the use and effectiveness of advertising investments as a firm response to shareholder complaints.

Conceptual Framework and Hypothesis Development

In general, marketing literature recognizes that stock market considerations influence firm advertising investment decisions (e.g., Bendig et al. 2018; Chung and Low 2017; Graham, Harvey, and Rajgopal 2005; Joseph and Richardson 2002; Lou 2014; Osinga et al. 2011; Srinivasan and Hanssens 2009). Joshi and Hanssens (2010) suggest that firms use advertising investments to directly manage investor perceptions (i.e., to improve

¹ Web Appendix A discusses the process of shareholder complaint submission in detail and provides examples of submitted complaints.
investor demand). We focus on this mechanism in building our conceptual framework.\footnote{In the “Theoretical Implications: Dynamics of Stock Markets and Product Markets” subsection, we detail why earnings management incentives, an alternative mechanism to managing investor perceptions, are unlikely to hold in the context of shareholder complaints.}

Figure 1 displays the relationships through which we study the use and effectiveness of an advertising investment response to shareholder complaints. In specifying our hypotheses, we rely on theoretical arguments and eight in-depth interviews with domain experts (i.e., executives of publicly listed firms).\footnote{Web Appendix B provides detailed information about this exploratory qualitative study of semistructured interviews.} As a vantage point, and building on previous research, shareholder complaints should have a negative baseline impact on firm value (e.g., Prevost and Rao 2000; Wagster and Prevost 1996; Woidtke 2002). We argue that to offset this drop in firm value, firms increase advertising investments (H1). Integrating stakeholder theory (Mitchell, Agle, and Wood 1997) with firsthand practical insights from our interviewed managers, we further identify shareholder complaint salience as a key moderator of the firm’s advertising investment response (H2–H4). Finally, we theorize how an advertising investment response mitigates the negative impact of shareholder complaints on firm value (H5).

**Advertising Investment Response to Shareholder Complaints**

Investor perception management suggests that when stock market challenges arise, firms rely on advertising investments to enhance investor confidence and secure demand for their stock (e.g., Chemmanur and Yan 2009; Lou 2014). Borrowing from this logic, we argue that firms increase advertising investments when shareholder complaints threaten firm value. Theoretically, we expect firms to do so given previous literature has well established the positive effect of advertising investments on firm value (e.g., Edeling and Fischer 2016; Joshi and Hanssens 2010). This should motivate managers to increase advertising investments as a compensatory action. Specifically, managers might expect advertising investments to offset the drop in demand for the firm’s stock because the heightened attention and visibility associated with increased advertising can attract new investors to replace departing ones (Barber and Odean 2008; Grullon, Kanatas, and Weston 2004; Lou 2014). This account was also echoed by an interviewed vice president (VP) of public relations, who remarked that “investing in the advertising side of things, it can get the word out of who you are going to be and why you should bring new dollars in... churn through some of the investors, and get some new blood in.” Moreover, also practically, managers might regard compensatory advertising investments as a feasible response to shareholder complaints because advertising investments are quick and easy to adjust (Conchar, Crask, and Zinkhan 2005); carry only limited downside (Markovitch, Steckel, and Yeoung 2005); and, compared with other marketing activities (e.g., customer relationship management, a firm’s market orientation), have a more immediate effect on firm value (Chakravarty and Grewal 2011). We therefore hypothesize the following:

\[ H_1: \text{Shareholder complaints lead a firm to increase its advertising investments.} \]

**Shareholder Complaint Salience as Moderator of an Advertising Investment Response**

The extent to which firms increase advertising investments in response to shareholder complaints is likely to depend on...
Shareholder complaint salience, which refers to the importance the firm attaches to the complaint (Lovett and MacDonald 2005). Borrowing from stakeholder theory, we argue that shareholder complaints should be more salient to the firm, and thus more likely to induce an advertising investment response, when they involve power, legitimacy, or urgency (David, Bloom, and Hillman 2007; Mitchell, Agle, and Wood 1997). Shareholder complaints are more powerful when submitted by shareholders who have the ability to exercise economic punishment or influence (shareholder complaint submitter). Complaints have broader legitimacy if they also relate to nonfinancial stakeholder concerns (shareholder complaint type). Finally, complaints are more urgent if their underlying topics receive greater media attention (shareholder complaint topic media attention). We examine these three factors that may moderate the strength of an advertising investment response.

Shareholder complaint submitter. A common way to classify shareholders submitting complaints is to distinguish between individual investors, institutional investors, and coordinated activist investors (e.g., Gillan and Starks 2007). We propose that firms perceive complaints submitted by institutional investors as more powerful than those submitted by individual investors or coordinated activists (David, Hitt, and Gimeno 2001) and thus respond more strongly through advertising investments. First, institutional investors hold a larger fraction of outstanding shares (e.g., Ryan and Schneider 2003) and thereby consume more attention in managerial decision making. Second, institutional investors are more able to exert public pressure (e.g., Teoh, Welch, and Wazzan 1999), among both shareholder communities (e.g., Gillan and Starks 2007) and the broader public. This amplifies the threat of their complaints on a firm’s future expected cash flows and reinforces incentives to manage investor perceptions through advertising investments. The interviewed managers expressed a similar view. In the words of a head of investor relations, “Institutional investors, because of the size of the actual impact, would get more attention than our retail shareholder base.” We thus hypothesize the following:

H2: A firm’s advertising investment response to shareholder complaints is stronger if complaints are submitted by institutional investors.

Shareholder complaint type. Literature commonly distinguishes between financial and nonfinancial stakeholders (e.g., Kaul and Luo 2018). Adopting this view, practitioner reports (e.g., PwC 2018), commentaries (e.g., Franck 2018), and commercial data providers (e.g., RiskMetrics) classify shareholder complaints according to the type of stakeholder the complaints address. We follow this typology and distinguish complaints that relate to the firm’s (1) financial and corporate governance concerns and (2) nonfinancial concerns that address stakeholders such as customers, employees, and the environment (see Flammer 2015; Goranova and Ryan 2014). We expect that complaints of a nonfinancial type hold broader legitimacy, defined by socially constructed values and norms (Mitchell, Agle, and Wood 1997), and thus make an advertising investment response more likely.

First, nonfinancial complaints increase the threat of negative spillovers onto various stakeholder groups (e.g., Cahan et al. 2015; Kotchen and Moon 2012), which can curtail demand, spark customer boycotts, and make it difficult to recruit talent. Because nonfinancial complaints often relate to strong normative beliefs and are comparatively easy for the public to understand, stakeholder backlash might be particularly strong and harmful to future expected cash flows (e.g., Kähr et al. 2016), which reinforces firm incentives to engage in an advertising investment response. Second, nonfinancial complaints may raise doubts about broader strategic issues than complaints about financial or governance aspects because nonfinancial complaints tend to directly relate to the firm’s business model, values, and operations. This further amplifies the perceived harm of shareholder complaints on a firm’s future expected cash flows and reinforces incentives to directly manage investor perceptions through increasing advertising investments. In the words of an interviewed chief financial officer (CFO), “When you are dealing with nonfinancial complaints, it is logical to invest more in advertising and communication, because the downside risk is larger.” We hypothesize:

H3: A firm’s advertising investment response to shareholder complaints is stronger if complaints reflect nonfinancial concerns.

Shareholder complaint topic media attention. Media attention of shareholder complaint topics reflects the extent to which the public is currently interested in the underlying issues of the complaint (Bednar, Boivie, and Prince 2013). We expect that complaints about topics that receive greater media attention make an advertising investment response more likely because managers perceive a greater urgency to react. First, if an issue is of high concern, stakeholders have a stronger motivation to act on it and eschew the firm (e.g., Engelberg and Parsons 2011; Van Heerde, Gijsbrechts, and Pauwels 2015). Managers might therefore be more alarmed that shareholder complaints translate into real economic costs and be more likely to consider an advertising investment response as defense. Second, managers make decisions on the basis of the issues they and their firm’s stakeholders focus attention on (Dyck, Volekhova, and Zingales 2008; Miller 2006; Ocasio 1997), and media coverage of a shareholder complaint topic likely draws their attention. Accordingly, such complaints are considered more critical, and managers are more likely to act through an advertising investment response. In line with this expectation, an

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4 An alternative reasoning could suggest that shareholder complaint salience makes substantial changes more likely and increases in advertising investments less likely. Yet the miniscule fraction of complaints that result in implemented changes as proposed, even among very salient complaints, does not support this conjecture.
interviewed head of investor relations stated, “I would be more likely to respond to issues that are in the press lately.” Accordingly, we hypothesize:

H4: A firm’s advertising investment response to shareholder complaints is stronger if complaint topics receive greater media attention.

Effectiveness of an Advertising Investment Response in Mitigating Firm Value Decline

We complete our conceptual framework by theorizing that an advertising investment response can actually mitigate the negative impact of shareholder complaints on firm value. The underlying mechanism is two-fold. First, investing in advertising signals firm financial health, product market prospects, and an otherwise sound strategy (Desai 2000; Kirmani and Rao 2000; Kurt and Hulland 2013), which should render investors less sensitive to devaluing the firm following shareholder complaints. As an interviewed VP of public relations remarked, “It just puts a positive spin on the company itself.” In addition, the positive affect induced through advertising might make investors more forgiving about performance deficiencies related to shareholder complaints. This is because investors, like other stakeholders, react less strongly to adverse news when emotionally connected with and positively inclined toward a firm (Mian and Sankaraguruswamy 2012). An interviewed VP of public relations explicitly mentioned that advertising can weaken the negative valence of shareholder complaints, as “Putting more money into advertising … is a way to get shareholders to look at whatever is the other shiny object and distract their attention away from the complaint.”

Second, advertising investments might also lessen the negative spillover effects of shareholder complaints on non-financial stakeholders of the firm. As such, the positive attitudes and emotional connection that advertising fosters among these stakeholders might alleviate repercussions in product and labor markets and weaken the resulting drop in firm value. As exemplified by the statement of an interviewed CFO, “Advertising could address concerns by some people who think we are not a good company by letting them and the broader market know we are.” For these reasons, we formally hypothesize:

H5: The negative effect of shareholder complaints on firm value is mitigated by a firm’s advertising investment response.

Method

Data Sources and Sample

We assemble a data set consisting of detailed information on all shareholder complaints received by S&P 1500 firms, advertising investments, firm value, shareholder complaint media attention, and a set of control variables from 2001 until 2016. We collect the first part of the data set from RiskMetrics, formerly the Investor Responsibility Research Center. This database covers complete annual shareholder complaint data for S&P 1500 firms, comprising 15,727 complaints. The database is unique in that it also includes data on withdrawn and omitted complaints submitted to firms but not put up for vote at the AGM. Of the 15,727 submitted complaints, 6,995 (i.e., 44.48%) are omitted or withdrawn. However, because including only complaints put up for vote at the AGM might not accurately reflect the true extent of shareholder dissatisfaction, we also incorporate these omitted or withdrawn complaints and thus circumvent the selection bias in other studies, which only use the complaints shareholders eventually voted on (Karpoff 2001). Moreover, our interviews suggest that managers consider shareholder complaints irrespective of whether they are eventually withdrawn. In the words of a VP of public relations, “Once the complaint is out, you have to respond. … You have to think that there are going to be other investors who are thinking the same thing …, even if [the complaints] were withdrawn.”

Because RiskMetrics covers only firm-year observations in which shareholder complaints are observed, we add a control group of firms that were part of the S&P 1500 for at least one year during the 2001-2016 period and were tracked by Compustat but do not appear in the RiskMetrics database because they did not receive any shareholder complaints. Using the Compustat Execucomp database, we identify a total of 411 possible control firms. In unreported analyses, we confirm that across all firm-year observations, neither the firms receiving shareholder complaints nor the control firms significantly differ from the universe of firms covered in Compustat in terms of the control variables we outline in the next section.

We retrieve advertising investment data from Kantar Media, a leading source of advertising data. Kantar Media continuously tracks brand advertising activity across broadcast, print, radio, internet, and outdoor media channels and translates this information to monetary amounts by surveying media and agency rates. We note that these data cover only media advertising and no other aspects of advertising (e.g., production costs, promotional material, agency costs).

Information on media attention to shareholder complaint topics comes from LexisNexis, and data on firm value and control variables come from Compustat’s quarterly database and the Center for Research in Security Prices. Consistent with previous work (e.g., Bayer, Tuli, and Skiera 2017), and to correctly match calendar-year advertising investment data from Kantar Media with fiscal-year financial data from Compustat, we retain only firms whose fiscal years end in December (68% of the firms). Doing so is important to ensure that the term “year” is the same for all firms in our sample, and that all firms are subject to the same industry conditions. The final sample consists of unbalanced annual panel data for 831 firms (656 firms receiving shareholder complaints and 175 control firms). After eliminating firm-years with incomplete information, the final sample is based on 3,896 submitted shareholder
complaints and includes 4,428 firm-year observations. The sampled firms belong to a wide range of industries including services as well as manufacturing. Electronics and computer (31%) constitute a large proportion of the sample, as do business services (13%) and chemicals (12%), followed by food (6%). Web Appendix C overviews the industry descriptives.

Measures
Shareholder complaints. We aggregate shareholder complaints at the firm-year level and take the natural logarithm because the distribution of complaints is highly skewed (e.g., Papies and Van Heerde 2017). To avoid losing firm-year observations with zero complaints, we follow Manchanda, Rossi, and Chintagunta’s (2004) procedure and add 1 to the actual value before the logarithmic transformation.6 We use the lagged level of shareholder complaints because shareholders submit their complaints toward the end of the fiscal year. To explain, SEC regulations require shareholders to submit complaints 120 calendar days before AGM materials are mailed to shareholders. For firms whose fiscal year ends on December 31, the AGM takes place in April and firms send the AGM materials to shareholders 30 to 50 days beforehand. Thus, for such firms, shareholder complaints are received by the end of November of the previous year and they become public anytime between January and March. Specifically, complaints discussed at the AGM become public through shareholders announcing their complaints or when firms send out preinformation about opposing the complaints, both of which tend to occur in January or February (Ernst and Young 2016). If complaints are withdrawn or omitted, they become public when the SEC publishes this information, usually anytime from January until the AGM takes place (SEC 2017). As a result, firms learn about shareholder complaints in the fourth quarter of the previous year, and other shareholders and the public learn about shareholder complaints in the first quarter of the current year.

Advertising investments. Our measure of advertising investments is Kantar Media’s annual advertising investments estimate, which we aggregate across a firm’s brands to arrive at a firm-year level. To control for firm size effects, we scale advertising investments by the firm’s total assets in the given year, collected from Compustat.7 If a firm does not advertise in any of the tracked channels, we assign it an advertising investment value of zero. Following prior literature, we use the unexpected portion of advertising as our measure (e.g., Liu et al. 2017; Nam and Kannan 2014), which is the deviation from expected advertising levels in a given year based on the firm’s prior year’s advertising level. This deviation is captured by the residuals from the following autoregressive fixed-effects model of advertising investments (Mizik 2010):  
\[
\text{ADV}_{i,t} = \varphi_0 + \varphi_1 \text{ADV}_{i,t-1} + \gamma \text{SIC}_j + \tau \text{YR}_t + \alpha_i + e_{i,t},
\]
where \(i = 1, \ldots, I\) indicates firms, \(j = 1, \ldots, J\) indicates two-digit Standard Industrial Classification (SIC) industries, and \(t = 1, \ldots, T\) indicates years. \(\text{ADV}_{i,t}\) measures advertising investments scaled by total assets, with \(\varphi_1\) modeling the autoregressive behavior and \(e_{i,t}\) representing an error term \(\sim N(0, \sigma)\). For reasons of parsimony, and following Mizik (2010), we employ a first-order autoregressive (AR[1]) specification. To account for the correlation in the dependent variable over time, we use an instrumental variable first-difference estimator to generate consistent parameter estimates (see Mizik 2010).8 Our modeling acknowledges that the past advertising investment level serves as an anchor point in setting the advertising budget in the current period (e.g., Hall, Lovallo, and Musters 2012; Prendergast, West, and Shi 2006). It allows for a one-period transitory effect of advertising investment deviations such that advertising investments can return to prior normal levels if no shareholder complaints are received in consecutive years (note that in 89% of our firm-year observations, firms do not receive shareholder complaints in consecutive years and can therefore reset their advertising investments to previous normal levels). The residuals from Equation 1 represent unexpected size-adjusted advertising investments, \(\text{UADV}_{i,t}\). For ease of readability, from here on, we omit the descriptors “unexpected” and “size-adjusted” and simply refer to “advertising investments.”

Firm value. We measure firm value by Tobin’s q, an established proxy for intangible firm value in the marketing literature that provides “market-based views of investor expectations of the firm’s future profit potential” (Rao, Agarwal, and Dahlhoff 2004, p. 129) and is considered the superior measure for assessing marketing strategy effectiveness (Day and Fahey 1988; Fang, Palmatier, and Steenkamp 2008). Tobin’s q is the ratio of a firm’s market value to the replacement cost of its tangible

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5 As expected, we observe a substantial reduction in sample size due to unavailability of data when constructing our variables, unavailable firm information when firms list their stock later or delist their stock earlier than the start and end date of our sample period, and attrition through acquisitions and bankruptcy.

6 Sensitivity analyses indicate that adding other constants (i.e., .0001, or .5) does not change our results.

7 An alternative measure of advertising investments is advertising share of voice (e.g., McAlister et al. 2016), which is the firm’s advertising investment divided by the sum of all advertising investments in the firm’s industry. Using this relative measure, we find results in close correspondence to those reported in our main analyses (see Web Appendix D).

8 We remove the firm-specific effects by first-differencing the data. We then create instruments from the first and second lags of the first-differenced dependent variable and run the more efficient two-step generalized method of moments estimator with robust standard errors. The estimated advertising forecast model is statistically significant ($\chi^2 = 7.64, p < .01$), and advertising levels are highly persistent ($\varphi = .59, p < .01$). The Arellano–Bond test for zero autocorrelation in the error term can be rejected at any order higher than 1 ($z_{19} = -1.528, \text{n.s.}$), so we conclude that the error term is serially uncorrelated. Because the Sargan test of overidentifying restrictions cannot be rejected ($\chi^2 = 88.52, \text{n.s.}$), the model specification meets the moment conditions and the instruments appear valid. Note that we replicate results when employing expanded AR(2) and AR(3) forecasting models. Web Appendix D overviews alternative models to estimate unexpected advertising investments.
assets and provides a measure of the premium (or discount) that the market is willing to pay above (below) the replacement costs of a firm’s tangible assets, thus capturing any above-normal returns expected from the firm’s tangible assets (Amit and Wernerfelt 1990). It has several advantages as a performance metric because it is derived from the stock price and thus is forward-looking, risk-adjusted, and less easily manipulated by managers. Moreover, Tobin’s q reflects a firm’s long-term profitability because it captures the relationship between the replacement cost of a firm’s tangible assets and the market value of the firm (Bharadwaj, Bharadwaj, and Konsynski 1999). We follow Chung and Pruitt (1994) and calculate Tobin’s q as the logarithm of $TQ_{i,t} = (MVE_{i,t} + PS_{i,t} + BVD_{i,t})/TA_{i,t}$, where $MVE_{i,t}$ is the market value of equity, $PS_{i,t}$ is the value of preferred stock, $BVD_{i,t}$ is the book value of debt, and $TA_{i,t}$ is the book value of total assets for firm $i$ in year $t$. Tobin’s q captures intangible firm value, yet for ease of readability, we use the terms “intangible firm value” and “firm value” interchangeably.

Shareholder complaint salience factors. We operationalize the shareholder complaint institutional submitter variable as the firm’s yearly percentage of shareholder complaints submitted by institutional investors (i.e., public pension funds, mutual funds, endowments, and foundations) versus complaints submitted by individual or coordinated investors. To operationalize the shareholder complaint nonfinancial type variable, we use the following procedure to distinguish shareholder complaints that address nonfinancial concerns from those that address financial concerns. RiskMetrics classifies each complaint as relating to either financial/governance or social responsibility concerns. For our measure of nonfinancial concerns, we use the complaints classified as social responsibility concerns. To verify that all corporate social responsibility concerns indeed relate to nonfinancial concerns, we pull the detailed complaint descriptions from RiskMetrics and review each complaint. Two independent coders confirm that all complaints (i.e., $\kappa = 1.00$) unambiguously relate to nonfinancial concerns. We then create a variable indicating the firm’s yearly percentage of complaints that were defined as relating to nonfinancial concerns.

We operationalize the shareholder complaint topic media attention variable as the yearly media coverage about the topic addressed in a given complaint as captured on LexisNexis. RiskMetrics summarizes the topic of each complaint in a short description nine words or fewer (91% of the summaries have fewer than six words), which we clean of filler words and use as index terms in our media search. We count all articles that mention the respective topic within a given year and that LexisNexis ranks with a relevancy score of at least 60%, net of duplicates in the same newspaper outlet (Liu and Shankar 2015). To control for scale effects of the topics, we normalize topic media coverage in a given year by the topic’s total media coverage over the sample period. In years in which a firm receives multiple shareholder complaints, we compute the arithmetic mean across the topic media coverage scores to arrive at our firm-year measure of shareholder complaint topic media attention. Web Appendix E provides further details and examples of how we construct the shareholder complaint salience moderators.

Control variables. On the basis of a systematic review of previous literature, we include control variables organized across financial flexibility, product market performance, stock market performance, and shareholder complaint details. In line with this literature, we include these covariates as levels, not as unexpected changes, and winsorize them at 1% to reduce the impact of outliers. For our model estimating advertising investments, our controls of financial flexibility include the logarithm of operating cash flows because firms alter their advertising levels due to financial constraints and affordability effects in the product market (Chakravarty and Grewal 2011). As suggested by prior literature (Chakravarty and Grewal 2011; Malshe and Agarwal 2015), we also control for financial leverage. On the one hand, financial leverage may reduce the firm’s flexibility in terms of resource allocation and spending behavior (Harris and Raviv 1991). On the other hand, firms profit from higher financial leverage through tax benefits related to deductible interest payments, which can result in higher spending levels. To calculate firm leverage, we divide long-term debt by the book value of assets (Rao, Agarwal, and Dahlhoff 2004). We include sales growth as a control for product market performance, measured as the percentage change in gross sales from the preceding year (Chung and Low 2017). Controlling for firm stock market performance, we include stock returns (Markovitch et al. 2005). Because firms tend to be benchmarked against their industry peers for stock performance comparisons, we follow Chakravarty and Grewal (2016) and use a dummy variable that takes a value of 1 if the firm’s stock return exceeds industry-averaged stock returns and 0 otherwise. Industry average returns are the equally weighted average of stock returns of all firms in a given four-digit SIC industry. We add a control for firm size to account for economies of scale (Chung and Low 2017), which we operationalize as the logarithm of total assets. We employ one-period lags of the control variables because this represents the most recent information available to managers when they decide on budgets at the beginning of the current period (Chakravarty and Grewal 2016; Currim, Lim, and Kim 2012). Finally, we include controls for shareholder complaint details that are not captured by our moderating factors but could influence an advertising investment response. Specifically, we control for the percentage of excluded shareholder complaints not discussed at the firm’s AGM and the percentage of shareholder complaints with voting support exceeding 50%.

For our model estimating the effectiveness of an advertising investment response, we control for a firm’s financial flexibility by including financial leverage, measured as described previously. Because theoretical arguments and empirical evidence are strong but equivocal for the relationship between financial leverage and Tobin’s q, we include it as a covariate without specifying the expected sign of the relationship (Malshe and
Agarwal 2015). We include market share as a control for product market performance, which has been shown to positively influence Tobin’s q (Fang, Palmatier, and Steenkamp 2008). Market share is expressed as the fraction of firm sales revenues divided by sales revenues of all firms in the same four-digit SIC industry. We also include sales growth because a higher growth rate might indicate higher future growth prospects that result in higher values of Tobin’s q (Rao, Agarwal, and Dahlhoff 2004). Our controls also include profitability, which is expected to have a positive effect on Tobin’s q (Grewal et al. 2008). We use return on assets (ROA) as our profitability measure, which is the ratio of operating income before depreciation by total assets. Regarding a firm’s economies of scale, we control for firm size and its established negative association with Tobin’s q (Bharadwaj, Bharadwaj, and Konsynski 1999), which we calculate as described previously. Finally, we control for shareholder complaint details including the percentage of excluded shareholder complaints not discussed at the firm’s AGM, the percentage of shareholder complaints with voting support exceeding 50%, shareholder complaint institutional submitter, shareholder complaint nonfinancial type, and shareholder complaint topic media attention. YRT is a vector of year controls to account for time effects, \( \alpha_i \) are firm-specific intercepts to account for unobserved firm-level heterogeneity, and \( c_{1i} \) and \( c_{2i} \) are error terms \( \sim N(0, \sigma) \). The parameter estimate \( b_{11} \) indicates whether firms increase advertising investments in response to shareholder complaints (H1); the respective estimates of \( b_{11}, b_{15}, \) and \( b_{17} \) show whether shareholder complaint salience factors moderate the advertising investment response (H2–H4); and the estimate of \( b_{23} \) indicates whether advertising investments are effective in weakening the postcomplaint drop in firm value (H6).

Given that Equations 2 and 3 are embedded in a system of equations, we face the modeling challenge of the right-hand side advertising investment variable being potentially endogenous. Endogeneity could also stem from autocorrelated errors of the lagged endogenous variable. Theoretically, we do not expect autocorrelation to be a problem for the advertising investment equation given that this measure is already an unexpected measure. We formally test for autocorrelation for panel data with the procedure recommended by Woolridge (2002) and fail to reject the null hypothesis of uncorrelated errors for any of the two equations. As a result, we can generate consistent estimates by ordinary least squares regressions in which standard errors are clustered by firm (Mizik and Jacobson 2009).

**Results**

Table 2 provides sample descriptive statistics and correlations of the variables in our models. As anticipated, unexpected advertising investments are, on average, zero. In years in which firms receive shareholder complaints, we observe a mean of 2.60 complaints per year, with a minimum of 0 and a maximum of 22 complaints. Figure 2 provides information about the distribution of shareholder complaints in our sample. Panel A plots the number of shareholder complaints across all firms by year. Panel B shows the number of complaints by firm-year for years in which shareholder complaints are received. Panel C plots the number of complaints by more detailed subcategories of complaint type (within financial and nonfinancial type) and by complaint submitter (Web Appendix E overviews our procedure to subcategorize shareholder complaint type).

**Advertising Investment Response to Shareholder Complaints**

H1 predicts that firms respond to shareholder complaints by increasing their advertising investments. Table 3 presents regression results of the associated test. Column 1 contains the results of Equation 2 with only the control variables. We focus on Column 2, in which we add shareholder complaints and
Table 1. Operationalization and Data Sources of Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Variable Operationalizationa</th>
<th>Data Source</th>
<th>Illustrative Applications in Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A: Focal Dependent and Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints (SHC)</td>
<td>Logarithm of shareholder complaint count</td>
<td>RiskMetrics</td>
<td>New to the marketing literature but appears in Ertimur, Ferri, and Muslu (2011)b</td>
</tr>
<tr>
<td>Advertising investments (UADV)</td>
<td>Unexpected size-adjusted advertising investments, derived from forecasting model as described in the “Method” section</td>
<td>Kantar Media</td>
<td>Chakravarty and Grewal (2016); Kim and McAlister (2011); Liu, Shankar, and Yun (2017)</td>
</tr>
<tr>
<td>Tobin’s q (TQ)</td>
<td>Tobin’s q given by firm market value over replacement costs, derived as described in the “Method” section</td>
<td>Compustat</td>
<td>Grewal, Chandrashekaran, and Citrin (2010); McAlister et al. (2016); Morgan and Rego (2009)</td>
</tr>
<tr>
<td><strong>B: Shareholder Complaint Salience Moderator Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint institutional submitter (INST)</td>
<td>Percentage of shareholder complaints submitted by institutional investors</td>
<td>RiskMetrics</td>
<td>New to the marketing literature but appears in David, Hitt, and Gimeno (2001)b</td>
</tr>
<tr>
<td>Shareholder complaint nonfinancial type (NONFIN)</td>
<td>Percentage of shareholder complaints relating to nonfinancial concerns</td>
<td>RiskMetrics</td>
<td>New to the marketing literature but appears in Guay, Doh, and Sinclair (2004)b</td>
</tr>
<tr>
<td>Shareholder complaint topic media attention (MEDIA)</td>
<td>Media coverage of the shareholder complaint topic as described in the method section</td>
<td>RiskMetrics, LexisNexis</td>
<td>New to the literature</td>
</tr>
<tr>
<td><strong>C: Control Variables in the Advertising Investment Model</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Flexibility</td>
<td>Cash flows</td>
<td>Logarithm of operating cash flow in million</td>
<td>Compustat</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>Long-term debt divided by book value of assets</td>
<td>Compustat</td>
<td>Chakravarty and Grewal (2011); Chung and Low (2017); Kashmiri and Mahajan (2017)</td>
</tr>
<tr>
<td>Product Market Performance</td>
<td>Sales growth</td>
<td>Percentage change in gross sales</td>
<td>Compustat</td>
</tr>
<tr>
<td>Economies of Scale</td>
<td>Firm size</td>
<td>Logarithm of total assets in million</td>
<td>Compustat</td>
</tr>
<tr>
<td>Shareholder Complaint Details</td>
<td>Shareholder complaints excluded</td>
<td>Percentage of withdrawn or omitted shareholder complaints</td>
<td>RiskMetrics</td>
</tr>
<tr>
<td>Shareholder complaints voting support</td>
<td>Percentage of shareholder complaints with voting support exceeding 50%</td>
<td>RiskMetrics</td>
<td>New to the marketing literature Campbell, Gillan, and Niden (1999)b</td>
</tr>
<tr>
<td><strong>D: Control Variables in the Tobin’s q Model</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Flexibility</td>
<td>Financial leverage</td>
<td>Long-term debt divided by book value of assets</td>
<td>Compustat</td>
</tr>
<tr>
<td>Product Market Performance</td>
<td>Market share</td>
<td>Firm revenues divided by revenues of all firms in the same four-digit SIC industry</td>
<td>Compustat</td>
</tr>
</tbody>
</table>

(continued)
thereby explain additional variance. The proposed model is statistically significant ($F = 31.85, p < .01$) and the variance inflation factors (VIFs) do not exceed ten, suggesting that multicollinearity is not a concern for the validity of our results. We further perform stepwise analyses, in which we add one regressor at a time to the model and confirm that multicollinearity does not affect the results. We find that the main effect of shareholder complaints on advertising investments is positive and significant ($\beta = .055, p < .01$), implying that receiving more shareholder complaints in the preceding period relates to an increase in advertising investments in the current period. This result aligns well with the theory of investor perception management and supports $H_1$. In economic terms, we find that for a firm with one shareholder complaint, receiving an additional complaint (i.e., the number of complaints doubles to two) unexpectedly increases its size-adjusted advertising investments by $0.004 (\approx \ln(2) \times .055 \times 10^{-1};$ see coefficient in Table 3). For an average firm in our sample, with average total assets of $2,021.8$ million (see Table 2), this translates into an increase in advertising investments of $8.08$ million ($0.004 \times 2,021.8$ million), holding assets fixed.

### Table 1. (continued)

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Variable Operationalization</th>
<th>Data Source</th>
<th>Illustrative Applications in Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profitability</strong></td>
<td>Operating income before depreciation divided by total assets</td>
<td>Compustat</td>
<td>Cao and Yan (2016); Grewal et al. (2008); McAlister et al. (2016)</td>
</tr>
<tr>
<td><strong>Economies of Scale</strong></td>
<td>Logarithm of total assets in million</td>
<td>Compustat</td>
<td>Grewal, Chandrashekaran, and Citrin (2010); McAlister et al. (2016); Nezami, Worm, and Palmatier (2018)</td>
</tr>
<tr>
<td><strong>Shareholder Complaint Details</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints excluded</td>
<td>Percentage of withdrawn or omitted shareholder complaints</td>
<td>RiskMetrics</td>
<td>New to the marketing literature; Campbell, Gillan, and Niden (1999)$^b$</td>
</tr>
<tr>
<td>Shareholder complaints with voting support exceeding 50%</td>
<td>Percentage of shareholder complaints submitted by institutional investors</td>
<td>RiskMetrics</td>
<td>New to the marketing literature; David, Hitt, and Gimeno (2001)$^b$</td>
</tr>
<tr>
<td>Shareholder complaint nonfinancial type (NONFIN)</td>
<td>Percentage of shareholder complaints relating to nonfinancial content</td>
<td>RiskMetrics</td>
<td>New to the marketing literature; Guay, Doh, and Sinclair (2004)$^b$</td>
</tr>
<tr>
<td>Shareholder complaint topic media attention (MEDIA)</td>
<td>Media coverage of the shareholder complaint topic as described in text</td>
<td>RiskMetrics, LexisNexis</td>
<td>New to the literature</td>
</tr>
</tbody>
</table>

$^a$All variables operationalized at firm-year level.  
$^b$Conceptually analogous application outside marketing.

Turning to the moderating effect of shareholder complaint salience, we present regression results of Equation 2 in Column 1 of Table 3. The model is statistically significant ($F = 27.46, p < .01$), with VIFs below ten, and the covariate estimates are similar to those of Column 2. To test $H_2$–$H_4$, we focus on the interaction effects between shareholder complaints and the respective salience moderator variable (i.e., institutional submitter, nonfinancial type, and topic media attention).$^9$ Regarding shareholder complaint submitter, we find that institutional investors increase the strength of an advertising investment response ($\beta = .015, p < .01$), consistent with $H_2$. With respect to shareholder complaint type, results support $H_3$. Firms are more likely to increase their advertising investments if complaints relate to nonfinancial concerns ($\beta = .013, p < .01$). Finally, and consistent with $H_4$, we find that media attention of the topic of the shareholder complaint strengthens an advertising investment response ($\beta = .016, p < .01$). In further confirmation of these results, the total effects (i.e., the sum of the simple effects of shareholder complaints, the respective moderator, and the interaction effect of these two variables) are positive for all three salience moderators.

### Effectiveness of an Advertising Investment Response in Mitigating Firm Value Decline

The test of $H_5$ involves examining whether an advertising investment response can mitigate the drop in firm value resulting from shareholder complaints. We estimate Equation 3 including only shareholder complaints and control variables, as shown in Column 1 of Table 4, and advertising investments and control variables, as shown in Column 2. Our focus,

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$^9$Note that the negative simple effects of the moderator variables have no bearing on testing the hypotheses, as they capture the effects of these variables on advertising investments when shareholder complaints are at their minimum.
Table 2. Descriptive Statistics and Correlations.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>M</th>
<th>SD</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
<th>(13)</th>
<th>(14)</th>
<th>(15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholder complaints (SHC)&lt;sup&gt;b&lt;/sup&gt;&lt;sup&gt;c&lt;/sup&gt;</td>
<td>2.600</td>
<td>2.450</td>
<td>1.000</td>
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<tr>
<td>2. Advertising investments (UADV)</td>
<td>−0.00</td>
<td></td>
<td>0.169</td>
<td>0.066</td>
<td>1.000</td>
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<td></td>
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<tr>
<td>3. Shareholder complaint inst. submitter (INST)</td>
<td>0.093</td>
<td>0.257</td>
<td>0.250</td>
<td>0.002</td>
<td>1.000</td>
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<tr>
<td>4. Shareholder complaint nonfinancial type (NONFIN)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.367</td>
<td>0.400</td>
<td>0.636</td>
<td>0.111</td>
<td>0.246</td>
<td>1.000</td>
<td></td>
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<tr>
<td>5. Shareholder complaint topic media attention (MEDIA)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.059</td>
<td>0.015</td>
<td>0.011</td>
<td>−0.158</td>
<td>0.047</td>
<td>0.051</td>
<td>1.000</td>
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<tr>
<td>6. Tobin’s q (TQ)</td>
<td>1.900</td>
<td>1.649</td>
<td>−0.04</td>
<td>0.004</td>
<td>−0.006</td>
<td>−0.012</td>
<td>−0.062</td>
<td>1.000</td>
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<tr>
<td>7. Firm size&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2021.80</td>
<td>4238.23</td>
<td>0.464</td>
<td>0.005</td>
<td>0.127</td>
<td>0.331</td>
<td>0.164</td>
<td>−0.236</td>
<td>1.000</td>
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</tr>
<tr>
<td>8. Cash flows&lt;sup&gt;b&lt;/sup&gt;</td>
<td>516.79</td>
<td>926.10</td>
<td>0.445</td>
<td>0.155</td>
<td>0.058</td>
<td>0.286</td>
<td>0.083</td>
<td>−0.033</td>
<td>0.483</td>
<td>1.000</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>9. Profitability</td>
<td>0.119</td>
<td>0.314</td>
<td>0.010</td>
<td>0.000</td>
<td>0.004</td>
<td>0.007</td>
<td>0.001</td>
<td>−0.094</td>
<td>0.064</td>
<td>0.008</td>
<td>1.000</td>
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</tr>
<tr>
<td>10. Stock returns</td>
<td>0.728</td>
<td>0.444</td>
<td>0.072</td>
<td>−0.014</td>
<td>−0.004</td>
<td>0.035</td>
<td>0.025</td>
<td>−0.071</td>
<td>0.085</td>
<td>0.071</td>
<td>−0.001</td>
<td>1.000</td>
<td></td>
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</tr>
<tr>
<td>11. Sales growth</td>
<td>0.304</td>
<td>19.333</td>
<td>−0.012</td>
<td>−0.003</td>
<td>−0.004</td>
<td>−0.009</td>
<td>0.010</td>
<td>0.068</td>
<td>−0.042</td>
<td>−0.008</td>
<td>−0.005</td>
<td>−0.011</td>
<td>1.000</td>
<td></td>
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</tr>
<tr>
<td>12. Financial leverage</td>
<td>0.210</td>
<td>0.278</td>
<td>−0.002</td>
<td>−0.001</td>
<td>−0.002</td>
<td>−0.001</td>
<td>−0.004</td>
<td>0.012</td>
<td>0.017</td>
<td>0.000</td>
<td>0.004</td>
<td>0.000</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Market share</td>
<td>0.101</td>
<td>0.179</td>
<td>0.302</td>
<td>0.019</td>
<td>0.075</td>
<td>0.243</td>
<td>0.079</td>
<td>−0.084</td>
<td>0.435</td>
<td>0.241</td>
<td>0.012</td>
<td>0.014</td>
<td>−0.016</td>
<td>−0.001</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Shareholder complaints excluded&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.240</td>
<td>0.375</td>
<td>0.486</td>
<td>0.018</td>
<td>0.075</td>
<td>0.338</td>
<td>0.007</td>
<td>0.010</td>
<td>0.300</td>
<td>0.296</td>
<td>0.007</td>
<td>0.061</td>
<td>−0.008</td>
<td>−0.002</td>
<td>0.201</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>15. Shareholder complaints voting support&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.129</td>
<td>0.299</td>
<td>0.261</td>
<td>0.005</td>
<td>0.087</td>
<td>0.089</td>
<td>0.018</td>
<td>−0.019</td>
<td>0.150</td>
<td>0.071</td>
<td>0.004</td>
<td>0.009</td>
<td>−0.005</td>
<td>−0.001</td>
<td>0.098</td>
<td>0.124</td>
<td>1.000</td>
</tr>
</tbody>
</table>

<sup>a</sup>Correlations based on variables' log transformations as used in the analyses, all in period t.
<sup>b</sup>Mean and standard deviation in variable’s original unit.
<sup>c</sup>Mean and standard deviation conditional on firm-year observations with nonzero shareholder complaints.
however, is on the full model in Column 3. The model is statistically significant \((F = 25.48, p < .01)\) and explains incremental variance. Because the VIFs are below ten, this confirms that multicollinearity is of no concern for our analyses. We find that the control variables have the expected signs, although financial leverage is not significant. Confirming prior research, shareholder complaints are negatively related to firm value \((\beta = -.212, p < .01)\), which highlights the need for remedial action on receiving them. Moreover, our results suggest that increasing advertising investments is an effective firm response that successfully mitigates the postcomplaint firm value decline \((\beta = .003, p < .05)\), as predicted in H5 and consistent with our expectations.

Figure 2. Shareholder complaint distributions.
\(^{a}\)Shareholder complaint financial type
\(^{b}\)Shareholder complaint nonfinancial type.

A: Number of Shareholder Complaints by Year

B: Number of Shareholder Complaints by Firm-Year

C: Number of Shareholder Complaints by Type (Subcategory) and Submitter

Subcategories of Shareholder Complaint Type

- Submitted by Institutional Investors
- Submitted by individual/coordinate investors
with the theory of investor perception management. We also reestimate Equation 3 without profitability as a control variable. This specification is insightful given that Equation 3 tests for investor perception effects beyond earnings levels (as proxied by the ROA measure of profitability). The results in Column 4 confirm that the stock market still rewards an advertising investment response ($\beta = .002$, $p < .10$).

### Additional Analyses

This section overviews additional analyses that provide further insights into the mechanisms underlying an advertising investment response to shareholder complaints. We present alternative modeling choices and various robustness checks in Web Appendix D.

### Shareholder Complaint Salience

**Moderating effect of detailed subcategories of nonfinancial shareholder complaints.** In an exploratory inquiry, we reestimate Equation 2 and replace the shareholder complaint type variable with the nine subcategories of complaint type, as plotted in Panel C of Figure 2 (results reported in Web Appendix E). We note that, after mean-centering the subcategory variables, VIFs remain above ten, and the adjusted R-squared is lower than when using the dichotomous shareholder complaint type classification as produced in Column 3 of Table 3. In line with our theorizing, however, we find that all financial subcategories (board of directors, executive compensation, takeover, and other shareholder rights) negatively moderate an advertising investment response, whereas nonfinancial subcategories (diversity, community, environment, human rights, product, and vices) positively moderate an advertising investment response, although not all effects are statistically significant. These results further support our theory-driven taxonomy of financial and nonfinancial shareholder complaint types.

**Moderating effect of shareholder complaint salience on firm value decline.** While not the focus of our analyses, in a set of unreported analyses we also test whether shareholder complaint salience moderates the negative effect of shareholder complaints on Tobin's q. We do not find significant moderating effects for shareholder complaint institutional submitter or shareholder complaint nonfinancial type, but we do find that complaints related to topics receiving more media attention cause a marginally larger drop in firm value than those about topics receiving less media attention. These findings are interesting because they suggest that managers might overestimate the perceived harm

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### Table 3. Advertising Investment Response.

<table>
<thead>
<tr>
<th></th>
<th>(1) Advertising investments (UADV)</th>
<th>(2) Advertising investments (UADV)</th>
<th>(3) Advertising investments (UADV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder complaints (SHC) (H₁)</td>
<td>.0549*** (.019)</td>
<td>.0471*** (.020)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints (SHC) × Institutional submitter (INST) (H₂)</td>
<td></td>
<td>.0148*** (.005)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints (SHC) × Nonfinancial type (NONFIN) (H₃)</td>
<td></td>
<td>.0125*** (.004)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints (SHC) × Topic media attention (MEDIA) (H₄)</td>
<td></td>
<td>.0162*** (.003)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint institutional submitter (INST)</td>
<td>−.0118*** (.004)</td>
<td>−.0115*** (.004)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint nonfinancial type (NONFIN)</td>
<td></td>
<td>−.0381*** (.003)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint topic media attention (MEDIA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints excluded</td>
<td>−.0318*** (.015)</td>
<td>−.0345*** (.015)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints voting support</td>
<td>−.0191 (.012)</td>
<td>−.0186 (.012)</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>.0000*** (.000)</td>
<td>.0000*** (.000)</td>
<td>.0000*** (.000)</td>
</tr>
<tr>
<td>Cash flows</td>
<td>.0018 (.001)</td>
<td>.0015 (.001)</td>
<td>.0013 (.001)</td>
</tr>
<tr>
<td>Stock returns</td>
<td>−.0083 (.007)</td>
<td>−.0065 (.007)</td>
<td>−.0064 (.007)</td>
</tr>
<tr>
<td>Sales growth</td>
<td>.0015 (.005)</td>
<td>.0010 (.005)</td>
<td>.0011 (.005)</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>−.0000 (.000)</td>
<td>−.0000 (.000)</td>
<td>−.0000 (.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>−.1815*** (.014)</td>
<td>−.2576*** (.019)</td>
<td>−.2581*** (.019)</td>
</tr>
<tr>
<td>Observations</td>
<td>4,428</td>
<td>4,428</td>
<td>4,428</td>
</tr>
<tr>
<td>Model F-statistic (df₁, df₂)</td>
<td>36.11*** (15, 4,413)</td>
<td>31.85*** (21, 4,407)</td>
<td>27.46*** (26, 4,402)</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>.150</td>
<td>.161</td>
<td>.170</td>
</tr>
<tr>
<td>ΔR-squared F-statistic (df₁, df₂)</td>
<td>78.46*** (3, 4,407)</td>
<td>265.22*** (6, 4,402)</td>
<td></td>
</tr>
</tbody>
</table>

*p < .1,

**p < .05,

***p < .01.

Notes: Coefficients scaled by $10^{-1}$ to improve readability. Standard errors clustered by firm in parentheses. Predictors calculated at period $t − 1$. Firm and year fixed effects not reported.

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10 We thank an anonymous reviewer for pointing out that mean-centering does not alleviate multicollinearity concerns.
that shareholder complaints have on firm value when submitted by an institutional investor or when reflecting nonfinancial concerns. We also use a split-sample design (i.e., above and below median advertising investments) to examine whether the effect of an advertising investment response on firm value is moderated by shareholder complaint salience but find no such evidence for any of the salience factors.

Alternative Investment Responses to Shareholder Complaints

If firms increase their advertising investments in response to shareholder complaints, does this come at the expense of other investments? Although we lack data for most other types of firm investments, we offer two exploratory analyses. First, following Kim and McAlister (2011), we derive an estimate for sales force investments by subtracting Compustat’s advertising item from Compustat’s selling, general, and administrative item. Using this proxy, we do not find that shareholder complaints drive sales force investments ($\beta = .070$, n.s.). Second, moving beyond the marketing domain, we test whether firms reduce capital expenditures, as reported in Compustat, after encountering shareholder complaints. Capital expenditures decrease current earnings but do not help in managing investor perceptions. If our argumentation holds, we should observe a negative (or at least no positive) effect, which is indeed what we find ($\beta = -.040$, n.s.).

Advertising Investment Response Mechanism

Explicit requests for advertising investment increases. It might be that advertising investments appear effective as a remedial response because, in their complaints, shareholders explicitly ask for an increase in advertising. To test this competing explanation, we examine the detailed content of each shareholder complaint that includes the words “advertising,” “marketing,” or “promotion,” but find no evidence for any demands directly related to an advertising increase ($N = 0$). Because SEC regulations allow companies to ignore complaints related to ordinary business operations, such as advertising, the lack of complaints requesting advertising increases is not surprising. However, to the extent that an advertising-related complaint concerns fundamental business strategy, it is not considered ordinary business and is eligible for submission. We find only a few complaints of that type in our data set ($N = 56$). Examples are complaints about advertising tobacco to minors and about advertising containing ethically controversial images. Our previous results do not change if we either exclude these cases or control for them with a dummy variable.

Advertising investment media types. Advertising investments comprise various media types that differ in audience, objectives, and effects. We examine whether some advertising media types are more effective in protecting postcomplaint firm value than others. Kantar Media provides detailed advertising

### Table 4. Effectiveness of an Advertising Investment Response.

<table>
<thead>
<tr>
<th></th>
<th>(1) Tobin’s q (TQ)</th>
<th>(2) Tobin’s q (TQ)</th>
<th>(3) Tobin’s q (TQ)</th>
<th>(4) Tobin’s q (TQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder complaints (SHC)</td>
<td>-.1690*** (.073)</td>
<td>-.2118*** (.075)</td>
<td>-.1759*** (.072)</td>
<td></td>
</tr>
<tr>
<td>Advertising investments (UADV)</td>
<td>0.0459*** (.001)</td>
<td>0.0459*** (.013)</td>
<td>0.0451*** (.016)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints (SHC) $\times$ Advertising investments (UADV) ($H_2$)</td>
<td>0.0030*** (.001)</td>
<td>0.0022* (.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint institutional submitter (INST)</td>
<td>.1348 (.125)</td>
<td>.1555 (.152)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint nonfinancial type (NONFIN)</td>
<td>-.0474 (.087)</td>
<td>-.0059 (.106)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaint topic media attention (MEDIA)</td>
<td>.0757*** (.021)</td>
<td>.0721*** (.026)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints excluded</td>
<td>.1018 (.097)</td>
<td>.1016 (.094)</td>
<td>.1017 (.094)</td>
<td></td>
</tr>
<tr>
<td>Shareholder complaints voting support</td>
<td>-.0045 (.070)</td>
<td>-.0008 (.070)</td>
<td>-.0056 (.070)</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>-.4348*** (.043)</td>
<td>-.4425*** (.108)</td>
<td>-.4324*** (.043)</td>
<td>-.4007*** (.042)</td>
</tr>
<tr>
<td>Profitability</td>
<td>.1106*** (.021)</td>
<td>.1121*** (.029)</td>
<td>.1118*** (.021)</td>
<td></td>
</tr>
<tr>
<td>Sales growth</td>
<td>.2711*** (.045)</td>
<td>.2735* (.156)</td>
<td>.2673*** (.045)</td>
<td>.1040*** (.032)</td>
</tr>
<tr>
<td>Market share</td>
<td>.5419*** (.253)</td>
<td>.5293* (.306)</td>
<td>.5655*** (.253)</td>
<td>.5306* (.303)</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>-.0002 (.001)</td>
<td>-.0001 (.001)</td>
<td>-.0002 (.001)</td>
<td>-.0019 (.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.1020*** (.108)</td>
<td>-.1760* (.180)</td>
<td>6.3286*** (.124)</td>
<td>6.6547*** (.1542)</td>
</tr>
<tr>
<td>Observations</td>
<td>4,428</td>
<td>4,428</td>
<td>4,428</td>
<td>4,428</td>
</tr>
<tr>
<td>Model F-statistic (df$_1$, df$_2$)</td>
<td>29.86*** (18, 4,410)</td>
<td>34.02*** (16, 4,412)</td>
<td>25.48*** (22, 4,406)</td>
<td>36.22*** (21, 4,407)</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>.121</td>
<td>.122</td>
<td>.120</td>
<td>.09</td>
</tr>
<tr>
<td>ΔR-squared F-statistic (df$_1$, df$_2$)</td>
<td>112.43*** (7, 4,406)</td>
<td>65.88*** (1, 4,407)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Notes: Standard errors clustered by firm in parentheses. Shareholder complaints calculated at period $t - 1$. Firm and year fixed effects not reported.
investment data grouped into print, radio, broadcast, internet, and outdoor advertising. Adding interaction terms of these five media types and shareholder complaints to Equation 3, we find marginally significant effects on Tobin’s q for the percentage of television ($\beta = .001, p < .10$) and outdoor ($\beta = .001, p < .10$) advertising. We conclude that the media type of advertising is of lower importance in protecting postcomplaint firm value; the effectiveness rather lies in the total amount of a firm’s advertising investments.

**Nomological Validity of Industry Conditions**

Because industry conditions can influence a firm’s likelihood to manage discretionary investments such as advertising (e.g., Chapman and Steenburgh 2011), we provide two tests that provide additional insights and allow us to reconcile our findings with prior literature. First, industries differ in the importance that investors attach to a firm’s earnings numbers, and previous literature has suggested that such industry earnings pressure influences a firm’s discretionary investment levels (Asker, Farre-Mensa, and Ljungqvist 2015). Consequently, we expect firms operating in industries in which stock prices are highly sensitive to earnings information to be more cautious about increasing advertising investments. We proxy industry return sensitivity to earnings by the coefficient of a regression of earnings against firm stock returns (Asker, Farre-Mensa, and Ljungqvist 2015). Interacting industry return sensitivity to earnings with shareholder complaints, analogous to the interactions in Equation 2, we find that higher return sensitivity to earnings is associated with a marginally lower increase in advertising investments ($\beta = -0.001, p < .10$).

Second, we argue that visibility and potential spillovers onto nonfinancial stakeholders explain why firms resort to advertising investments when facing shareholder complaints. Thus, firms should be more likely to increase advertising investments if visibility among a broader set of stakeholders is large and if the overlap between the product market and the stock market is high. Previous literature has argued that market structures vary in these regards across business-to-customer (B2C) and business-to-business (B2B) markets (Lichtenthal, Yadav, and Donthu 2006), and we therefore test whether firms are more likely to increase their advertising investments when operating in a B2C versus a B2B industry. Including B2C industry membership as an interacted dummy with shareholder complaints, while excluding the firm fixed effects in Equation 2, we find marginal support for this argument ($\beta = .001, p < .10$).

**Discussion**

Shareholders and their concerns have recently attracted marketing’s attention as firms are increasingly challenged to manage stock markets and product markets symbiotically. In this article, we focus on shareholder complaints, a prominent form of stock market adversity, and study how firms use advertising investments to mitigate the drop in firm value following shareholder complaints. Three key takeaways are as follows: First, contrary to the often-documented observation that firms decrease marketing investments when challenged by the stock market, we find that, in the context of shareholder complaints, firms increase advertising investments to improve investor perceptions. Second, firms are more likely to increase advertising investments if shareholder complaints are more salient (i.e., are submitted by institutional investors, relate to nonfinancial concerns, or if the topics of the complaints receive more media attention). Third, advertising investments are an effective instrument for mitigating the firm value decline following shareholder complaints. Our results have various implications for marketing theory and practice, which we discuss next.

**Theoretical Implications: Dynamics of Stock Markets and Product Markets**

While a substantial amount of research has explored how marketing investments drive shareholder behavior (e.g., Rust et al. 2004; Srinivasan and Hanssens 2009), a small number of studies have begun to investigate whether shareholder behavior can also have feedback effects on marketing investments. This research tends to focus on the impact of stock prices. Our study sheds light on a distinctive, yet hitherto overlooked, aspect of shareholder behavior—shareholder complaints—that is increasingly relevant for firm managers and, as we show, for their advertising investment decisions. Combining our results with the findings of other stock market feedback studies (e.g., Bendig et al. 2018; Mizik 2010) leads to the conclusion that adverse stock market pressures do not always result in marketing investment cuts, as per an earnings management perspective. Instead, in support of an investor perception management perspective, firms might find it more effective to directly manage firm value through increasing advertising investments.

We expect two drivers to explain this phenomenon. First, shareholder complaints often pertain to nonfinancial issues, so soothing investors financially by cutting advertising investments is unlikely to be effective because these complaints are not financially motivated in the first place. Considering that the general quest of maximizing profits is often at odds with consumer welfare and corporate social responsibility (e.g., Kotchen and Moon 2012), cutting advertising investments as a response to nonfinancial concerns may even be considered counterproductive by investors.

Second, firms that encounter shareholder complaints tend to display mediocre to bad earnings performance, either because of poor past strategic choices that caused complaints or because of processing complaints in the current period.\(^{11}\) Finance literature suggests that if firms miss earnings expectations, even if

\(^{11}\) The financial costs, such as legal, advisory, and administrative costs, required to handle shareholder complaints can be tremendous and soar into the multimillion-dollar range (Strategy& 2015). Confirming the profit slump, we find that while, overall, firms tend to increase their earnings in the fourth quarter of the fiscal year as compared with the other three quarters, firms with shareholder complaints do not report increased earnings in the fourth quarter of the fiscal year.
only by a thin margin, they bank any additional earnings until a later period when they can use those earnings to meet or exceed expectations (e.g., DeGeorge, Patel, and Zeckhauser 1999; Shleifer 2002). Likewise, this literature finds that incentives to manage earnings are higher for firms that have consecutively reported high or increasing earnings in the recent past, and not for those that have reported poor earnings (Myers, Myers, and Skinner 2007). This point is also discussed in Chakravarty and Grewal (2011), who argue that it is good past performance that induces short-term earnings pressures. Given the poor past performance of firms receiving shareholder complaints, these firms might have lower motivation to engage in earnings management.

As such, our findings also pertain to the recent discourse on profit versus value maximization. Multiple articles in this area argue that marketing actions that increase profits may not necessarily increase firm value (e.g., Srivastava, Shervani, and Fahey 1998). We add to this discussion by showing that marketing actions that decrease profits may not always decrease firm value. In this regard, our results correspond closely with those of Gao et al. (2015), who study product-harm crises and find that although increasing advertising investments reduces firm profit, it nevertheless mitigates the loss in firm value. In other words, reductions in accounting profit do not always lead to reductions in economic profit, not even in the short run. This is an encouraging finding for marketing practice.

Our findings also add to the literature that studies how firms can attenuate crisis situations through marketing investments. The traditional focus of the marketing function has been the product market, with an array of research studying how firms employ advertising instruments to address adversities emanating from product markets, such as consumer complaints (e.g., Luo 2008), product regulation (e.g., Moorman, Du, and Mela 2005), or product-harm crises (e.g., Cleeren, Dekimpe, and Van Heerde 2017). Other research shows how advertising investments help firms during recessions (e.g., Srinivasan, Lilien, and Sridhar 2011). Adding to this literature, we show that advertising investments not only are a compelling way to address product-market crises but also can mitigate the adverse effects of shareholder crises.

In terms of adverse performance effects, our focus is on firm value, which is a function of both future expected cash flows and firm risk. Given the strong risk-reducing properties of advertising investments (e.g., Luo and Bhattacharyya 2009; McAlister, Srinivasan, and Kim 2007), coinciding with the weakened investor confidence in the firm when receiving shareholder complaints, the channel through which advertising investments protect firm value might be by reducing firm risk. To test for this benefit, we run an exploratory test in which we interact shareholder complaints with advertising investments and regress this variable on firm risk, measured as the standard deviation of the residuals of the firm’s four-factor stock price model in year t (Chakravarty and Grewal 2011). The model mimics Equation 3 but replaces Tobin’s q with firm risk. Results are of the expected direction, but advertising investments are marginally insignificant in reducing firm risk after encountering shareholder complaints (β = −0.043, n.s.).

Finally, our results contribute to a better understanding of the corporate governance literature relative to marketing actions. Previous literature, as well as our data, has shown that firms rarely respond directly to the issues raised in shareholder complaints (e.g., Gillan and Starks 2007). Presumably, managers regard their own information about the firm to be superior to that held by shareholders (Soltes, Srinivasan, and Vijayaraghavan 2017) or fear that shareholders seek only short-term gains. This perspective is shared by scholars and commentators who claim that shareholder complaints only distract management from their duties and that outside investors lack the necessary skills and experience to optimize management’s decisions (Shumsky 2017; Wohlstetter 1993). Our qualitative interviews support this idea, with one of the interviewed CFOs stating that “shareholders follow your firm from a distance and are not involved in the daily development of your strategy and the considerations involved.” In addition, whereas some complaints reflect shareholders’ discontent with an issue in which they are highly involved, other complaints result from a more general “we are not happy” sentiment (Prial 2012), making it difficult for management to cure shareholder dissatisfaction by taking direct action. We do not take a stance on whether shareholder complaints are reasonable or whether firms’ refusal to implement proposed changes is warranted. However, we show that firms do react to these complaints, namely by altering their advertising investments, and we show that this response is effective in terms of protecting firm value. This is another reassuring finding for marketing practice.

Managerial Implications: Strategic Action Plan for Firms Facing Shareholder Complaints

In light of our findings from both the qualitative interviews and econometric analyses, we suggest a three-step action plan for managers facing shareholder complaints. When confronted with complaints, managers should (1) assess the content of the complaint and determine whether to implement the shareholder’s suggestion, (2) evaluate the impact the complaint has on firm value and inherent firm responsiveness, and (3) devise actions to alleviate the potential harm of the complaint to firm value. We next provide details on each step and offer actionable guidelines.

The first step involves managers closely analyzing the actual content of received complaints and assessing whether they should respond by changing any aspect of their business operations. For example, this could be the case when shareholders point to shortcomings in the firm’s operations or supply chain, which managers should acknowledge as market intelligence and change accordingly. Although previous literature has shown that firms typically neglect such insights, we suggest that managers should always be vigilant to maximize their firm’s strategic potential and remain attentive to shareholder feedback in accomplishing this objective. In the words of a CFO we interviewed, “You have to engage in a dialogue with
shareholders who suggest that your value proposition is not optimal,” and “Shareholders have the right to indicate this to you.”

Second, irrespective of whether the firm implements the issue shareholders complain about, managers should next evaluate the impact of the complaint and consider actions to alleviate the harm that complaints inflict on firm value. Our findings corroborate that shareholder complaints substantially reduce firm value but also identify advertising investments as an effective tool to protect firm value. To further demonstrate the impact of increasing advertising investments in response to shareholder complaints, we perform a counterfactual analysis that answers two questions. First, for firms that increased their advertising investments in response to shareholder complaints, what was their incremental improvement in firm value compared with if they had not increased investments? Second, for firms that did not increase their advertising investments in response to shareholder complaints, what was their incremental loss compared with if they had increased investments? For this analysis, we employ a switching regression methodology (e.g., Cao and Sorescu 2013), detailed in Web Appendix F. In essence, we use a first-stage regression to predict the probability of a firm increasing its advertising investments in response to shareholder complaints and derive the inverse Mills ratio as the selection correction variable. In a second stage, we then regress firm value on the inverse Mills ratio and the control variables, separately for firms that increase advertising investments and those that do not. Finally, we use the predicted firm values from the second-stage estimation to conduct the what-if analysis.

We find that firms that increased their advertising investments in response to shareholder complaints achieved an incremental gain of .057, or 3.5%, in firm value compared with if they had not increased these investments. By contrast, firms that did not increase their advertising investments in response to shareholder complaints gave up an incremental lift in firm value of .152, or 1.3%, compared with if they had increased their investments. These results underscore our general finding that advertising investments help protect firm value in the face of shareholder complaints, but, perhaps even more importantly, they also show how a firm jeopardizes firm value if it decides against an advertising response.

Although these results underscore the benefits of an advertising investment response to shareholder complaints in general, they do not indicate the optimal level of increasing advertising investments. As a second analysis, we therefore perform a marginal effects analysis based on the estimated coefficients from Equation 3 in Table 4 (Web Appendix G overviews the details). This approach has been applied in marketing by Mantrala et al. (2007) and Srinivasan, Lilien, and Sridhar (2011) and provides two important insights. First, it describes how to calculate firm-specific marginal effects and how to statistically assess whether a given firm underspends, overspends, or spends at an approximately optimal level. As such, when faced with shareholder complaints, managers can readily use our model as a decision aid to examine whether they advertise at optimal levels. Second, after performing such an analysis for the firms in our sample, we find that the majority of firms underinvest in advertising following shareholder complaints. Notably, though, if shareholder complaint salience is high (i.e., if complaints are submitted by institutional investors, pertain to nonfinancial concerns, or relate to topics that receive higher media attention), firms invest close to an optimal level.

Combining all the findings from our article, we conclude that firms increase their advertising investments following shareholder complaints, yet most do not do so sufficiently, especially if shareholder complaint salience is low (i.e., if the complaint is not submitted by an institutional investor, does not pertain to nonfinancial concerns, and does not discuss topics receiving large media attention). This conclusion is striking because firms jeopardize substantial firm value by underutilizing an advertising investment response. We thus caution managers not to underspend on advertising in response to shareholder complaints, especially when the complaints appear less salient and managers may thus feel less of an urge to manage investor perceptions.

Third, when contemplating the extent of increasing advertising investments, managers should also consider how to best implement an advertising investment response. This includes taking into account the differential effects of advertising media types. As shown in our additional analysis, television and outdoor advertising seem marginally more effective at mitigating the drop in firm value. We conjecture that television advertising is beneficial because of its large short-term elasticity compared with print or combined advertising and because it is built on emotional rather than informative appeals, which is essential in nurturing investors’ affect to the firm (Sethuraman, Tellis, and Briesch 2011). Likewise, outdoor advertising is known for increasing awareness and broadening visibility (Lichtenthal et al. 2006). Although our focus is on advertising investments, the qualitative interviews help explore how to design the advertising content. An interviewed head of investor relations noted a role of “advertising to explain your strategy… and reiterate why it is a good strategy.” In the words of an interviewed chief financial controller, “Advertising is not just about the underlying product, it is about letting [the market] know we are a good company.”

Insights from the qualitative interviews further suggest the importance of coordinating an advertising investment response with other functions in the firm, such as public relations. For instance, as stated by one chief financial controller, “It is also about public relations and sponsorships to try and appease [complaining shareholders].” Another CFO noted that “using interviews and articles in the business press are good ways to correct impressions of the market and wider stakeholder groups.” If complaints pertain to nonfinancial issues, another route might involve “independent parties [to] help shape the public discussion in your favor, such as interest groups,” as one CFO recommended. Unilever, for instance, started a well-publicized collaboration with the World
Wildlife Fund after being criticized by shareholders for its lack of sustainability efforts.

Likewise, the firm’s investor relations department might be an important partner to design an advertising investment response. Often considered a strategic corporate marketing activity (Dolphin 2004), it is well-placed to advise how to address concerned shareholders in terms of message content and how best to reach shareholders. This could include, for instance, “presenting yourself on conferences, expos, and symposia,” as one chief financial controller noted, or “to be present at investor roadshows.” In any case, quoting a head of investor relations, “Investor relations, public relations, and marketing [have to] work together very closely in addressing shareholder complaints.”

In addition, firms might look for external partners to better communicate their value proposition to the investor community and amplify their advertising efforts. One such partner might be analysts who channel information between firms and investors and help “validate the business logic underlying the advertising expense” (Luo and De Jong 2012, p. 607). As a head of investor relations stated, “Depending on the issue at hand, we have a direct line to the analysts,” while a VP of public relations shared that “having analysts as a kind of intermediary or go-between is a great way to defuse an issue that might come up with complaining investors, especially as analysts have spent time with us and really know our products and what we are trying to do.”

To conclude, our research suggests that managers should consider the broader implications of an advertising investment strategy across both product and financial markets. Managing the dynamics between advertising investments and the stock market becomes an even more pressing task as shareholder complaints increasingly deal with topics directly under marketing’s responsibility. We believe that our findings arm marketing managers with stronger justifications for their advertising budget decisions, their position in the C-suite and at the board level, and their organizational impact to counter the threat of marginalized marketing responsibilities (Rust et al. 2004). That being said, advertising investment decisions should always be part of a coherent long-term marketing strategy, ideally one that aligns shareholders’ interests with firm strategy and prevents shareholder dissatisfaction in the first place (Kurt and Hulland 2013).

**Limitations and Directions for Further Research**

With the novelty of our research come certain limitations that provide avenues for future research. One topic for future research is a more detailed investigation of the roles of different functions within a firm and how they might help coordinate an advertising investment response, as suggested by our qualitative interviews. Relatedly, while beyond the scope of the present research, it may be worthwhile to consider other, perhaps competing, responses that managers could use when confronted with complaining shareholders. We offer some first ideas in our additional analyses and invite future research to explore this path in more detail. In addition, firm contingencies could affect an advertising response to shareholder complaints and moderate the effectiveness of such a response. Firm factors that relate to spillover effects between investors and nonfinancial stakeholders might play a role, such as a firm’s proportion of retail investors, who have been shown to respond more strongly to advertising investments (Lou 2014). The firm’s strategic emphasis on advertising might be another factor influencing firm advertising responsiveness to shareholder complaints (Mizik and Jacobson 2003).

Moreover, it is possible that shareholder complaints moderate the effectiveness of a firm’s advertising investments, in addition to advertising investments protecting firm value, as we find in the current research. Literature on product crisis management suggests such effects during times of crisis (e.g., Cleeren, Van Heerde, and Dekimpe 2013), and future research might provide insights on this matter in the context of shareholder complaints. An interesting finding we note in Table 3 is the negative association of the percentage of excluded complaints with a firm’s advertising investments. This result is surprising because when budget decisions are made, the firm does not yet know whether complaints will be withdrawn or omitted, because this information tends to be revealed only at a later point, possibly until the day of the AGM. One might speculate that, over time, firms develop knowledge about the likelihood of complaints being withdrawn or omitted so they can make more informed decisions at the time budgets are set. Alternatively, if advertising budgets are very flexible, firms might be able to undo or reduce the planned increase in advertising investments in cases in which the threat of shareholder dissatisfaction disappears. Future research might help uncover these dynamics.

Finally, our modeling of unexpected advertising investments assumes a transitory effect of advertising deviating from expected levels in a given year. At the same time, we cannot exclude the possibility that shareholder complaints could have a more permanent bearing on the firm’s future advertising investments. This could be the case if the firm learns about strategy shortcomings through complaints and decides to combat it through advertising. This is an interesting conjecture that we hope future research will address.

**Conclusion**

Research to date has provided inconclusive views on how firms adjust marketing investments in response to stock market adversities. We offer novel insights on a currently overlooked type of stock market adversity, shareholder complaints, and how firms adjust their advertising investments in response to those complaints. Our findings suggest that firms increase their advertising investments and that the stock market rewards them for doing so. Specifically, an advertising investment response to shareholder complaints helps reduce the postcomplaint drop in firm value. Furthermore, we find that more salient shareholder complaints—that is, those submitted by institutional investors, relating to nonfinancial concerns, and relating to
topics receiving more media attention—make an increase in advertising investments more likely. Our results offer important implications for marketing theory about how shareholder feedback drives advertising investments as well as practical insights to support managers to make timely and appropriate advertising investment decisions on receiving shareholder complaints.

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