REPUTATIONS IN FLUX: HOW A FIRM REPAIRS ITS MULTIPLE REPUTATIONS IN RESPONSE TO SOCIAL AND FINANCIAL VIOLATIONS

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ABSTRACT

Drawing from research on social cognition and impression management, we examine how a firm repairs its multiple reputations in response to social and financial violations. First, we identify the sociocognitive properties that distinguish a firm's financial, social, and general reputations. We then argue that the effectiveness of a firm's repair strategy will depend on the type of reputation being repaired and on the nature of violation the firm faces. We test our hypotheses using two longitudinal violation samples: financial restatements and environmental malfeasance. We find that a more accommodative repair strategy is more effective at repairing a firm's multiple reputations following a financial restatement, but is less effective following environmental malfeasance. However, the effectiveness of a firm's accommodative repair strategy on each type of reputation varies for different theoretical reasons. Ultimately, we advance organizational research on reputation and perception management by showing that reputation repair is a more complex and dynamic process than has been previously considered.

Keywords: Firm reputation, reputation repair, perception management, social cognition

Academic interest in firm reputation continues to grow (cf. Fombrun, 2012), and many studies have shown a link between a favorable firm reputation and positive firm outcomes. For example, a favorable reputation has been shown to increase price premiums (Deephouse, 2000; Rindova, Williamson, Petkova, & Sever, 2005), profitability (Roberts & Dowling, 2002), a firm's ability to attract quality employees (Turban & Cable, 2003), and strategic flexibility (Deephouse & Carter, 2005; Pfarrer, Pollock, & Rindova, 2010). Overall, past research has provided considerable evidence that a favorable reputation can be a valuable asset to a firm.

Given the value of a favorable reputation, how a firm attempts to repair its reputation in response to actions that negatively violate stakeholders' expectations can be critical to its success. Examples of such violations include financial accounting restatements (e.g. Pfarrer, Smith, Bartol, Khanin, & Zhang, 2008), accusations of sweatshop labor (e.g., Lamin & Zaheer, 2012), and environmental malfeasance (e.g., Zyglidopoulos, 2001). A violation can lead to a number of consequences, including direct damage to a firm's reputation (e.g., Love & Kraatz, 2009; Rhee & Haunschild, 2006), loss of stakeholder trust and goodwill (e.g., Karpoff, Lee, & Martin, 2008; Zyglidopoulos, 2001), negative media coverage (e.g., Zavyalova, Pfarrer, Reger, & Shapiro, 2012), and executive turnover (e.g., Arthaud-Day, Certo, Dalton, & Dalton, 2006; Boivie, Graffin, & Pollock, 2012). Given these consequences, organizational research has become increasingly interested in understanding the reputation repair process following a violation (cf. Lamin & Zaheer, 2012; Love & Kraatz, 2009; Mishina, Block, & Mannor, 2012; Rhee & Haunschild, 2006; Rhee & Valdez, 2009; Zavyalova et al., 2012).

However, while interest in the reputation repair process is growing, research in this domain has largely failed to recognize that a firm may have multiple and perhaps conflicting reputations (cf. Barnett & Pollock, 2012; Carter & Deephouse, 1999; Lange, Lee & Dai, 2011).

For instance, a firm may have a financial reputation for delivering value to investors, a social reputation for exceptional corporate responsibility among socially-conscious advocates, or, more generally, a reputation for being "more or less good and attractive" among the public (Deephouse, 2000; Lange et al., 2011: 159; Love & Kraatz, 2009). While researchers have begun to theorize about the general interplay among a firm's multiple reputations (e.g., Lange et al., 2011; Mishina et al., 2012; Rindova & Martins, 2012; Rindova et al., 2005), less is known about how a firm's multiple reputations are differentially affected by the repair process following a violation (cf. Love & Kraatz, 2009; Rhee & Valdez, 2009). For example, it is plausible that a firm's strategy used to repair one of its reputations might be detrimental to another. Additionally, prior organizational research has typically examined the repair process only within a single violation context (cf. Lamin & Zaheer, 2012; Love & Kraatz, 2009; Rhee & Haunschild, 2006; Zavyalova et al., 2012). As such, we also know little about how the type of violation might influence the repair of multiple reputations. Like above, it is possible that a strategy used to repair one oriest might work differently in another context.

For example, in 2009 Toyota was praised in Harris Interactive's *Reputation Quotient* survey as having one of the best general corporate reputations in the U.S. In the same year, Toyota was also highly listed in *Fortune's* annual survey of *America's Most Admired Companies*. These rankings reflect Toyota's positive reputations with the general public and more specific financial audiences, respectively. By the end of the year, however, Toyota implemented one of the largest automobile recalls in history, and its new President responded by apologizing for the firm's failures and vowing to improve safety and quality (Kelly, 2012; Tabuchi & Maynard, 2009; Wardrop, 2010). Financial audiences seem to have appreciated Toyota's response, as evidenced by Toyota's continued favorable position in *Fortune's* ranking.

Yet, general audiences seem to have reacted negatively, as Toyota experienced one of the most significant year-over-year drops in the history of the Harris survey (Harris Interactive, 2011; Kelly, 2012). Thus, Toyota's response may have worked to repair its financial reputation while simultaneously damaging its general reputation. In addition, while Toyota's response following its recall may have placated financial audiences, would the same strategy have had a similar effect following a financial restatement or an industrial accident?

In this study, we address the limitations of past research by examining how a firm repairs its multiple reputations following different organizational violations. In particular, we examine the reputation repair process for two violations: firm financial restatements as reported by the U.S. Government Accountability Office (GAO), and environmental malfeasance as reported by the U.S. Environmental Protection Agency (EPA). We test our set of hypotheses using novel media-based measures to capture a firm's financial, social, and general reputations, which we define below. Ultimately, we answer a call for "theory-based studies designed to systematically identify and model the key variables" (Coombs, 2007:135) that are critical to reputation repair—including a firm's multiple reputations, the violation context, and a firm's repair strategy.

Our study makes three primary contributions. First, we contribute to reputation research by identifying the distinct sociocognitive properties that define a firm's multiple reputations. In particular, we focus on differentiating a firm's specific reputations (e.g., a reputation for social responsibility and a reputation for financial value) from its general reputation. Second, because a firm's multiple reputations have different sociocognitive properties, different processes may be associated with the repair of each reputation following a violation. We explore these potential differences by examining how a firm's repair strategy—the set of coordinated communication and actions used to repair reputation following a violation (cf. Benoit, 1995; Coombs, 2007)— affects its multiple reputations as outcomes of the repair process. Finally, we also consider how the type of violation—and how it is related to the type of firm reputation—affects how stakeholders respond. We argue that the violation context plays an important role in determining the effectiveness of different repair strategies for a firm's different reputations.

FIRM REPUTATION AND REPUTATION REPAIR

Organizational scholars often rely on a social constructionist perspective (Berger & Luckmann, 1967) to define firm reputation, explain its perceptual nature, and describe the recursive process by which it is gained, maintained, and potentially lost (e.g., Fombrun 1996; Lange et al., 2011; Love & Kraatz, 2009; Pfarrer et al., 2010; Rao, 1994; Rhee & Valdez, 2009; Rindova & Martins, 2012; Rindova et al., 2005). As stakeholders interact with a firm, they develop expectations about the value of a firm's outcomes. A firm that consistently delivers valuable outcomes develops a positive reputation among stakeholders. In this way, reputation serves as a "social fact" (Pfarrer et al., 2010: 1132) that is used by stakeholders as a "cognitive shorthand" to "gauge the probable outcomes of interacting with a particular organization" (Mishina et al., 2012: 460). As a cognitive tool for framing relationships, firms with higher reputations tend to enjoy more fruitful stakeholder interactions (cf. Barnett & Pollock, 2012).

Scholars who have studied the social construction of firm reputation note that there are two primary ways to understand stakeholders' reputation judgments (cf. Fombrun, 2012; Lange et al., 2011; Mishina et al., 2012; Rindova et al., 2005; Rindova & Martins, 2012). First, reputation can be viewed as a *specific* judgment based on stakeholders' idiosyncratic expectations and perceptions of a firm. According to this perspective, stakeholders construct multiple specific reputations of a firm based on the behaviors and outcomes that are salient to them (cf. Carter & Deephouse, 1999; Love & Kraatz, 2009). For example, a firm may have a specific reputation for economic value creation among financial stakeholders, or a specific reputation for social value creation among socially-conscious stakeholders.

Second, reputation can also be viewed as a *general* assessment of a firm's overall favorability among stakeholders. According to this perspective, reputation is a global impression of a firm that is generally shared across stakeholder groups and is based on a firm's overall ability to satisfy broad social expectations (cf. Lange et al., 2011; Fombrun, 1996; Rindova & Martins, 2012). In this sense, general reputation can be understood as public perceptions of a firm's generic goodness or badness. For example, a firm may be regarded as having high "generalized favorability" among public audiences, which is often summarized as the collective emotional appeal or affinity towards a firm (cf. Bundy & Pfarrer, 2015; Lange et al., 2011: 155).

We argue that there are three sociocognitive properties that differentiate the specific and general perspectives of firm reputation, as summarized in Table 1.¹ Detailing these three properties can help us understand the differential effects of violations and repair strategies on a firm's multiple reputations. First, the two perspectives differ in terms of how stakeholders cognitively process information to form their reputation judgments (Bundy & Pfarrer, 2015; Lange et al., 2011). In making a specific reputation judgment, stakeholders engage in more deliberate and reflective assessments to consider a firm's ability to deliver idiosyncratic value. In contrast, general reputation results from a more heuristic and intuitive process reflective of stakeholders' overall judgments of a firm.

Insert Table 1 here

¹ Despite their distinctive properties, we recognize that there is likely some overlap among a firm's specific and general reputations. We expland on this idea in the Discussion.

Second, because a firm's different reputations reflect different primary modes of cognitive processing, stakeholders may require more or less detailed information to make each judgment. The information signals stakeholders use to construct a firm's general reputation are less nuanced than the more complex signals stakeholders use to construct specific reputations. For example, stakeholders may use more detailed information found in financial statements and analysts' reports to form judgments concerning a firm's specific financial reputation. In contrast, stakeholders form judgments about a firm's general reputation from more generic good versus bad signals, often captured in the language stakeholders use to describe a firm (cf. Deephouse, 2000). In this way, stakeholders construct a firm's general reputation from the generalized "patterns in the history of a firm's actions" collected and interpreted over time, rather than any specific piece of information (Rindova & Martins, 2012: 22).

Finally, the specific and general perspectives differ in how tightly linked the assessment is with a specific evaluator group. The specific view of reputation is often characterized as "reputation *for* something" and according *to* someone (Rindova et al., 2005: 1035). Thus, specific reputations tend to vary across stakeholder groups based on each group's relationship with the firm (Lange et al., 2011). In contrast, general reputation is not based on meeting stakeholders' idiosyncratic "parochial ends" (Love & Kraatz, 2009: 317), but rather is based on an overall evaluation of the firm as "more or less good and attractive" (Lange et al., 2011: 159). A firm's general reputation therefore tends to "transcend stakeholder group boundaries," and becomes more loosely coupled with a firm's idiosyncratic behaviors that may be related to the more specific reputation assessments (Rindova & Martins, 2012: 22).

While a firm can have many specific reputations, we focus on two primary types: *financial reputation*—based on a firm's ability to consistently deliver financial value over timeand *social reputation*—based on a firm's delivery of social value via consistent demonstration of integrity and social responsibility in its interactions with stakeholders. Our focus on specific financial and social reputations is consistent with past organizational research that has emphasized the importance of considering a "market based reputation" and a "political/social based reputation" (e.g., Mahon, 2002: 420), as well as the notion of financial (Wall Street) and social (Main Street) "thought worlds" (e.g., Lamin & Zaheer, 2012: 47).

Given the importance of maintaining positive specific and general reputations, we next consider how a firm repairs its multiple reputations following a violation.

Reputation Repair

A violation occurs when a firm's actions deviate from stakeholders' expectations (Burgoon & Le Poire, 1993).² When a violation occurs, stakeholders engage in a cognitive evaluation process to reconcile the violation with their typical expectations of the firm (Fiske & Taylor, 1991). The reconciliation process can influence stakeholders' perceptions of the firm in a negative manner (Elsbach, 2003), which can lead to withdrawal of stakeholder support and damage to a firm's reputation (Love & Kraatz, 2009).

Managers often use reputation repair strategies following a violation in order to manage stakeholders' expectations (cf. Benoit, 1995; Coombs, 1995, 2007, 2011; Elsbach, 2003; Pfarrer, DeCelles, Smith, & Taylor, 2008; Rhee & Valdez, 2009; Zavyalova et al., 2012). Repair strategies range along a continuum of accommodativeness (Bundy & Pfarrer, 2015; Elsbach, 2003; Coombs, 2007). Less accommodative strategies attempt to avoid reputational damage associated with a violation by reducing a firm's perceived responsibility, and may include excuses, justifications, and deflections. In contrast, more accommodative strategies attempt to

² Expectancy violations can be positive (e.g., better-than-expected returns, innovative products, exceptional employee benefits), or negative (e.g., financial restatements, product recalls). In this manuscript, we focus on negative expectancy violations and refer to them simply as "violations."

manage the reputational damage from a violation by accepting responsibility, and may include apologies, expressions of regret, and promises of corrective action.

How stakeholders interpret a violation and respond to a repair strategy will be influenced by their prior judgments of a firm (Bundy & Pfarrer, 2015; Coombs & Holladay, 2006; Mishina et al., 2012; Pfarrer et al., 2010; Rhee & Valdez, 2009). This suggests that different repair strategies may influence a firm's multiple reputations in different ways. However, studies investigating how repair strategies affect stakeholder perceptions remain few (cf. Lamin & Zaheer, 2012; Zavyalova et al., 2012), and research has yet to consider the interplay among a firm's multiple reputations in the reputation repair process (cf. Love & Kraatz, 2009; Rhee & Valdez, 2009). Additionally, organizational research has ignored how different types of violations might influence the efficacy of different strategies in repairing a firm's multiple reputations. Thus, we advance research in this domain by considering the interplay between a firm's multiple reputations, a firm's repair strategies, and different violation contexts.

HYPOTHESES

We frame our hypotheses around three types of firm reputation: financial, social, and general reputation. In developing our hypotheses, we consider how the accommodativeness of a firm's repair strategies influence each of these reputations in two types of violations, financial and social violations, which are conceptually linked to the two specific types of reputation.

Repairing Financial Reputation

A firm's specific financial reputation reflects its *ability* to consistently deliver financial value over time. Financial value may be derived from providing reliable accounting returns, predictable and positive stock market performance, or meeting financial analysts' targets. As

mentioned above, many scholars consider a firm's financial reputation one of its most salient specific reputations (Lamin & Zaheer, 2012; Mahon, 2002; Mishina et al., 2012).

As a specific reputation judgment, how financial stakeholders respond to a violation and repair strategy depends on whether or not the violation threatens their specific ability-based perceptions of the firm. Prior research suggests that when a firm's ability to produce valued outcomes is threatened, an effective repair strategy should reduce the perceived lack of ability and reinforce that the organization controls its environment—even if it requires admitting fault for the violation (Kim, Ferrin, Cooper, & Dirks, 2004; Mishina et al., 2012). An assertion of control serves as a "positive capability cue [demonstrating] that the firm actually possesses the ability" underlying the reputation judgment (Mishina et al., 2012: 468). Because positive ability-based cues are more diagnostic than negative ability-based cues (Skowronski & Carlston, 1989), we argue that an assertion of control will outweigh the negative cue of violation responsibility.

A number of empirical studies provide support for this logic. For example, Kim et al. (2004) found that, in the context of an ability-based violation, individuals exhibited more positive beliefs towards a violating party when that party responded by asserting control over the situation. At the organization level, Lee, Peterson, and Tiedens (2004) found that a firm's assertion of control over an ability-based violation had a positive influence on stock price. As such, the violation type—in terms of the degree to which the violation signals a lack of financial ability—is an important condition for understanding the effectiveness of a repair strategy on a firm's financial reputation. In the following two subsections, we apply these arguments to examine how a firm repairs its financial reputation in response to a financial and social violation.

Financial violation. When a firm commits a financial violation, such as restating its earnings, it signals to financially-oriented stakeholders that it may lack the ability to continue

delivering financial value and maintain control over its financial outcomes (Lee et al., 2004; Salancik & Meindl, 1984; Sutton & Callahan, 1987). A more accommodative repair strategy includes a firm's acknowledgment that a violation has occurred, its specific role in the violation, and the actions it will take to resolve the violation (Coombs, 2007). As such, a more accommodative strategy provides detailed and diagnostic information that demonstrates control of the violation and reinforces the financial ability of the firm (e.g., Benoit, 1995; Coombs 2007; Lee et al., 2004; Marcus & Goodman, 1991; Pfarrer et al., 2008a).

In contrast, a less accommodative strategy may allow a firm to avoid attributions of responsibility for a financial violation, but it may also provide evidence that the firm lacks control of its finances (Lee et al., 2004). For example, a firm may respond to a restatement by blaming its external auditors. This may deflect responsibility, but it also may suggest that the firm is unable to accurately judge the competence of its financial service providers or control its own records. Financial stakeholders may begin to doubt other decisions made by the firm and develop concerns about its financial future. Thus, a demonstration of control via a more accommodative strategy should be positively received by financially-oriented stakeholders as they reevaluate a firm's financial reputation following a financial violation.

Hypothesis 1a: For a financial violation, a more accommodative repair strategy will be positively related to a firm's financial reputation.

Social violation. In contrast to a financial violation, financially-oriented stakeholders are less likely to perceive a social violation, such as environmental malfeasance, as related to a firm's financial ability (Lamin & Zaheer, 2012). Taking responsibility for a social violation does little to signal financial ability and control yet may expose the organization to additional financial losses. As such, financial stakeholders are likely to view a social violation through a

"cost-benefit lens, where attempts to accommodate will be viewed as imposing additional costs" related to being held responsible for the violation (Lamin & Zaheer, 2012: 53). It is these potential costs associated with being more accommodative that will be seen as a threat to a firm's financial ability, rather than the social violation itself. Financial stakeholders' assessments of a firm's financial reputation are therefore likely to decrease as a firm responds more accomodatively to a social violation. For example, prior research showed that investors reacted positively to less accommodative strategies in response to accusations of sweatshop labor, while they reacted negatively to more accommodative strategies (Lamin & Zaheer, 2012).

Hypothesis 1b: For a social violation, a more accommodative repair strategy will be negatively related to a firm's financial reputation.

Repairing Social Reputation

In contrast to financial reputation, which reflects a firm's ability to deliver financial value over time, a firm's social reputation reflects its *integrity* in its interactions with stakeholders (Lamin & Zaheer, 2012; Mishina et al., 2012). For example, a firm may build its social reputation by consistently treating employees fairly, by having a proactive relationship with the environment, or by encouraging consumer protection. Stakeholders making social reputation judgments will be concerned with firm behaviors that provide social value, rather than focusing on financial impact (Lamin & Zaheer, 2012). Others have characterized this reputation as representing a firm's moral character, ethics, or social responsibility (Doh, Howton, Howton, & Siegel, 2010; Love & Kraatz, 2009; Zyglidopoulos, 2001).

Like with financial reputation, how social stakeholders respond to a violation and repair strategy will depend on the degree to which they perceive a threat to their specific integritybased perceptions of the firm's social reputation. Prior research suggests that socially-oriented

stakeholders' negative perceptions of a violation increase as they perceive the violation to be more morally and normatively undesirable (Jones, 1991; Kim et al., 2004; Mishina et al., 2012; Rhee & Valdez, 2009). In turn, being held responsible for a morally undesirable violation becomes more damaging to the firm's social reputation as stakeholders' perceptions that the firm lacks integrity increase (Kim et al., 2004; Mishina et al., 2012). Thus, the degree to which a violation is perceived as a matter of integrity is an important factor when considering how a firm's repair strategy affects its specific social reputation. In the following two subsections, we apply these theoretical arguments to examine how a firm repairs its social reputation in response to a financial and social violation.

Financial violation. A financial violation, such as an earnings restatement, can occur for many reasons, including errors and misinterpretation of complex and sometimes burdensome rules and regulations (Hennes, Leone, & Miller, 2008; Kalbers, 2009). Additionally, research shows that negative market reactions to restatements have declined significantly as restatements have become more common (Scholz, 2008), and others suggest that securities rules are so complex that even highly informed investors can be confused by the meaning of a restatement (Burks, 2011). As such, many scholars remain equivocal regarding the moral nature of restatements (e.g., Hennes et al., 2008; Palmrose, Richardson, & Scholz, 2004). This suggests that it may be difficult for socially-conscious stakeholders to determine if a financial violation threatens their specific, integrity-based perceptions of a firm. This difficulty of interpretation is important when considering the effectives of a firm's repair strategy.

In addition to acknowledging responsibly for a violation, a more accommodative repair strategy has normative value in that can satisfy social expectations of justice, sincerity, and fairness (Coombs, 2007; Dean, 2004; Pfarrer et al., 2008a). Indeed, a number of organizational,

communication, and impression management scholars have argued that acknowledging a violation and signaling concern over societal norms is essential for maintaining a positive social relationship (e.g., Benoit, 1995; Coombs, 2007; Elsbach, 2003; Pfarrer et al., 2008a). As such, because the exact integrity-based nature of the violation is difficult to understand, social stakeholders may interpret an organization's acceptance of responsibility for a financial violation as a sign of goodwill and an attempt to restore its integrity (Benoit, 1995; Pfarrer et al., 2008a).

Empirical evidence supports this logic. For example, Bradford and Garrett (1995) showed that a more accommodative strategy increased perceptions of a violating firm as honest, concerned, and responsive. Thus, we argue that socially-oriented stakeholders may be inclined to forgive a firm who accepts responsibility for a financial violation, preferring the positive integrity information of a more accommodative response over the potential negative integrity information of violation responsibility.

Hypothesis 2a: For a financial violation, a more accommodative repair strategy will be positively related to a firm's social reputation.

Social violation. In contrast, being held responsible for a social violation, such as environmental malfeasance, may be damaging to a firm's social reputation given the increased potential for the violation to be perceived as matter of integrity. Integrity-based perceptions of a violation increase as it becomes easier for stakeholders to identify harm, and as social consensus or agreement about the negativity of an event increases (Jones, 1991). In cases of environmental malfeasance, social consensus regarding negativity is likely high for socially-conscious stakeholders, particularly given increasing trends in salience and public awareness of environmental issues (cf. Dunlap, 1991). It may also be easier for them to identify harm given the often visible consequences of environmental violations, including trashed waterways, damage from acid rain, and vivid images of harmed wildlife.

Given the potential for higher integrity-based perceptions, instead of interpreting a firm's acceptance of responsibility as a sign of goodwill, socially-oriented stakeholders may interpret a firm's responsibility for a social violation as "highly diagnostic negative integrity information" (Kim et al., 2004: 107). Previous research has shown that negative information is more diagnostic than positive information when dealing with integrity-based judgments like social reputation (Skowronski & Carlston, 1989). Thus, as integrity-based perceptions of a violation increases, the negative information conveyed via responsibility for the violation may outweigh any positive information concerning justice and fairness.

In support of this logic, scholars have argued and found that a more accommodative strategy can be damaging when trying to repair integrity-based judgments following integrity-based violations (e.g., Kim et al., 2004; Mishina et al., 2012). For example, Kim et al. (2004) found that providing a more accommodative response for an integrity-based violation reduced perceptions that a trading partner adhered to a set of shared integrity principles. As such, a more accommodative repair strategy in response to an integrity-based social violation, such as environmental malfeasance, may be damaging to social reputation as it provides stronger evidence that the firm may lack integrity.

Hypothesis 2b: For a social violation, a more accommodative repair strategy will be negatively related to a firm's social reputation.

Repairing General Reputation

A firm's general reputation is reflective of stakeholders' more heuristic "approachavoidance" judgments (Lange et al., 2011: 165). As such, the information signals stakeholders used to construct a firm's general reputation are less nuanced than the ability- or integrity-based signals used to construct s firm's specific reputations. Instead, stakeholders frame the information in generic terms of "good" versus "bad." Thus, given the low information specificity used in making the judgment, the specific context of a violation signal—in terms of violation type—is not as important as when assessing a firm's specific reputations.

As intuitive assessments, stakeholders' generalized judgments are more susceptible to information processing heuristics and biases than their specific judgments (Fiske & Taylor, 1991). One of these biases is a tendency to anchor judgments consistent with initial and easily available information (Tversky & Kahneman, 1974). Stakeholders likely weigh a firm's initial response—and the impression it generates—more heavily than subsequent information. This explains why public relations practitioners emphasize the importance of providing a repair strategy at the onset of a violation (Massey, 2001). Reaching out to stakeholders with positively framed information can serve to anchor general social perceptions towards a more favorable impression of the firm (Murphy, 1991).

While a more accommodative strategy may demonstrate financial ability and signal a concern for social integrity, it also conveys a generically bad signal in that it confirms the firm is accepting responsibility for a violation. Thus, stakeholders may be anchored by a negative general impression of the "guilty" firm. In contrast, the general impression generated from a less accommodative strategy is one of diffused responsibility and reduced negativity. Thus, the effect of anchoring combined with a less accommodative strategy should reduce damage to general reputation, regardless of the violation type (cf. Bundy & Pfarrer, 2015).

A number of empirical studies have shown that an organization's disclosure of responsibility for a violation leads to general negative reactions among stakeholders. For

example, Dean (2004) found that being held responsible for a product harm violation had a strong negative relationship with overall favorable firm perceptions. Additionally, Turk, Jin, Stewart, Kim, and Hipple (2012) found that participants reported more positive attitudes towards a firm with a prior good general reputation using a less accommodative repair strategy in the context of multiple violation types.

Hypothesis 3a: For a financial violation, a more accommodative repair strategy will be negatively related to a firm's general reputation.

Hypothesis 3b: For a social violation, a more accommodative repair strategy will be negatively related to a firm's general reputation.

METHODOLOGY

Samples

The financial violation sample consists of firms that engaged in financial accounting restatements as recorded by the U.S. Government Accountability Office from 1997 to 2005 (GAO 2002; 2006). Prior work has suggested that restatements represent an important context for studying financially based violations (cf., Arthaud-Day et al., 2006; Pfarrer et al., 2008b; Zhang, Bartol, Smith, Pfarrer, & Khanin, 2008). All firms in the sample are U.S. public companies and we drew from firms listed in the S&P 1500 index. Our unit of analysis is the firm restatement (N = 387). Due to the availability of data for control variables, the final sample contains 370 restatements by 287 firms. We conducted *t*-tests to check for differences between the final sample and the dropped observations (n = 17). There were no statistically significant differences across the set of dependent and independent variables.

The social violation sample consists of firms that faced civil or administrative accusations of environmental malfeasance as recorded by the Environmental Protection Agency (EPA). Prior

work has suggested that environmental violations represent an important context for studying socially based violations (cf. Barnett & King, 2008; Delmas & Toffel, 2008; Hendry, 2006; King & Lenox, 2000; Zyglidopoulos, 2001). The sample frame consists of all civil cases and settlements brought against a firm by the EPA for violations to the Clean Air Act, Clean Water Act, Superfund Act, and other laws and policies enforced by the EPA. The data were collected from the EPA's Enforcement and Compliance History Online database. We collected EPA violations over \$50,000 committed by publicly traded firms from 1996 to 2008. Many firms are involved in settlements under \$50,000, and most of these small settlements receive no public scrutiny or organizational comment. The unit of analysis is each enforcement case (N = 87). Given data availability of control variables, the final sample consists of 75 violations by 58 firms. We conducted *t*-tests to check for differences between the final sample and the observations dropped due to data availability (n = 12). There were no statistically significant differences across the set of dependent and independent variables.

Reputation Measures

We used computer-aided textual analysis (CATA) techniques to develop our measures of social, financial, and general reputation (cf. Deephouse, 2000; Krippendorff, 2004; Neuendorf, 2002; Short, Broberg, Cogliser, & Brigham, 2010). CATA uses a set of procedures to categorize communication allowing for inference about context (Krippendorff, 2004; Short et al., 2010). Measures are constructed using standardized word counts based on dictionaries that are theorized to represent constructs. A number of prior studies have used CATA to study reputation and other social evaluations (e.g., Deephouse, 2000; Lamin & Zaheer, 2012; Zavyalova et al., 2012).

We constructed our CATA reputation measures using word counts generated from firm media coverage. Mahon (2002: 431) noted that "the media's role in underscoring the reputation

of the firm or industry cannot be overstated," and using the media to measure reputation and other social evaluations is common in organizational research (e.g., Deephouse, 2000; Deephouse & Carter, 2005; Lamin & Zaheer, 2012; Pollock & Rindova, 2003).³ We used the LexisNexis database to capture media from the 50 largest U.S. newspapers by circulation and firms' press releases (cf. Zavyalova et al., 2012).

We collected two sets of media coverage for each violation. Time t is the day a violation is announced. The first set of media coverage extends from the day before the violation to one-year prior to measure each type of endowed reputation_(t-1), which we use as controls in all models, as described below. The second set extends from the day after the violation to one-year forward to measure each type of reputation_(t+1), which we use as our dependent variables. Similar to the value-relevance paradigm in finance and accounting (cf. Barth, 2000), our study is focused on the incremental association between a firm's response strategy and its reputation over a longer time window, thus prompting our choice to use one year of post-violation media to capture reputation. We consider a shorter time window in a supplemental analysis below, which is more akin to the event-study paradigm (cf. McWilliams & Siegel, 1997).

To measure *general reputation*, we used the positive tenor of media coverage about a firm. Media tenor variables capture the perceptions of the firm based on the relative proportion of positive language in media. Deephouse (2000) originally used media tenor as a measure of general reputation, and a number of researchers have used similar measures in subsequent work (e.g., Bermiss, Zajac, & King, 2013; Zavyalova et al., 2012). We analyzed each firm's media coverage using the pre-defined and validated dictionaries available in the Linguistic Inquiry and

³ Our media-based measures of reputation also allow us to capture additional variance. Because many firms in our samples are not represented in certification rankings (such as *Fortune's Most Admired*), reliance on such rankings would significantly reduce our sample size and statistical power. Indeed, only two firms in our EPA violation sample were ranked in *Fortune's Most Admired* list. We do, however, use certification rankings to validate our media-based measures, which we detailed below.

Word Count (LIWC) text analysis software to capture both positive and negative tenor in a given text (Pennebaker, Booth, & Francis, 2007).⁴ LIWC processes each text file to match words in the file to words in the pre-defined dictionary. The general reputation measure is a continuous variable representing the proportion of positive tenor dictionary words over the total number of words in the media corpus, multiplied by 100. Scaling by the total word count controls for differences in the length of corpus text (Short et al., 2010).

We developed unique CATA dictionaries for *financial* and *social* reputation following the guidelines of Short et al. (2010) and McKenny, Short, and Payne (2013). The general process is to 1) use deductive and inductive techniques to develop a word dictionary to represent each construct, 2) validate word lists using content experts and assess rater reliability, and 3) assess the predictive validity of the new variables. We began by using the formal definitions for social and financial reputation detailed above, combined with other definitions found in the literature, to develop exhaustive word lists for each type of reputation.

Using Rodale's *Synonym Finder* (1978), we built a dictionary for financial reputation using the following baseline keywords: ability, performance, profit, value, return, and competence. Similarly, we built a social reputation dictionary using the following baseline keywords: integrity, character, responsibility, values, principles, transparency, ethical, and benevolence. We then supplemented each deductive dictionary with an inductive search of common reputation words found in the sample corpus of media coverage. The final, mutually exclusive word lists included 269 words for financial reputation and 277 for social reputation.

We then validated the word lists using expert raters. We used two raters, each with multiple, top-tier journal articles on the concepts of firm reputation and related social evaluations. The raters selected 67 words from the financial reputation dictionary and 143 words

⁴ For a detailed discussion of the reliability and validity of LIWC, please see http://liwc.net/liwcdescription.php.

from the social reputation dictionary to represent the respective constructs. Using Holsti's method (1969), the interrater reliabilities were 0.75 and 0.73 for financial and social reputation, respectively, both of which fall within acceptable ranges and demonstrate consistency between raters (Short et al., 2010). Like the measure for general reputation, the financial and social reputation measures are continuous variables representing the proportion of dictionary words over the total words in the corpus, multiplied by 100.

We also checked to ensure that dictionary words were being used in the media text in a way that reflects the underlying constructs. We randomly selected 50 articles from the corpus and hand coded to see if 1) the dictionary words were referencing the focal firm in the text, and 2) if the dictionary words were being negated or used to in a way that would not reflect reputation (for example, using the financial reputation dictionary word "performance" to reference a proper noun or something other than financial performance). Results showed that individual dictionary words clearly referenced the focal firm in over 90% of cases, and only a small percentage of dictionary words were negated (1%) or used in a way that does not reflect reputation (6%). As others have noted (cf. Neuendorf, 2002; Short et al., 2010), a small amount of error is expected when using CATA techniques, and given that stakeholders are likely to generalize the overall tone and content of an article to all firms mentioned (Zavyalova et al., 2012), we are confident that our dictionaries accurately capture the constructs of interest.

Finally, to demonstrate predictive validity, we tested each measure to see if it would predict being ranked in a popular certification ranking. Such certifications are often used as proxies for corporate reputation (cf. Dowling & Gardberg, 2012). We used *Fortune's Most Admired Companies* to represent financial reputation. While *Fortune* does not formally define reputation, many scholars consider the ranking as a measure of financial reputation, largely

because it is based on surveys of financial analysts and industry participants (Dowling & Gardberg, 2012). We used *Corporate Responsibility Magazine's (CR) Best Corporate Citizens* list to represent social reputation. *CR's* ranking evaluates corporate accountability and responsibility using over 300 data elements among seven categories ranging from climate change to corporate philanthropy (cf. CR, 2012). Finally, we used Harris Interactive's *Reputation Quotient* survey to represent general reputation. The definition of reputation for the *Reputation Quotient* survey is firms "held in the highest regard" by a random sample of the public (Fombrum, Gardberg, & Sever, 2000: 13), and is often used to represent general reputation (Dowling & Gardberg, 2012).

We regressed each reputation ranking on the set of media reputation measures using data from the financial restatement sample. We also included controls for firm size, total word count of the text corpus, and year. Results revealed that the financial reputation media measure positively predicts (p < 0.01) being ranked in *Fortune's Most Admired Companies* while the other media reputation measures do not predict being ranked.⁵ Similarly, the social reputation media measure marginally predicts (p < 0.10) being ranking in the *CRO* survey while the other media measures are not statistically significant. Finally, the general reputation media measure positively predicts (p < 0.05) being ranked in the *Reputation Quotient* survey while the other measures do not have a significant effect. Overall, the pattern of relationships suggests valid media measures of reputation.

Repair Strategy Measure

To capture a firm's *repair strategy*, we used a structured content analysis technique to analyze firms' press releases on the day a violation was announced (cf. Duriau, Reger, & Pfarrer, 2007; Lamin & Zaheer, 2012). Financial laws require that a firm issue a public statement when

⁵ Detailed results are available from authors.

restating its earnings, so a press release or other statement was available for all observations in the GAO dataset. In contrast, firms are not legally required to respond to an EPA violation. When a firm-generated press release was not available we relied on the EPA's press release to code for the firm's repair strategy, which often includes a statement from the firm. Each press release was evaluated in its entirety as the unit of analysis and coded based on the primary message of the release (Lamin & Zaheer, 2012).

As mentioned above, a repair strategy exists along a continuum of accommodativeness (cf. Coombs, 2011). Thus, we coded a repair strategy on a seven-point scale, with 1 representing low accommodativeness and 7 representing high accommodativeness. We employed a trained graduate student who was blind to the hypotheses of the study to assess interrater reliability. Consistent with coding protocol (Neuendorf, 2002), the first author and the graduate student each independently coded a random sample of 200 press releases from the complete GAO dataset. A Krippendorff's alpha of 0.92 indicated high interrater agreement (Krippendorff, 2004).

Controls

We included a variety of controls to help eliminate alternative explanations. In all models across both samples we included controls for each type of *endowed reputation*_(t-1) to account for the influence of a firm's reputation history on the social construction of a new reputation. Additionally, a firm that has a *prior violation* may find it more difficult to repair its reputation and may be inclined to prefer one repair strategy to another. Thus, we include a prior violation dummy variable taking a value of 1 if the firm had a similar violation in the previous year. An alternative measure capturing a violation in the past three years led to substantively similar results. Across both samples we controlled for the total *word count* (in millions) of the corpus text to control for the visibility of the firm in the press during the year prior to the violation. We

also controlled for *firm size* and *firm performance*. Larger and more profitable firms may garner more attention for their violations, which may negatively influence reputation. The data for these variables comes from the COMPUSTAT database. Firm size is measured as the logarithm of firm sales. We employed an alternative measure using the logarithm of the number of firm employees and received substantively similar results. Firm performance is measured using return on assets (ROA), the ratio between net income and total assets. Both firm size and performance are lagged one-year relative to the dependent variable of interest.

For the GAO sample, we controlled for whether or not the restatement was related to the *core* earnings of the firm, which is often used a proxy for the magnitude or seriousness of the restatement, and the *direction* of the restatement (cf. Palmrose & Scholz, 2004). Both variables are dummy coded, with 1 indicating a core restatement or a positive restatement, respectively. We employed similar dummy controls for *year* and *industry* effects, with industry specified at the one-digit SIC level.

We also controlled for the *prominence* of the violation within the press release, the *source* of the restatement, and whether or not the restatement was *bundled* with other news items. Research in accounting has found that less prominent disclosures (e.g., restatement disclosures in a footnote to operating results) can reduce the negative perceptions associated with a restatement (Files, Swanson, & Tse, 2009). This variable takes a value of 1 if the disclosure was in the headline of the press release, a 2 if the disclosure was in the body of the release narrative, and a 3 if the disclosure was in a footnote. Prior research also indicates that the restatement source—either self-disclosed by the firm or a disclosure forced by the SEC—can influence firm outcomes (cf. Pfarrer et al., 2008b). This variable takes a value of 1 if the disclosure was initiated by the focal firm and a zero otherwise. Finally, a restatement bundled

with other news items could dampen the negative reaction to the restatement (cf. Graffin, Carpenter, & Boivie, 2011). This variable takes a value of 1 if the press release contained multiple news items and a zero otherwise.

Finally, in the GAO sample we also controlled for whether the restatement could be perceived as *intentional* or not, and for the total *magnitude* of the restatement in terms of change to net income. Prior research has recognized that the GAO restatements database captures a mixture of intentional and unintentional restatements (Hennes et al., 2008), and that the distinction needs to be recognized as stakeholders may react differently to restatements perceived as being more intentional. To do so, we rely on Hennes et al.'s (2008) classification of intentional restatements, which they coded based on firms' self-disclosures, regulatory investigations, and litigation. This control takes a value of 1 if deemed to be intentional, and a 0 otherwise. To control for magnitude, which may also influence how stakeholders' perceive a restatement, we subtracted a firm's reported net income from any restated net income during the time period of the study, as reported by the COMPUSTAT database.

For the EPA sample, we controlled for the size of the *financial penalty* associated with the violation, measured as the total dollar amount of the settlement (in millions). We also dummy coded for instances in which we had to rely on an *EPA press release* for the repair strategy information. Finally, due to the small sample size and estimation technique detailed below, we were unable to employ dummy controls for year and industry given a lack of statistical power. We thus employed a dummy variable to control for the *presidential administration* in which the EPA violation occurred. A value of 1 indicates the violation took place during the administration of George W. Bush, and a 0 during the administration of Bill Clinton. To control for potential

industry effects we employed a dummy variable indicating if the violating firm was in the *manufacturing* sector, as represented by SIC codes ranging from 2000-3999.

Estimation Procedure

Both samples include firms with repeated violations over time, and some firms had multiple violations within the same year. Additionally, our models include a firm's set of endowed reputations as control variables. Given these sample and model characteristics, the assumption of constant error variance needed for ordinary least squares regression is likely violated (Wooldridge, 2000). Thus, in order to determine the appropriate analytic method, we tested each sample for the presence of heteroskedasticity and autocorrelation. A Cook-Weisberg test revealed the presence of heteroskedasticity across all models. Durbin's alternative tests, which test for autocorrelation resulting from a lagged dependent variable, revealed no concerns except for the model testing financial reputation_(t+1) as a dependent variable in the GAO sample.

Given these results, we used feasible generalized least squares (FGLS) as our estimator. FGLS has been used in prior research investigating repair strategies (cf. Lamin & Zaheer, 2012; Philippe & Durand, 2011) and provides reliable estimates in the presence of heteroskedasticity while not requiring *a priori* specification of the form of heteroskedasticity (e.g., from repeated firms, years, or both) (Greene, 2003; Wooldridge, 2000). We also ran additional FGLS models robust to autocorrelation for the financial reputation_(t+1) model in the GAO sample. These results were substantively similar to those reported below. Because our sample is cross-sectional with only some repeated observations, other panel-based techniques that control for heteroskedasticity and autocorrelation may not be appropriate (e.g., Arellano-Bond dynamic panel models).

The causal ordering of our models is likely best suited for two-stage estimation. A twostage design allows us to predict a firm's repair strategy in the first stage, and, in-turn, predict the influence of that repair strategy on a firm's reputation_(t+1) in the second stage while controlling for the potential endogeneity resulting from the first-stage equation. That is, a two-stage model allows us to control for a firm's potential non-random selection of a repair strategy.

Two-stage estimation requires the identification of unique instrument variables that are predictive of the first-stage endogenous variable but are uncorrelated with the error term in the final models (Bascle, 2008). We used three dummy variables as instruments in the GAO sample: whether the firm announced substantive *action* taken to prevent the violation from reoccurring, whether the violation was left unresolved or *open-ended*, and whether the restatement required *multiple adjustments* to a firm's accounting statements (e.g., an adjustment to earnings and assets). Because of statistical power and identification concerns, we only used the open-ended and action instruments in the EPA sample. In the first stage we regressed the repair strategy variable on the set of controls and unique instruments. In the second stage we regressed each reputation_(t+1) variable (our dependent variables of interest) on the controls and the fitted value of the repair strategy variable obtained from the first-stage estimation, with appropriate adjustment to model standard errors. We used the results from the second-stage estimations to test our hypotheses. We thus estimated a total of six two-stage models, one model for each of the three reputation_(t+1) outcome variables in each sample.

We also tested the instruments for relevance and exogeneity, as suggested by Bascle (2008). All first-stage *F*-statistics were above the appropriate values identified by Stock and Yogo (2005), suggesting that the instruments are relevant to the endogenous repair strategy variable. The GAO sample *F*-statistic = 10.08, which is above the 10% critical value of 9.08, suggesting a strong and relevant set of instruments. The EPA sample *F*-statistic = 7.79, which is above the 25% critical value of 7.25, suggesting a relevant but weaker set of instruments. All

Hansen-*J* statistics across the second-stage models in both samples revealed that the instrument variables were exogenous, meaning that the instruments were not correlated with the error terms in the second stage (the highest p-value for the Hansen-*J* statistic across GAO models = 0.1481; the highest p-value for the Hansen-*J* statistic across EPA models = 0.2921; a failure to reject the null means that the instruments can be considered exogenous [Bascle, 2008]). Overall, these results provide support for the use of the identified instruments.

Finally, we structure our analyses using two separate samples as opposed to combing the samples and using dummy variables and interactions to indicate wrongdoing. While combining samples can generate greater statistical power, prior research suggests that combining samples can be problematic when the variance of error terms are substantially different across samples (cf. Green, 2003; Henderson, Miller, & Hambrick, 2006). Error variances in the financial violation sample were between two and seven times smaller than variances in the social violations sample. In addition, our samples employ different sets of controls that are conceptually unique to the violation type, and thus cannot be theoretically or empirically captured across contexts. Thus, we chose to keep our samples separate.

RESULTS

Table 2 provides descriptive statistics and pairwise correlations for the measures in the GAO financial violation sample, and Table 3 provides descriptive statistics and correlations for the measures in the EPA social violation sample. We tested for multicollinearity using variance inflation factors (VIF). The largest mean VIF across all models was 3.16 and all individual VIFs were below the recommended cut-off of 10 (Chatterjee & Price, 1991).

Insert Tables 2 & 3 here

The results from the two-stage FGLS regression analyses appear in Tables 4 and 5. Table 4 presents results for the GAO financial violation sample, and Table 5 presents results for the EPA social violation sample. Model 1 in both tables presents the results from the first-stage regressions estimating a firm's repair strategy.

Models 2 and 3 of Tables 4 and 5 present the results from the second-stage regressions testing Hypotheses 1a and 1b, which address the relationship between a firm's repair strategy and its financial reputation_(t+1). Model 2 includes only the controls and Model 3 includes the controls and the repair strategy independent variable (the fitted value obtained from the first-stage regression in Model 1). Hypothesis 1a predicts a positive relationship between a more accommodative repair strategy and financial reputation_(t+1) for a financial violation. This hypothesis is supported—Model 3 of Table 4 shows a positive and statistically significant relationship (b = 0.041; p < 0.01). A one-standard deviation increase in accommodativeness would increase the mean financial reputation_(t+1) by over six percent. Hypothesis 1b predicts a negative relationship between a more accommodative repair strategy and financial reputation_(t+1) for a social violation. This hypothesis is not supported as the coefficient for financial reputation_(t+1) in Model 3 of Table 5 is not statistically significant (b = -0.013; p > 0.10).

Insert Tables 4 & 5 here

Models 4 and 5 of Tables 4 and 5 present the results from the second-stage regressions testing Hypotheses 2a and 2b, which address the relationship between a firm's repair strategy and its social reputation_(t+1). Hypothesis 2a predicts that a more accommodative repair strategy

will be positively related to social reputation_(t+1) for a financial violation. This hypothesis is supported. The coefficient reported in Model 5 of Table 4 is statistically significant and positive (b = 0.005; p < 0.05). Hypothesis 2b predicts that a more accommodative repair strategy will be negatively related to social reputation_(t+1) for a social violation. This hypothesis is also supported. The coefficient reported in Model 5 of Table 5 is statistically significant and negative (b = -0.079; p < 0.01). These results suggest that a one-standard deviation increase in accommodativeness increases the mean social reputation_(t+1) by two percent in the financial violation sample, but decreases the mean social reputation_(t+1) by twenty-nine percent in the social violation sample.

Finally, Models 6 and 7 of Tables 4 and 5 present the results from the second-stage regressions testing Hypotheses 3a and 3b, which deal with the relationship between a firm's repair strategy and its general reputation_(t+1). The results provide no support for Hypothesis 3a; the result in Model 7 of Table 4 is not consistent with the prediction that a more accommodative repair strategy would be negatively related to a firm's future general reputation_(t+1) for a financial violation. Instead, a more accommodative repair strategy has a positive and statistically significant relationship with general reputation_(t+1) in the financial violation sample (b = 0.052; p < 0.01). We consider this divergent finding in the Discussion section below.

However, the results do provide support for Hypothesis 3b. The coefficient reported in Model 7 of Table 5 for a firm's more accommodative repair strategy is negative and statistically significant with general reputation_(t+1) (b = -0.083; p < 0.01). A one-standard deviation increase in accommodativeness would decrease the mean general reputation_(t+1) by seven percent in the social violation sample. In summary, Hypotheses 1a, 2a, 2b, and 3b are supported, while Hypotheses 1b and 3a are not supported.

Supplemental Analyses

We conducted three supplemental analyses to ensure the robustness of our findings. First, we tested an alternative time period to capture reputation_(t+1). Consistent with prior work (Lamin & Zaheer, 2012), we chose a window that was closer to the event date comprising the first seven days following the violation to reexamine our hypotheses. Hypotheses 1a, 2b, and 3b continued to receive support. Additionally, Hypothesis 1b, which predicted a negative relationship between a firm's accommodativeness and financial reputation $_{(t+1)}$ in the context of a social violation, also received support. Our test of this hypothesis was not statistically significant in our original analysis. This suggests that financial stakeholders' initial negative reactions to increased accommodativeness in response to a social violation may weaken over time. We also did not find support for Hypothesis 2a, which received support in our original analysis and predicted a positive relationship between accommodativeness and social reputation_(t+1) in the context of a financial violation. Instead, the supplemental analysis resulted in a significant and negative relationship, which may suggest that social stakeholders initially react negatively to the admittance of guilt associated with being accommodative (consistent with the social violation context), but that this negative reaction may weaken as these stakeholders come to appreciate accommodativeness in this setting.

Second, while we treated a firm's response strategy as a continuous measure, others have argued that repair strategies should be considered more discretely (Coombs, 2011; Lamin & Zaheer, 2012). As such, we recoded a firm's repair strategy into four distinct categories: accommodation, decoupling, defiance, and denial (see Lamin & Zaheer, 2012). Our findings were substantively similar to those reported above. In particular, when examining accommodation as a discrete response, we obtained an identical pattern of results with our main

analyses. We also found that defiance and denial, two strategies often considered very low in accommodativeness, were statistically significant and positive in the models testing Hypotheses 2b and 3b. This suggests that both social stakeholders and more general audiences prefer less accommodativeness in the context of a social violation, consistent with our predictions. We also found that a decoupling response strategy, in which the firm attempts to distance itself from the violation via deflecting responsibility onto other entities, was statistically significant and negatively related to all three reputation_(t+1) variables in the context of a financial violation (defiance and denial strategies were not statistically significant in any of the financial violation models). This suggests that while all audiences seem to prefer accommodation in the context of an ability-based financial violation, they also react negatively to deflections of responsibility.

Third, we recognized that our media-based measures used to capture a firm's multiple reputations focused only on positively valenced words. However, several studies have noted the importance of also capturing negatively valenced words when conducting media-based reputation studies (e.g., Bermiss et al., 2013; Zavayalova et al., 2012). We used the same techniques detailed above to develop and validate word lists to capture the negative counter to each reputation construct (e.g., *negative financial reputation, negative social reputation,* and *negative general reputation*). Including these negative reputation measures as controls in all models resulted in findings that were substantively similar to those reported above. We continue to find support for Hypotheses 1a, 2a, 2b, and 3b, while Hypotheses 1b and 3a are not supported.

DISCUSSION

We make several contributions to organizational theory and research on firm reputation. First, we extend recent research that has begun to investigate the reputation repair process with an understanding that reputation is a complex and multifaceted construct (Rhee & Valdez, 2009;

Zavyalova et al., 2012). In particular, we contribute by showing a firm's multiple reputations are repaired in different ways for different reasons. For example, we show that financial stakeholders respond positively to a more accommodative repair strategy in the context of a financial violation, largely because such a strategy demonstrates ability and control. While social stakeholders also respond positively to a more accommodative strategy in the context of a financial violation, we argue that social perceptions of integrity drive the relationship rather than perceptions of control. These findings suggest that researchers must be careful when investigating the outcomes of reputation repair. Steps taken to defend, build, or change one reputation may have unintended consequences on another depending on the audience's reference.

Second, we show that each of a firm's reputations invokes a different frame to influence how stakeholders react to different violations, largely depending on the nature of the violation and how it relates to the nature of the reputation assessment. For example, we show that social and general reputation are repaired by a more accommodative strategy in response to a financial violation, but are damaged by a more accommodative strategy in response to a social violation. Thus, the violation context plays an important role in the effectiveness of a repair strategy.

Finally, we also make a theoretical contribution to research on reputation by identifying the unique sociocognitive properties that differentiate specific from general reputations. We identify general reputation as a more heuristic and global assessment of the firm, which requires low information specificity and is largely de-coupled from a unique stakeholder group. In contrast, specific reputations are more deliberate and detailed assessments of the firm, which require high information specificity and are tightly coupled with specific stakeholders. Because the fundamental nature of these reputations differs, we expected different relationships with outcome variables and different processes associated with reputation repair. Several of these

differences were confirmed, while others were not. We consider those that were not confirmed in more detail below as we discuss important avenues for future research.

Implications for Future Research

The hypothesis that a firm's financial reputation_(t+1) would be negatively influenced by a more accommodative strategy in the context of a social violation was not supported. Additionally, we found countervailing results in regards to our hypothesis that general reputation would be negatively influenced by a more accommodative strategy in the context of a financial violation. These findings were surprising, as each hypothesis had prior theoretical and empirical support. It may be the case that different forces related to the salience of each violation influenced the outcomes. For example, financial stakeholders are likely to respond more negatively to violations when there is potential for legal liability and future financial damages. Because the EPA dataset involved civil settlements, it is possible that stakeholders concerned with financial reputation did not fear future legal liability, and were instead satisfied that the firm was moving on from the violation, regardless of the repair strategy employed.

Additionally, in reference to general audiences responding positively to a more accommodative repair strategy in the context of a financial violation, it may be the case that a financial restatement is not a salient violation to general audiences. As mentioned above, financial restatements often involve complex and convoluted financial accounting rules, and the general public may not be familiar with the nuances of the violation. As such, general audiences may not necessarily recognize the generically negative signal associated with responsibility for a restatement. Thus, future research should attempt to compare and contrast the forces associated with violation salience and reputation when investigating a firm's repair strategy.

While not hypothesized, our first-stage results also reveal interesting implications in terms of how a firm's multiple endowed reputations might be used to predict its repair strategy. In particular, the results show that a firm's multiple reputations may conflict with themselves in the repair process. For example, a firm's endowed social reputation_(t-1) positively predicts a more accommodative repair strategy as an antecedent in the social violation context, but such a strategy is negatively related to future social reputation_(t+1). These findings suggest that the forces that internally motivate a certain strategic response (for example, the desire to display social integrity by being more accommodative) may actually serve to damage external perceptions along the same dimension. We encourage future research to consider in more detail the motives behind different repair strategies, and how those motives might conflict with potential outcomes (see Bundy & Pfarrer, 2015, for a recent discussion of this issue).

Our research shows that the effectiveness of a repair strategy is a function of both the type of reputation being repaired and the context of the violation. A more accommodative repair strategy can be beneficial in certain situations for certain reputations, and harmful in other situations. Of course, this may raise some normative and ethical concerns for managers. Our intention has been to theorize and examine how stakeholders' reactions influence the process of reputation repair. We do not intend for our results to be prescriptive, and instead have attempted to be descriptive in explaining the phenomenon under investigation. Responsibility of a violation is often a question of perception rather than fact (Bundy & Pfarrer, 2015; Gephart, 2007). Because of this, many scholars have begun to question the long-standing advice from practitioners to "always be accommodative" (Coombs & Holladay, 2006; Koehn, 2013). Our results are supportive of this questioning and show that a more accommodative repair strategy, even when delivered with good intentions, can damage relationships and make reputation repair

more difficult. In making managers and stakeholders aware of these outcomes, it is our hope that this research advances understanding of the dynamic and complex reputation repair process.

There are a number of additional opportunities for future research stemming from the findings of our study. For example, while we focus on how a firm repairs its multiple reputations in response to a violation, there remain many unanswered questions related to how these different reputations form and develop over time. Indeed, this study only scratches the surface for understanding the complex web of interdependencies associated with general and specific reputations. Which reputation develops first? How do the reputations interrelate? How much control does a firm have over the formation of each reputation? These are all important and unanswered questions related to a firm's reputational structure. Consider an example: Apple has long enjoyed high levels of financial, social, and general reputation. However, it is not entirely clear which of these reputations developed first, nor is it clear which of these reputations is most influential on Apple's outcomes and under which circumstances. Thus, we encourage future research to continue investigating the intricate dynamics of a firm's multiple reputations.

In addition to the violation context, there may be other factors that influence reputation repair, including: a firm's history of addressing violations, a firm's endowment of resources, the number and variance of stakeholder groups the violation affects, the number and variance of stakeholder groups that activate or deactivate as the conditions surrounding the violation evolve, the variance in how the violation is perceived, and so on. Theorizing on the role that moderators play in how stakeholders perceive a violating firm, how a firm manages the violation, and the multifaceted nature of firm reputation would serve as important extensions of the current study.

Finally, in measuring the three forms of firm reputation we relied only on the mainstream media, and did not consider the role of specific media outlets, such as journals specifically

targeted to financial or social audiences (cf. Petkova, Rindova, & Gupta, 2013). In measuring all of our reputation variables from the general media we relied on the rhetorical concept of heteroglossia, or the idea that one single piece of text can have multiple interpretations or "voices" according to how the perceiver interprets the text (cf. Morris, 2009). For example, the news statement "Company X had positive growth and strong profit in Q3, but its emissions increased significantly" could be interpreted in a number of ways. Stakeholders concerned with financial value may react positively to the increasing growth and profit, while stakeholders concerned with social value may react negatively to the increased emissions. Thus, while our understanding of reputation repair might benefit from a focus on multiple media types, focusing on the general media can also shed insight given the presence of heteroglossia.

In conclusion, this study is part of a nascent stream of research that examines the complex nature of firm reputation and how the processes associated with repairing multiple reputations influences firm outcomes. From an organizational perspective, an enhanced awareness of the trade-offs associated with a firm's multiple reputations should enhance managers' ability to repair these reputations when they are threatened. From a stakeholder perspective, understanding how each reputation motivates their reactions should allow stakeholders to recognize potential biases when making judgments in response to a violation. Such consideration may result in more effective reputation management and potentially increased benefits for society as firms and stakeholder are inclined to act more proactively together when responding to violations.

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	Specific Reputation	General Reputation
Definition	A specific judgment based on stakeholders' idiosyncratic expectations and perceptions of the firm	A general assessment of a firm's overall favorability among stakeholders
Primary cognitive system	Deliberate/reflective	Heuristic/intuitive
Information specificity	Higher information specificity	Lower information specificity
Link with stakeholder group	Tightly linked with a specific stakeholder group	Loosely linked with stakeholder groups

TABLE 1 COMPARING SPECIFIC AND GENERAL REPUTATIONS

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Repair strategy	3.93	1.26																				
2. Financial reputation (t+1)	0.83	0.24	0.00																			
3. Social reputation (t+1)	0.28	0.11	-0.02	0.29																		
4. General reputation (t+1)	1.45	0.45	-0.03	0.43	0.55																	
5. Financial reputation (t-1)	0.83	0.24	-0.02	0.50	0.14	0.30																
6. Social reputation (t-1)	0.27	0.11	-0.00	0.16	0.68	0.44	0.25															
7. General reputation (t-1)	1.45	0.46	-0.08	0.26	0.42	0.81	0.48	0.50														
8. Core restatement	0.83	0.38	-0.12	0.06	0.01	0.04	0.05	0.01	0.03													
9. Direction	0.11	0.31	0.18	-0.03	-0.02	-0.02	-0.08	0.00	-0.06	0.09												
10. Intentional	0.32	0.47	0.04	0.14	0.01	0.11	0.15	0.02	0.17	0.16	-0.01											
11. Magnitude	-56.66	420.66	-0.01	-0.04	0.05	0.00	0.05	0.17	0.07	-0.06	-0.03	-0.13										
12. Past violation	0.13	0.34	0.06	0.08	-0.07	-0.08	0.01	-0.04	-0.03	0.02	-0.04	0.15	-0.16									
13. Prominence	1.54	0.61	-0.17	-0.06	-0.08	-0.06	-0.04	-0.11	-0.05	-0.06	-0.02	-0.21	-0.01	-0.00								
14. Word count	0.32	0.34	-0.04	0.02	0.35	0.28	-0.03	0.29	0.24	-0.06	-0.01	0.13	-0.06	0.04	-0.02							
15. Firm performance (ROA)	7.60	81.83	0.09	0.05	-0.05	0.00	0.04	0.01	0.04	0.03	-0.02	0.08	-0.18	0.05	0.01	-0.03						
16. Firm size (log of sales) ^b	8754	17487	-0.04	-0.02	0.37	0.34	-0.01	0.36	0.31	0.01	0.08	0.20	-0.01	0.03	-0.11	0.51	0.02					
17. Bundled	0.59	0.49	-0.11	0.04	-0.11	-0.09	0.04	-0.13	-0.04	0.02	-0.02	-0.10	-0.02	0.01	0.49	-0.14	-0.02	-0.18				
18. Source	0.64	0.48	0.19	0.03	-0.02	-0.04	-0.00	0.02	-0.05	0.12	0.06	0.07	-0.08	0.04	-0.21	-0.09	0.05	-0.06	-0.01			
19. Action	0.18	0.38	0.19	0.12	-0.02	0.05	0.10	-0.06	0.00	0.15	-0.01	0.37	0.00	0.02	-0.18	-0.08	0.05	0.02	-0.05	0.13		
20. Open-ended	0.37	0.48	-0.07	0.08	0.01	0.01	0.14	-0.06	0.01	0.12	-0.13	0.39	-0.10	0.06	-0.15	0.04	0.09	-0.03	-0.06	0.11	0.27	
21. Multiple adjustments	0.26	0.44	0.15	0.08	0.02	0.02	0.06	0.04	0.02	0.13	0.09	0.21	-0.07	0.22	-0.06	0.04	0.03	0.16	-0.03	0.09	0.17	0.18

TABLE 2 DESCRIPTIVE STATISTICS – FINANCIAL VIOLATION SAMPLE^a

^a Correlations greater than |0.10| are significant at p < 0.05 ^b Unlogged mean and standard deviation presented

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Repair strategy	3.72	1.24															
2. Financial reputation (t+1)	0.82	0.20	0.04														
3. Social reputation (t+1)	0.34	0.15	0.07	-0.19													
4. General reputation (t+1)	1.54	0.38	0.14	0.32	0.32												
5. Financial reputation (t-1)	0.80	0.24	0.01	0.68	-0.25	0.28											
6. Social reputation (t-1)	0.32	0.10	0.19	-0.10	0.63	0.45	0.02										
7. General reputation (t-1)	1.52	0.41	0.04	0.24	0.13	0.73	0.46	0.50									
8. EPA release	0.74	0.44	0.01	0.10	-0.35	-0.10	0.07	0.27	-0.05								
9. Financial penalty	1.85	3.51	-0.09	0.11	-0.04	0.05	0.10	-0.08	0.02	-0.37							
10. Past violation	0.08	0.27	-0.04	0.04	-0.04	0.08	0.30	0.05	0.18	0.18	-0.10						
11. Bush admin	0.67	0.47	0.12	-0.10	0.15	0.09	-0.13	0.18	0.03	0.24	-0.34	0.21					
12. Manufacturing	0.71	0.46	-0.02	0.18	-0.46	-0.19	0.31	-0.33	-0.05	0.08	0.08	0.00	-0.23				
13. Word count	0.43	0.50	0.32	0.03	0.05	0.21	0.03	0.08	0.13	0.18	-0.12	0.14	0.24	0.10			
14. Firm performance (ROA)	4.45	8.49	-0.05	0.30	-0.52	0.20	0.35	-0.31	0.31	0.39	0.03	0.19	-0.11	0.30	0.20		
15. Firm size (log of sales) ^b	43564	67400	0.08	0.10	0.10	0.37	0.31	0.45	0.49	0.20	-0.14	0.41	0.40	-0.09	0.44	0.27	
16. Open-ended	0.06	0.23	-0.38	0.05	0.20	0.08	0.02	-0.03	-0.02	-0.30	0.13	-0.07	-0.24	-0.06	-0.14	-0.03	-0.20

 TABLE 3

 DESCRIPTIVE STATISTICS – SOCIAL VIOLATION SAMPLE ^a

^a Correlations greater than |0.21| are significant at p < 0.05 ^b Unlogged mean and standard deviation presented

 TABLE 4

 TWO-STAGE FGLS REGRESSION RESULTS – FINANCIAL VIOLATION SAMPLE^a

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	DV-	DV =	DV =				
Variable	DV =	Financial	Financial	Social	Social	General	General
vanable	Repair	reputation	reputation	reputation	reputation	reputation	reputation
	strategy	(t+1)	(t+1)	(t+1)	(t+1)	(t+1)	(t+1)
Financial reputation (t-1)	0.303*	0.426**	0.411**	-0.021	-0.023**	-0.147*	-0.177**
Financial reputation (t-1)	(0.121)	(0.017)	(0.020)	(0.020)	(0.004)	(0.069)	(0.018)
Social reputation (t-1)	1.280**	0.057	0.052	0.503**	0.479**	-0.068	-0.097*
Social reputation (r 1)	(0.355)	(0.045)	(0.037)	(0.060)	(0.017)	(0.203)	(0.045)
General reputation (t-1)	-0.410**	0.023*	0.039*	0.019	0.027**	0.809**	0.821**
General repatation (r 1)	(0.070)	(0.010)	(0.009)	(0.012)	(0.003)	(0.042)	(0.013)
Core restatement	-0.6118**	0.006	0.032**	0.001	0.002	0.009	0.035**
	(0.060)	(0.006)	(0.007)	(0.010)	(0.003)	(0.035)	(0.010)
Direction	0.504**	-0.008	-0.038**	-0.002	-0.003	0.024	-0.009
	(0.082)	(0.007)	(0.009)	(0.012)	(0.004)	(0.042)	(0.010)
Intentional	-0.061	0.029**	0.022**	0.007	0.002	0.093**	0.083**
	(0.062)	(0.007)	(0.007)	(0.009)	(0.002)	(0.030)	(0.009)
Magnitude Past violation Prominence	0.000	0.000**	0.000**	0.000**	0.000**	0.000†	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
	0.198^{+}	(0.014)	(0.002)	-0.004	-0.001	$-0.0/5^{*}$	-0.066**
	(0.103)	(0.011)	(0.011)	0.006	(0.004)	(0.038)	(0.013)
	-0.141	(0.007)	(0.001)	(0.000)	(0.003)	(0.031)	(0.042)
	(0.049)	(0.003)	(0.000)	(0.007)	(0.002)	(0.023)	(0.000)
Word count	(0.189)	(0.012)	-0.018	(0.043)	(0.033)	(0.037)	(0.039^{11})
	0.000**	0.000**	0.000**	-0.000	-0.000*	-0.000	-0.000
Firm performance (ROA)	(0,000)	(0.000)	(0,000)	(0,000)	(0,000)	(0,000)	(0,000)
	-0.087**	0.001	0.004	0.006*	0.008**	0.012	0.015**
Firm size (log of sales)	(0.020)	(0.002)	(0.002)	(0.003)	(0.001)	(0.012)	(0.003)
~	-0 226**	0.014†	0.02.0*	-0.003	0.000	-0.040	-0.033**
Bundled	(0.068)	(0.008)	(0.008)	(0.009)	(0.003)	(0.030)	(0.008)
G	0.393**	-0.008	-0.026**	-0.007	-0.007**	-0.012	-0.039**
Source	(0.057)	(0.005)	(0.007)	(0.009)	(0.002)	(0.030)	(0.009)
Action (instrument)	0.783**						
Action (instrument)	(0.083)	-	-	-	-	-	-
Onen anded (instrument)	-0.398**						
Open-ended (Instrument)	(0.054)	-	-	-	-	-	-
Multiple adjustments	0.403**						
(instrument)	(0.062)	-	-	-	-	-	-
			0.041**		0.005*		0.052**
Kepair strategy	-	-	(0.008)	-	(0.002)	-	(0.010)
Constant	5.310**	0.434**	0.211**	0.078†	0.043**	0.372*	0.092
Constant	(0.248)	(0.024)	(0.044)	(0.041)	(0.016)	(0.139)	(0.062)
Wald Chi ²	2220**	32036**	31022**	385**	40180**	949**	130176**

^a N=370; Standard errors in parentheses. Two-tailed tests. Year and Industry dummies included but coefficients omitted. † $p \le 0.10$; * $p \le 0.05$; ** $p \le 0.01$

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	
	DV -	DV =						
Variable	Dv =	Financial	Financial	Social	Social	General	General	
	Repair	reputation	reputation	reputation	reputation	reputation	reputation	
	strategy	(t+1)	(t+1)	(t+1)	(t+1)	(t+1)	(t+1)	
Financial reputation (t 1)	1.335**	0.757**	0.769**	0.026	0.103*	0.146**	0.241**	
Financial reputation (t-1)	(0.344)	(0.038)	(0.038)	(0.023)	(0.040)	(0.055)	(0.067)	
Social reputation (t-1)	4.504**	-0.644**	-0.580**	1.139**	1.680**	0.057	0.649**	
Social reputation (1-1)	(0.875)	(0.085)	(0.100)	(0.036)	(0.142)	(0.209)	(0.177)	
General reputation (t-1)	-0.494*	-0.014	-0.017	-0.081**	-0.127**	0.712**	0.620**	
()	(0.235)	(0.016)	(0.018)	(0.014)	(0.026)	(0.050)	(0.046)	
Word count	0.896**	0.053*	0.064*	0.024*	0.097**	0.045†	0.135**	
	(0.073)	(0.017)	(0.020)	(0.012)	(0.023)	(0.024)	(0.029)	
EPA release	-0.198	-0.006	-0.005	-0.024**	-0.016	-0.073*	-0.067**	
	(0.165)	(0.012)	(0.013)	(0.007)	(0.011)	(0.033)	(0.023)	
Financial penalty	-0.026	0.003*	0.002†	0.001	-0.000	-0.004	0.003	
	(0.018)	(0.001)	(0.001)	(0.000)	(0.002)	(0.004)	(0.002)	
Bush administration	0.340*	0.039**	0.043**	0.009	0.055**	0.086*	0.133**	
	(0.137)	(0.014)	(0.014)	(0.008)	(0.012)	(0.025)	(0.022)	
Past violation	-0.310	-0.140**	-0.146**	-0.014	-0.023	-0.166*	-0.184**	
	(0.248)	(0.023)	(0.024)	(0.039)	(0.045)	(0.055)	(0.045)	
Firm performance (ROA)	(0.0137)	(0.000)	(0.001)	-0.004**	-0.002	(0.003)	0.006^{**}	
	(0.007)	(0.001)	(0.001)	(0.001)	(0.001)	0.006	(0.002)	
Firm size (log of sales)	(0.038)	(0.009)	(0.012)	(0.003)	(0.0052)	(0.014)	(0.011)	
	0.074	-0.089**	-0.085**	-0.046**	-0.008	-0.105**	-0.105**	
Manufacturing industry	(0.145)	(0.019)	(0.020)	(0.007)	(0.014)	(0.033)	(0.013)	
	-2 014**	(0.01))	(0:020)	(0.007)	(0.011)	(0.055)	(0.015)	
Open-ended (instrument)	(0.239)	-	-	-	-	-	-	
	0.216							
Action (instrument)	(0.164)	-	-	-	-	-	-	
D	. ,		-0.013		-0.079**		-0.083**	
Repair strategy	-	-	(0.010)	-	(0.017)	-	(0.010)	
Constant	3.705**	0.554**	0.591**	0.207**	0.474**	0.413**	0.812**	
Constant	(0.325)	(0.048)	(0.062)	(0.029)	(0.075)	(0.142)	(0.126)	
Wald Chi ²	1469**	1332**	1434**	20189**	18307**	1312**	5606**	

TABLE 5 TWO-STAGE FGLS REGRESSION RESULTS – SOCIAL VIOLATION SAMPLE^a

^a N=75; Standard errors are in parentheses. All tests are two-tailed. † $p \le 0.10$; * $p \le 0.05$; ** $p \le 0.01$