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Firms' Response to Slacktivism: When and Why are E-Petitions Effective?

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ABSTRACT E-petitions have evoked an important debate about the potential for digital activism to pressure firms to change social policies and practices. One prevailing perspective is that slacktivism, a tendency of online supporters to provide only token support, undermines any possible impact. An alternative perspective is that social media dynamics underlying digital activism offer new pathways for social activists to pressure firms toward social change. To explore this debate, we combine insights from research on social movements, social media, and the logic of connective action to theorize the impact of social media mechanisms such as e-petition connectivity and velocity. With a hand-coded database of 1587 e-petitions targeting Fortune 500 firms from 2012 to 2017 through the platform [Change.org](https://www.change.org), we empirically evaluate whether these e-petitions matter. Our empirical results strongly suggest that e-petitions do matter, and we explain when digital activism has impact. The activation of social media mechanisms spreads negative information and directly intensifies the threat to the targeted firm's reputation, pressuring firms to concede to e-petitioner demands. Furthermore, our findings indicate that firm visibility and resource availability can represent boundary conditions for the firm's vulnerability and ability to respond to digital activism.

Keywords: connective action, e-petitions, firm responsiveness, slacktivism, social activism, social media

INTRODUCTION

In March 2020, two e-petitions were launched on [Change.org](https://www.change.org) related to employee medical leave during the COVID-19 crisis. One was filed against CEO Jeff Bezos by a self-proclaimed 'social justice supporter', arguing that Whole Foods employees deserved

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paid sick leave. Within 4 days, over 250,000 people signed the e-petition. Management conceded, providing paid leave to all Whole Foods employees. The second e-petition was filed by a CVS pharmacy technician against CEO Larry Merlo of CVS Health, demanding that CVS update its paid sick leave policy for COVID-19. Despite over 40,000 signatures, CVS failed to respond.

The creation and dissemination of e-petitions – formal, public requests for change via online platforms – represent an increasingly popular way to pressure organizations into social change (Chen et al., 2019; Minocher, 2019). E-petitions are one approach in a larger constellation of digital activism, where social activism is mediated through digital technologies. Digital activism ranges from clicktivism (e.g., 'liking' posts) to hacktivism (e.g., disrupting websites for political/social motives) (George and Leidner, 2019). A diverse array of social media platforms (e.g., video-sharing sites, social networking sites, blogs, and microblogs) allow users to develop, circulate, share, and comment on various types of content (Leong et al., 2019; Vaast et al., 2017). Such approaches bypass conventional social activism routes that have historically relied on disruption via traditional media (King, 2008, 2011; McDonnell and King, 2013). Online e-petition platforms and other social media mechanisms may facilitate new and direct pathways to trigger firm responsiveness to social activist pressures (Durand et al., 2019; Leong et al., 2019). Consequently, we consider the question: Do e-petitions matter? And if so, when and why are firms responsive to e-petition requests for social change?

Several scholars suggest that digital activism does not have significant impact, due to the disparate, disconnected, and potentially unmotivated nature of online supporters (Barnett et al., 2020). Indeed, slacktivism is often cited as a reason to dismiss online calls for change (Barnett et al., 2020; Kristofferson et al., 2014; Minocher, 2019; Schumann and Klein, 2015). A portmanteau of *slacker* and *activism*, slacktivism refers to the tendency to provide only token support for a cause, with little willingness to act beyond 'likes', clicks, and e-signatures. Additionally, the perceived limits of slacktivism are sometimes coupled with the perspective, though not empirically tested, that social media actually diminishes activist power by creating fragmented information and requests, which firms may dismiss as 'noise' (Barnett et al., 2020, p. 59). Slacktivism may also hinder collective action, as credible social movements have historically depended on formal leaders and/or organizations, with members sharing a collective identity and goals (Bennett and Segerberg, 2012; Briscoe and Gupta, 2016; King, 2008; King and Carberry, 2020; Leong et al., 2019; Soule, 2018). Together, these arguments suggest that firms would be unresponsive to e-petitions, whose supporters may be slacktivists that lack collective identity, close network ties, and/or formal organizations traditionally associated with successful collective action (Barnett et al., 2020; Bennett and Segerberg, 2012; Briscoe and Gupta, 2016).

However, there are equally strong and compelling arguments against these notions. With their ease of use, low cost, and potential to attract large numbers of supporters (Chen et al., 2019), e-petition platforms may provide the opportunity for another type of collective engagement based on the logic of connective action,^[1] where technology works as the organizing agent rather than social-movement organizations – informally binding together individuals with 'varying levels of commitment and belief' (Bennett and Segerberg, 2012; George and Leidner, 2019, p. 5; Leong et al., 2019; Vaast et al., 2017). Essentially, e-petitions shared on social media may convert a large number of potentially

‘noncommittal’ (George and Leidner, 2019, p. 7) or slacktivist supporters into a collective threat that generates a response from the targeted firm. According to connective action, even though individual e-petition signatories vary in their efforts to disseminate emotional and opinionated content about the social issue to their social networks, a growing number of supporters nevertheless lends credibility to the e-petition filer’s request (Chen et al., 2019; George and Leidner, 2019; Hartmann et al., 2021; Milan, 2015; Wang et al., 2021). Therefore, if digital activism leads to this type of connective engagement, it may overcome the challenges of slacktivism.

Given these conflicting viewpoints, we address the empirical query of whether e-petitions matter to targeted firms, by focusing on the underlying theoretical puzzle: When does connective action overcome the challenges of slacktivism and enable e-petitions to exert a sufficiently credible threat to induce firms to respond? We examine this research question using a hand-collected dataset of 1587 e-petitions filed on the platform [Change.org](https://www.change.org) targeting Fortune 500 firms. Our findings suggest that the characteristics of e-petitions succeed in directly pressuring firms to concede to e-petition filer demands. Furthermore, firm visibility and resource availability indicate that a firm’s vulnerability and ability to act impact the firm’s response to digital activism.

This study offers multiple contributions to management research. First, we combine insights from social movement research, the logic of connective action, and social media research to theorize how e-petitions successfully elicit firm responsiveness. We argue that the primary persuasive method of e-petitions is to disrupt the target firm’s image and reputation, and that firm-level characteristics pose boundary conditions to firm responsiveness (Briscoe and Gupta, 2016; King, 2011; McDonnell and King, 2013).

Next, we augment social movement research by incorporating connective action to theorize how e-petitions may circumvent the need for a strong leader and/or social movement organization (SMO) historically required for successful collective action (Bennett and Segerberg, 2015). Specifically, we argue that the digital mechanisms of connectivity and velocity spread negative evaluations (Wang et al., 2021) and enable e-petitions to pressure firms directly without relying on a third party (i.e., traditional media) by creating a large, decentralized network of e-petition filers and supporters.^[2] In so doing, we controvert the pessimistic stance on digital activism’s potential to change firm behaviour (Barnett et al., 2020; Kristofferson et al., 2014; Morozov, 2009).

Lastly, our study offers one of the first large-scale, empirical investigations of the dynamics underpinning successful digital activism against firms. Scholars have noted gaps in available empirical research on how internet technologies and social media characteristics impact firm responsiveness to digital activism, a research area ‘still in its infancy’ (George and Leidner, 2019, p. 16; Luo et al., 2016). Our results offer important insights for both managers strategizing responses to e-petitions and activists pressuring firms to enact social change.

EFFECTIVENESS OF E-PETITIONS: DEVELOPMENT OF HYPOTHESES

While literature suggests that firms may ignore e-petitions due to perceptions of slacktivism, we develop a general framework incorporating social movement theory, logic of connective action, and social media research to predict when firms are

responsive to e-petition demands (Durand et al., 2019; McDonnell and King, 2013). Social movement theory suggests that when doubts are raised about a firm's conformity to social norms, it threatens a firm's image and reputation, thus triggering a response to activist demands (McDonnell and King, 2013). Social movement research also explains how mediated disruptions exert pressure, such as negative attention through traditional media (King, 2008, 2011; McDonnell and King, 2013; McDonnell et al., 2015). Departing from social movement literature, social media research has emphasized ways social media platforms change the dynamic production and consumption of content by providing new and unexpected ways for information to flow, thereby affecting social approval (Wang et al., 2021), firm reputation (Etter et al., 2019), and social activists (Luo et al., 2016). Connective action research has also examined how social media has impacted collective organizing (Bennett and Segerberg, 2015), though most of this research explores activist participation patterns (Leong et al., 2019), not impact of collective organizing on firms.

Disrupting Reputation and Image: Direct Impacts

Drawing from these research streams, we propose four hypotheses to predict when e-petitions may disrupt a firm's image and reputation, thus triggering a response (Briscoe and Gupta, 2016; King and Carberry, 2020; McDonnell and King, 2013). Based on connective action and social media characteristics, the first two hypotheses theorize how e-petition connectivity and velocity may independently lead to firm response.

E-petition connectivity. Drawing on connective action research, we define e-petition connectivity as the accumulating strength that occurs as an e-petition attracts supporters (Cullinane et al., 2014; Leong et al., 2015, 2019). For example, the digital platform [Change.org](#) enables e-petitions to develop connectivity by acting as an organizing tool, linking e-petition supporters, despite disparate interests, to jointly pressure firms to change their social policy and/or practices. When individuals sign an e-petition, they demonstrate their support for the issue as framed by the e-petition filer, becoming part of an ad hoc collective contesting firm practices. The number of signatories shows how many individual supporters are connected by the e-petition, which represents its accumulated strength.

As noted previously, firms may choose to discount e-petitions due to perceptions of slacktivism. However, e-petitions can overcome such claims by attracting and connecting a significant number of signatories. In addition, e-petitions enable supporters to publicly validate the demands of the e-petition's request (George and Leidner, 2019, p. 17; Leong et al., 2019). As e-petition connectivity grows, each new signatory adds credibility to the cause and the concerns expressed in the e-petition (George and Leidner, 2019). Similarly, social movement scholars have suggested that activist tactics that rally large numbers of individuals draw more attention from firm decision-makers. As the protest grows, it can influence public opinion on issue salience. Consequently, the firm may lose public support and the ability to control the 'crowds' (Della Porta and Diani, 2006; King and Soule, 2007). Social media provides effective channels for e-petition filers to capitalize on the power of numbers by generating a virtual crowd of supporters who can influence public opinion.

E-petition connectivity leads to formation of a large connective network, consisting of myriad stakeholders who support the e-petition for disparate reasons, diffusing the need for a shared identity (Bennett and Segerberg, 2015; Leong et al., 2019). With each additional signature, the e-petition filer's framing of the complaint is reinforced, thereby intensifying the threat to firm reputation and reducing the likelihood of inaction to 'weather the storm' (Barnett et al., 2020, p. 58). Relatively higher e-petition connectivity may move a firm from inertia to response, as managers seek to protect a firm's reputation and image. E-petitions with more connectivity can indicate to firm decision-makers that the demands for social change constitute critical and credible concerns. Thus, we hypothesize:

Hypothesis 1: E-petition connectivity is positively related to firm responsiveness.

E-petition velocity. In addition to e-petition connectivity, we argue that e-petition velocity poses a direct threat to firm reputation and image, mitigating perceptions of slacktivism. In a social media context, velocity captures how quickly an e-petition spreads within and across signatory networks, thus enabling broader diffusion among stakeholders (Wang et al., 2021). In management research, velocity includes two dimensions: the degree of the change (the spread of an e-petition) and the speed of the change (Eisenhardt and Bourgeois, 1988; McCarthy et al., 2010).

First, e-petition supporters can move beyond passive participation by spreading the e-petition's content on social media outlets. For example, [Change.org](#) provides links for supporters to directly share e-petitions on social networking sites with a personal message. When sharing an e-petition on social media, individuals are broadcasting negative information and grievances about the targeted firm – a process that may ultimately increase engagement and diffusion of the e-petition's content (Etter et al., 2019; Wang et al., 2021). A social media post both disseminates the e-petition filer's original complaint and enables individual activists to inject their own perspective (Etter et al., 2019; Leong et al., 2019). When signatories share more personal experiences and insights, it may further substantiate the social validity of the original e-petition's claims (George and Leidner, 2019; Weng et al., 2013) and enhance viral potential of the e-petition (Alhabash and McAlister, 2014).

Furthermore, the speed at which an e-petition spreads prompts a sense of urgency that the claims are timely and relevant. Speed of messaging across social media may also challenge the firm's ability to control the framing of the issue, as each new post and personal note further strengthens the original e-petition filer's framing (Etter and Vestergaard, 2016; Illia et al., 2023). Consequently, the more quickly an e-petition spreads, the less time the firm has to mitigate damage to its reputation and image.

E-petition velocity, then, undermines a firm's ability to control issue framing (Wang et al., 2021), as the complaint spreads across social media platforms, growing in urgency and social support. In addition, e-petition velocity helps amplify the e-petition filer's message by reinforcing, repeating, and communicating it (George and Leidner, 2019, p. 17). This escalates the negative messaging to a wider range of stakeholders and mitigates perceptions of slacktivism (George and Leidner, 2019). Consequently, when an e-petition's velocity is relatively higher, it indicates greater

likelihood that the firm will counter the threat to its reputation and image. Therefore, we hypothesize:

Hypothesis 2: E-petition velocity is positively related to firm responsiveness.

Disrupting Reputation and Image: Indirect Impacts

Drawing from social movement research, our next two hypotheses capture how e-petitions may be successful through mediated disruption – that is, by generating third-party attention (Eesley et al., 2016; King, 2008, 2011). Specifically, the third hypothesis focuses on the role of traditional media coverage; and the fourth hypothesis argues that the societal salience of the e-petition issue may increase pressure to respond.

E-petition traditional media coverage. According to social movement research, when protest activities (e.g., boycotts) produce a mediated disruption (e.g., mass media coverage), activists present a greater threat to the targeted firm (King, 2008, 2011; McDonnell and King, 2013). Mass media coverage increases message salience, leading to greater image and reputational consequences (King, 2011). Thus, the ability to engage with traditional media may also enhance e-petition impact by extending the message to more conventional audiences, potentially reaching critical stakeholder groups such as institutional investors and industry insiders (Wang et al., 2021).

E-petitions may get picked up by traditional media outlets that build their agenda around newsworthy social media content (Illia et al., 2023; Neuman et al., 2014). Traditional media coverage may increase e-petition impact, as it confers legitimacy and visibility to e-petition claims and generates a greater sense of urgency (King, 2011; Minocher, 2019). As a result, the e-petition can appear more threatening, and managers may become more sensitized to the e-petition filer's concerns (King, 2008). Likewise, empirical evidence suggests that media coverage leads to market disruptions when investors become concerned about threats to firm image and reputation (King, 2011). Taking this information into account, we argue that traditional media coverage of an e-petition increases reputational threat, influencing firm responsiveness (McDonnell and King, 2013). Therefore, we hypothesize:

Hypothesis 3: Coverage of the e-petition in traditional media is positively related to firm responsiveness.

Societal salience of the issue. Research suggests that firms are more likely to address issues with strong societal salience, reflecting broad-based public opinion and activist group interest (Clark et al., 2017). We argue that when e-petitions address significant societal issues, targeted firms perceive a greater potential for activists to inflict damage. In general, when public interest increases about social issues, social activists gain momentum among a broader range of stakeholders. Consequently, activist requests may increase firm awareness and responsiveness (Clark et al., 2017; Eesley and Lenox, 2006; Proffitt Jr and Spicer, 2006; Rivoli and Waddock, 2011). Given the temporal dynamic of social issues, it may take time for new ideas about social practices to acquire societal salience (Rivoli and Waddock, 2011). As a result, the degree of contention surrounding a social issue varies

over time, especially between social activists, the public, and the firm sector. Initially, when social activists identify a gap between firm behaviour and societal expectations, their demands for change are easily dismissed. However, as public awareness increases over time, activist claims may gain more credibility and control of issue framing (Rivoli and Waddock, 2011). Therefore, ‘once the public accepts a standard of behavior about a certain issue, demonstrating social consensus, the opportunity window closes’, and the targeted firms must comply (Clark et al., 2017, p. 1143; Lamertz et al., 2003; Rivoli and Waddock, 2011; Zyglidopoulos, 2003).

E-petition filers can strengthen their position by tapping into societal consensus. E-petitions that mirror popular social issues may elicit more support from the public and attract support from interest groups with more power and resources (Chen et al., 2019). In addition, e-petitions may increase legitimacy when they tap into society’s current framing of an issue and consider the types of changes that should accompany it. Social movement scholars have posited that controlling the framing of a social issue is critical for activists trying to mobilize and shape public opinion (Barnett et al., 2020; King, 2008). Thus, we argue that e-petitions addressing prominent social issues will increase pressure on targeted firms to respond. We hypothesize:

Hypothesis 4: The societal salience of the e-petition’s issue is positively related to firm responsiveness.

The Role of Firm Vulnerability and Ability in Moderating Slacktivism.

Thus far, we have argued that combining connective action with aspects of social movement research helps identify direct and indirect ways e-petitions pressure firms to accommodate activist demands. We also argue that a firm’s vulnerabilities and abilities, combined with e-petition connectivity, velocity, media coverage, and societal salience, may provide more insights into potential impact of an e-petition.

Firm reputation. One firm-specific characteristic that may impact firm decision-making stems from its reputation, which is commonly defined as the outcome of a deliberate process of assessment by external stakeholders about a firm’s ability to deliver value (Bundy and Pfarrer, 2015; Den Hond et al., 2014). Since a good reputation is valuable and arduous to obtain – often hard-earned over years of service to multiple stakeholders, or achieved through unlikely economic feats (such as the case of unicorn companies) – firms are incentivized to safeguard favourable stakeholder perceptions (Fombrun and Shanley, 1990; Pollock et al., 2019; Rindova et al., 2005). Firms invest heavily in their reputation, believing it essential for building social capital, goodwill, and financial value (King, 2011; Zavyalova et al., 2016). Moreover, because reputation is built over a long period of time, it often becomes the standard of practice expected by firm stakeholders.

However, there is debate about whether a favourable firm reputation protects it from accusations of misconduct or serves as a liability, increasing public scrutiny (Bundy and Pfarrer, 2015; King and Carberry, 2018; McDonnell and King, 2018; Zavyalova et al., 2016). One perspective argues that more reputable firms, for instance, may trigger a halo

effect (Bromley, 1993; McDonnell, 2016; McDonnell et al., 2015; Pfarrer et al., 2010). According to this perspective, stakeholders give the firm the benefit of the doubt in the face of negative criticism from activists (King, 2011). Consequently, more reputable firms may be less responsive to stakeholder demands, thus relying on a good reputation to buffer them against e-petition filer criticisms (Bundy and Pfarrer, 2015; Kim and Davis, 2016, p. 1901; Zavyalova et al., 2016).

Alternatively, a firm's good reputation may be a liability when faced with accusations of misconduct, eliciting additional scrutiny and harsher judgement by stakeholders (King and Carberry, 2018; McDonnell and King, 2018). Accordingly, firms with better reputations may be more likely targets of activist demands. As stakeholders learn about e-petition claims, 'reputable organizations that fail to "put their money where their mouth is" violate their stakeholders' expectations; jilted stakeholders may be especially angered, perceiving such actions as evidence of "organizational hypocrisy" or "organizational sacrilege"' (Harrison et al., 2009; King and Carberry, 2018; McDonnell and King, 2013, p. 11). Based on this rationale, we propose that being a reputable firm is a liability that increases the pressure of e-petition connectivity, velocity, media coverage, and societal salience. McDonnell and King (2018) maintain that the liability aspects of a good reputation are likely to be triggered once a firm's blame is established. If e-petition connectivity, velocity, traditional media, and societal salience confirm firm misconduct, the burdens of a good reputation make the firm more vulnerable to digital activism. A firm's stakeholders may be upset and/or angered that the firm's behaviour is falling below expectations. Thus, a firm that wants to preserve its reputation will be more responsive to stakeholder pressures. In line with this rationale, we argue that favourable firm reputation can intensify the positive effect of e-petition connectivity, velocity, traditional media, and societal salience on a firm's responsiveness to e-petitions. Thus, we hypothesize:

Hypothesis 5: A firm's reputation positively moderates the relationship between e-petition connectivity, velocity, traditional media, and societal salience and firm responsiveness.

Firm media visibility. The degree of public attention a firm receives in traditional media is another firm-specific characteristic that influences responsiveness to e-petition connectivity, e-petition velocity, traditional media coverage, and societal salience. A firm's visibility in the media is at times connected with reputation, but visibility contains an independent and separate dynamic since traditional media coverage may portray firms positively and/or negatively (Zavyalova et al., 2016). In other words, a firm's visibility is based on the total amount of traditional media coverage it receives, though coverage is not always positive (e.g., environmental crises, financial misconduct); thus, the impact of firm visibility and reputation are not the same.

We expect that more visible firms will be more sensitive to e-petition pressure, as greater visibility translates into increased stakeholder scrutiny and more external pressure (Benton and You, 2019). When compared to less conspicuous firms, firms with higher visibility are likely to have larger audiences of stakeholders who recognize the firm and are interested in e-petition complaints (Kim and Davis, 2016). Indeed, scholars find that more visible firms are more vulnerable to shareholder activism (Rehbein et al., 2004) and

protests (King, 2008), resulting in greater sensitivity to stakeholder demands (Brammer and Millington, 2006; Kim and Davis, 2016, p. 1900). This increase in public attention may also increase stakeholder support for the e-petition, which may amplify connectivity, intensify velocity, elicit more traditional media coverage, and increase societal salience. Therefore, we hypothesize:

Hypothesis 6: A firm's visibility positively moderates the relationship between e-petition connectivity, velocity, traditional media, and societal salience and firm responsiveness.

Resource availability. Although firms may be willing to respond to an e-petition's connectivity, velocity, traditional media, and societal salience, a firm's ability to fulfil e-petition filer demands will likely affect responsiveness (Durand et al., 2019). We argue that firms must have adequate resources to bear the costs of e-petition filer demands. Since resources are limited, firms need to consider the trade-offs and implications of allocating resources to e-petition issues. Indeed, Durand et al. (2019) argue that there is variation across firms in terms of resource availability, and this influences firm opportunity costs and capacity to incur expenses related to stakeholder demands. Consequently, although firms may face similar pressures from e-petitions, they can differ in their ability to accommodate or address e-petition demands. Firms with more resources are better positioned to deploy responsive actions (Haleblian et al., 2012; King, 2011). Conversely, firms with lower resource availability may have more stringent resource allocations (Durand et al., 2019; Stadtler and Lin, 2017), and may not be able to translate their willingness into action. Therefore, we argue that firms with higher resource availability will be more responsive to e-petition connectivity, velocity, traditional media, and societal salience. We hypothesize:

Hypothesis 7: A firm's resource availability positively moderates the relationship between e-petition connectivity, velocity, traditional media, and societal salience and firm responsiveness.

An overview of the conceptual model predicting firm responsiveness to e-petitions' requests for social change is illustrated in [Figure 1](#).

DATA AND METHODS

Sample and Data Collection

To test our hypotheses, we assembled a dataset starting with the Fortune 500 list, which includes the largest US firms ranked by their total revenue, to observe which firms have been targeted by e-petitions addressing social issues for the period 2012–17. We focused on Fortune 500 firms because scholars have shown that activists tend to interact more often with larger and higher-status firms (e.g., King, 2008; McDonnell et al., 2015). Among the social media platforms dedicated to e-petitions, we focused on [Change.org](#). With more than 200 million users over 196 countries, [Change.org](#) (n.d.) claims to be the

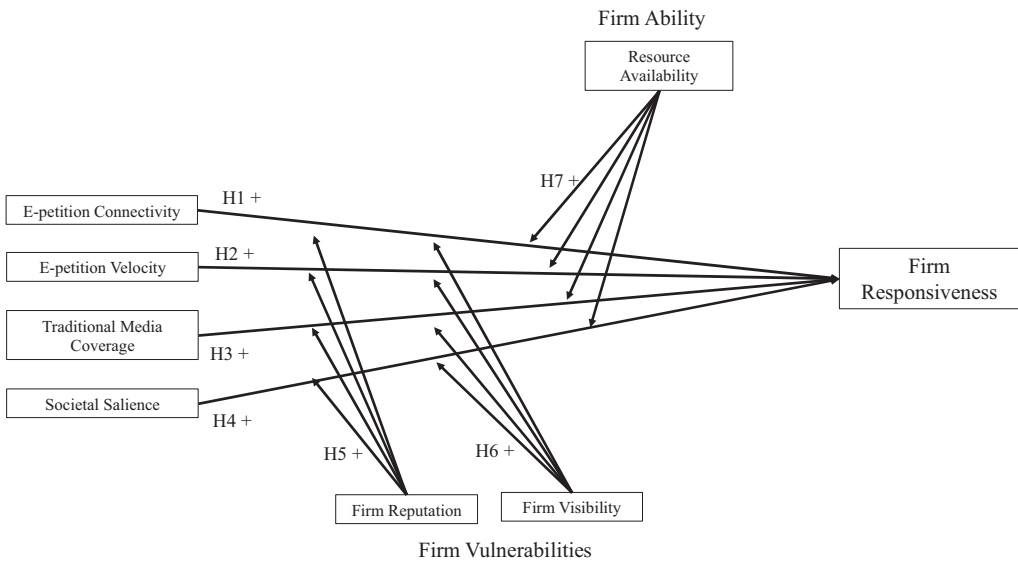


Figure 1. Conceptual model of firm responsiveness

largest online petitioning site. In addition, [Change.org](#) has higher visibility on traditional media than other e-petition platforms, and the petitions filed against firms encompass a wide range of social issues (Chen et al., 2019).

Several coders searched for e-petitions targeting Fortune 500 firms from 2012 to 2017. After identifying whether a firm was targeted by an e-petition addressing social issues, they recorded the data about each e-petition following specific instructions (available upon request). For instance, we collected e-petition data regarding the social issue, the number of targets, the types of changes requested, and characteristics about the e-petition filers and their visibility. Next, we combined our e-petition dataset with data from several other sources, including COMPUSTAT for firm-specific data, Riskmetrics for shareholder resolutions data, Lexis-Nexis for visibility, the Policy Agendas Project for social issue salience, and the Reputation Institute for reputation data. Our final sample consists of 1587 e-petitions, targeting 162 unique firms (see online appendix for distribution over years).

Dependent Variable

Following previous research analysing firm responsiveness to stakeholder demands for social change (Chen et al., 2019; Eesley and Lenox, 2006; King, 2008), we label a firm's commitment to addressing the demands of the e-petition as *responding* to the e-petition. To measure responsiveness, we examine the activists' victory claim on [Change.org](#). When e-petition filers are satisfied with the response of the target, they change the status of the e-petition to victory and provide a description of the firm's accommodative actions. We examined all victory claims to distinguish between victories where firms agreed to make the requested change (see online appendix for excerpts) and victories related only to increased awareness about a social issue. More

specifically, if an e-petition filer declared victory and stated that they raised awareness about a social issue, but there was no mention of a firm's compromise and/or actions, we did not code this as a positive firm response. We created a binary variable where 1 represents a firm's agreement to make the change requested in the e-petition, and 0 indicates no response from the firm. In our sample, about 12 per cent of e-petitions were successful.

Independent Variables

E-petition connectivity. E-petition connectivity entails the degree to which the e-petition connects and brings together supporters. We capture an e-petition's connectivity by using the number of signatures supporting the e-petition. By signing an e-petition, individuals express their support for the requested change in firm social policies and practices. An increasing number of e-petition supporters indicates through connective action that the e-petition is an organizing mechanism (Bennett and Segerberg, 2015), binding individuals together and reinforcing the credibility of the issue to pressure the targeted firm. The number of supporters for each e-petition was obtained from [Change.org](https://change.org).

E-petition velocity. We measure the e-petition's velocity by calculating the average number of times an e-petition was shared daily on the social media platform Facebook. According to Pew Research Center, Facebook was by far the most popular social media platform in America during our period of study (Greenwood et al., 2016). We also selected Facebook instead of other social media platforms (e.g., Twitter) because it allowed us to track how often an e-petition was shared by tracing its URL. The focus on short texts in Twitter, for instance, incentivizes users to use shorter URL services when sharing a message. Consequently, it is much more difficult to track e-petitions shared on Twitter than Facebook. To count the number of shares on Facebook, we used SharedCount (n.d.) – an online tool that identifies the number of shares a link has on Facebook. After that, we divided the total number of shares on Facebook by the number of days an e-petition was open to the public.

E-petition traditional media coverage. Following previous research (King, 2008; Vasi and King, 2012), we capture the media attention associated with the e-petition by the number of times an e-petition received coverage from traditional media, newspaper, television, or radio. [Change.org](https://change.org) recommends and incentivizes e-petition filers to provide updates regarding any media coverage about the e-petition to rally more supporters. We counted the number of different articles covering an e-petition, as reported by the e-petition filer on the [Change.org](https://change.org) website.

Societal salience. We operationalize social salience by using Gallup's 'Most Important Problems' (MIP) polls. Conducted since 1935, MIP polls have been widely used in political science and communication as a measure of the general public's opinions about issue salience (Barberá et al., 2019; Tan and Weaver, 2007). Specifically, we retrieved MIP data from the US Policy Agendas Project which maps social problems into 25 topic schemes developed by scholars involved in the Comparative Agendas Project. Moreover,

the US Policy Agendas Project normalizes percentages, making the sum of all topics equal to 100, and provides the annual average of topic salience across all polls. We used the same 25 topic schemes to categorize all e-petition issues (see online appendix for distribution of issues in our sample).

Moderation Variables

Reputation. Analogous to previous research employing rankings to capture reputation (King, 2008; McDonnell and King, 2013; Pollock et al., 2019; Rindova et al., 2018), we use the US RepTrak 100 reports from the Reputation Institute to build our measure of reputation. Scholars have posited that the inclusion of firms in rankings provides a valuable signal to stakeholders (Rindova et al., 2018). We selected RepTrak as a source for our measure because it reflects the US general public, rather than industry peers or analysts such as in the 'Most Admired Companies' ranking. RepTrak measures firm reputation based on four dimensions: good feeling; trust; admiration and respect; and overall reputation (Ponzi et al., 2011). Using the US RepTrak 100 reports, we created an indicator variable in which 1 represents the firm presence in the ranking and 0 otherwise.

Firm visibility. Using Lexis-Nexis, we measured firm visibility by the number of times a firm is mentioned in the *Los Angeles Times*, *New York Times*, *Washington Post*, *Wall Street Journal*, *Chicago Tribune*, and *USA Today* (Kim and Davis, 2016). These newspapers have been widely used in social movement and management research as sources of data regarding media coverage about firms (Bednar et al., 2013; King, 2008).

Resource availability. We operationalized resource availability using free cash flow, defined as operating cash flow minus gross capital expenditures, which is widely used as a measure of firm financial health (for a review, see Adame et al., 2020; Vasi and King, 2012). Scholars have shown that unabsorbed resource slack positively impacts firm ability to promote strategic changes (Haleblian et al., 2012).

Control Variables

We include several control variables to account for additional factors that stem from social movement and issue management theories which may impact firm responsiveness. Previous research has shown that stakeholder salience can influence firm responsiveness (Eesley and Lenox, 2006). We control for e-petition filer salience by including indicator variables designating specific stakeholder groups such as customers and employees (see online appendix for distribution across groups). *Customers* is a dummy variable where 1 represents e-petition filers who disclosed that being current or past customers was relevant to filing the e-petition. *Employees* is a dummy variable in which 1 represents e-petition filers who disclosed themselves as employees of the targeted firm. Moreover, e-petitions that are part of a broader movement pressuring a firm for change can be more salient for targeted firms, so we control for *social movement*, as a dummy variable in which 1 indicates that the e-petition is part of a broader movement. To find this information, we looked in each petition for references

to campaign websites, protests, boycotts, collaboration with non-governmental organizations (NGOs), and other organized offline activities. Last, we include a dummy variable, *NGOs*, indicating whether an NGO filed the e-petition.

Moreover, we also control for *e-petition filer experience* by evaluating the number of previous e-petitions initiated by the e-petition filer on the [Change.org](https://www.change.org) platform. E-petition filers can target one or several firms in the same e-petition. E-petitions targeting several firms may address more complex societal issues that may require industry coordination to solve them. Then, we also control for *multiple targets*, where 1 signifies that the e-petition targets multiple firms and 0 otherwise. We also analyse *issue salience for shareholder activists*. For each e-petition, we identified whether the issue overlaps with issues addressed in social shareholder resolutions submitted in the previous year. We include this control because it captures additional pressure on the firm. If shareholder activists have expressed concern for similar types of issues, this means that other stakeholders are aware that the firm has been struggling with the issue, and it makes the firm more vulnerable to the demands of the e-petition. We create an indicator variable where 1 represents overlap between the e-petition and the shareholder resolutions. We also control for the *perceived cost* of accommodation, as the count of the number of requests made in the e-petition. Following the recommendations of Certo et al. (2020) to include first order variables of a ratio variable, we add the number of *Facebook shares* and the *e-petition duration* in days as control variables. Last, we include fixed effects for the most common e-petition issues: animal rights, consumer rights, the environment, health, and human rights.

At the firm level, we include the variable *firm receptivity* to shareholder activists in order to control firms' openness and receptivity to external influence. Following McDonnell et al. (2015), we create a receptivity score based on firm response to social policy shareholder proposals, using a Janis–Fadner coefficient of imbalance. The Janis–Fadner coefficient was developed to capture the emotional valence of any type of communication that may be classified as favourable, unfavourable, and neutral (Janis and Fadner, 1965; McDonnell et al., 2015; Pfarrer et al., 2010; Pollock and Rindova, 2003). Firm responses to social policy shareholder resolutions similar to media articles have three possible responses: receptivity, neutrality, or resistance (McDonnell et al., 2015, p. 661). First, firms can withdraw the proposal, showing receptivity and willingness to negotiate with the activists. Second, firms can refuse to implement the proposal, but firms may take a neutral stance toward the shareholder proposal by allowing it to go for a vote during the annual shareholder meeting. Third, firms can challenge the proposal by petitioning the Securities and Exchange Commission (SEC) for permission to omit the resolution from the annual proxy, indicating hostility to activists. All shareholder proposals are aggregated with a range from -1 to 1, so that a negative score indicates hostility to shareholder activists while a positive score indicates receptivity. Firms that have not been targeted by shareholder activists receive a score of zero, implying neutrality.

Moreover, we control for firm size using total assets and for financial performance using the variables return on assets and Tobin's *Q*. Since larger and more profitable firms may have more resources available, they may also be more likely to respond to e-petitions. We also control for advertising intensity, measured as advertising expenses divided by sales, because a firm's advertising is likely to attract more stakeholder attention and

subsequently more activist pressures (Eesley et al., 2016; Gardberg and Fombrun, 2006). Last, we include industry and year fixed effects to account, respectively, for potential differences among industries and temporal exogenous shocks.

Statistical Analysis

A primary concern with estimation processes is that there is potential for an inadequate or incorrect sample selection to occur, since 'the sample is not randomly drawn from the underlying population' (Wooldridge, 2010, p. 790). Sample selection can emerge because of a research design or an omitted variable affecting both the probability of sampling the case and the dependent variable of interest (Bushway et al., 2007; Certo et al., 2016; Wolfolds and Siegel, 2019). In our case, we can only observe firm responsiveness from Fortune 500 firms that were initially targeted by e-petitions. Moreover, it is reasonable to assume that e-petition filers are not randomly targeting Fortune 500 firms. Rather, they are selecting firms because they believe these firms are more likely to be responsive to their demands. We use a two-step Heckman probit model, which uses a maximum-likelihood estimation, to address the potential sample selection problem and account for our binary-dependent variable (Van de Ven and Van Praag, 1981; Wolfolds and Siegel, 2019). In the first step, we estimate the probability of a firm being targeted by an e-petition filer, using all the firms that are part of the Fortune 500 list. In the second step of our analysis, we estimate the probability of firm responsiveness as a function of independent variables and selection hazard, using probit modelling (Wolfolds and Siegel, 2019). In addition, all firm-level variables were lagged one year to mitigate concerns of reverse causality. We employ Stata's heckprobit function with clustered standard errors at the firm level to account for heteroskedasticity and serial correlation (Angrist and Pischke, 2008).

A requirement for estimating sample selection models is to add an exclusion restriction variable, a variable affecting the likelihood of a firm being targeted (the selection), but the variable cannot affect the likelihood of firm responsiveness (the outcome) (Certo et al., 2016; Hill et al., 2021; Wolfolds and Siegel, 2019). To meet this exclusion restriction, we selected two variables, the number of governance (non-social) shareholder resolutions and the internet penetration in the US. The rationale for selecting the number of governance shareholder resolutions is that the variable signals that the shareholder activists had concerns with the management of the targeted firms (such as executive compensation or board composition). Governance shareholder resolutions indicate that the firm is vulnerable and may provide opportunity for other stakeholder activists, instigating e-petition filers to target those specific firms. Since governance shareholder resolutions address different issues than the e-petitions focusing on social issues we are analysing, it is unlikely that this variable will affect firm responsiveness. Our second variable, US internet penetration – measured as the percentage of individuals using the internet from the World Development Indicators – can influence the probability of a firm being targeted by e-petition filers. The rationale for this variable is that a prerequisite for becoming involved in digital activism is having access to the internet. This variable also meets the exclusion condition since access to the internet is likely to only impact stakeholder access to and knowledge about new forms of digital activism but should not impact a firm's decision to respond to e-petition filers. In addition to the two variables

meeting the exclusion restriction, we include all firm-level covariates of the second step, including the year and the industry-fixed effects in the selection estimation.

In Table II, model 1 shows our findings regarding the selection equation. Our exclusion restrictions are significant predictors of a firm being targeted by an e-petition ($p < 0.001$) but does not directly affect the likelihood of firm responsiveness. Following Chang et al. (2016), we perform a Wald test to evaluate the strength of our instrumental variables, testing the null hypothesis that all the coefficients for these variables are zero. The χ^2 statistic (95.01) is larger than 10, alleviating concern resulting from weak instrumental variables. Moreover, the 'athrho', which indicates the correlation of error terms from the selection and the firm responsiveness equation, is statistically different from zero, justifying the use of sample selection models.

Although the primary purpose for analysing the likelihood of being targeted is statistical, we highlight some results because they may shed light on whether there is overlap between the drivers of targeting between e-petitions and stakeholder activist tactics. We find that the factors motivating e-petition filers' targeting decisions are comparable to the factors motivating other types of activist tactics. Analogous to previous research, e-petition filers tend to target firms that are larger, more reputable, and have a stronger presence in the media (Eesley et al., 2016; King, 2008). For instance, a good reputation appears to be more of a liability than an asset when it comes to the targeting decisions of stakeholder activists since e-petition filers tend to target more reputable firms (King and McDonnell, 2012).

RESULTS

Table I presents descriptive statistics and correlations for the second step in our empirical analysis, firm responsiveness to e-petitions. Most of the correlations are below 0.4 and variance inflation factors are all below five, suggesting no problems of multicollinearity (Kennedy, 2008).

Table II reports our results regarding firm responsiveness. Model 2 displays the findings for hypotheses H1–H4. Hypothesis 1 predicts that e-petition connectivity is positively related to firm responsiveness. Our findings provide support for this hypothesis, since e-petition connectivity ($\beta = 0.049$, $p = 0.002$, average marginal effect (AME) = 0.002, $p = 0.001$) is positively associated with firm responsiveness. The AME of the e-petition connectivity indicates that increasing e-petition connectivity by one standard deviation (SD) leads to an increase of 1.16 percentage points in terms of the probability of firm responsiveness. This figure indicates that e-petitions with high (+1 SD) connectivity are 1.21 times more likely to elicit firm responsiveness compared to e-petitions with a low (−1 SD) connectivity.

Hypothesis 2, which predicts that e-petition velocity is positively associated with firm responsiveness, is also supported ($\beta = 0.003$, $p = 0.006$, AME = 0.0001, $p = 0.009$). The AME of e-petition velocity indicates that an increase of one standard deviation in e-petition velocity leads to an increase of 7.78 per cent points in terms of predicting the probability of firm responsiveness; it means that e-petitions with a high (+1 SD) velocity are 4.92 times more likely to elicit firm responsiveness compared to e-petitions with a low (−1 SD) velocity.

Table I. Descriptive statistics and correlations

<i>Variables</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>
1 Firm responsiveness	0.12	0.33												
2 E-petition connectivity	1.58	5.82	0.24											
3 E-petition velocity	70.12	779.83	0.21	0.07										
4 Traditional media coverage	0.09	0.54	0.20	0.14	0.00									
5 Societal salience	0.04	0.05	0.07	-0.03	-0.02	0.02								
6 Firm reputation	0.40	0.49	0.07	-0.02	0.04	-0.03	0.03							
7 Firm visibility	0.23	0.30	0.05	0.05	0.04	0.00	0.04	0.11						
8 Free cash flow	9.74	14.29	-0.02	-0.01	0.00	0.05	0.19	-0.04	0.48					
9 Customer	0.09	0.29	0.12	0.02	-0.02	0.03	0.11	0.05	0.02	0.04				
10 Employee	0.02	0.13	0.00	0.00	-0.01	0.09	-0.05	-0.05	-0.04	-0.04	-0.04			
11 Social movement	0.13	0.34	0.29	0.22	0.01	0.06	-0.09	-0.02	-0.10	-0.05	-0.10	-0.04		
12 NGO filer	0.20	0.40	0.06	0.15	0.05	0.03	-0.04	0.04	-0.12	0.01	-0.06	-0.02	0.36	
13 ln(Filer expertise)	0.35	0.52	0.13	0.17	0.03	-0.01	-0.03	0.18	0.07	0.13	-0.01	0.00	0.16	0.17
14 Other firms targeted	0.42	0.49	-0.13	-0.03	-0.05	0.01	0.00	-0.09	-0.16	0.01	-0.06	-0.07	0.02	0.12
15 Overlap shareholder resolution	0.23	0.42	0.02	0.06	0.08	0.02	0.05	0.02	0.05	0.15	0.03	0.00	0.00	-0.01
16 E-petition duration	475.67	347.10	-0.35	0.07	-0.11	-0.04	-0.07	0.01	0.01	0.03	-0.05	0.01	0.01	0.09
17 Facebook shares	4.29	24.89	0.03	0.39	0.16	0.01	-0.05	0.01	0.13	0.01	-0.02	-0.02	0.03	0.01
18 Perceived cost of accommodation	1.46	0.58	0.03	0.05	-0.03	0.03	-0.01	-0.02	-0.10	-0.04	-0.02	-0.01	0.07	0.02
19 Total assets	152025.30	336273.80	0.01	0.03	0.00	0.16	0.30	-0.17	0.04	0.40	0.08	-0.01	0.04	0.05
20 ROA	0.08	0.06	-0.04	-0.03	-0.03	-0.05	-0.09	0.02	0.21	0.29	-0.03	0.02	-0.08	-0.05
21 Advertising intensity	0.03	0.03	-0.05	0.00	0.01	-0.04	0.05	0.22	-0.07	-0.20	-0.05	-0.07	-0.06	-0.04
22 Firm receptivity	0.03	0.39	-0.07	-0.01	0.01	-0.01	-0.09	-0.13	-0.16	-0.08	0.00	0.01	0.05	0.00
23 Tobin's Q	2.52	1.42	0.03	-0.02	0.07	-0.05	-0.05	0.32	0.31	-0.03	-0.03	0.02	-0.11	-0.06

(Continues)

Table I. (Continued)

	13	14	15	16	17	18	19	20	21	22
14	-0.16									
15	0.11	-0.08								
16	-0.04	0.07	0.06							
17	0.06	-0.02	0.04	0.00						
18	0.04	-0.02	-0.04	-0.06	-0.03					
19	-0.07	0.08	0.17	0.03	-0.10	10.0-				
20	0.05	-0.06	-0.11	-0.04	0.01	11.0	-0.19			
21	-0.01	-0.04	0.07	-0.02	0.00	0.03	-0.17	0.03		
22	-0.01	-0.01	-0.02	0.04	-0.05	0.05	0.08	-0.04	-0.14	
23	0.13	-0.20	0.12	-0.12	0.07	0.04	-0.24	0.34	0.16	-0.17

Note: N = 1587.

Table II. Heckman probit models predicting firm responsiveness

	<i>Selection</i>		<i>Firm responsiveness</i>				
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>
E-petition connectivity		0.049** (0.015)	0.045** (0.016)	0.050** (0.016)	0.050** (0.016)	0.051** (0.016)	0.047** (0.017)
E-petition velocity		0.003** (0.001)	0.003** (0.001)	0.003* (0.001)	0.003** (0.001)	0.003** (0.001)	0.003* (0.001)
Traditional media coverage		0.418* (0.183)	0.428* (0.184)	0.414* (0.182)	0.384* (0.184)	0.424* (0.183)	0.399* (0.187)
Societal salience		2.427 (1.761)	2.442 (1.804)	2.354 (1.782)	2.485 (1.779)	3.969 (2.099)	3.842 (2.183)
Firm reputation	0.603*** (0.140)	0.265 (0.177)	0.192 (0.237)	0.309 (0.196)	0.231 (0.179)	0.438 (0.234)	0.398 (0.339)
Firm visibility	7.898*** (1.366)	-0.554 (0.630)	-0.512 (0.630)	-0.613 (0.603)	-0.554 (0.626)	-0.547 (0.624)	-0.595 (0.586)
Free cash flow	0.022* (0.010)	-0.0133 (0.009)	-0.0146 (0.009)	-0.013 (0.009)	-0.0128 (0.009)	-0.0135 (0.009)	-0.014 (0.007)
E-petition connectivity × Firm reputation			0.024 (0.042)				0.026 (0.040)
E-petition velocity × Firm reputation				-0.001 (0.001)			-0.001 (0.001)
Traditional media coverage × Firm reputation					0.256 (0.250)		0.196 (0.219)
Societal salience × Firm reputation						-3.570 (2.756)	-3.318 (3.158)
Customer		0.633** (0.239)	0.625* (0.247)	0.633** (0.241)	0.638** (0.226)	0.646** (0.237)	0.642** (0.237)
Employee		0.389 (0.519)	0.369 (0.530)	0.392 (0.520)	0.406 (0.518)	0.431 (0.531)	0.424 (0.546)
Social movement		1.635*** (0.241)	1.629*** (0.232)	1.639*** (0.241)	1.657*** (0.244)	1.671*** (0.234)	1.687*** (0.229)
NGO filer		0.067 (0.254)	0.059 (0.252)	0.066 (0.255)	0.071 (0.257)	0.065 (0.254)	0.055 (0.253)
ln(Filer expertise)		-0.184 (0.173)	-0.181 (0.177)	-0.186 (0.173)	-0.190 (0.175)	-0.195 (0.169)	-0.201 (0.174)
Other firms targeted		0.055 (0.194)	0.051 (0.196)	0.036 (0.195)	0.058 (0.196)	0.065 (0.194)	0.029 (0.194)
Overlap with shareholder resolution		0.0944 (0.176)	0.0807 (0.181)	0.110 (0.178)	0.104 (0.178)	0.080 (0.173)	0.101 (0.173)

(Continues)

Table II. (Continued)

	Selection		Firm responsiveness				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
E-petition duration		-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.006*** (0.001)
Facebook shares		-0.009* (0.004)	-0.011 (0.006)	-0.008* (0.003)	-0.009* (0.004)	-0.009* (0.004)	-0.010 (0.005)
Perceived cost of accommodation		-0.156 (0.148)	-0.161 (0.143)	-0.150 (0.146)	-0.155 (0.149)	-0.151 (0.146)	-0.146 (0.138)
Total assets	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)
ROA	0.738 (0.721)	-1.110 (2.148)	-1.325 (2.304)	-1.034 (2.158)	-1.212 (2.172)	-1.049 (2.112)	-1.252 (2.264)
Advertising intensity	8.552** (2.976)	-16.03*** (4.805)	-16.48*** (4.894)	-16.55*** (4.845)	-15.96*** (4.786)	-16.21*** (4.743)	-17.608*** (4.692)
Firm receptivity	0.184 (0.128)	-0.649* (0.293)	-0.620* (0.303)	-0.670* (0.296)	-0.675* (0.285)	-0.669* (0.293)	-0.690* (0.293)
Tobin's Q	0.036 (0.064)	0.333*** (0.094)	0.335*** (0.097)	0.333*** (0.094)	0.340*** (0.098)	0.339*** (0.091)	0.346*** (0.096)
Year fixed effect	Included	Included	Included	Included	Included	Included	Included
Industry fixed effect	Included	Included	Included	Included	Included	Included	Included
Most common issue fixed effect		Included	Included	Included	Included	Included	Included
Internet penetration	0.107*** (0.011)						
Governance shareholder resolution	0.124** (0.044)						
Constant	-9.936*** (0.932)	10.63*** (1.577)	10.64*** (1.514)	10.67*** (1.602)	10.66*** (1.600)	10.57*** (1.578)	10.685*** (1.552)
athrho		-0.773* (0.326)	-0.828* (0.383)	-0.778* (0.320)	-0.755* (0.327)	-0.769* (0.323)	-0.820* (0.358)
N	3899	1587	1587	1587	1587	1587	1587

Note: Cluster standard errors in parentheses.

***p < 0.001; **p < 0.01; *p < 0.05.

As outlined in hypothesis 3, we expect that the degree of traditional media coverage of an e-petition is also positively related to firm responsiveness. Our results offer support for this hypothesis because traditional media coverage ($\beta=0.418$, $p=0.022$, $AME=0.018$, $p=0.019$) is positively related to firm responsiveness. The AME of media attention indicates that increasing an e-petition's traditional media coverage by one standard deviation increases the probability of firm responsiveness by about one percentage point. This finding indicates that e-petitions with relatively high (+1 SD) traditional media coverage are 1.15

times more likely to lead to firm responsiveness, when compared to e-petitions with a low (-1 SD) traditional media coverage. Our hypothesis concerning societal salience (H4) is the only hypothesis where we do not find support for the main effects. These empirical findings, then, support our theorization that e-petition connectivity, velocity, and coverage of traditional media can mitigate the significance of slacktivism and induce firm responsiveness.

For hypothesis 5, we expect a firm's reputation to positively moderate the effect of e-petition connectivity, velocity, traditional media coverage, and societal salience on firm responsiveness. Models 3–7 do not provide support for the moderating role of firm reputation: e-petition connectivity ($\beta=0.024$, $p=0.555$), e-petition velocity ($\beta=-0.001$, $p=0.593$), traditional media coverage ($\beta=0.256$, $p=0.307$), and societal salience ($\beta=-3.57$, $p=0.195$). Following the recommendations of Busenbark et al. (2022), we calculate the AME value of reputation across different values of our independent variables. Specifically, we are interested in determining if only high levels of reputation impacted the independent variables. The figures, available upon request, show that even at high levels ($+2$ SD) of our independent variables, firm reputation does not have a positive effect on firm responsiveness.

In Table III, models 1–5 provide our results regarding the moderating effect of firm visibility. Our findings provide empirical support for hypothesis 6, which predicts that a firm's visibility positively moderates the effect of an e-petition's connectivity, velocity, traditional media coverage, and societal salience on firm responsiveness, in regard to e-petition connectivity ($\beta=0.168$, $p<0.001$). Since interactions in probit models are difficult to interpret (Hoetker, 2007), we first plot the AME of the independent variable across different values of the moderation variable (see Busenbark et al., 2022). Then, we plot and compare the slopes of the independent variable at lower (-1 SD) and higher ($+1$ SD) levels of the moderation. Consistent with our theorization, Figure 2a demonstrates that the AME associated with e-petition connectivity intensifies with the increase of firm visibility; but surprisingly, at higher levels of firm visibility (above $+1$ SD), the effect starts to decrease. Similarly, Figure 2b displays that the probability of firm responsiveness with low firm visibility is 18 per cent with a low ($+1$ SD) and 20 per cent with a high ($+1$ SD) e-petition connectivity – an increase of 11 per cent. Meanwhile, the probability of firm responsiveness with high firm visibility is 10 per cent with a low ($+1$ SD) and 14 per cent with a high ($+1$ SD) e-petition connectivity – an increase of 40 per cent, reinforcing the amplification effect of our theorization.

For hypothesis 7, we predict that a firm's resource availability positively moderates the effect of e-petition connectivity, velocity, traditional media coverage, and societal salience on firm responsiveness. In Table III, models 6–10 provide support for hypothesis 7 with respect to the moderation of e-petition connectivity ($\beta=0.008$, $p<0.001$) and traditional media attention ($\beta=0.049$, $p=0.001$). Figure 3a indicates that the AME of e-petition connectivity increases with higher levels of financial slack, supporting our theorization that firms with more resources are more responsive to e-petition connectivity. Figure 3b shows that firms with more available resources ($+1$ SD) are more likely to respond to e-petition connectivity, as compared to firms with fewer available resources (-1 SD). The interaction between e-petition traditional media coverage and firm financial slack also aligns with our theorization that resource availability increases firm responsiveness to e-petitions. Figure 4a denotes that the AME of the degree of traditional media coverage increases with additional

Table III. Heckman probit models predicting firm responsiveness

	<i>Firm responsiveness</i>									
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>	<i>Model 8</i>	<i>Model 9</i>	<i>Model 10</i>
E-petition connectivity	0.031* (0.015)	0.054*** (0.016)	0.050*** (0.0159)	0.048*** (0.015)	0.032* (0.014)	0.010 (0.020)	0.049*** (0.016)	0.051*** (0.016)	0.049*** (0.015)	0.018 (0.015)
E-petition velocity	0.003*** (0.001)	0.002* (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.002* (0.001)	0.003*** (0.001)	0.002 (0.001)	0.003* (0.001)	0.003*** (0.001)	0.002* (0.001)
Traditional media coverage	0.330 (0.181)	0.395* (0.185)	0.288 (0.327)	0.423* (0.185)	-0.111 (0.350)	0.194 (0.180)	0.403* (0.173)	-0.399 (0.285)	0.420* (0.184)	-0.310 (0.316)
Societal salience	1.675 (1.638)	1.754 (1.618)	2.409 (1.795)	0.580 (2.158)	-1.043 (1.890)	2.170 (2.044)	2.222 (1.849)	1.297 (2.059)	1.952 (1.945)	0.272 (2.042)
Firm reputation	0.441* (0.222)	0.332 (0.191)	0.280 (0.166)	0.236 (0.183)	0.446 (0.232)	0.293 (0.221)	0.239 (0.186)	0.384* (0.175)	0.262 (0.179)	0.337 (0.190)
Firm visibility	-2.550*** (0.558)	-1.313 (0.812)	-0.586 (0.687)	-0.940 (0.613)	-3.566*** (0.824)	-0.339 (0.595)	-0.381 (0.617)	-0.306 (0.656)	-0.550 (0.618)	-0.213 (0.588)
Free cash flow	0.009 (0.009)	-0.007 (0.009)	-0.013 (0.009)	-0.014 (0.010)	0.007 (0.009)	-0.022* (0.010)	-0.016 (0.010)	-0.021 (0.011)	-0.015 (0.011)	-0.039*** (0.013)
E-petition connectivity × Firm visibility	0.168*** (0.028)				0.177*** (0.038)					
E-petition velocity × Firm visibility		0.004*** (0.001)			0.003*** (0.001)					
Traditional media coverage × Firm visibility			0.468 (1.068)		1.580 (1.233)					
Societal salience × Firm visibility				8.516 (6.545)	12.457 (7.008)					
E-petition connectivity × Free cash flow						0.008*** (0.001)				0.007* (0.002)

(Continues)

Table III. (Continued)

	<i>Firm responsiveness</i>									
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>	<i>Model 8</i>	<i>Model 9</i>	<i>Model 10</i>
E-petition velocity × Free cash flow							0.0002 (0.0002)			0.000 (0.000)
Traditional media coverage × Free cash flow								0.049** (0.015)		0.033 (0.021)
Societal salience × Free cash flow									0.032 (0.051)	0.210 (0.054)
Customer	0.748** (0.235)	0.600* (0.244)	0.620* (0.244)	0.599* (0.256)	0.701* (0.244)	0.677* (0.276)	0.642* (0.256)	0.615* (0.304)	0.638** (0.238)	0.655* (0.305)
Employee	0.389 (0.533)	0.323 (0.504)	0.390 (0.519)	0.371 (0.520)	0.370 (0.534)	0.329 (0.538)	0.414 (0.523)	0.406 (0.542)	0.385 (0.519)	0.315 (0.571)
Social movement	1.869*** (0.228)	1.629*** (0.245)	1.637*** (0.244)	1.632*** (0.242)	1.907*** (0.249)	1.798*** (0.235)	1.612*** (0.244)	1.703*** (0.255)	1.639*** (0.241)	1.819*** (0.246)
NGO filer	-0.127 (0.262)	0.011 (0.258)	0.067 (0.256)	0.081 (0.255)	-0.141 (0.262)	-0.026 (0.277)	0.024 (0.261)	0.080 (0.266)	0.070 (0.253)	0.006 (0.277)
ln(Filer expertise)	-0.264 (0.190)	-0.181 (0.170)	-0.187 (0.173)	-0.204 (0.174)	-0.330 (0.202)	-0.145 (0.225)	-0.169 (0.180)	-0.174 (0.196)	-0.183 (0.173)	-0.180 (0.247)
Other firms targeted	-0.139 (0.194)	-0.030 (0.194)	0.053 (0.195)	0.052 (0.189)	-0.200 (0.188)	-0.131 (0.193)	0.069 (0.196)	-0.016 (0.195)	0.057 (0.192)	-0.168 (0.180)
Overlap with shareholder resolution	-0.025 (0.165)	0.088 (0.180)	0.088 (0.181)	0.117 (0.186)	0.043 (0.158)	0.229 (0.147)	0.103 (0.169)	0.107 (0.166)	0.092 (0.175)	0.200 (0.148)
E-petition duration	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.006*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)	-0.006*** (0.000)
Facebook shares	-0.010*** (0.003)	-0.012*** (0.003)	-0.009* (0.004)	-0.008* (0.004)	-0.013*** (0.003)	-0.023*** (0.007)	-0.013 (0.008)	-0.011* (0.005)	-0.008* (0.004)	-0.026*** (0.009)

(Continues)

Table III. (Continued)

	Firm responsiveness									
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Perceived cost of accommodation	-0.143 (0.133)	-0.186 (0.146)	-0.155 (0.148)	-0.143 (0.146)	-0.131 (0.128)	-0.161 (0.141)	-0.107 (0.156)	-0.148 (0.157)	-0.155 (0.147)	-0.137 (0.155)
Total assets	-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)	-0.000 (0.000)	0.000 (0.000)	0.000* (0.000)
ROA	-2.633 (2.088)	-1.262 (2.015)	-1.043 (2.152)	-1.387 (2.100)	-2.796 (2.09)	-0.762 (2.492)	-1.260 (2.094)	-0.293 (2.362)	-1.139 (2.128)	-0.841 (2.63)
Advertising intensity	-16.82*** (4.368)	-17.34*** (4.540)	-16.03*** (4.805)	-16.61*** (4.762)	-17.689*** (4.400)	-20.35*** (4.867)	-15.56*** (4.877)	-16.92*** (4.996)	-16.05*** (4.763)	-20.688*** (4.869)
Firm receptivity	-0.880*** (0.245)	-0.805*** (0.268)	-0.662* (0.295)	-0.656* (0.289)	-0.985*** (0.229)	-0.621 (0.330)	-0.671* (0.294)	-0.717* (0.312)	-0.653* (0.294)	-0.697* (0.333)
Tobin's Q	0.382*** (0.097)	0.327*** (0.085)	0.329*** (0.092)	0.341*** (0.096)	0.372*** (0.097)	0.300** (0.099)	0.316*** (0.092)	0.286** (0.102)	0.332*** (0.094)	0.268*** (0.102)
Year fixed effect	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Industry fixed effect	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Most common issue fixed effect	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Constant	11.28*** (1.783)	10.82*** (1.502)	10.63*** (1.566)	10.68*** (1.547)	11.515 (1.745)	11.40*** (1.448)	10.69*** (1.521)	11.13*** (1.532)	10.63*** (1.565)	11.723 (1.359)
athrho	-1.004*** (0.232)	-0.947*** (0.307)	-0.771* (0.332)	-0.825*** (0.310)	-1.159 (0.262)	-0.919* (0.416)	-0.771* (0.333)	-0.731* (0.370)	-0.788* (0.322)	-1.025 (0.495)
N	1587	1587	1587	1587	1587	1587	1587	1587	1587	1587

Note: Cluster standard errors in parentheses. ***p < 0.001; **p < 0.01; *p < 0.05.

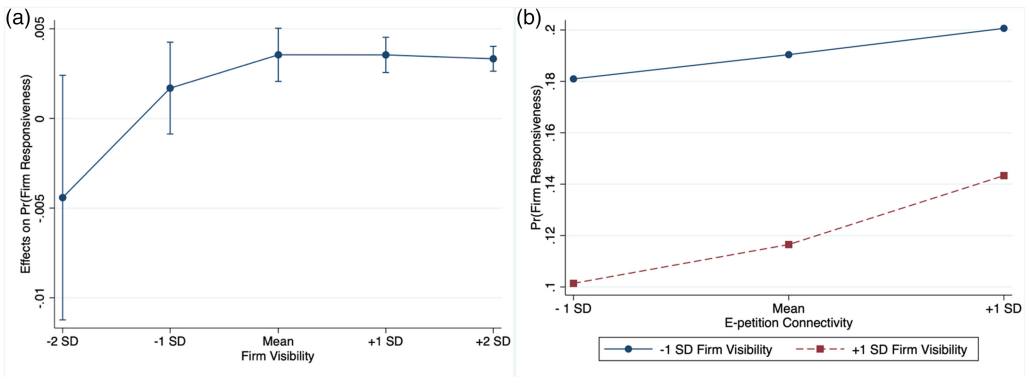


Figure 2. (a, left) The AME of e-petition connectivity across levels of firm visibility. (b, right) The effect of E-petition connectivity on firm responsiveness at high and low firm visibility [Colour figure can be viewed at wileyonlinelibrary.com]

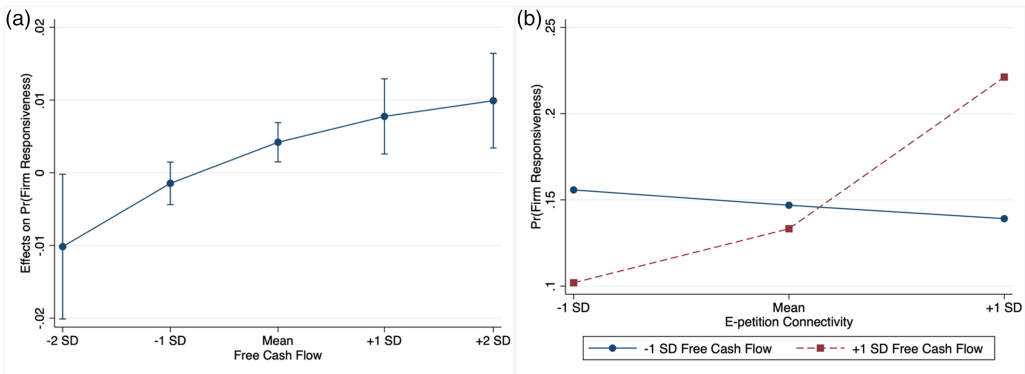


Figure 3. (a, left) The AME of e-petition connectivity across levels of free cash flow. (b, right) The Effect of E-petition connectivity on firm responsiveness at high and low free cash flow [Colour figure can be viewed at wileyonlinelibrary.com]

financial slack. Figure 4b indicates that the probability of firm responsiveness with low firm resource availability is 16 per cent with a low (+1 SD) and 13 per cent with a high (+1 SD) traditional media coverage. The probability of firm responsiveness with high firm resource availability is 11 per cent with a low (+1 SD) and 14 per cent with a high (+1 SD) traditional media coverage.

Post-hoc Analysis

We theorize that societal salience of issues addressed in e-petitions could pressure targeted firms to respond. However, we find no empirical support for societal salience in the direct or moderating hypotheses. This prompts us to consider that societal salience may work as a boundary condition rather than as a source of pressure to firm responsiveness. Table IV, models 1–3 show that societal salience positively moderates the effects

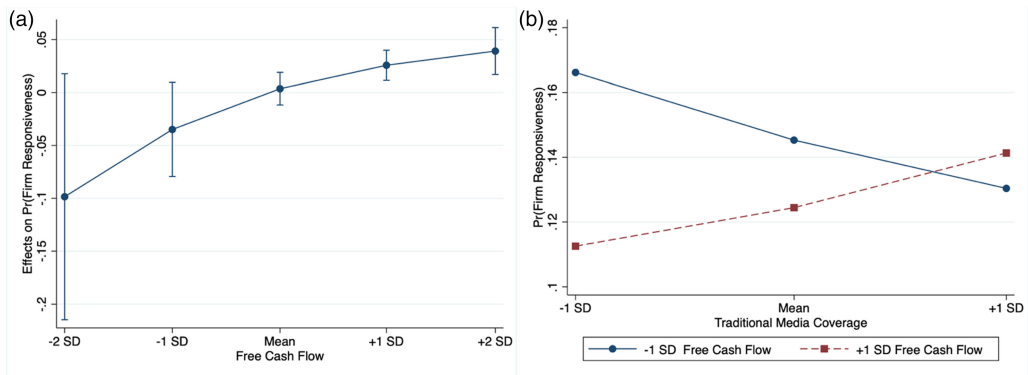


Figure 4. (a, left) The AME of traditional media coverage across levels of free cash flow. (b, right) The effect of traditional media coverage on firm responsiveness at high and low free cash flow [Colour figure can be viewed at wileyonlinelibrary.com]

of traditional media coverage on firm responsiveness. Figure 5a show that the AME of traditional media coverage increases with higher levels of societal salience. Likewise, Figure 5b display that when societal salience is high (+1 SD), firms are more likely to respond to e-petitions with traditional media coverage, as compared to issues with low societal salience (-1 SD). Although we did not theorize these findings, societal salience works as a boundary condition, amplifying the effect of traditional media coverage on firm responsiveness rather than a direct source of pressure. One possible explanation is that when e-petitions garner support through traditional media coverage, societal salience indicates the likelihood of an e-petition spreading to other stakeholder realms, thus increasing the ability of traditional media coverage to disrupt the targeted firm's image and reputation.

Robustness Checks

We conduct several robustness checks to further validate our results. First, we examine whether our findings are robust with alternative measures of firm reputation. Using the Fortune's Most Admired Firms ranking and following the previous literature (King, 2008; McDonnell and King, 2013), we create an ordinal reputation score and use it instead of our current reputation measure. The results with this measure are similar to those reported in our analyses, which find that firm reputation is consistently insignificant. Second, we re-estimate our analysis including only e-petitions initiated by less salient stakeholders (i.e., excluding customers, employees, NGOs, and social movement campaigns) and find similar results to those reported in our main analysis. Third, we examine the robustness of our findings to the endogeneity concerns related to omitted variable bias. We assess whether our findings are robust enough to account for a time-invariant-omitted variable bias by including firm fixed effects with the between-within method (see Allison, 2009; Certo et al., 2017). These results are similar to those presented in our analysis. After that, we evaluate the robustness of our findings to time-variant-omitted variable biases, which are not captured with fixed effects (Certo et al., 2017). To do so, we use the robustness of inference to replacement

Table IV. Heckman probit models predicting firm responsiveness

	<i>Firm responsiveness</i>		
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
E-petition connectivity	-0.016 (0.021)	0.049** (0.016)	0.051** (0.016)
E-petition velocity	0.003* (0.001)	0.001 (0.001)	0.003** (0.001)
Traditional media coverage	0.455** (0.150)	0.406* (0.179)	0.345* (0.162)
Societal salience	-3.917 (3.266)	1.508 (1.752)	1.592 (1.923)
Firm reputation	0.192 (0.294)	0.239 (0.171)	0.355* (0.174)
Firm visibility	-0.974 (0.590)	-0.650 (0.608)	-0.461 (0.615)
Free cash flow	-0.014 (0.012)	-0.013 (0.009)	-0.016 (0.010)
E-petition connectivity × Societal salience	2.978*** (0.641)		
E-petition velocity × Societal salience		0.099 (0.064)	
Traditional media coverage × Societal salience			7.485* (3.257)
Customer	0.552 (0.339)	0.620** (0.233)	0.627* (0.248)
Employee	0.356 (0.646)	0.406 (0.516)	0.441 (0.529)
Social movement	1.639*** (0.314)	1.592*** (0.250)	1.725*** (0.245)
NGO filer	0.132 (0.319)	-0.022 (0.252)	0.065 (0.259)
ln(Filer expertise)	-0.416 (0.255)	-0.182 (0.172)	-0.190 (0.179)
Other firms targeted	-0.196 (0.247)	0.079 (0.190)	0.042 (0.197)
Overlap with shareholder resolution	0.155 (0.315)	0.0828 (0.169)	0.152 (0.166)

(Continues)

Table IV. (Continued)

	<i>Firm responsiveness</i>		
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
E-petition duration	-0.007*** (0.001)	-0.007*** (0.001)	-0.007*** (0.001)
Facebook shares	-0.012* (0.005)	-0.012* (0.005)	-0.009* (0.004)
Perceived cost of accommodation	-0.191 (0.202)	-0.118 (0.142)	-0.151 (0.155)
Total assets	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
ROA	-1.568 (2.297)	-1.571 (1.879)	0.248 (2.070)
Advertising intensity	-21.39*** (5.644)	-15.32*** (4.486)	-15.90*** (4.985)
Firm receptivity	-0.845** (0.323)	-0.724** (0.257)	-0.694* (0.269)
Tobin's Q	0.310** (0.114)	0.318*** (0.087)	0.322*** (0.096)
Year fixed effect	Included	Included	Included
Industry fixed effect	Included	Included	Included
Most common issue fixed effect	Included	Included	Included
Constant	14.21*** (1.901)	10.61*** (1.457)	10.63*** (1.675)
athrho	-1.254* (0.608)	-0.857** (0.308)	-0.681* (0.318)
N	1587	1587	1587

Note: Cluster standard errors in parentheses.

***p < 0.001; **p < 0.01; *p < 0.05.

(RIR) threshold which indicates the percentage of a parameter estimate that would need to be biased in order to invalidate inference (Busenbark et al., 2022; Xu and Frank, 2021). In other words, RIR quantifies the percentage of cases that would have to be overturned by an omitted variable with an effect of zero to nullify our findings. For an omitted variable to overturn the relationship between a certain number of e-petition supporters and firm responsiveness, it would need to replace 40.5 per cent of significant cases. E-petition velocity and traditional media coverage would need, respectively, to have 24.48 and 16.26 per cent of cases replaced by cases with an effect of zero. Altogether, it indicates that our results are unlikely to be driven by omitted variable bias, given results of the firm fixed effects and RIR analyses.

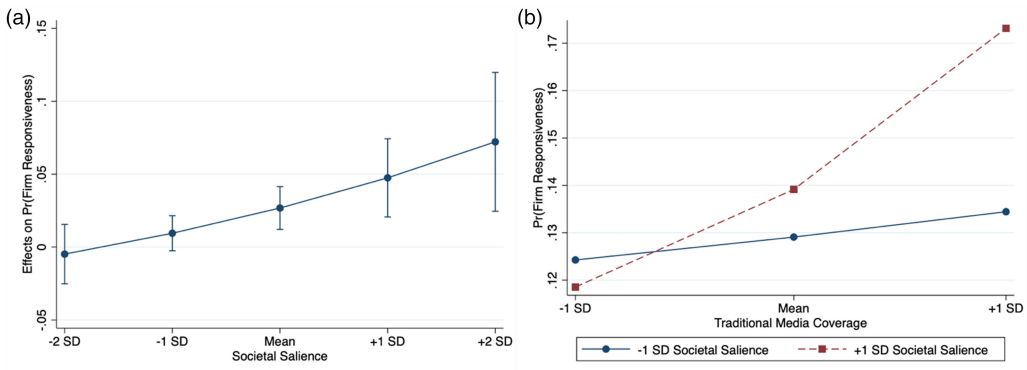


Figure 5. (a, left) The AME of traditional media coverage across levels of societal salience. (b, right) The effect of traditional media coverage on firm responsiveness at high and low societal salience [Colour figure can be viewed at wileyonlinelibrary.com]

DISCUSSION

Despite a rich body of research on firm responses to social activism, scholars have only begun to explore how digital technologies impact responsiveness (Briscoe and Gupta, 2016; Luo et al., 2016). This paper contributes to the emerging debate about how social media alters relational dynamics between firms and social activists (Barnett et al., 2020; Blevins and Ragozzino, 2020; Etter et al., 2019). On one hand, some scholars theorize that digital activism such as e-petitions requires fundamental changes to firm response strategies (Wang et al., 2021). E-petitions rely on the mechanics of social media; in turn, these mechanics may affect how social evaluations of firms are generated and spread (Etter et al., 2019). On the other hand, some scholars dispute that social media introduces dynamism of any significance (Blevins and Ragozzino, 2020; Etter and Vestergaard, 2016), while others argue that the rise of slacktivism actually constrains the ability of stakeholders to successfully bring issues to firms' attention and alter their behaviour (Barnett et al., 2020). Examining 1587 e-petitions targeting Fortune 500 firms, we find support for our hypotheses about the effects of e-petition connectivity, velocity, and traditional media coverage in eliciting firm responsiveness. Furthermore, our findings indicate that firm visibility and resource availability can represent boundary conditions for a firm's vulnerability and ability to respond to digital activism.

Theoretical Contributions

We move the conversation forward about the role of activism via social media, and specifically the role of e-petitions, as an effective tool to change business behaviour. Our findings support the idea that social media has changed the dynamic of content production and consumption by providing new and unexpected ways in which information can flow (George and Leidner, 2019; Wang et al., 2021). Historically, traditional media provided a gatekeeping function for firm image and reputation. Today, social media enables a broad set of stakeholders to express critiques of firm policies and practices, leading

to a more dynamic and multifaceted development of firm image and reputation (Etter et al., 2019). The presence of social media reduces the capacity of traditional media and firms' public relations efforts to shape public attention and story narratives (Etter et al., 2019; Kaplan and Haenlein, 2010).

Our empirical findings suggest that e-petition connectivity and velocity may directly pressure firms into social change. Soule (2018) emphasizes the need to parse the direct and indirect effects of social movements. We provide empirical evidence that e-petition connectivity directly leads to increased pressure on targeted firms to respond to e-petition demands. This finding may stem from the ability of e-petition connectivity to generate large networks of diverse stakeholders that increase the e-petition's importance and credibility (George and Leidner, 2019). Our empirical findings are even stronger for velocity, which focuses on how quickly e-petition supporters spread information across their personal social media networks. By sharing this information online, e-petition supporters increase visibility of the e-petition request and amplify its message, as it is 'heard through repetition' (George and Leidner, 2019, p. 17). Our empirical evidence suggests that when e-petition sharing occurs at higher rates, the e-petition filer and supporters better control the framing of the social issue, which intensifies the threat to disrupt the targeted firm's reputation and image. It is noteworthy that the effect of e-petition velocity is larger than e-petition connectivity. A possible reason is that velocity can lead to virality, suggesting wide reach across social networks, combined with affective evaluation of the shared content and active discussion of the message (Alhabash and McAlister, 2014). Such virality increases pressure on firm reputation and image. Consequently, firms may respond more promptly to e-petition velocity to minimize such threats. It should also be noted that the impact of velocity via social media echoes traditional media's role of increasing the number of people who are aware of the social protests. The result is similar in both instances, as firms are likely to respond more promptly as threats to their reputation and image intensify.

Moreover, we explain that e-petition connectivity and velocity are based on connective action, where the digital platform becomes the organizational mechanism for loosely connected individuals with different levels of commitment to directly pressure firms to make social changes. This new pathway of influence substantially lowers the cost of participating in collective engagement, eliminates the necessity for organization- or leader-centred social movements, and minimizes the commitment required to participate in a collective effort (Bennett and Segerberg, 2015; King and Carberry, 2020). We deepen the conversation about social activism by pushing the boundaries of social movement research and demonstrating that connective action through digital media allows new forms of social activism to threaten a firm's reputation and image. This leads to the activists' desired results – namely, firm responses to online demands – that mirror responses to highly orchestrated collective actions such as boycotts and protests (Briscoe and Gupta, 2016).

These empirical results are important in our theorizing that perceptions of slacktivism are over-emphasized in the debate about social media impact on firm responsiveness. Under a more traditional perspective of social movements, the existence of slacktivists undermines the ability of collective action to emerge and pressure firms to make social changes (Barnett

et al., 2020). Slacktivists are perceived as less effective than participants in traditional social movements – individuals who share an activist identity and stand ready to commit to action to pursue their goals (Den Hond and De Bakker, 2007; King and Carberry, 2020). Our findings counter arguments that social media limit stakeholder ability to influence firms or that slacktivist threat is insufficient to generate firm response (Barnett et al., 2020). Rather, our empirical results reveal that perceptions of slacktivism are less important than the pressure of e-petition connectivity, and velocity, magnified by traditional media, to prompt firm responses to digital activism. With this, we expand the conversation about connective action by showing this new form of collective organizing directly impacts firms.

In addition, we also evaluate how e-petition connectivity, velocity, traditional media coverage, and societal salience interact with firm characteristics previously found to matter in responsiveness to social issues, such as reputation, visibility, and resource slack. In some instances, consistent with prior literature, we find those effects are amplified by firm vulnerabilities, such as firm visibility (Benton and You, 2019; Brammer and Millington, 2006; Kim and Davis, 2016; King, 2008; Rehbein et al., 2004). However, we do not find empirical support for the amplifying effect of firm reputation predicted by prior scholarship (Harrison et al., 2009; King and Carberry, 2018; McDonnell and King, 2013).

Taken together, our results suggest that the social media context has changed the underlying story of when firms respond to activist demands for social change – especially with respect to stakeholders who do not have a primary relationship with the firm and/or SMOs. Moreover, our results raise questions about the importance of firm reputation and visibility in shaping firm responsiveness. Although previous research has found that firm reputation and visibility influence firm responsiveness to stakeholder activism (Rehbein et al., 2004), our results do not provide support for the idea that reputation and visibility directly impact a firm's response in the context of e-petitions. A firm's reputation, for instance, may significantly influence the targeting decisions of e-petition filers, but contrary to prior research, it does not have any association with firm responsiveness to e-petitions.

Our findings show that visibility and resource availability positively moderate the impact of e-petition connectivity. Hence, firm vulnerabilities and abilities, in terms of firm visibility and resource availability, function as boundary conditions, amplifying the effect of e-petition characteristics rather than direct sources of firm responsiveness. One point of discrepancy, though, is that at very high levels of visibility, the moderation effect decreases, indicating that higher visibility may render firms less responsive to digital activism. One possible explanation is that very high visibility may imply that the firm is already garnering lots of publicity; therefore, additional attention related to the petition does not pose a significant threat to the firm. Another interpretation is that highly visible firms receive a disproportionately large number of e-petitions to begin with, so the firms may need to be more selective in terms of the e-petitions to which they respond.

Likewise, prior research argues that firms with more resource availability are more likely to respond to activism (Durand et al., 2019). In our findings, resource availability plays a moderating role – not a direct one. When firms have financial resources, there are several scenarios where they may become more responsive to the threat of e-petition connectivity and traditional media coverage. First, we find that

financially healthy firms are more likely to take action when an e-petition's connectivity increases as it garners more supporters. Second, firms with financial resources are significantly more likely to respond to e-petitions covered by traditional media outlets. These findings indicate that as connectivity and traditional media coverage increase, financially healthy firms find the benefits of taking action ultimately outweigh the costs of accommodating e-petition filers (Durand et al., 2019; Haleblian et al., 2012; King, 2011; Stadler and Lin, 2017).

While most of our explanations of firm responsiveness to digital activists centre around the direct pressure of e-petition connectivity and velocity, we also find that traditional media coverage can influence firm behaviour by broadcasting activist concerns about firm practices (see Della Porta and Diani, 1999; Eesley et al., 2016; King, 2008). Media coverage can lead to increased and unwanted attention from the public, which increases pressure on firms to respond. In addition, our findings suggest that traditional media may also legitimize the claims being made in e-petitions and help firms prioritize which activist demands require a response.

Limitations and Future Research

Our study provides new insights about firm responsiveness to e-petitions based on an integrated approach at the intersection of social movement, social media, and connective action literature. The model that we develop and test takes into account several aspects of social movements, digital activism, and firm vulnerabilities that impact response to e-petitions. Still, our study contains limitations that future research could address to further examine when and why firms respond to digital activists. For example, management scholars have posited that issue salience – the degree to which an issue resonates with firm managers (Bundy et al., 2013) – is a source of firm responsiveness (Durand et al., 2019). Future research can gather data from the perspective of managers to explore whether issue salience represents an additional boundary for e-petition connectivity, velocity, traditional media coverage, and societal salience.

In this paper, we gathered e-petitions from one source, [Change.org](#), and focused on Fortune 500 firms. By default, these firms may incur greater scrutiny and have a different approach to activism than smaller firms. Future research could explore firm responsiveness to digital activism in different contexts. Furthermore, our findings suggest that the e-petitions filed by customers or as part of social movement efforts, and firm characteristics such as advertising intensity and previous firm receptivity to activism, may elicit more firm responsiveness. Future research may examine further those variables in the context of digital activism.

Another limitation of this study is that there was limited information about some of the characteristics of e-petition supporters. Various e-petition supporters may differ in terms of social clout, social media networks and influence, and access to traditional media, for instance. Future research could investigate whether support from public figures (e.g., artists or other celebrities) contributes to firm responsiveness. Marketing literature has shown that celebrity endorsements can have positive effects on sales and brand evaluations (Bergkvist and Zhou, 2016). In the context of social media, a celebrity endorsement of digital activism may further amplify connectivity or velocity. Future research can also look more closely at the underlying drivers of connectivity and velocity. For example, it would be interesting to

examine if the similarity between e-petitions, and/or how closely e-petitions are filed to one another, leads to a cumulative or fatigue effect in pressuring firms to change their practices. Another possible research area would be to examine how the content of e-petitions, such as their language, rhetoric, emotional content, and clarity, affect connectivity and velocity.

Additionally, consistent with other activist research, we do not examine the degree that firms acquiescing to e-petition filers actually implement social changes. Future research could gather data from the perspective of managers regarding the impact of digital activism and the decision-making process for responding to online demands. Last, management scholars have shown that organizational and chief executive officer (CEO) ideology as well as other CEO traits influence overall social activities of firms (Briscoe et al., 2014; Gamache et al., 2020). Future research, then, can explore how these corporate opportunity structures interact with external pressures generated by digital activism to shape firm responsiveness.

Practical Implications

Our study provides important practical implications. For e-petition supporters, our study offers good news: even while some researchers construe e-petitions as slacktivism, firms are directly responsive when the petition garners connectivity, velocity, and traditional media coverage. Contrary to recent theorizing about slacktivism (Barnett et al., 2020), e-petitions shared on social media pose a credible threat to firm image, stimulating changes on social issues. While we limited our examination of digital activism to e-petitions specifically, their direct impact on firms is significant for all types of digital activism. Indeed, other forms of digital activism may be even more impactful – potentially demanding more resources or effecting operations (e.g., hacktivism). Our study highlights that social media and digital activism are changing firm–stakeholder relationships in significant ways that should be further studied and analysed. When facing the threat of damage, our results suggest that firms with sufficient resources respond to e-petitions regardless of other fundamental factors (e.g., their reputation or desire for social approval). Given inherent resource constraints, this response to e-petitions may not be sustainable, requiring more discernment from managers. Future research might identify circumstances when responding to digital activism is most beneficial to firms. With an ever-widening array of stakeholders, and the potential for faster dispersal of social issues via social media platforms, making informed decisions about activist requests is critical.

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NOTES

- [1] We use the term *connective action* to refer to the logic of connective action in the rest of the manuscript.
- [2] An e-petition filer is any stakeholder who may file an e-petition targeting a firm to change its policies and processes. An e-petition supporter is any stakeholder who signs the e-petition.

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