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Private politics scholarship portrays companies' organizational vulnerabilities as opportunities for social activists because they signal openness to change. But meaningful organizational change requires not only openness to change, but capacity to mobilize resources to implement it. We develop a resource reconfiguration perspective that posits companies' capacity to reconfigure organizational resources is an important determinant of their responses to private political activism. Furthermore, we highlight the possible trade-offs when organizations respond to activist demands by reallocating resources from other social performance priorities. We test our theory in the context of global supply chain factories by investigating which are more likely to improve wage practices in response to local labor activism demanding better compensation, and whether they do so by trading off commitments to other practices. Analyzing 3,495 social audit reports of 2,352 suppliers in 114 cities in China from 2012 to 2015, we find support for our resource reconfiguration perspective. Worker activism demanding better compensation led local supplier factories to improve compliance with wage and benefits standards, but came with slower improvement in compliance with health and safety standards. Organizational structures that facilitate resource reconfiguration—piece-rate payment and unions—amplify both effects.

A growing literature recognizes that social activists can influence companies, without government intervention, by imposing disruption costs or reputational damage (e.g., Baron, 2001; Davis et al., 2005; King, 2008a; Briscoe and Gupta, 2016). Companies have developed a repertoire of responses to social activism, including increasing prosocial claims, establishing social responsibility committees, releasing social performance reports, committing to cease contested behaviors or to adopt behaviors advocated by activists, and forming alliances with activist organizations (e.g., King, 2008b; McDonnell and King, 2013; Briscoe, Chin, and Hambrick, 2014; Briscoe, Gupta, and Anner, 2015; McDonnell, King, and Soule, 2015; Odziemkowska and McDonnell, 2018). The prevailing wisdom on whether companies are subject to activism and how they respond hinges on vulnerabilities that hamper resistance, such

as economic dependence, internal power fractures, and reputational liability. These make up what is known in the literature as the corporate opportunity structure (Luders, 2006; King, 2008a; Bartley and Child, 2014; King and McDonnell, 2015; Gupta and Briscoe, 2020)

The corporate opportunity structure thus identifies conditions that signal companies' openness to change. Companies facing weaknesses in their organizational or environmental arrangements are more willing to reconsider policies and practices in the presence of social activism (Luders, 2006; Julian, Ofori-Dankwa, and Justis, 2008). However, an organization's openness to change reveals nothing about its capacity to implement change. Meaningful organizational change requires resources and the ability to effectively deploy them. Yet, some of the vulnerabilities theorized to create corporate opportunities, such as organizational instability or leadership disruptions (King, 2008a), might actually make it harder for an organization to achieve the substantive changes sought by activists. Thus, companies' responses to activism should be expected to vary not only based on their vulnerabilities, but also on their capacity to implement the changes to policy and practice demanded by activists. There is little discussion in the private politics literature of how organizations implement activist demands, yet that is essential to understanding whether private political movements can effect real changes.

We therefore propose a *resource reconfiguration* perspective that highlights the role of organizational resources and capacity in companies' response to private political movements. We posit that companies with greater capacity to shift organizational resources to social performance areas contested by activists are more likely to achieve the sought-for change. In addition, we explore what trade-offs are entailed when organizations reallocate resources from one set of priorities to another. While it is possible that responses to social activism create win-win scenarios that generate sufficient revenues or savings to cover their cost, we suspect that more

often organizations will have to shift resources from other areas to implement the social change demanded by activists. Our investigation of whether organizations siphon resources from other corporate social performance priorities to fund change in the contested area contributes to a growing literature on the indirect effects of activism. To date, studies have investigated intended positive effects, such as spillovers that diffuse activist-demanded changes from targeted firms to other firms (e.g., Briscoe and Safford, 2008; Soule, Swaminathan, and Tihanyi, 2014; Briscoe, Gupta, and Anner, 2015), but less is known about the unintended, potentially negative consequences of activism. The resource reconfiguration perspective shifts the focus from corporate opportunities to corporate actions, from organizational vulnerability to organizational capacity. In doing so, it yields a more nuanced understanding of when and how private political movements produce meaningful change.

We test our theory in the context of global value chain suppliers facing varying levels of labor activism in their institutional environments. Specifically, we examine which global supply chain factories are more likely to improve their labor practices in response to local labor activism and, of these, which factories are more likely to make trade-offs by cutting back improvement in other labor practices. Analyzing 3,495 social audit reports of 2,352 suppliers in 114 cities in China from 2012 to 2015, we find support for our resource reconfiguration perspective. Activist demands for better compensation lead local supplier factories to improve compliance with wage and benefits standards, but also to cut back improvement in compliance with health and safety standards. We further demonstrate that piece-rate payment and unions—organizational structures that facilitate resource reconfiguration—amplify both effects.

EXPLAINING COMPANIES' RESPONSES TO ACTIVISM: OPPORTUNITY STRUCTURE VERSUS ACTION STRUCTURE

A motivating question in private politics research is: "without seeking the state as a mediator, when are social movement activists—a relatively powerless community of individuals—able to influence managers to change their policies or practices?" (King, 2008a: 395). The answer that emerges in the literature depends largely on the companies' *corporate opportunity structure*. Adapted from the political opportunity structure concept in social movement theory, the corporate opportunity structure encompasses characteristics of a firm and its environment that signal susceptibility to activism.

Most private politics studies focus on the opportunities presented to social activists by companies' weaknesses and vulnerabilities (Baron, 2001; King, 2008a; Soule, 2009). According to the prevailing view, "[f]or concessions to occur, activists must do more than just perceive a signal of potential opportunities, the corporate target must actually be structurally vulnerable" (King, 2008b: 401). Studies have highlighted economic resource vulnerabilities that make it difficult for organizations to resist activism, including intense industry competition (Baron, 2001; Pacheco and Dean, 2015), economic duress (Luders, 2006), dependence on markets challenged by the movement or constituencies sympathetic to it (Luders, 2006; Pacheco and Dean, 2015), pressure from activist shareholders (Reid and Toffel, 2009) or from consumers demanding credence goods (Feddersen and Gilligan, 2001; Julian, Ofori-Dankwa, and Justis, 2008), and threats of government regulation or enforcement (King, 2008a; Reid and Toffel, 2009). Other studies focus on firms' structural and cultural vulnerabilities, including instability prompted by merger, acquisition, or restructuring (Raeburn, 2004), employee activism (Briscoe and Gupta, 2016), and divisions amongst organizational elites (Weber, Rao, and Thomas, 2009).

In addition to these economic, structural, and cultural weaknesses, studies have theorized and found that a strong reputation can make firms more vulnerable to activism. Large investor-facing and consumer-facing companies depend on their reputations to maintain sales, share price, and the loyalty of employees and other stakeholders (den Hond and de Bakker, 2007; Bartley and Child, 2014). Although such firms might be strong in other respects, their dependence on reputation makes them more vulnerable to activist attacks. Thus, "[r]eputation, in this sense, has become an important liability for firms" (King and McDonnell, 2015: 449) and activists have become skilled at making "use of the vulnerability of such firms for reputation damage with consumers" (den Hond and de Bakker, 2007: 910). Just as private political movement activity can disrupt firms' material operations or productive activities, it can also cause "disruption" to their reputations (McDonnell and King, 2013: 391; McDonnell, King, and Soule, 2015: 658). Accordingly, studies have found that firms more vulnerable to reputation threats are more responsive to social activism (Eesley and Lenox, 2006; King, 2008b; Julian, Ofori-Dankwa, and Justis, 2008; Reid and Toffel, 2009; McDonnell and King, 2013; Zhang and Luo, 2013; Luo, Zhang, and Marquis, 2016). Studies also identify reputation as a driver of field-level responses to activism, demonstrating that non-target firms are more likely to follow the lead of firms that have conceded to activism as the sought-for policy becomes less contentious (Briscoe and Safford, 2008) or its wisdom becomes clear (Briscoe, Gupta, and Anner, 2015), thus obviating the risk of negative reputational consequences for acceding.

This emphasis in the private politics literature on organizational instability and reputational vulnerability as key opportunities for social activism and organizational change suffers from three limitations that motivate our study. First, the literature's focus on corporate opportunity structure neglects the critical importance of the *corporate action structure* for

successfully implementing organizational change. Meaningful organizational change requires not only openness to change, as captured by the corporate opportunity structure, but the capacity and resources to implement change. In fact, some of the weaknesses identified as corporate opportunities, such as organizational instability and leadership disruptions, might actually impede an organization's ability to implement sustained and meaningful change on contentious issues. We propose the concept of corporate action structure to emphasize structural attributes of individual firms that influence their ability to implement new policies and practices in response to activism.

Second, the focus on reputational vulnerability keeps private political theory from explaining the outcomes of activism challenging smaller, non-branded companies. We suspect that this emphasis on reputation is an artifact of the empirical context for much private political research; namely, large, public, consumer-facing or investor-facing companies in the United States. Reputational vulnerability is an appropriate focus when examining the behaviors of such companies because when they are challenged by activists, they often stand to lose substantial brand value. However, while reputation preservation has been shown to be a key factor explaining responses to activism by such companies, it is not clear that it can explain how small, non-branded companies—the lion's share of local and global economies—will respond to activism.

Third, the theoretical emphasis on corporate reputational vulnerability has produced a body of research focused on companies' symbolic responses to activism with less attention paid to whether companies make real, substantive changes. Studies have focused on impression management (McDonnell and King, 2013), unverified public statements agreeing to activist demands (e.g., Eesley and Lenox, 2006; King, 2008b; Gupta and Briscoe, 2020), and formal

organizational structures such as CSR committees (McDonnell, King, and Soule, 2015). Such responses—public-facing and requiring few resources—are tailor-made for managing risks associated with reputational vulnerability. However, it is not clear whether they are associated with substantive organizational change on the fundamental social and environmental issues motivating private political activism. To be sure, symbolic responses are worthy of study, as they are often central to activists' broader political strategies (McDonnell and King, 2013; den Hond and de Bakker, 2007). But to fully understand the possibilities and limitations of private political activism requires more investigation of substantive changes in companies' practices.

To help fill these gaps, we extend theory about corporate opportunity structure with insights on corporate action structure. Toward this end, we propose a *resource reconfiguration* perspective that highlight the role of resources and capacity in private politics. Specifically, we posit that the capacity of companies to reconfigure organizational resources is an important determinant of social activism outcomes. We argue, too, that resource constraints can force trade-offs—reallocation of resources in response to activism—that jeopardize other social priorities. Note that resource reconfiguration is *not* equivalent to the total quantity of organizational resources or organizational slack. Rather, we focus on structural organizational conditions that facilitate resource deployment allowing for organizational change.

While studies of corporate responses to activism have paid limited attention to the role of corporate resources in shaping outcomes, two bodies of work suggest that resources should be at the forefront. First, resource mobilization theory in the social movement literature long has recognized the importance of resources in producing and sustaining activism (McCarthy and Zald, 1973, 1977; Tilly, 1978; Jenkins, 1985), stressing social activists' organizational capacity and the ability to acquire material resources as key features of successful social movements

(Jenkins, 1983; Davis et al., 2005; McAdam and Scott, 2005). This perspective contains important but largely unmined insights into when and how change is likely to occur at companies in the presence of private political activism.

Studies of the relationship between corporate resources and corporate responses to activism tend to focus on the sheer amount of resources required to comply (Lenox and Eesley, 2009) or on how resources bolster firms' "ability to fight" (Lenox and Eesley, 2009: 56) or to "resist interest group pressures" (Julian, Ofori-Dankwa, and Justis, 2008: 966) rather than on the organizations' capacity to mobilize resources to implement change. Luders (2006) acknowledges that just as resisting activism requires resources, so does acceding to its demands. However, the concession costs to which he refers arise not from the implementation of movement demands, but rather from potential backlash by counter-protesters; in that study, white segregationists threatened counter-boycotts of businesses that met the demands of civil rights activists. Thus, although Luders (2006) helpfully shifts the literature's perspective to consider costs beyond those of the disruptive movement activity, that study remains focused on the resources necessary to engage in battles with activists of various stripes and provides little purchase on what it takes for an organization to turn swords into plowshares when the dust settles.

A second body of literature on how organizations respond to turbulence in their environments can illuminate how organizations' capabilities shape their ability to meet activists' demands. Teece and colleagues stress that some capabilities, underpinned by organizational routines and managerial skills, enable organizations to more efficiently alter their resource configurations, allowing them to integrate, build, and reconfigure internal resources to address changes in the business environment (Teece, Pisano, and Shuen, 1997; Teece, 2007). While such studies are oriented toward competition, innovation, and performance (Adner and Helfat, 2003;

Helfat and Winter, 2011; Stadler, Helfat, and Verona, 2013), their key insight that capacity to alter resource deployment plays a critical role in adapting to new challenges and market turbulence can also inform our understanding of how organizations react to private political activism.

There has been some recognition in the private politics literature that response to activism depends in part on companies' capacity to alter resources. For example, Julian et al.'s (2008) survey-based study found that restaurant company managers who rated their companies as having higher organizational capacity also rated their companies as being more likely to implement changes requested by an interest group (specifically, to disclose nutritional information). However, the study did not directly observe or investigate specific organizational routines or processes enabling reallocation of resources. A direct and deeper investigation of the corporation action structure is needed.

THE WORKER MOVEMENT AND CORPORATE REPONSES IN THE GLOBAL SUPPLY CHAIN

We develop the resource reconfiguration perspective in the context of supplier factories' responses to worker activism. High-profile sweatshop scandals since the 1990s and more recent catastrophes, such as the Rana Plaza building collapse in 2013 that killed more than 1,000 factory workers in Bangladesh, have attracted worldwide attention to hazardous supply chain factory working conditions, putting reputational pressure on global brands to improve them. In response, many brands have induced suppliers to adopt labor codes of conduct and have audited those suppliers for compliance. Nevertheless, conditions for workers ultimately depend on how supplier factories implement those labor standards on the shop floor.

While there is extensive documentation of the anti-sweatshop movements in the Global North against global brands (Bartley and Child, 2011, 2014) and their customers (Briscoe,

Gupta, and Anner, 2015), little attention has been paid to whether and how supplier factories in the Global South respond to worker activism demanding better working conditions. These factories differ from their branded clients in several ways that make for a particularly compelling context for advancing understandings of private political activism. First, these firms are smaller than their multinational buyers and, not being consumer-facing or investor-facing, encounter significantly less public scrutiny and reputational pressure. Revealing their responses to activism will significantly extend the private politics literature, which has focused primarily on large, consumer-facing and/or investor-facing organizations in the United States and a handful of studies of other Western countries.

Second, suppliers tend to be embedded in countries (such as China, Vietnam, Cambodia, Myanmar, and Bangladesh) that deny worker activists many of the civil society channels that activists in Western democracies typically enjoy, such as social movement organizations and media access, and institutionalized national labor movements (Anner and Liu, 2016; Chen and Gallagher, 2018). The media tend to be under tight government control, which discourages reporting and discussion of collective actions in order to curtail activists' influence (King, Pan, and Roberts, 2013, 2017).

These distinct characteristics of supplier factories and their institutional environments provide opportunities to generate new insights into the conditions for successful private political action. Labor scholars have documented a rise in worker activism resisting exploitation in the Global South (e.g., Cox, 2015; Anner and Liu, 2016; Pike, 2020), but little is known about whether and under what conditions it succeeds (Elfstrom and Kuruvilla, 2014; Cox, 2015; Anner and Liu, 2016). Empirical evidence has so far been inconclusive: some case studies reveal short-term effects of wildcat strikes (Anner, 2018) while others argue that labor movements failed to

bring about substantial changes (Lee and Friedman, 2009; Chen and Gallagher, 2018). Our study extends this literature by providing a unique window into factory responses to private political movements raising workers' demands. Specifically, we investigate the response of supplier factories to worker activism demanding better compensation in China, a vital source in many companies' global supply chains. We focus on activism around compensation because the vast majority of labor activism in developing economies, including China, has been for wage and benefits (Wedeman, 2009; Chen, 2009; Elfstrom and Kuruvilla, 2014).

Below, we theorize, from a resource reconfiguration perspective, whether and how supplier factories respond to local worker activism for better compensation. We view worker movements as potential catalysts for field-level changes even at firms not directly targeted by activism (den Hond and de Bakker, 2007). We therefore focus on worker movements in supplier factories' regions regardless of whether these supplier factories were direct or indirect targets. We first ask: given the aforementioned idiosyncratic organizational and institutional characteristics in global supply chain production countries like China, can local worker movements demanding better compensation trigger field-level changes that lead supplier factories to improve compliance with wage and benefits standards? We then theorize how corporate action structures predict heterogeneity in factory responses to activism and investigate whether activism-induced improvements in wage and benefits standards are associated with trade-offs on other worker issues.

Factory Response to Worker Activism for Wage and Benefit Improvement

Private politics theories stress that social activists can catalyze organizational changes in at least two ways: tarnishing a company's reputation (Baron, 2001) and disrupting its routines in ways that increase production costs (Luders, 2006). In countries where many supply chain

factories are located, collective political action is repressed and state-controlled media conceal social activism from public view. Consequently, suppliers face no appreciable reputational threat from negative publicity due to worker activism. Any changes to supplier behavior in response to activism are therefore likely to motivated by disruptions or threatened disruptions to productive activities. Because private politics research to date has focused on organizational image and public perception as drivers of companies' responses to activism, less is known about how disruption costs might drive companies to change and whether such changes are likely to occur in understudied emerging markets (Briscoe and Gupta, 2016: 43)

Worker activism for better compensation tends to take the form of strikes, protests, and sit-ins, which threaten to disrupt production and cause economic loss. Even when firms do not face direct threats by their own workers to disrupt production, broad-based worker activism can trigger field-level changes (den Hond and de Bakker, 2007), especially among factories embedded in the same geographic community (Freeman and Audia, 2006). Geographically proximate factories tend to rely on the same labor pool and are mindful of each other's compensation practices. Furthermore, it has become increasingly easy for worker activists in one factory to mobilize peers in other local factories using social networks that facilitate participation and communication (Edwards and McCarthy, 2004; Siegel, 2009). Thus, factories in cities with more worker activism—even factories not directly targeted—might perceive increased risks of becoming targets and therefore preemptively allocate more organizational resources to improve workers' pay.

Factories in the same geographic community also face similar regulatory risks from local governments' responses to worker activism. Significant research has shown how activism shapes governmental policies—including more stringent regulation and enforcement—in liberal

democracies (Hoffman, 1999; Schneiberg and Soule, 2005; King and Pearce, 2010; Van Rooij and Lo, 2010; Briscoe and Gupta, 2016). Although governments in the Global South often repress activism, activism can focus even an authoritarian government's attention on certain social issues and prompt regulators to intensify enforcement (e.g., increase the number of inspections, issue more violations, and impose more severe penalties) (Nathan, 2003; Elfstrom and Kuruvilla, 2014; Liu et al., 2015; Steinhardt and Wu, 2016; Marquis and Bird, 2018). Thus, factories in cities with more worker activism might perceive increased regulatory risks and therefore improve their compliance with wage and benefits laws to avoid scrutiny.

Because worker movements are capable of imposing significant disruption costs and risks on supplier factories that are geographically proximate to these movements, we argue that it will prompt these factories to increase their performance in workers' wages and benefits. We therefore hypothesize:

> *Hypothesis 1 (H1). Factories in cities with more worker activism demanding better compensation will exhibit more wage and benefit improvement than factories in cities with less such activism.*

Resource Trade-offs: Worker Activism for Better Compensation and Suppliers' Health and Safety Conditions

Although the private politics literature has extensively documented companies' responses to social activism, it has not to our knowledge considered whether and how responding to one social appeal could influence performance on other social dimensions. Existing theoretical perspectives do not provide clear guidance. On the one hand, activism on a particular social issue places target organizations and their peers in the spotlight, which might lead management to improve along other social dimensions that activists might view as inadequate, in order to avoid future conflicts. In addition, organizational structures and processes created to address one issue

might concurrently help with others, which would lead those organizations to more broadly improve their social performance. In contrast, however, a resource reconfiguration perspective suggests that because organizational resources are finite, shifting resources to respond to social activism on one dimension might require companies to siphon resources from other priorities.

We posit that the latter scenario is more likely for supply chain factories in the Global South, which tend to operate on razor-thin margins and compete mainly on labor costs (Gereffi and Christian, 2009). While wage and benefits have been the focus of supply chain worker activism, global brands have pressured suppliers to improve workplace health and safety conditions to avoid embarrassing exposés about sweatshop conditions that lack even basic occupational health and safety measures. Meeting these different demands requires suppliers, which have especially limited resources for social compliance, to make difficult decisions about how to allocate resources, as shifting resources to one area might drain them from others. We argue that while worker activism for better compensation is associated with subsequent performance improvement by supplier factories along this social compliance dimension, those improvement efforts will concurrently dampen factories' improvement in compliance with occupational health-and-safety–related standards, spurring a performance gap between the two areas.

First, compliance with health and safety standards is notoriously costly, driving organizations to trade-offs between safety and productivity (Das et al., 2008; Dov, 2008). A recent study of over 100,000 organizations in the US state of Oregon found that organizations providing safer workplaces had significantly lower odds of survival than their more hazardous peers (Pagell et al., 2020). These trade-offs are likely to be felt acutely by supplier factories in the Global South, which tend to run on very thin margins.

Second, workers in low-income countries tend to prioritize wage and benefits over health and safety. A review by Viscusi and Aldy (2003) found that demand for workplace safety increases with income and that workers in low-income countries tend to tolerate unsafe and unhealthy conditions in exchange for wage. A survey of managers and workers in Vietnam's garment industry likewise finds that workers prioritize wage and benefits over health and safety (Domat et al., 2013). Similarly, unions in supply chain factories have been shown to prioritize compensation over health and safety (Oka, 2016). Indeed, the vast majority of worker activism in China is for wage and benefits (Wedeman, 2009; Chen, 2009; Elfstrom and Kuruvilla, 2014), sending a clear message to employers about workers' priorities.

Given that implementing health and safety standards is costly and that workers in supply chain factories in the Global South tend to prioritize wage and benefits, supplier factories are likely to make trade-offs in health and safety compliance as they shift organizational resources to improve compensation in response to local worker activism, widening the gap between the two dimensions of compliance. We therefore hypothesize:

> *Hypothesis 2 (H2): Factories in cities with more worker activism demanding better compensation will exhibit a greater increase in the performance gap between wage-and-benefits and health-and-safety than factories in cities with less such activism.*

Corporate Action Structures and Corporate Responses to Activism

The resource reconfiguration perspective seeks to capture organizations' ability to reallocate resources from one area to another without significant frictions and resistance. Below, we describe two corporate action structures—piece-rate payment and unionization—that we theorize will influence the extent to which suppliers are able to reconfigure resources to respond to worker activism for better compensation and the extent to which they will shift resources from occupational health-and-safety–related areas to do so.

Piece-rate payment. Many suppliers respond to the price and production pressures of the global value chain by adopting internal incentive structures to promote worker productivity and thus reduce costs and increase volume (Bartley, 2005; Gereffi, Humphrey, and Sturgeon, 2005; Anner, Bair, and Blasi, 2013; Locke, Rissing, and Pal, 2013). Specifically, many suppliers use piece-rate (or piecework) payment—compensation based on number of units produced—to incentivize productivity by giving workers a direct share of the economic gains associated with their productivity (Burawoy, 1983; Williamson, 1985; Lazear, 2000).

Piece-rate payment structures are notoriously associated with poor working conditions because they incentivize workers to cut corners to produce more quickly—and they signal management's laser focus on high-volume, low-cost production to the exclusion of other concerns. Indeed, research has shown piece-rate factories to be less susceptible to improvements in working conditions sought by brands (Bird, Short, and Toffel, 2019). Yet piece-rate payment may facilitate suppliers' ability to respond to disruptions prompted by activism by giving them more flexibility to reallocate resources. Piece-rate payment has long been associated with labor market flexibility—the ability to readily change head count and working conditions through layoffs, wage cuts, work intensification, and outside contracting (Cappelli, 1997)—because managers can easily adjust compensation based on cost per unit (Long, 2009). This type of flexibility allows factories to respond effectively to environmental turbulence such as local worker activism, since management has tight control of financial resources and can quickly change cost per unit to meet workers' demands. Because these characteristics are likely to enable employers to respond rapidly to workers' wage and benefits demands, we hypothesize:

> *Hypothesis 3 (H3): The positive relationship between local worker activism demanding better compensation and improvement in factories' wage and benefits is especially strong for factories that use piece-rate pay.*

Although output-based compensation systems allow organizations the flexibility to respond nimbly to worker activism for wages and benefits, we nevertheless also argue that factories with this type of incentive structure are particularly likely to trade off health and safety for wage and benefit improvements.

First, managers at piece-rate suppliers tend to place low priority on health and safety measures because these can impede the high productivity goals that drive such organizations (Holmstrom and Milgrom, 1991; Prendergast, 1999; Dohmen et al., 2011). Managers at piece-rate suppliers are therefore especially likely to shift resources away from health and safety initiatives when worker activism forces them to increase wage and benefits.

Second, piece-rate–paid workers are less likely to resist such a shift. Research has found that such workers tend to place a lower priority on workplace health and safety than other workers do: they cut corners to produce more quickly, avoid health and safety procedures that slow down productivity (Patterson, 2007), and are more reluctant to take breaks (Lilley et al., 2002). Thus, they are less likely to object when managers seek to siphon resources from health and safety to fund higher wage and benefits.

Because both managers and workers in piece-rate factories tend to place a lower priority on health and safety measures, resource reallocation from health and safety to wages and benefits in response to compensation-oriented worker activism is especially likely to occur in these factories. We therefore hypothesize:

> *Hypothesis 4 (H4). The positive relationship between local worker activism demanding better compensation and the increase in performance gap between wage-and-benefits and health-and-safety is especially strong for factories that use piece-rate pay.*

Unionization. Unions have historically been the most important formal channel for worker participation in management processes. Studies of unions in the Global North have

stressed their political role in raising labor standards by rectifying power imbalances between workers and employers (Reilly, Paci, and Holl, 1995; Rodríguez-Garavito, 2005; Morantz, 2009). However, in many countries in the Global South, unions are not permitted to perform this political function, existing instead at the pleasure of employers to curry political favor with the authoritarian state (Brown and O'Rourke, 2007; Friedman and Lee, 2010). In countries such as China and Vietnam, unions are considered extensions of the government rather than independent representatives of workers' interests (Anner and Liu, 2016). Empirical evidence of the union role in worker activism in the Global South is inconclusive. Studies have shown that unions in China can facilitate collective bargaining and gain favorable outcomes for workers, especially when local labor markets are tight, and can function as mediators during strikes (Chen, 2010). Other studies have found unions in China to be dominated by management and ineffective at representing worker interests (e.g., Chen, 2009; M. Liu, 2010; Pringle and Meng, 2018) .

Even unions lacking political power can facilitate field-level changes triggered by worker activism by communicating activists' demands and integrating them into the organization. This function is particularly valuable in factories that are in regions with widespread worker activism but are not yet targets themselves. Management attention is a scarce resource and not all external events are attended equally (Ocasio, 1997). Insiders such as employee groups have been shown to raise issue saliency in an organization and catalyze organizational responses to private political movements (Briscoe and Safford, 2008; Briscoe, Gupta, and Anner, 2015). Specifically, unions can bring local labor activism—including efforts in other companies to increase wage and benefits—to management's attention, allowing it to address the issue before it becomes contentious in their own factory.

Unions can also help management engage with workers and implement change. Even unions lacking independence and political power can be critical tools for facilitating worker-management conversations about wage and benefits and for assuaging worker-management conflicts (Chen, 2010; Liu, 2010; Chan and Hui, 2014). If management elects to improve wage and benefits in responses to local labor activism, unions provide a vehicle for instigating these changes. They can communicate workers' desired wage to management and management's wage targets and financial constraints to workers and can mediate conflicts that arise during implementation (Chan and Hui, 2014). Thus, supplier factories with unions can more effectively implement changes to wages and benefits in response to local labor activism.

For these reasons, we hypothesize:

Hypothesis 5 (H5): The positive relationship between local worker activism demanding better compensation and the improvement of factories' wage and benefits performance is stronger for unionized than for nonunionized factories.

Although the political function of unions is hamstrung in many authoritarian countries, studies have shown that unionized factories in China and Vietnam have superior health and safety conditions as well as greater improvement in those conditions (Gillen et al., 2002; Dong et al., 2004; Nissen, Angee, and Weinstein, 2008). Unions in Chinese factories play an important role in monitoring occupational health and safety conditions on the shop floor (Reilly, Paci, and Holl, 1995; Chen and Chan, 2004; Walters, 2006) and educating employees on workplace conditions and workers' well-being (Dong et al., 2004; Nissen, Angee, and Weinstein, 2008).

We posit that unions can buffer management's inclination to drain organizational resources from health-and-safety–related compliance in response to local worker activism demanding better compensation. Workers in unionized factories tend to have greater knowledge of workplace hazards and dangerous practices (Gillen et al., 2002) and are thus more likely to

resist attempts to degrade workplace safety measures. Such resistance can make it harder for management to siphon off health and safety resources. Furthermore, unions educate not only workers, but also management by communicating frontline workers' experience of hazards that would not otherwise be known to management (Chen and Chan, 2004). Greater awareness of these issues might restrain management from considering cuts in the health and safety budget as a way to fund improved wage and benefits. We therefore hypothesize:

> *Hypothesis 6 (H6). The positive relationship between local worker activism demanding better compensation and the increase in performance gap between wage-and-benefits and health-and-safety is weaker for unionized than for nonunionized factories.*

DATA AND MEASURES

We test our hypotheses using a proprietary dataset of audits conducted in 2012–2015 by a well-recognized multinational social auditing firm that required anonymity as a condition of sharing its data. Audit teams assessed the extent to which a supplier factory's workplace conditions met a single code of conduct specifying standards for wage and benefits, occupational health and safety, and other domains. These standards are consistent with international consensus standards such as the International Labor Organization (ILO) core labor standards.

We examine the extent to which a factory's focal (current) audit performance had improved (or worsened) since its prior audit, depending on whether local worker activism occurred in the interim. Thus, our estimation sample is limited to factories with at least two audits in our dataset. Our estimations are based on 3,495 focal audits of 2,352 factories in 114 cities in mainland China on behalf of 78 buyers from 13 countries.[1] Table 1 reports the industry composition of our sample; Figure 1 depicts the geographical distribution of audited factories.

[1] Because our specification also relies on data from each supplier's prior audit, our analysis is based on a total of 5,989 focal and prior audits. Note that 5,989 is less than twice the number of focal audits because some suppliers were audited more than twice in our sample period, which results in 1,001 audits being the focal audit in one observation and the prior audit in another.

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--- Insert Figure 1 about here ---

Dependent Variables

We examine the change in a factory's performance since its prior audit, considering two audit categories: (a) wage and benefits and (b) occupational health and safety. The wage and benefits category includes more than 40 audit items such as "Regular work is calculated correctly, and is paid at the agreed wage and at least at minimum wage," "Overtime wage is calculated and paid as legally required," and "Wage are paid without any delay." The health and safety category includes more than 50 audit items such as "First aid kits are available in each workplace," "Workplace ventilation is adequate," "Facility conducts regular emergency drills," and "Personal protective equipment, such as goggles, safety shoes and helmets, is provided and paid for by the facility, and is in use." The audit team examines factory floor conditions, reviews documents, and interviews employees to assess compliance with each item. These items are then aggregated and weighted to yield a score for each category.[2] Specifically, each audit results in a *wage & benefits score* and a *health & safety score*, each ranging from 0 to 100, with higher scores indicating better compliance. In our sample, *wage & benefits score* averages 67 and ranges from 0 to 100 and *health & safety score* averages 79 and ranges from 25 to 100.

Our first dependent variable measures a factory's improvement in the wage & benefits category between successive audits. We calculate *improvement in wage & benefits score* by subtracting a factory's prior audit's *wage & benefits score* from its focal audit's *wage & benefits score*; the result averages 5.1 and ranges from -91 to 92. Larger positive values indicate greater improvement; more negative values indicate greater degradation.

[2] Pursuant to the nondisclosure agreement, we cannot disclose the full list of audit items and the formula for aggregating and weighting them.

Our second dependent variable measures the extent to which a factory's performance gap between these two categories (*wage & benefits score* and *health & safety score*) widens or narrows between successive audits. We create this measure in four steps. First, because a factory's *wage & benefits score* and *health & safety score* have different averages, standard deviations, and ranges, we standardize each score to facilitate comparison. Second, we calculate a factory's focal audit performance *gap between wage & benefits score and health & safety score (focal audit)* by subtracting the standardized health & safety score (focal audit) from the standardized wage & benefits score (focal audit). The gap reflects the extent to which the factory's focal standardized wage & benefits score exceeds its standardized health & safety score. Third, we make the same calculation for the corresponding measures associated with the prior audit to calculate the factory's *gap between wage & benefits score and health & safety score (prior audit)*. Fourth, we calculate the *increase in performance gap between wage & benefits score and health & safety score* by subtracting the prior audit's gap from the focal audit's gap; positive values indicate widening gaps and negative values indicate narrowing gaps. In our sample, this measure averages 0 and ranges from -5.5 to 4.2.

Independent Variables

To measure local worker activism in a factory's city between the prior and focal audits, we obtained data from the China Labor Bulletin (CLB) (https://clb.org.hk/), to our knowledge the only publicly accessible, detailed data on workers' collective actions in mainland China, dating back to 2011.[3] CLB data include all collective action incidents—such as strikes, sit-ins, protests, and blocking roads—in mainland China that are publicly reported, including those

[3] There are no official statistics about worker activism in China and databases built by labor scholars such as Chen (2009), Wedeman (2009), and Elfstrom and Kuruvilla (2014) do not cover the years of our audit data (2012–2015).

mentioned in Chinese newspapers and social media (e.g., blogs, Weibo.com), as well as in English-language media outlets.

For all collective actions during 2012–2015, CLB reports the dates, location, demands, and estimated number of participants. Figure 2 depicts the geographical distribution of collective actions in mainland China during 2012–2015 documented by CLB. Whereas 84 percent of collective actions in all locations were demands related to wage and benefits, in the cities that comprise our sample—the 114 cities that include at least one audited factory—100 percent of the collective action demands were related to wage and benefits, and CLB reports the identity of the targeted firm(s) in 33 percent of these collective actions. None of the audited supplier factories in our sample were identified as targets, but we cannot rule out the possibility that some were targeted in the 67 percent for which targets are not reported. Table 2 reports the number of collective actions by industry in cities that included at least one audited factory in our sample.[4]

--- Insert Figure 2 about here ---
--- Insert Table 2 about here ---

Social movement scholars have highlighted the number of participants as an important predictor of an action's impact. By showing their numbers, activists collectively express their voice, demonstrate their legitimacy, and increase the salience of the contested issue (den Hond and de Bakker, 2007). CLB categorizes the number of participants in each collective action as being below 100 ("small events"), 101–1,000 ("medium events"), 1,001–10,000 ("large events"), or more than 10,000 ("mega events"). Mirroring researchers' common practice of handling interval data, we assign the midpoints of the three closed intervals as scores for those categories.[5] To create a point estimate for the open-ended top category, we rely on Hout's (2004: 4)

[4] In a robustness test, we focus solely on worker activism in the manufacturing industry. This yields largely similar results (i.e., coefficients' directions and significance levels).
[5] See Hout (2004) for a detailed rationale for this methodology; for empirical application examples, see Pampel and Hunter (2012), Desai, Chugh, and Brief (2014), Wodtke (2016), and Schneider, Hastings, and LaBriola (2018).

approach, which extrapolates "from the next-to-last category's midpoint using the frequencies of both the next-to-last and last (open-ended) categories a formula based on the Pareto curve." This two-step estimation begins with the equation:

$$M_{top} = L_{top}\frac{V}{V-1} \text{ whereby } V = \frac{\ln(f_{top-1}+f_{top})-\ln(f_{top})}{\ln(L_{top})-\ln(L_{top-1})}. \quad [1]$$

M_{top} is the estimated midpoint of the top category, a parameter we are estimating. L_{top} is the lower limit of the top category, L_{top-1} is the lower limit of the next-to-last category, f_{top} is the frequency in the top category, and f_{top-1} is the frequency in the next-to-last category. Hout's second step seeks to avoid overpredicting positive outcomes by adjusting the midpoint estimate to M^*_{top} by trimming M_{top} to halve the magnitude of the top category's interval, as follows:

$$M^*_{top} = L_{top} + \frac{1}{2}\times\left(M_{top} - L_{top}\right) = \frac{1}{2}\times L_{top}\times\left(1+\frac{V}{V-1}\right). \quad [2]$$

Following this approach, we assign midpoint values of 50 participants for collective actions events that CLB categorized as having up to 100 participants; 500 for those with 101–1,000 participants; 5,000 for those with 1,001–10,000; and 18,335 for those with more than 10,000.[6]

We then create *local worker activism* in three steps. First, we calculate the total estimated number of participants in the local collective actions in a factory's city between the factory's prior and focal audits. For example, if three collection actions occurred in a factory's city between its prior and focal audit and if two had 101–1,000 participants and one had 1,001–10,000, the total estimated number of collective action participants since that factory's prior

[6] In CLB's worker activism dataset, L_{top} (lower limit of the top category) is 10,001, L_{top-1}(lower limit of the next-to-last category) is 1,001, f_{top} (frequency in the top category) is 8, and f_{top-1} (frequency in the next-to-last category) is 310. Thus, V= [ln(310+8)-ln(8)]/[ln(10,001)-ln(1,001)]=1.6. The adjusted midpoint value for the top interval = 0.5 × 10,001 × [1+1.6/(1.6-1)]=18,335.

audit would be 6,000 (500 + 500 + 5,000). Second, we top-code these sums at the 95th percentile of the sample distribution (47,535) to reduce the potential impact of outliers. In our estimation sample, the total number of participants in local collective actions since a factory's prior audit averages 10,992 and ranges from 0 to 47,535. Third, we standardize this variable to avoid multicollinearity issues because it is also included in interaction terms in our estimation models.

In robustness tests, we alternatively measure local activism as *local worker activism instances*—the number of collective actions that occurred in a factory's city between the factory's prior and focal audit (ignoring the number of participants).[7]

We code a dichotomous variable, *piece-rate payment*, as 1 when the supplier pays its frontline workers on a piece rate as recorded by the auditor, and 0 otherwise. We code *union*, another dichotomous variable, as 1 when the supplier is unionized as recorded by the auditor, and 0 otherwise. We use lagged values of these variables so that they pertain to the prior audit in order to examine their effect on subsequent improvement. Eleven percent of these prior audits were conducted at suppliers paying piece rate and 23 percent at unionized suppliers.

Control Variables

City-level controls. Although we include city fixed effects to control for time-invariant differences across cities that might influence factories' improvement rates, we obtained data from the China City Statistical Yearbooks (2011–2015) to control for several city-level factors to account for within-city variation over time. Because growing cities might have increasing numbers of residents willing to participate in collective actions, we control for *city population*,

[7] We considered but rejected two alternative approaches. We first explored creating four variables that counted the number of collective actions in each size category, but discovered they were highly correlated with each other (ρ varying from 0.6 to 0.9). We then explored creating a dummy variable to indicate whether a factory's city had experienced any of the highest-participation worker activism (above 10,0000 participants), but found that this variable was very highly correlated with our main measure, *local worker activism* (ρ=0.7) and with *local worker activism instances* (ρ=0.7). Therefore, we did not pursue these measures.

which we log to reduce skew. We control for *city GDP per capita* (which we log to reduce skew) and *city GDP growth rate* (calculated as the percent change in GDP from the previous year) because research suggests that as regions in China become more economically developed, they have higher levels of law enforcement (e.g., Marquis and Bird, 2018), which might prompt factories to increase compliance with labor standards.

Research indicates that local governments facing greater economic development pressure may be more prone to lax law enforcement and inspection (Van Rooij et al., 2017), which might influence factories' compliance with labor standards. We therefore control for economic development pressure using *city GDP growth rate ranking*, which is the ranking of the factory's city's GDP growth rate relative to all other cities in the same province. We pursue this approach because under China's political promotion system, city-level officials compete with other cities in the same province (administrative division) and winners are selected and promoted by province-level officials (Zhou, 2004, 2007).

Because research shows that increasing Internet access in China affects the outcome of social activism (e.g., Luo, Zhang, and Marquis, 2016; Marquis and Bird, 2018; Yue, Wang, and Yang, 2019), we also control for *city Internet diffusion*, measured, following Yue et al. (2019), as the percentage of a city's residents with Internet access.

Factory-level controls. We control for a set of factory-level variables that might influence a factory's social compliance, using data obtained from the auditing company. Because research indicates that larger factories are more visible and thus exposed to higher regulatory risks (Surroca, Tribó, and Zahra, 2013), we control for *factory employment*, which we measure as the number of employees, logged to reduce skew. Because an organization's practices vary

over its life cycle (Hannan and Freeman, 1984), we control for *factory age*, calculated by subtracting the factory's founding year from the audit year, then adding 1.

Because local workers tend to resist exploitation more and demand better treatment than migrant workers do (Flanagan, 2006), we control for a factory's *local worker ratio*, measured as the percentage of frontline workers who are local. Because the gender composition of employees is shown to influence working conditions—with some research finding female workers more likely to voice their demands and defend their rights (Rock, 2003; Elias, 2005) but other research finding female manufacturing workers more tolerant of exploitative working conditions (Caraway, 2007)—we control for the factory's *female worker ratio*, measured as the percentage of frontline employees who are women.

Because some factories might outsource problems to their subcontractors and thus have better audit performance, we include a dummy variable *use subcontractors*. Because research shows that certification to a management system standard predicts greater improvement in code compliance (Bird, Short, and Toffel, 2019), we code *management system certification* as 1 when a supplier is certified to at least one standard (e.g., SA8000, ISO 9001, or OHSAS 18001) when it is audited, and 0 otherwise.

Audit-level controls. We control for audit-level factors that might influence factory compliance with labor standards, using data from the auditing company. Because factories with lower audit scores in their prior audit have more room for improvement in their subsequent audit than factories that had higher scores, we control for *wage & benefits score (prior audit)* in our models that predict *improvement in wage & benefits score*. Similarly, we control for the *gap in wage & benefits score and health & safety score (prior audit)* in models that predict the *increase in performance gap between wage & benefits score and health & safety score*.

Because factories may face increasing remediation difficulties in successive audits, we control for *audit sequence* with dummies indicating a factory's first audit in the sample, its second audit, and so on. Because the time gap between a factory's prior and focal audits might influence the extent of improvement, we control for *months since prior audit* measured by the number of days between the prior and focal audits divided by 30. Because research indicates that when the audit is paid for by the buyer (rather than the audited factory), auditors tend to report more violations (Short, Toffel, and Hugill, 2016), we include in our models two dummy variables, *paid by buyer (prior audit)* and *paid by buyer (focal audit)*.

We account for audit team characteristics shown to affect audit scores (Short, Toffel, and Hugill, 2016). We control for the team's gender composition by including two dummy variables indicating an *all-female audit team* or a *mixed-gender audit team,* with *all-male audit team* as the omitted category, for both the prior and focal audits. We control for *audit team average age* and for *audit team maximum tenure*, calculated as the most years that any team member had worked at the auditing firm—in both cases for both the prior and focal audits.

ESTIMATION AND RESULTS

To estimate improvement in compliance scores and changes in their gaps, we account for the aforementioned audit-level variables for both the prior and focal audits. We also include fixed effects for city and for industry to control for all time-invariant factors that might affect average compliance improvement rates for factories in different cities and industries. The city-level and factory-level variables being very stable over time, we only include their values pertaining to the prior audit in order to avoid triggering multicollinearity concerns that would arise if we also included their (very similar) values pertaining to the focal audit.

We include year fixed effects to control for overall temporal shocks and trends. Because buyer countries' institutional characteristics, such as regulation, can influence buyers' attentiveness to supply chain conditions (Toffel, Short, and Ouellet, 2015), we also include buyer-country fixed effects to control for potential differences in the pressure exerted on supplier factories to comply to labor standards.

Results

Summary statistics and correlations are reported in Tables 3 and 4. We test our hypotheses using ordinary least squares (OLS) regression, clustering standard errors by the supplier factory's province,[8] and report results in Table 5.

--- Insert Tables 3, 4, and 5 about here ---

Columns 1, 3, and 5 of Table 5 report results of our models that predict factories' *improvement of wage & benefits score.* The model in Column 1 tests the direct effect of worker activism for wage and benefits on factories' *improvement of wage & benefits score*. The statistically significant positive coefficient on *local worker activism* ($\beta = 2.114$, $p < 0.01$) reveals that factories in cities with more local worker activism exhibit greater improvement in complying with wage and benefits standards, which supports H1. A one-standard-deviation increase in local worker activism—that is, 16,106 more collective action participants (roughly equivalent to three "large" collective action events, those with 1,001– 10,000 participants)—is associated with a 2.1-point increase in *wage & benefits score*, which is 41 percent of the 5.1-point sample mean of *improvement of wage & benefits score*. Figure 3 depicts average predicted effects of this model.

--- Insert Figure 3 about here ---

[8] Clustering by province is more conservative than clustering by supplier factory or city.

The models in Columns 2, 4, and 6 report results of OLS models that predict the *increase in performance gap between wage & benefits score and health & safety score* (henceforth referred to as the performance gap). In Column 2, the statistically significant positive coefficient on *local worker activism* (β =0.135, $p < 0.01$) reveals that factories in cities with more local worker activism for wage and benefits exhibit a wider performance gap—that is, their wage & benefits scores increase to a greater degree than their health & safety scores—which supports H2.[9] Figure 4 depicts average predicted effects of this model. These results show that while worker activism accelerates local factories' compliance in wage & benefits, it dampens their improvement of health & safety scores.

--- Insert Figure 4 about here ---

The model in Column 3 adds the interaction between *piece-rate payment (prior audit)* and *local worker activism* to the model in Column 1. The statistically significant positive coefficient on the interaction term ($\beta = 2.122$, $p < 0.05$) reveals that the positive relationship between local worker activism and factories' improvement in wage & benefits scores is particularly pronounced among factories that use piece-rate payment, supporting H3. A one-standard-deviation increase in local worker activism for factories that do not use piece-rate pay is associated with a 1.97-point increase ($\beta = 1.973$) in wage & benefits scores, less than half of the 4.1-point increase for piece-rate–paid factories (calculated as 1.973 + 2.122). Figure 5 depicts average predicted effects of this model and illustrates how piece-rate–paid factories respond more acutely to local worker activism.

[9] To interpret the magnitude of the effect of a 1-standard-deviation increase in local worker activism, akin to roughly three "large" collective action events, we rely on predicted average effects from the models reported in Column (1) in Tables 5 and 6. These results indicate that, for example, compared to factories in cities in which no collective action events occurred between the factories' successive audits, factories in cities in which three large collective action events occurred exhibit a nearly 2-point increase in *wage & benefits score* and a nearly 1-point decrease in *health & safety score*, resulting in a 3-point performance gap increase.

--- Insert Figure 5 about here ---

The model in Column 4 adds the interaction between *piece-rate payment (prior audit)* and *local worker activism* to the model in Column 2. The statistically significant positive coefficient on the interaction term ($\beta = 0.122$, $p < 0.01$) reveals that the effect of local worker activism seeking better compensation on widening local factories' performance gap is particularly pronounced in factories that use piece-rate payment. Figure 6 depicts average predicted effects of this model. A one-standard-deviation increase in local worker activism is associated with a 0.25 increase in performance gap (calculated as 0.127 + 0.122) for piece-rate factories, nearly twice the 0.13 increase ($\beta = 0.127$) for non-piece-rate factories.

--- Insert Figure 6 about here ---

The model in Column 5 adds the interaction between *union (prior audit)* and *local worker activism* to the model in Column 1. The statistically significant positive coefficient on this interaction term ($\beta = 2.259$, $p < 0.05$) reveals that the positive relationship between local worker activism and factories' improvement in wage & benefits scores is particularly pronounced for unionized factories, supporting H5. A one-standard-deviation increase in local worker activism is associated with a 1.8-point increase ($\beta = 1.804$) in wage & benefits scores for nonunionized factories, less than half the 4.1-point increase for unionized factories (calculated as 1.804 + 2.259). Figure 7 depicts average predicted effects of this model and illustrates how factories with unions respond more acutely to local worker activism.

--- Insert Figure 7 about here ---

The model in Column 6 adds the interaction between *union (prior audit)* and *local worker activism* to the model in Column 2. The statistically significant positive coefficient on the interaction term ($\beta = 0.140$, $p < 0.01$) reveals that, compared to the effect on local nonunionized

factories, local worker activism seeking better compensation has a particularly pronounced effect on widening unionized local factories' performance gap. This result is the opposite of what H6 predicted. Figure 8 depicts the average predicted effects in this model. A one-standard-deviation increase in local worker activism is associated with a 0.26 increase in performance gap (calculated as 0.116 + 0.140) for unionized factories, more than twice the 0.12 increase (β = 0.116) for non-unionized factories. In the Discussion section below, we reflect on this unexpected finding and its implications.

--- Insert Figure 8 about here ---

Empirical Extensions

To further understand the widened performance gap between wage & benefits scores and health & safety scores, especially the changes in health & safety scores after local worker activism seeking better compensation, we conduct supplemental analyses. We calculated *improvement in health & safety score* by subtracting a factory's *health & safety score* at its prior audit from the focal audit value; the result averages 5.2 and ranges from -65 to 75 in our sample. Table 6 reports comparable models that predict *improvement of health & safety score* and control for *health & safety score (prior audit)*.

--- Insert Table 6 about here ---

In Column 1, the statistically significant negative coefficient on *local worker activism* (β = -0.979, $p < 0.05$) reveals that factories in cities with more local worker activism for wage and benefits exhibit *less* improvement in health & safety scores. A one-standard-deviation increase in such activism is associated with improving nearly 1.0 point *less* in health & safety score. This is a 20-percent diminishment from the sample average of improving by 5.2 points. A Wald test reveals that the difference between the coefficients on *local worker activism* in Column 1 of

Tables 5 and 6 is statistically significant ($\chi^2 = 12.38$, $p < 0.01$). Figure 9 depicts average predicted effects of this model.

--- Insert Figure 9 about here ---

The model in Column 2 of Table 6 adds the interaction between *piece-rate payment (prior audit)* and *local worker activism*. The results yield a statistically significant negative coefficient on the interaction term ($\beta = -0.768$, $p < 0.05$), which indicates that the negative relationship between local worker activism for wage and benefits and improvement of health & safety scores (as indicated by the negative *local worker activism* coefficient) is especially acute for factories using piece-rate payment. One-standard-deviation increase in local worker activism (i.e., roughly equivalent to three "large" collective action events, those with 1,001– 10,000 participants) is associated with a dampening in improvement in health & safety scores by 0.9 points ($\beta = -0.928$) for non-piece-rate–paid factories, and by 1.7 points for piece-rate–paid factories (calculated as (-0.928) + (-0.768)). Figure 10 depicts average predicted effects of this model and illustrates how, compared to factories that do not rely on piece-rate pay, factories that do use it have less improvement in occupational health and safety conditions in response to more local worker activism for better compensation. A Wald test comparing coefficients on *local worker activism* × *piece-rate payment (prior audit)* in Column 3 of Tables 5 and 6 reveals that their difference is statistically significant ($\chi^2 = 9.80$, $p < 0.01$).

--- Insert Figure 10 about here ---

The model in Column 3 of Table 6 adds the interaction between *local worker activism* and *union (prior audit)* to the model in Column 1 in that table. The results indicate a statistically significant negative coefficient on *local worker activism* × *union (prior audit)* ($\beta = -1.252$, $p < 0.05$). Interpreted in light of the negative coefficient on local worker activism, this reveals that

the negative relationship between *local worker activism* seeking better compensation and *improvement in health & safety score* is especially acute for unionized factories. One-standard-deviation increase in local worker activism (i.e., roughly equivalent to three "large" collective action events, those with 1,001– 10,000 participants) is associated with a dampening of improvement in health & safety scores by 0.8 points ($\beta = -0.809$) for non-unionized factories, but by 2.1 points for unionized factories (calculated as (-0.809) + (-1.252)). Figure 11 depicts average predicted effects of this model and illustrates how, compared to non-unionized factories, unionized factories exhibit less improvement in occupational health and safety conditions in response to local worker activism for better compensation. A Wald test reveals that the difference between the coefficients on *local worker activism* × *union (prior audit)* in Column 3 of Table 6 and Column 5 of Table 5 is statistically significant ($\chi^2 = 17.87$, $p < 0.01$).

--- Insert Figure 11 about here ---

DISCUSSION

Our study proposes a resource reconfiguration perspective to enrich current explanations of companies' responses to private political activism. We posit that responses depend on companies' capacity to reconfigure resources to address activist demands and that reallocation of resources to the contested area might entail a sacrifice of resources dedicated to other, related areas. We find that worker activism seeking better compensation improves local supplier factories' compliance with wage and benefits standards, but concurrently erodes their improvement in compliance with health and safety standards. We demonstrate that organizational structures facilitating resource reconfiguration—in particular, piece-rate payment and unionization—moderate both the extent of compliance with activist demands and the magnitude of the trade-off with related social compliance priorities. These findings make

significant contributions to the literatures on private political movements and on global supply chain labor practices.

Contributions to the Literature on Private Political Activism and Companies' Responses

Our research makes four contributions to the literature on how companies respond to private political activism. First, we shift the theoretical framework from the corporate *opportunity* structure to the corporate *action* structure. The corporate opportunity framework foregrounds material and reputational vulnerabilities of companies, overlooking the fact that such weakness might make it difficult for companies to execute the organizational changes sought by activists. The resource reconfiguration framework highlights contingencies that explain variation in companies' capacity to mobilize necessary resources to effectuate the changes demanded by activists. It shifts the frame from concession to movement demands to the actual implementation of those demands, allowing for deeper understanding of the nature and extent of change achieved by private political activism.

Second, the resource reconfiguration framework illuminates the broader consequences of social activism on corporate social performance, including the trade-offs it can provoke. Briscoe and Gupta (2016: 7), in their review of the social activism literature, observe that "the bulk of research on social activism in organizational contexts examines outcomes that are part of activists' goals and objectives" but has largely ignored activism's "unanticipated effects—including direct effects on targeted organizations, or indirect effects on other entities in the field." Very little is known about how the changes a company makes in response to social activism relate to its performance on other social dimensions. While research suggests that concessions granted to some activists can pave the way for a more conciliatory response to future

activism (McDonnell, King, and Soule, 2015), we know of no studies that examine the price concessions impose on competing social or economic priorities.

The resource reconfiguration perspective's focus on resource constraints forces attention to these trade-offs. The resources necessary to implement organizational changes must come from somewhere. It is conceivable that companies could support measures adopted in response to activism by increasing productivity or by siphoning resources from profits, dividends, executive compensation, or other financial priorities, yielding net improvement in social performance across the board. However, in our context, we find evidence suggesting that it was workers who bore the cost of these trade-offs—suppliers appear to fund the demand for increased compensation by eroding improvements in occupational health and safety. This finding extends the emerging literature on the indirect effects of activism by revealing that activism can produce negative as well as positive spillovers. It also suggests the need for a broader conceptualization of "concession costs" (Luders, 2006) that recognizes that the costs of implementing change in response to activism might be borne not only by conceding companies but by the very constituencies that activists sought to help.

Third, the resource reconfiguration perspective provides a framework for theorizing mechanisms beyond reputation as drivers of corporate responses to activism. In the scholarship on corporate response in the private politics literature, reputation dominates both theoretical studies (e.g., Baron, 2001; Abito, Besanko, and Diermeier, 2019) and empirical research (e.g., Eesley and Lenox, 2006; Julian, Ofori-Dankwa, and Justis, 2008; King, 2008b; Reid and Toffel, 2009; McDonnell and King, 2013; Zhang and Luo, 2013; Luo, Zhang, and Marquis, 2016). While reputation undoubtedly drives the behavior of many companies, it is an incomplete explanation in two respects.

One reason is that reputation is a paramount consideration for only a narrow universe of economic actors. Most businesses in local and global markets are small, private, and unbranded and are neither consumer- nor investor-facing. It is not clear that they are driven by the reputational mechanisms driving the publicly traded consumer- and investor-facing companies on which many private politics studies are based. While we do not rule out that reputation might also be important for these organizations, our findings suggest other key drivers. They respond to activism when it threatens their productive activities, and the extent of their response depends on their capacity to mobilize organizational resources. Attention to resource reconfiguration can broaden the reach of private political theory to encompass this much wider universe of less–reputation-driven businesses. A second reason why reputation is an incomplete explanation of companies' responses to activism is that, even when reputational concerns do drive corporate concessions, they are unlikely to explain fully the variation in implementation. In such cases, the resource reconfiguration perspective can supplement reputational explanations.

Fourth, a focus on companies' organizational capacity for action invites closer attention to the substantive outcomes achieved by private political activism. Studies commonly document companies' symbolic responses to activism—such as publicly acknowledging the movement, making PR announcements, releasing corporate social responsibility reports, and assembling ad hoc committees (Eesley and Lenox, 2006; King, 2008b; McDonnell and King, 2013; McDonnell, King, and Soule, 2015; Gupta and Briscoe, 2020)—without inquiring whether these formal structures and commitments actually improve performance on the issues that motivated the activism. We suspect that this orientation toward symbolic responses is partly an artifact of the literature's emphasis on reputation; a symbolic response can often defuse a reputational threat. Our perspective highlights companies' organizational capacity for action and their ability to

achieve substantive performance improvement when it consumes costly resources. Identifying these capacities is crucial for understanding the achievements of private political movements.

Contributions to the Literature on Labor Practices in Global Supply Chains

Our research also contributes important empirical evidence to the literature on labor practices in global value chains. First, we provide important evidence in the debate over the efficacy of worker activism. Research to date has been inconclusive and dominated by qualitative case studies. Some studies reveal short-term effects of wildcat strikes (Cox, 2015; Anner, 2018), whereas others show labor movements failing to bring about substantial changes (Lee and Friedman, 2009; Chen and Gallagher, 2018). The handful of studies that document labor movements quantitatively do not observe the actual outcomes produced (Elfstrom and Kuruvilla, 2014; Anner and Liu, 2016). Our large-scale quantitative investigation of 2,352 supplier factories' responses to over three thousand worker collective actions in 114 cities across China reveals that worker activism seeking better compensation indeed led local supplier factories to improve compliance with wage and benefits standards. Furthermore, our study identifies formal organizational structures that account for variation in such improvement: factories with piece-rate payment and unions were more responsive to local activists' demands for better pay. This adds novel insights into the factors predicting the success of worker activism.

Second, our study documents the trade-offs to health and safety that some supplier factories made as they responded to local worker activism seeking better compensation. This finding extends research demonstrating the tension that can arise between profits and worker safety (Das et al., 2008; Dov, 2008; Pagell et al., 2020) and the general preference of manufacturing workers in developing countries for compensation over health and safety

measures (Domat et al., 2013; Oka, 2016). Our finding suggests the tremendous challenges labor activists face in raising working conditions overall in the global value chain.

Finally, our finding that unions failed to buffer the shifting of resources from health-and-safety–related areas in response to local worker activism demands for better compensation cautions against relying on unions to promote corporate social performance broadly defined. Some socially conscious brands have come to see unions as a proxy for good workplace governance that can mitigate the risk of harmful supply chain working conditions. Although unions are known to be associated with better workplace health and safety conditions (Reilly, Paci, and Holl, 1995; Gillen et al., 2002; Chen and Chan, 2004; Walters, 2006), we did not find them preserving health and safety performance in factories confronting local activism seeking better wages. In fact, our analyses show that the increase in the performance gap between the two areas is more pronounced for unionized than for non-unionized factories, meaning that in unionized factories, more resources are shifted from the health-and-safety–related area to the wage-and-benefits area in response to local activism. It is difficult to draw firm conclusions about this finding without knowing more about union strength and worker preferences in our supplier factories. While our finding may reflect unions' lack of power to stand up to management to protect health and safety resources valued by workers, it may instead reflect union efficacy in representing workers' preferences for better wages and benefits over health and safety measures, consistent with prior research on worker priorities (Oka, 2016).

Limitations and Future Directions

There are several limitations in our study. First, we acknowledge that the CLB database on which we rely is unlikely to capture all labor unrest in China because it only records publicly reported incidents. Although our study shows that publicly reported worker activism has

significant influence on local factories, we speculate that unreported events might also influence local factories whose managers might learn about them through informal means.

Second, many CLB reports did not specify which companies the movement was targeting. As a result, we are unable to tease out the influence of workers movements on targeted factories and nontargeted factories, nor can we delineate the diffusion process.

Third, we were unable to obtain data on factory profitability and management compensation, both of which might influence how factories might respond to worker activism by shifting resources from occupational health-and-safety–related areas to do so.

Fourth, we do not have data on paystubs or factory budgets for compensation and workplace health and safety measures that would enable us to directly measure resource reconfiguration. We rely on audit reports to assess factory compliance in these areas, just as many others have (e.g., Locke, Qin, and Brause, 2007; Oka, 2010; Ang et al., 2012; Distelhorst et al., 2015). In addition, we cannot directly observe intraorganizational processes such as how resource allocation decisions are made and implemented on the shop floor.

The resource reconfiguration perspective suggests exciting opportunities for future research to investigate variations in the way private companies implement responses to social activism. Research could investigate the structural conditions that make companies that adopt symbolic measures to deflect reputational threats more likely to also improve on the dimensions contested by the activism—for instance, by lowering greenhouse gas emissions or increasing workplace diversity. Research should seek to better understand who bears the costs of concessions to activism. Studies could investigate the nature and extent of trade-offs companies make to various dimensions social performance across a range of contexts and identify conditions that inhibit such trade-offs.

CONCLUSION

We develop a resource reconfiguration perspective that highlights the role of organizational resources and capacity in companies' responses to social activism. Our findings reveal that organizations' capacity to reconfigure organizational resources is an important determinant of private political activism outcomes and that organizations siphon resources from other corporate social performance priorities to fund change in the contested area. Our study suggests the need to look beyond organizations' vulnerabilities and openness to change to learn more about their capacity to implement change.

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Figure 1. Audited Factories in Mainland China (2012–2015)

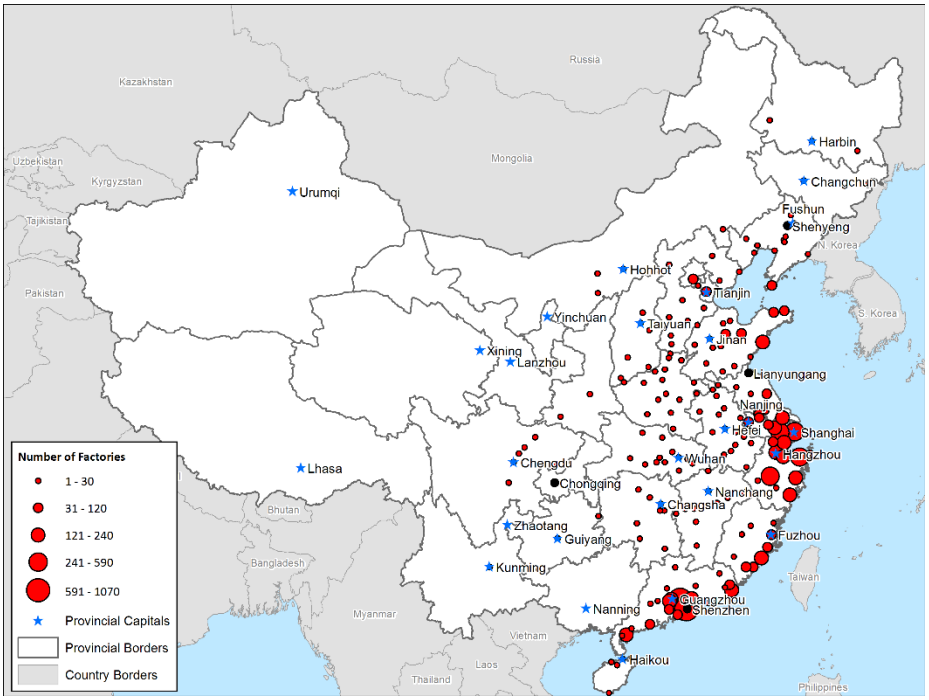
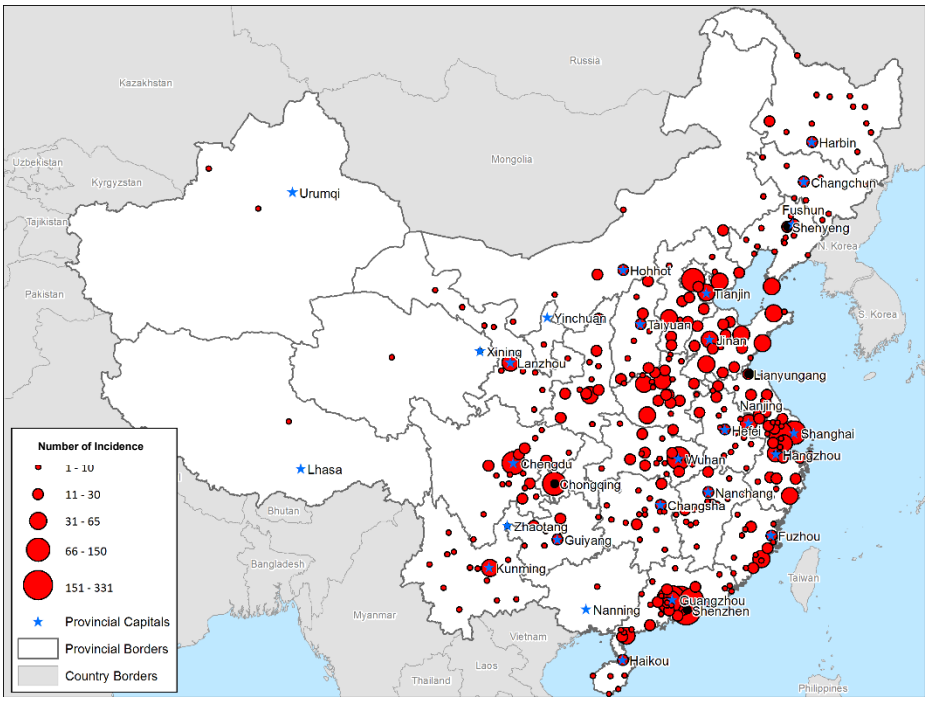


Figure 2. Number of Collective Action Incidents in Mainland China (2012–2015)



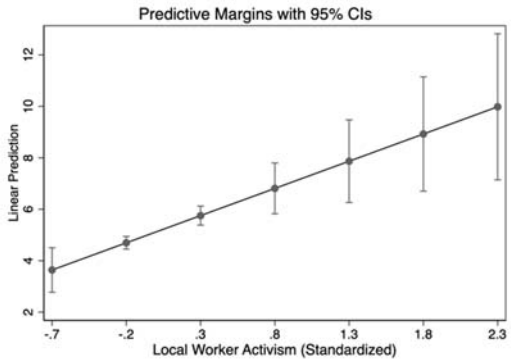


Figure 3. Average predicted values of *improvement of wage & benefits score* over varying levels of *local worker activism*, based on results of Model 1 of Table 5.

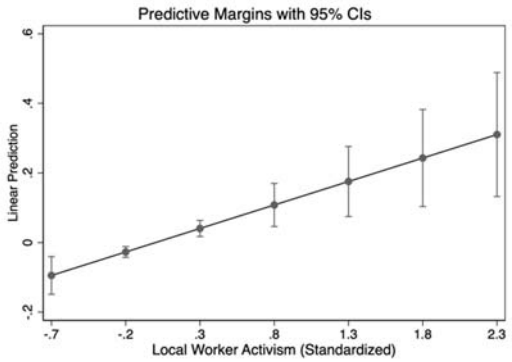


Figure 4. Average predicted values of *the increase of performance gap between wage & benefits score and health & safety score* over varying levels of *local worker activism*, based on results of Model 2 of Table 5.

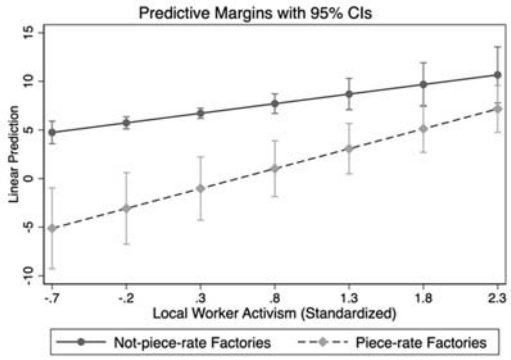


Figure 5. Average predicted values of *improvement of wage & benefits score* over varying levels of *local worker activism*, by factories that do or do not use *piece-rate payment*, based on results of Model 3 of Table 5.

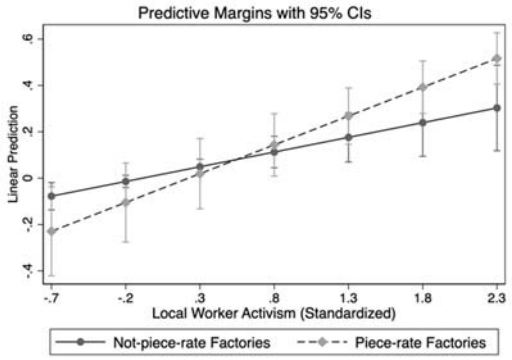


Figure 6. Average predicted values of *the increase of performance gap between wage & benefits score and health & safety score* over varying levels of *local worker activism*, by factories that do or do not use *piece-rate payment*, based on results of Model 4 of Table 5.

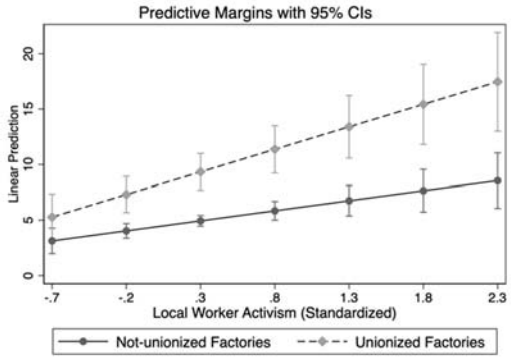


Figure 7. Average predicted values of improvement of *wage & benefits score* over varying levels of *local worker activism*, by factories with or without a *union*, based on results of Model 5 of Table 5.

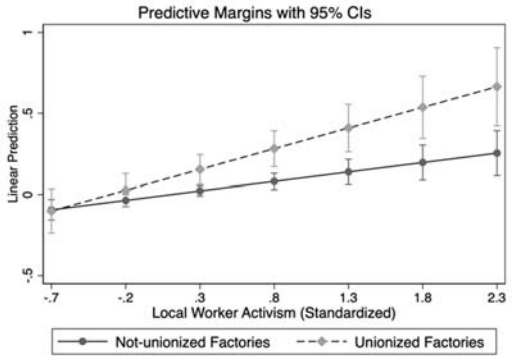


Figure 8. Average predicted values of *the increase of performance gap between wage & benefits score and health & safety score* over varying levels of *local worker activism*, by factories with or without a *union*, based on results of Model 6 of Table 5.

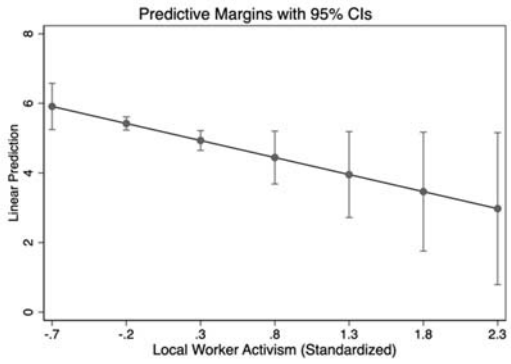


Figure 9. Average predicted values of improvement of *health & safety score* over varying levels of *local worker activism*, based on results of Model 1 of Table 6.

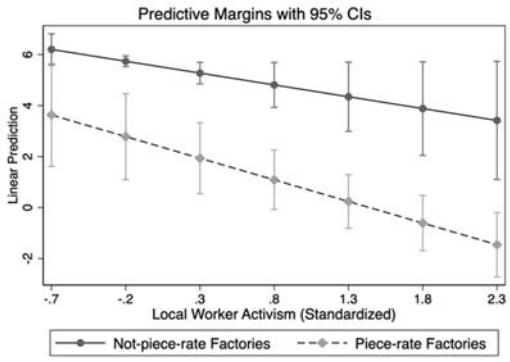


Figure 10. Average predicted values of improvement of *health & safety score* over varying levels of *local worker activism*, by factories that do or do not use *piece-rate payment*, based on results of Model 2 of Table 6.

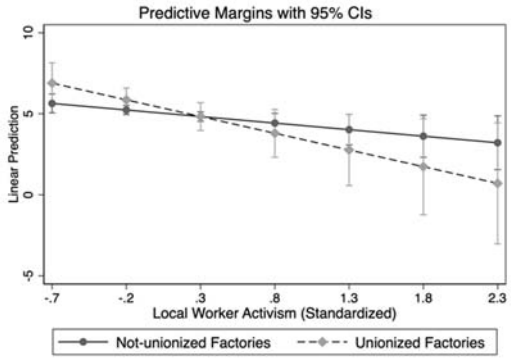


Figure 11. Average predicted values of improvement of *health & safety score* over varying levels of *local worker activism*, by factories with or without a *union*, based on results of Model 3 of Table 6.

Table 1. Industry Composition of Audits and Audited Supplier Factories

	Audits		Supplier factories	
Industry	Number	Percent	Number	Percent
Hardlines	786	22.5	511	21.7
Other	434	12.4	266	11.3
Apparel	416	11.9	301	12.8
Electronics	358	10.2	243	10.3
Toys	299	8.6	204	8.7
Housewares	286	8.2	185	7.9
Textiles	234	6.7	167	7.1
Personal use items	177	5.1	126	5.4
Accessories	176	5.0	137	5.8
Footwear	130	3.7	90	3.8
Sports and outdoor	100	2.9	65	2.8
Automotive	99	2.8	57	2.4
Total	3,495	100	2,352	100

Table 2 Number of Collective Action Incidents by Industry in Cities with Audited Supplier Factories

Industry	Incidents	Percent
Manufacturing	1,627	42
Construction	938	24
Transportation & logistics	545	14
Services	442	11
Education	156	4
Mining	95	2
Other	108	3
Total	3,911	100

Table 3. Summary Statistics

	Mean	S.D.	Min	Max
Improvement of wage & benefits score	5.12	31.90	-90.83	92.14
Improvement of health & safety score	5.23	15.91	-65.15	74.79
Increase in performance gap	0	1.32	-5.53	4.22
Wage & benefits score (focal audit)	66.64	27.53	0	100
Health & safety score (focal audit)	78.51	15.39	24.53	100
Performance gap between wage & benefits score^{S} and health & safety score^{S} (focal audit)	0	1.20	-3.50	4.12
Wage & benefits score (prior audit)	61.52	31.21	0	100
Health & safety score (prior audit)	73.29	16.68	19.91	100
Performance gap between wage & benefits score ^{S} and health & safety score ^{S} (prior audit)	0	1.18	-3.27	3.46
Local worker activism	10,992	16,106	0	47,535
Local worker activism ^{S}	0	1	-0.68	2.27
Piece-rate payment (prior audit)	0.11	0.32	0	1
Union (prior audit)	0.23	0.42	0	1
City population (prior audit) ^{L}	6.54	0.50	4.30	8.00
City GDP per capita (prior audit) ^{L}	11.19	0.41	9.79	11.91
City GDP growth rate (prior audit)	9.35	2.03	1.23	17.23
City GDP growth rate ranking (prior audit)	10.12	6.01	1	21
City Internet diffusion (prior audit)	0.33	0.19	0.002	0.82
Factory employment (prior audit) ^{L}	5.09	1.16	1.79	9.62
Factory age (prior audit) ^{L}	2.16	0.68	0	3.95
Percent of female workers (prior audit)	0.58	0.17	0.05	0.97
Percent of local workers (prior audit)	0.36	0.35	0	1
Use subcontractor (prior audit)	0.17	0.38	0	1
Management system certification (prior audit)	0.14	0.35	0	1
Paid by buyer (prior audit)	0.30	0.46	0	1
Paid by buyer (focal audit)	0.31	0.46	0	1
Audit sequence	2.71	0.98	2	6
Months since prior audit	9.00	5.50	1.53	23.47
All-female audit team (prior audit)	0.37	0.48	0	1
Mixed-gender audit team (prior audit)	0.11	0.31	0	1
All-female audit team (focal audit)	0.38	0.49	0	1
Mixed-gender audit team (focal audit)	0.08	0.27	0	1
Audit team average age (prior audit)	29.85	3.57	25	45
Audit team average age (focal audit)	30.12	3.76	25	45
Audit team maximum tenure (prior audit)	3.56	2.40	0.74	10.48
Audit team maximum tenure (focal audit)	3.79	2.47	0.74	10.48

N = 3,495. ^{S} indicates standardized. ^{L} indicates logged.

Table 4. Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Improvement of wage & benefits score	1															
2	Improvement of health & safety score	0.19	1														
3	Increase in performance gap	0.67	-0.60	1													
4	Wage & benefits score (prior audit)	-0.62	-0.14	-0.35	1												
5	Health & safety score (prior audit)	-0.12	-0.56	0.29	0.31	1											
6	Performance gap between wage & benefits score [S] and health & safety score [S] (prior audit)	-0.42	0.35	-0.54	0.59	-0.59	1										
7	Local worker activism [S]	-0.08	-0.09	0.00	0.04	0.14	-0.08	1									
8	Piece-rate payment (prior audit)	0.03	0.02	0.00	-0.13	-0.12	-0.01	-0.09	1								
9	Union (prior audit)	0.07	0.02	0.05	-0.01	-0.02	0.01	-0.13	0.13	1							
10	City population (prior audit) [L]	0.01	0.02	0.00	0.05	0.02	0.03	0.38	-0.06	0.02	1						
11	City GDP per capita (prior audit) [L]	0.03	0.01	0.02	0.01	0.04	-0.02	0.29	-0.01	0.06	0.45	1					
12	City GDP growth rate (prior audit)	0.02	0.01	0.00	-0.07	-0.01	-0.05	-0.12	0.05	-0.06	-0.22	-0.14	1				
13	City GDP growth rate ranking (prior audit)	0.04	0.01	0.01	-0.14	0.02	-0.13	0.40	-0.04	-0.08	0.01	0.08	-0.47	1			
14	City Internet diffusion (prior audit)	0.03	0.00	0.02	-0.02	0.05	-0.06	0.39	-0.04	0.00	0.53	0.65	0.00	-0.12	1		
15	Factory employment (prior audit) [L]	0.06	0.01	0.04	-0.10	-0.04	-0.04	0.05	0.13	0.34	-0.02	0.07	0.00	0.12	0.08	1	
16	Factory age (prior audit) [L]	0.03	-0.01	0.04	0.00	-0.03	0.02	-0.03	0.05	0.22	0.02	0.09	-0.03	0.00	0.08	0.26	1
17	Percent of female workers (prior audit)	0.00	-0.03	0.02	0.09	0.09	0.00	-0.14	0.01	-0.03	0.01	0.01	0.04	-0.14	-0.04	-0.15	0.00
18	Percent of local workers (prior audit)	0.00	0.00	0.01	0.08	-0.03	0.09	-0.47	0.06	0.08	-0.22	-0.31	0.17	-0.33	-0.35	-0.20	0.02
19	Use subcontractor (prior audit)	0.02	0.05	-0.02	-0.05	-0.06	0.00	-0.03	0.10	0.03	0.03	0.00	-0.04	0.03	-0.02	0.00	-0.02
20	Management system certification (prior audit)	0.06	0.03	0.03	0.01	-0.03	0.03	-0.07	0.06	0.25	0.02	0.05	-0.05	-0.03	0.02	0.28	0.12
21	Paid by buyer (prior audit)	-0.02	0.00	-0.02	0.06	0.05	0.00	-0.03	-0.04	-0.04	-0.01	-0.04	0.04	-0.03	-0.04	-0.12	-0.06
22	Paid by buyer (focal audit)	-0.03	0.00	-0.02	0.07	0.06	0.01	0.00	-0.06	-0.05	0.00	-0.02	0.04	-0.03	-0.02	-0.13	-0.06
23	Audit sequence	-0.04	-0.05	0.00	0.02	0.09	-0.06	-0.01	-0.03	0.09	-0.04	0.07	-0.11	-0.01	0.05	0.10	0.18
24	Months since prior audit	-0.30	-0.26	-0.04	0.36	0.27	0.08	0.29	-0.08	-0.08	0.00	-0.01	-0.05	-0.02	-0.01	-0.11	-0.05
25	All-female audit team (prior audit)	0.00	0.01	-0.01	-0.02	-0.02	0.00	0.01	-0.01	-0.01	-0.01	0.08	0.03	0.03	0.01	-0.07	-0.03
26	Mixed-gender audit team (prior audit)	0.06	0.03	0.02	-0.09	-0.02	-0.06	0.14	-0.01	0.04	0.03	0.09	-0.03	0.19	0.11	0.35	0.09
27	All-female audit team (focal audit)	0.01	0.00	0.01	-0.01	-0.02	0.01	0.00	0.01	0.00	-0.01	0.09	0.01	0.02	0.02	-0.02	0.00
28	Mixed-gender audit team (focal audit)	-0.05	-0.09	0.02	-0.01	0.04	-0.04	0.23	-0.02	0.03	0.05	0.08	0.00	0.12	0.11	0.26	0.08
29	Audit team average age (prior audit)	0.01	0.01	-0.01	-0.08	0.04	-0.10	0.03	-0.02	-0.02	-0.06	-0.04	0.04	0.11	-0.03	0.05	0.00
30	Audit team average age (focal audit)	-0.03	0.00	-0.03	-0.03	0.04	-0.06	0.07	-0.03	-0.04	-0.10	-0.07	0.04	0.14	-0.04	0.00	-0.01
31	Audit team maximum tenure (prior audit)	0.06	0.05	0.00	-0.12	0.00	-0.09	0.01	-0.03	0.01	-0.05	0.06	-0.02	0.16	0.03	0.16	0.04
32	Audit team maximum tenure (focal audit)	-0.05	-0.03	-0.02	-0.02	0.03	-0.04	0.05	-0.04	0.01	-0.10	0.00	-0.03	0.14	0.01	0.11	0.04

Table 4. Correlations (continued)

		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
17	Percent of female workers (prior audit)	1															
18	Percent of local workers (prior audit)	0.33	1														
19	Use subcontractor (prior audit)	0.07	0.00	1													
20	Management system certification (prior audit)	-0.04	0.01	0.03	1												
21	Paid by buyer (prior audit)	0.12	0.06	0.05	-0.04	1											
22	Paid by buyer (focal audit)	0.12	0.05	0.03	-0.05	0.69	1										
23	Audit sequence	0.01	-0.01	0.00	0.06	0.01	0.05	1									
24	Months since prior audit	0.03	-0.01	-0.05	-0.06	-0.01	-0.02	-0.11	1								
25	All-female audit team (prior audit)	0.03	0.06	0.02	0.02	-0.02	-0.02	0.01	-0.02	1							
26	Mixed-gender audit team (prior audit)	-0.07	-0.18	-0.03	0.02	0.03	0.02	0.02	-0.07	-0.27	1						
27	All-female audit team (focal audit)	0.02	0.01	0.00	0.02	0.00	-0.01	-0.01	-0.05	0.12	-0.02	1					
28	Mixed-gender audit team (focal audit)	-0.09	-0.16	-0.03	0.01	-0.02	0.02	0.06	0.13	-0.04	0.18	-0.23	1				
29	Audit team average age (prior audit)	-0.03	-0.07	-0.01	-0.02	-0.02	-0.03	0.08	-0.04	-0.12	0.05	0.02	0.02	1			
30	Audit team average age (focal audit)	-0.05	-0.06	-0.03	-0.04	-0.02	-0.02	0.05	0.06	0.04	0.04	-0.13	0.04	0.11	1		
31	Audit team maximum tenure (prior audit)	-0.05	-0.08	-0.01	0.00	-0.02	-0.02	0.09	-0.10	-0.04	0.21	0.01	0.10	0.60	0.10	1	
32	Audit team maximum tenure (focal audit)	-0.03	-0.04	-0.01	-0.02	-0.03	0.00	0.09	0.07	0.03	0.10	-0.08	0.19	0.09	0.62	0.21	1

N = 3,495. ^{S} indicates standardized. ^{L} indicates logged.

Table 5. Primary OLS Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	*Improvement in wage & benefits score*	*Increase in performance gap*	*Improvement in wage & benefits score*	*Increase in performance gap*	*Improvement in wage & benefits score*	*Increase in performance gap*
Local worker activism [S]	2.114**	0.135**	1.973**	0.127**	1.804**	0.116**
	(0.590)	(0.037)	(0.622)	(0.038)	(0.559)	(0.030)
Piece-rate payment (prior audit)	-8.818***	-0.092	-8.378***	-0.066	-8.716***	-0.085
	(2.150)	(0.107)	(1.904)	(0.088)	(2.161)	(0.108)
Union (prior audit)	3.361***	0.068+	3.416***	0.071+	3.721**	0.090
	(0.717)	(0.038)	(0.701)	(0.038)	(1.000)	(0.061)
Local worker activism [S] × Piece-rate payment (prior audit)			2.122*	0.122**		
			(0.899)	(0.037)		
Local worker activism [S] × Union (prior audit)					2.259*	0.140**
					(0.803)	(0.039)
Wage & benefits score (prior audit)	-0.671***		-0.672***		-0.671***	
	(0.014)		(0.014)		(0.014)	
Performance gap between wage & benefits score[S] and health & safety score[S] (prior audit)		-0.697***		-0.696***		-0.695***
		(0.025)		(0.025)		(0.025)
City population (prior audit) [L]	-52.404	-2.272	-50.458	-2.163	-49.876	-2.133
	(103.885)	(6.904)	(103.936)	(6.882)	(103.321)	(6.769)
City GDP per capita (prior audit) [L]	-19.812	-1.861	-19.828	-1.862	-19.625	-1.848
	(36.181)	(1.415)	(35.985)	(1.399)	(35.947)	(1.396)
City GDP growth rate (prior audit)	-0.124	-0.001	-0.104	-0.000	-0.096	0.000
	(0.310)	(0.013)	(0.309)	(0.013)	(0.308)	(0.013)
City GDP growth rate ranking (prior audit)	0.014	0.001	0.014	0.001	0.019	0.002
	(0.128)	(0.005)	(0.127)	(0.005)	(0.129)	(0.005)
City Internet diffusion (prior audit)	-2.327	0.470	-2.311	0.470	-2.960	0.428
	(11.570)	(0.781)	(11.548)	(0.784)	(12.123)	(0.768)
Factory employment (prior audit) [L]	0.268+	0.034	0.263	0.034	0.264+	0.034
	(0.151)	(0.021)	(0.153)	(0.021)	(0.146)	(0.021)
Factory age (prior audit) [L]	0.795	0.068*	0.793	0.068*	0.800	0.069*
	(0.714)	(0.025)	(0.716)	(0.025)	(0.709)	(0.025)
Percent of female workers (prior audit)	4.505*	0.017	4.364*	0.009	4.182*	-0.003
	(1.915)	(0.144)	(1.837)	(0.140)	(1.671)	(0.135)
Percent of local workers (prior audit)	2.316*	0.196*	2.343*	0.197*	2.370*	0.199*
	(0.900)	(0.080)	(0.899)	(0.079)	(0.908)	(0.078)
Use subcontractor (prior audit)	-1.982+	-0.073*	-1.998+	-0.074*	-1.949+	-0.071*
	(1.050)	(0.029)	(1.068)	(0.030)	(1.042)	(0.029)
Management system certification (prior audit)	1.851+	-0.004	1.872+	-0.003	1.932+	0.001
	(1.002)	(0.061)	(1.005)	(0.061)	(1.019)	(0.063)
Paid by buyer (prior audit)	-0.509	-0.027	-0.505	-0.027	-0.573	-0.031
	(1.222)	(0.057)	(1.223)	(0.057)	(1.206)	(0.058)
Paid by buyer (focal audit)	2.570	-0.034	2.548	-0.035	2.582	-0.033
	(1.556)	(0.056)	(1.559)	(0.056)	(1.549)	(0.055)

Table 5. Primary OLS Regression Results (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	*Improvement in wage & benefits score*	*Increase in performance gap*	*Improvement in wage & benefits score*	*Increase in performance gap*	*Improvement in wage & benefits score*	*Increase in performance gap*
Months since prior audit	-0.294*	0.003	-0.296*	0.003	-0.297*	0.003
	(0.122)	(0.007)	(0.120)	(0.007)	(0.124)	(0.007)
All-female audit team (prior audit)	-0.737	-0.019	-0.787	-0.022	-0.745	-0.019
	(1.205)	(0.022)	(1.233)	(0.023)	(1.199)	(0.022)
Mixed-gender audit team (prior audit)	3.168+	0.054	3.056+	0.048	3.007+	0.044
	(1.688)	(0.038)	(1.742)	(0.040)	(1.733)	(0.038)
All-female audit team (focal audit)	-0.196	0.065	-0.209	0.064	-0.141	0.069
	(0.686)	(0.059)	(0.683)	(0.059)	(0.722)	(0.059)
Mixed-gender audit team (focal audit)	-3.273*	0.123	-3.339*	0.119	-3.521*	0.108
	(1.338)	(0.077)	(1.301)	(0.076)	(1.269)	(0.079)
Audit team average age (prior audit)	-0.051	-0.002	-0.047	-0.001	-0.058	-0.002
	(0.115)	(0.001)	(0.114)	(0.001)	(0.121)	(0.001)
Audit team average age (focal audit)	0.164	0.000	0.156	0.000	0.168	0.001
	(0.218)	(0.007)	(0.222)	(0.008)	(0.216)	(0.007)
Audit team maximum tenure (prior audit)	0.196	-0.006	0.191	-0.007	0.215	-0.005
	(0.241)	(0.006)	(0.240)	(0.006)	(0.256)	(0.007)
Audit team maximum tenure (focal audit)	-0.417	-0.002	-0.417	-0.002	-0.420	-0.002
	(0.286)	(0.009)	(0.286)	(0.009)	(0.284)	(0.009)
Observations	3,495	3,495	3,495	3,495	3,495	3,495
R-squared	0.4547	0.3765	0.4550	0.3770	0.4553	0.3777

Note: Ordinary least squares (OLS) regression coefficients with standard errors clustered by supplier province in parentheses. City fixed effects, industry fixed effects, year fixed effects, audit-sequence fixed effects, and buyer-country fixed effects are included. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10 (two-tailed tests). ^{S} indicates standardized. ^{L} indicates logged.

Table 6. OLS Regressions Predicting Improvement in Health & Safety Score

	(1)	(2)	(3)
Dependent variable	*Improvement in health & safety score*		
Local worker activism [S]	-0.979*	-0.928+	-0.809*
	(0.454)	(0.461)	(0.348)
Piece-rate payment (prior audit)	-2.950**	-3.109**	-2.999**
	(1.002)	(0.843)	(1.010)
Union (prior audit)	0.575+	0.555	0.373
	(0.324)	(0.331)	(0.430)
Local worker activism [S] × Piece-rate payment (prior audit)		-0.768*	
		(0.363)	
Local worker activism [S] × Union (prior audit)			-1.252*
			(0.468)
Health & safety score (prior audit)	-0.550***	-0.550***	-0.549***
	(0.024)	(0.024)	(0.023)
City population (prior audit) [L]	23.319	22.628	21.986
	(58.033)	(57.720)	(56.288)
City GDP per capita (prior audit) [L]	13.285	13.288	13.136
	(9.466)	(9.407)	(9.422)
City GDP growth rate (prior audit)	-0.061	-0.068	-0.076
	(0.138)	(0.140)	(0.135)
City GDP growth rate ranking (prior audit)	-0.033	-0.033	-0.036
	(0.080)	(0.080)	(0.079)
City Internet diffusion (prior audit)	-5.023	-5.026	-4.654
	(11.871)	(11.883)	(11.639)
Factory employment (prior audit) [L]	-0.310	-0.308	-0.308
	(0.251)	(0.251)	(0.256)
Factory age (prior audit) [L]	-0.474+	-0.474+	-0.477+
	(0.257)	(0.257)	(0.256)
Percent of female workers (prior audit)	1.651	1.701	1.825
	(1.254)	(1.243)	(1.255)
Percent of local workers (prior audit)	-1.584	-1.594	-1.613
	(1.198)	(1.190)	(1.176)
Use subcontractor (prior audit)	0.316	0.322	0.301
	(0.356)	(0.355)	(0.352)
Management system certification (prior audit)	1.110+	1.102+	1.065
	(0.627)	(0.628)	(0.644)
Paid by buyer (prior audit)	-0.006	-0.007	0.028
	(0.765)	(0.766)	(0.773)
Paid by buyer (focal audit)	1.720**	1.727**	1.711**
	(0.583)	(0.584)	(0.584)
Months since prior audit	-0.268***	-0.268***	-0.268***
	(0.031)	(0.031)	(0.033)
All-female audit team (prior audit)	-0.094	-0.076	-0.089
	(0.476)	(0.474)	(0.477)
Mixed-gender audit team (prior audit)	1.035+	1.076+	1.125*
	(0.519)	(0.518)	(0.516)
All-female audit team (focal audit)	-1.140	-1.135	-1.170
	(0.937)	(0.939)	(0.932)
Mixed-gender audit team (focal audit)	-3.691**	-3.667**	-3.553**
	(0.959)	(0.953)	(0.985)
Audit team average age (prior audit)	-0.013	-0.015	-0.010
	(0.069)	(0.069)	(0.067)
Audit team average age (focal audit)	0.088	0.091	0.086
	(0.061)	(0.061)	(0.061)
Audit team maximum tenure (prior audit)	0.196**	0.198**	0.186*
	(0.067)	(0.067)	(0.068)
Audit team maximum tenure (focal audit)	-0.196	-0.196	-0.194
	(0.153)	(0.154)	(0.154)
Observations	3,495	3,495	3,495
R-squared	0.3838	0.3839	0.3844

Note: Ordinary least squares (OLS) regression coefficients with standard errors clustered by supplier province in parentheses. City fixed effects, industry fixed effects, year fixed effects, audit-sequence fixed effects, and buyer-country fixed effects are included. *** p<0.001, ** p<0.01, * p<0.05, + p<0.10 (two-tailed tests). [S] indicates standardized. [L] indicates logged.