BETWEEN LEGITIMACY AND COST: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING RIGHTS IN GLOBAL SUPPLY CHAINS

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Scholars and practitioners have advocated for freedom of association and collective bargaining (FOA/CB) rights as a key mechanism to improve labor compliance in global supply chains. Drawing on a longitudinal data set comprising 6,500 Better Work factory assessments across seven countries from 2015 to 2021, the authors compare violations of various FOA/CB elements to provide a general picture of the progress and problems of FOA/CB in supplier workplaces. They argue that suppliers are likely to selectively comply with FOA/CB elements that afford them some legitimacy but will violate the elements that impose significant costs on them. Specifically, the authors find fewer violations of union formation rights, in contrast to higher violations of union operation rights and of collective bargaining rights. Yet, when these latter rights are respected, they are associated with better compliance with other employment standards, with effective collective bargaining having the strongest effect.

The dominant form of private regulation of labor standards in global supply chains (GSCs)—codes of conduct and auditing—has led to limited and unstable improvement for workers over the past three decades (Locke 2013; Kuruvilla 2021). Scholars and practitioners have pivoted to focus on the enabling rights of freedom of association and collective bargaining (FOA/CB) as an alternative means to improve compliance with other employment standards in supplier factories (Anner 2021; Kuruvilla and Li 2021; Reinecke and Donaghey 2021b). Given that suppliers face

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pressures to improve compliance from multiple sources, we address the question of how suppliers may respond to various elements of FOA/CB.

Extant research presents both pessimistic and cautiously optimistic views on the state of FOA/CB at supplier workplaces. The pessimistic view sees little or no improvement in FOA/CB rights in GSCs (Barrientos and Smith 2007; Lund-Thomsen and Lindgreen 2014; Kuruvilla 2021). Reasons for this lack of improvement include lead firms' lack of will and technical capacity to enforce these rights, their aggressive sourcing practices, and constraints in the host country political environment (e.g., China) that limit FOA (Anner 2012, 2017; Egels-Zandén and Merk 2014).

More optimistic accounts highlight the positive ways in which some committed brands, multi-stakeholder initiatives (MSIs), and transnational activists have supported worker organizations and collective bargaining in supplier factories. Such positive examples include cross-border organizing campaigns that facilitated unionization and collective bargaining agreements (CBAs) at some export factories (Rodríguez-Garavito 2005; Anner 2011), MSIs that facilitated the exercise of worker voice in certain supplier workplaces (Pike 2020; Reinecke and Donaghey 2021a), and the recent CBAs at Honduran garment export factories that have been extolled as a "sustainable solution for poor working conditions" in the garment sector (Anner 2022: 5).

In contrast to prior research that focused on a particular aspect of FOA/CB in GSCs, we develop an analytical framework integrating four elements of FOA/CB rights—union formation, union operation, collective bargaining, and strikes—to provide a comprehensive analysis of the progress and problems of these core labor rights at supplier workplaces. We argue that suppliers are likely to selectively comply with FOA/CB elements such as union formation that afford them legitimacy with lead firms or local governments, but will violate the elements of union operation and collective bargaining that impose significant costs on their operations. We draw on 6,500 factory assessments (also referred to as "audits") from the International Labour Organization's (ILO) Better Work (BW) program covering 1,983 factories in seven countries from 2015 to 2021.[1] Analysis of detailed violations of FOA/CB rights supports our argument.

Our contribution is to highlight the specific obstacles to the administration of these rights, and provide insights that could help channel the efforts of various actors to advance FOA/CB rights in GSCs, as well as to inform implementation and risk analysis concerning FOA/CB under the 2024 Corporate Sustainability Due Diligence legislation in the European Union.

Freedom of Association and Collective Bargaining in Global Supply Chains

Private regulation in the form of codes of conduct and social auditing has led to limited and unstable improvement on some employment standards

[1]BW data are available from the Better Work program of the ILO.

in GSCs over the past three decades (Barrientos and Smith 2007; Locke 2013; Kuruvilla 2021). Practitioners and scholars have increasingly advocated for the enabling rights of FOA/CB as an alternative means to improving international labor standards (Kuruvilla and Li 2021; Reinecke and Donaghey 2021b), whether called "empowered participatory approaches" (Rodríguez-Garavito 2005), "labor-centered paths" (Gereffi and Lee 2016), "encompassing collective bargaining agreements" (Anner 2021), or "transnational industrial relations agreements" (Ashwin et al. 2020).

Many actors have endeavored to promote FOA/CB in GSCs. Although some MSI's, such as the Fair Labor Association (FLA), have been criticized for not emphasizing FOA/CB (Anner 2012), brands such as H&M and Zara have signed framework agreements with global unions, leveraging the monitoring capacity of unions to enforce global labor standards (Bourguignon, Garaudel, and Porcher 2020). At the industrial level, 15 garment brands and IndustriAll (a global union) co-founded the Action Collaboration Transformation initiative to promote FOA/CB in major garment-producing countries to negotiate a living wage for garment workers (Ashwin et al. 2020). Additionally, international civil society organizations (CSOs) and global unions have coordinated campaigns to support unionization and collective bargaining at export factories (Rodríguez-Garavito 2005; Anner 2011), funded and trained local unions (Li and Hu 2023), and pressured global brands to sign local FOA/CB protocols, for example, in Indonesia (Siegmann, Merk, and Knorringa 2017).

Furthermore, developed country governments are increasingly intervening or legislating labor issues in GSCs (Amengual and Bartley 2022), exemplified by the currently unfolding raft of new legislation on corporate sustainability due diligence in Europe. With specific reference to FOA/CB, the European Union–Vietnam Free Trade Agreement in 2019 reinforced the ambitious labor provisions in the short-lived Trans-Pacific Partnership led by the United States and thus pressured Vietnam to ratify ILO Convention 98 on the Right to Organise and Collective Bargaining, opening political space for independent unions in Vietnam (Anner 2021: 621). At the local level, some local unions have leveraged global buyers to support union rights at the workplace (Bartley and Egels-Zandén 2016) and worker activism has exerted collective voice and brought about collective negotiations, for example, in Vietnam (Anner 2018) and China (Li 2021). Overall, the actions of private, social, public, and local actors create a general institutional norm for suppliers to uphold FOA/CB rights.

Given these various sources of pressure, what does the available evidence indicate regarding the extent of progress of FOA/CB in supplier workplaces? Optimistic and pessimistic arguments and examples both apply. The *pessimistic strand* highlights little or no improvement in FOA/CB rights at supplier sites (Barrientos and Smith 2007; Lund-Thomsen and Lindgreen 2014; Kuruvilla 2021). To begin with, apart from a lack of emphasis by brands and MSIs (Anner 2012), there are technical difficulties in detecting

FOA/CB violations at the workplace given the short duration of the typical social audit, the lack of worker trust in auditors, and the challenges in accurately gauging subtle anti-union practices (Egels-Zandén and Merk 2014). Inadequate information can hinder buyers' enforcement efforts and suppliers' incentive to comply (Locke, Amengual, and Mangla 2009).

The implementation of global FOA/CB rules at supplier workplaces can also be hampered by local states (Niforou 2012; Anner 2017; Bartley 2018). Often, local labor laws specify rules regarding various FOA/CB elements such as threshold membership for union recognition. Governments in developing countries, where low-cost labor-intensive supply chains are located, typically have low administrative capacity or motivation to enforce FOA/CB rights (Ruwanpura 2015). For example, the Bangladesh government actively resisted independent safety committees at garment factories and rejected many union registration applications (Bair, Anner, and Blasi 2020).

Evidence also suggests that aggressive sourcing practices of global firms undermined the resources and power of worker organizations at supplier workplaces. For example, Anner (2018: 75) found that declines in prices and delivery time undermined efforts of worker committees to address cost-sensitive issues in Vietnam's apparel export factories. Louche, Staelens, and D'Haese (2020: 389–90) found that just-in-time orders and low prices led to a flexible workforce with low wages in an Ethiopian supplier, resulting in "lack of bargaining power" for the union. Similarly, codes of conduct did not lead to more respect for CB or better-quality CBAs among the 192 unionized Indonesian factories analyzed by Bartley and Egels-Zandén (2015); nor did they allow workers to influence final decisions at the workplaces surveyed by Graz, Piazza, and Walter (2022).

Contrasting this pessimistic backdrop are some *optimistic* accounts. Some evidence shows that some global buyers and MSIs have actively facilitated the establishment of workplace unions or worker committees. Some social certification programs require local unions and CSOs to monitor and complain on behalf of workers, creating space for unions to organize workers (Riisgaard 2009). Examples with stronger buyer involvement include the democratic election of union leaders in one Chinese supplier of Reebok in 2002–3 (Yu 2008), democratic union elections in Turkish apparel factories (Koçer and Fransen 2009: 245), and the formation of worker welfare committees at some Yue Yuen factories belonging to the world's largest shoe supplier (Bartley 2018: 169). Likewise, Gansemans, Louche, and D'Haese (2021) showed how a Norwegian importer facilitated union recognition and social dialogue at pineapple plantations in Costa Rica. Reinecke and Donaghey (2021a) found, in their study of a pilot participation committee program among Bangladesh factories, that brands played three facilitative roles: guarantor (obtaining factory buy-in), capacity-builder (providing training on workplace dialogue to factory managers, supervisors, and workers), and enforcer (e.g., enforcing election of worker committees).

Other research shows that worker organizations at supplier factories are effective in using collective bargaining or voice to improve working conditions. For instance, Anner (2022) reported that Honduran unions, with support from international campaigns, succeeded in negotiating 22 CBAs with factories by 2021 that improved pay and dignity for 44% of the workforce in the country's garment sector. Pike (2020) showed that consultative committees promoted by Better Work Lesotho improved compliance. More generally, union presence at supplier workplaces has been shown to be associated with better compliance with labor standards (Oka 2016; Bird, Short, and Toffel 2019).

Other positive examples include efforts by some brands and MSIs to address FOA/CB violations at supplier factories. For instance, Levi Strauss, The Children's Place, and Kontoor Brands signed global binding agreements with labor unions and local CSOs to address gender-based violence and FOA violations in five garment factories in Lesotho in 2019 (Anner 2021: 626). In fact, FOA violations have long comprised a large portion of the complaints from local workers and unions to MSIs such as FLA, Worker Rights Consortium (Anner 2012, 2021), and Clean Clothes Campaign (Merk 2009), which often investigate and pressure brands and suppliers to address the issues.

The optimistic and pessimistic portrayals of FOA/CB in supplier workplaces have generally focused on a specific aspect of these rights, and in particular settings (for exceptions, see Anner 2012). Few have examined *all elements of FOA/CB rights* across *multiple contexts* to provide a comprehensive view of the status of these rights. In this article, we examine how suppliers across multiple countries might deal with the various elements of FOA/CB rights.

The Legitimacy and Cost Implications of FOA/CB Elements to Suppliers

How might suppliers respond to various FOA/CB rights under institutional pressures from multiple actors? Although scholars have studied suppliers' views on private regulation in general (e.g., Soundararajan, Spence, and Rees 2018; Lund-Thomsen 2020), studies of supplier strategies regarding FOA/CB are largely non-existent. We draw on prior literature to better understand supplier motivations. Under institutional pressures, suppliers are either likely to comply or at least appear to be compliant with some (but not all) labor standards, in order to appear as legitimate business partners or employers (Perry, Wood, and Fernie 2015; Jamali, Lund-Thomsen, and Khara 2017; Soundararajan et al. 2018). Furthermore, costs are a key concern for suppliers, whose margins are razor thin especially given the purchasing practices of brands that "squeeze" suppliers on price and delivery time (Anner 2018) while not compensating suppliers for the extra costs of compliance (Ruwanpura and Wrigley 2011; Soundararajan et al. 2018; Khan, Ponte, and Lund-Thomsen 2020). In light of these

legitimacy and cost concerns, many suppliers engaged in what Jamali et al. (2017) referred to as "selective decoupling" of actual practices from private codes and local laws.

Building on these insights, we suggest that factory managers are likely to balance legitimacy benefits and costs of various elements of FOA/CB rights when deciding on coupling or violation strategies. Legitimacy concerns often trickle down from global buyers whose reputation and legitimacy may be threatened by social activism (Bartley and Child 2014), and from global unions and/or due diligence legislation mentioned above. For suppliers, legitimacy usually entails adopting policies and practices that are important to current or expected future buyers and/or workers. However, FOA/CB involves relatively opaque process rights that are difficult to monitor (Egels-Zandén and Merk 2014), creating situations in which symbolic adoption of legitimating structures without substantive changes to efficiency practices may suffice for legitimacy (Meyer and Rowan 1977). Given the scope for "partial implementation," suppliers may perceive signals from global buyers about the importance[2] and thus legitimacy benefits of certain policies and practices when buyers collect and/or publicly report such metrics from supplier workplace (e.g., H&M and Marks & Spencer report the presence or absence of unions among their suppliers). Therefore, the adoption of *visible* structures—easily observable or measurable—may serve the legitimacy needs of both suppliers and global brands and retailers. Furthermore, visible structures such as a workplace union may help the supplier to showcase good industrial relations (IR) practices to global buyers (Koçer and Fransen 2009: 245), many of whom are concerned about labor unrest (Anner 2018; Oka 2018). For other less visible issues, suppliers are likely to evade the costly ones given their agency and concern with costs (e.g., Soundararajan et al. 2018). Our point is that suppliers may engage in "selective coupling"[3] of FOA/CB practices with institutional requirements—complying with FOA/CB elements that bring high legitimacy at a relatively low cost, but violate the FOA/CB rights that are more likely to significantly increase their costs.

FOA/CB rights typically include four major elements: the right to form independent trade unions, the ability of unions to operate in the workplace without interference, the right to engage in collective bargaining, and the right to strike. Union *formation* typically includes the right to form and register a trade union and obtain employer recognition of it. In countries where independent unions are not allowed (e.g., China), codes of conduct often insist on "parallel" means, that is, freely elected worker committees, which

[2]The most important signal is arguably direct linkage between compliance and business orders, which are not necessarily coupled in practice (Amengual, Distelhorst, and Tobin 2020).

[3]We use selective "coupling" instead of "decoupling" because decoupling usually indicates that the organizations endorse the formal policies but do not implement them in practice (Meyer and Rowan 1977). But suppliers in our context may not formally endorse the labor rights promoted by Western buyers and MSIs (Lund-Thomsen 2020).

provide workers with some voice. Union *operation* includes a union's capacity to conduct elections for leadership positions, meet with workers, post information on employment standards, represent workers in labor disputes, and engage in quotidian union activity. *Collective bargaining* includes many aspects, such as the right to bargain and conclude agreements and the right to inform workers about CBA provisions. The *right to strike* entails legal protection of workers' jobs and other rights for them to conduct strikes, especially to support their demands during collective bargaining. These elements of FOA/CB bring varying legitimacy benefits and costs to suppliers.

For union formation, formal structures or policies are typically highly visible and easily verifiable, and hence, the presence of a workplace union—regardless of whether it can operate freely—can be a visible signal of FOA, bestowing high legitimacy by making the appearance of compliance and functioning IR. The presence of a union per se may be a low cost issue to factory management; this is especially the case because managers can often draw on their power in the workplace to control the daily activities of a union, making it a non-functioning *symbolic union* on paper. Indeed, Louche et al. (2020: 390) documented a case in which farm managers asked workers to form a union in order to obtain a social standards certification. More perniciously, case studies show that some factories deliberately worked with moderate unions to fend off radical ones that may strike (Anner 2011) or establish quasi-union committees or councils to promote management-dominated workplace harmony (Anner 2011: 96; Perry et al. 2015: 743). Nonetheless, in a few cases factory managers—facing only weak pressure from global buyers—defeated union formation attempts by using obvious anti-union tactics such as holding group meetings with workers to smear unions (Ruwanpura 2015) or dismissing workers who joined a union (Koçer and Fransen 2009: 249). Overall, in the context of pressures from buyers and other stakeholders, we would expect low violations of union formation rights, given their high legitimacy benefit and low cost, and consequently, a higher incidence of workplace unions in our sample.

By contrast, the element of union *operation* involves daily activities that are less visible and more difficult to quantify (relative to the presence or absence of a union) to signal compliance or functioning IR practices. Suppliers may thus perceive moderate legitimacy benefits to allow mundane union activities while seeing a gray space to violate union operation rights. Moreover, such activities may increase labor costs *directly* when unions regularly monitor working conditions and remediate violations of legal standards or private codes (e.g., social security contribution) through direct negotiation with management and/or contacting relevant global brand or retailers (Bartley and Egels-Zandén 2016; Li and Hu 2023) or pressuring local governments to enforce laws (Ford, Gillan, and Ward 2023). Workplace unions may also increase labor costs *indirectly* by raising workers' awareness of their legal rights through training (Li and Hu 2023), which may enable

workers themselves to request such rights from management. For this monitoring role, union leaders need independence from management and paid time-off to talk to workers and external actors. Such costs to management may underlie prior findings that factory managers try to prevent functioning unions or committees by, for example, limiting time off for union activity, threatening worker representatives (Tetteh and Mustchin 2022: 519), firing union leaders/activists (Anner 2011), or otherwise interfering with union leaders who occupy union leadership positions (Anner 2018: 89). Considering moderate legitimacy benefits and some costs to management, we would expect to see higher violations of union operation rights relative to union formation rights.

Similar to union operation, collective bargaining processes are also less visible and more difficult to quantify to serve as good signals about the suppliers' respect of CB rights. It is difficult, for example, to gauge whether the employer bargains in good faith. Respect of CB rights may thus bring moderate legitimacy benefit to suppliers. But suppliers may have a major motivation to resist genuine CB given that it has the most potential to increase labor costs by instituting (better) employment standards in collective agreements. For example, Anner's (2022: 4–5) survey of 387 workers in the Honduran export sector showed that those covered by CBAs received 6.5% wage premiums and were more likely to have a lunch subsidy and free transportation than workers without CBAs. That is, effective collective bargaining including CBAs usually improves work conditions and increases labor costs to management, which may or may not be offset by productivity gains (Freeman and Medoff 1984). Factory managers may thus attempt to resist signing CBAs (Anner 2011; Louche et al. 2020), or sign *symbolic* CBAs with moderate or management-controlled unions that neither represent worker voice nor improve conditions beyond rights set forth in law (Niforou 2012: 364), or not implement CBAs at all (Bartley and Egels-Zandén 2015: S31). Thus, we would expect the highest violations of collective bargaining rights given their ability to impose high costs, with only modest legitimacy benefits to the supplier.

Finally, *strikes*, especially large-scale ones, tend to be highly salient events for media and global buyers because of their disruption to supply chains that delays delivery and sales (Oka 2018: 97). Consequently, employer violations of workers' right to strike during such a salient event—such as replacing striking workers—are likely to be highly visible. The potential publicity of such violations may raise high legitimacy concerns for suppliers given that it signals unstable labor relations and significant collective conflict. After all, "stability is now part and parcel of where the brands are looking"—as explained by one brand representative (Oka 2018: 100). Meanwhile, strikes are likely to impose high costs on the employer in the form of lower production output, late delivery in lieu of just-in-time production, and penalties for delays (Anner 2018). The effectiveness of wildcat strikes in forcing management concessions on higher wages and other legal

Table 1. Four Elements of FOA/CB Rights and Their Legitimacy and Cost Implications to Suppliers

	Legitimacy: Appearance of compliance	*Costs: Influence on other employment standards*	*Expected violations*
Union formation	High	Low	Low
Union operation	Moderate	Moderate	Moderate
Collective bargaining	Moderate	High	High
Strike	High but rare	High but rare	Low

Notes: FOA/CB, freedom of association/collective bargaining.

standards in Vietnam (Anner 2018) and China (Li 2020) attests to their costs. Nonetheless, this strong disruptive potential is often constrained by legislated bureaucratic processes for strike authorization. Legal strikes—those that are protected by laws and basic codes on FOA/CB—are relatively rare in GSCs. Considering the high legitimacy concern and the rarity of legal strikes, we expect low violations of strike rights.

The foregoing analysis of potential legitimacy benefits and costs of the four FOA/CB elements is summarized in Table 1. Our first proposition, comparing the four elements, is that violations of collective bargaining rights will be the highest, followed by violations of union operation rights, which in turn would be higher than union formation or strike rights violations. We note that measurement bias or ease of detection may significantly influence the violations observed. The quality of indicators used for each FOA/CB element and the assessment/audit process are thus crucial for a meaningful comparison.

Regarding potential costs to suppliers, we suggest that FOA/CB as enabling rights may impose costs to management through their potential to improve compliance with other employment standards such as wages and safety issues. Although unions and collective bargaining should be able to achieve employment terms better than those specified in national laws and private codes, most export factories in developing countries have not achieved full compliance and continue to violate basic labor rights (Kuruvilla 2021). Improvement in compliance may thus be a meaningful indicator of the union's roles as monitoring agent (*union operation*) and *collective bargaining* agent, incurring costs to management. Indeed, Antolin, Babbitt, and Brown's (2021) analysis of Better Work assessments showed that compliance is related with actual costs measured by weekly pay and production cost. Hence our second proposition is that the various elements of FOA/CB will be related differently to compliance with other employment standards. Specifically, we expect to see that compliance with the CB element (i.e., *effective CB*) would evidence a stronger relationship with compliance of other labor standards relative to compliance with the *union operation* element (i.e., *functioning union* when unions are allowed to function properly). And in turn, a well-functioning union would associate with higher

compliance with other labor standards relative to the *union formation* element (i.e., *symbolic union*). As the costs of strikes to management may occur mainly in the form of production lost and the right to strike may be an important background threat that bolsters the other union activities, we do not compare the strike rights–compliance relationship in this second proposition.

Methodology

Data

For high-quality measurement of FOA/CB rights, we draw on Better Work's (BW) assessments of factories in seven countries from January 2015 to September 2021. BW is a joint program of the ILO and International Finance Corporation (the World Bank Group) and is touted as "the most ambitious and far-reaching program" (Bair 2017: 171) covering apparel, textile, and footwear export factories. BW assessments provide the most comprehensive information on FOA/CB issues for our analysis. A typical BW assessment is unannounced to factory management and conducted by a team of two enterprise advisors/auditors who usually spend two days in the factory. The assessors review factory documents, interview managers, and triangulate by on-site inspections and interviews with a few dozen workers, worker representatives, and union leaders. BW's assessors, who have long tenure in BW, tend to be well-trained in labor standards and have established a rapport with the factory managers and workers/unions based on the capacity-building service they provide to factories and workers (Anner 2018). Their rapport with workers and unions likely enables them to elicit relatively accurate information on violations of FOA/CB rights in the 12 months before the audit. Our data show 186 assessors in the seven BW country programs conducting an average of 36 audits with an average tenure of 4 years at BW during our observation period.

BW assessments include multiple indicators for each of the four FOA/CB elements. Each element thus includes both easy-to-measure as well as opaque items. For example, there are relatively clear items such as the union having access to workers (for union formation), firing union leaders (for union operation), CBA terms at least as favorable as law, or replacing striking workers, respectively. Each element also includes more subtle indicators including the employer dissuading workers from union formation, or the employer interfering with union operation, good faith collective bargaining, or preventing workers from striking. Therefore, measurement and detection issues may be similar across the four FOA/CB elements in BW assessments.

We have access to 6,500 BW audits as well as separate data sets containing other factory information. These audits, shown in Table 2, covered 1,983 factories across seven countries. All garment/textile export factories in Cambodia, Jordan, and Haiti are mandated to join BW as a condition of

Table 2. Better Work Audits in Seven Countries, 2015–2021

Year	*Cambodia*	*Vietnam*	*Indonesia*	*Bangladesh*	*Jordan*	*Haiti*	*Nicaragua*	*Total*
2015	283	221	114	48	62	30	21	779
2016	413	257	146	71	68	24	22	1,001
2017	423	289	174	108	74	23	23	1,114
2018	391	271	177	133	75	24	24	1,095
2019	405	297	190	174	81	33	23	1,203
2020	221	311	32	50	54	9	6	683
2021	367	156	18	0	59	19	6	625
Total audits	2,503	1,802	851	584	473	162	125	6,500
No. of factories	721	496	289	290	101	49	37	1,983
No. of factories with two or more audits	578	407	222	157	93	36	33	1,526

trade agreements with the United States, whereas factories in Indonesia, Vietnam, Bangladesh, and Nicaragua have self-selected (or were encouraged by their global buyers) into BW. Among the factories, 457 experienced only one audit by BW, 324 had two, 274 had three, 312 experienced four, and 50 had five audits. While all the audits recorded violations of FOA/CB elements to test our first proposition, we draw on those factories with two or more repeated audits to form an unbalanced panel data set for the fixed-effect model for our second proposition.

Notably, several major apparel brands including H&M and Inditex (Zara) are BW's brand partners, as are many members of the Action Collaboration Transformation (ACT) that advocate for FOA/CB. Thus, BW factories are essentially facing multiple sources of pressure—from the many brands they supply, international organizations (BW and ILO), and local unions and governments, given BW's tripartite governance structure (Amengual and Chirot 2016). These overlapping efforts may form the strongest force pushing for FOA/CB in export factories. BW data thus constitute a "most likely case" in which FOA/CB rights would be respected and workers would achieve better employment standards.

Measurement of FOA/CB Rights

Better Work assessments include an average of 200 items that are counted in non-compliance reports shared with member brands. The exact number of items varies across countries based on local laws; for example, the question on whether workers can freely form or join unions is not asked in Vietnam. Among the 200 items, approximately 22 pertain to FOA/CB rights. While collective bargaining (five items) and strike (four items) rights are clear and well classified in BW's system, some items on union formation and operation are blurry. Four items in particular—employer dissuades workers from or threatens, punishes, fires workers for *union membership or activity*—relate to both union formation and operation. To reduce the odds

of fewer items and thus fewer violations of union formation rights, we take a conservative approach to maximize the items on union formation to include the four ambiguous items together with another five items on union formation. This approach minimizes items on union operation to include only four items on ostensible impingements of union activities, specifically, no facility, union dues issues, interference, and firing union leaders. Note that classifying the four items into union operation did not significantly change the findings, in part because of very low violation rates of these issues.

To facilitate comparing violation rates of the four FOA/CB elements, we calculate the percentage of assessments that found *any one item* within each element that was violated, following the approach by Distelhorst and McGahan (2022). For example, one audit would be coded as 1 (vs. 0) for a binary variable *union formation* if the factory violated any of its nine constituent items. These element violation rates can provide more robust comparison and tests given very low violation rates of the items (13 of the 22 items were found to be violated in less than 1% of the audits) and that only a very small minority[4] of audits recorded more than one violation within each element.

Besides detailed FOA/CB items and violations, another advantage of the BW assessments is the record of the presence of union(s) and collective bargaining agreement(s) at the factory. This information is not counted in non-compliance rates reported to buyers and thus may suffer less misreporting by factory managers and workers. We integrate the union presence information with *violation of any union operation rights* to create two variables to distinguish union presence from operation: *symbolic union presence* is coded as 1 (vs. 0) if a workplace union exists but at least one of the union operation rights is violated (13.1% among audits recorded union presence); *functioning union* is coded as 1 (vs. 0) if a workplace union exists and all union operation rights are respected. Similarly, we combine CBA presence and *violation of any collective bargaining rights* to create two variables: *CBA symbolic presence* (coded as 1 when CBA exists but at least one CB right is violated) and *effective collective bargaining* (coded as 1 when CBA exists and all CB rights are respected). Our nuanced coding of union and CB status allow us to go beyond prior regression analyses of the impact of the presence of a union (Oka 2016; Bird et al. 2019) or CBA (Bartley and Egels-Zandén 2015) on compliance to show the difference between symbolic presence of a union or CBA and functioning ones.

Analytical Strategy and Control Variables

We first show changes in FOA/CB violations along with audit cycle or years with Better Work as preliminary evidence of suppliers' responses to

[4]Only 0.38% of total assessments/audits found 2 to 5 violations of union formation rights; 1% found 2 to 3 violations of union operation rights; 4.52% found 2 to 4 violations of CB rights; and 0.05% found violations of 2 to 3 strike rights.

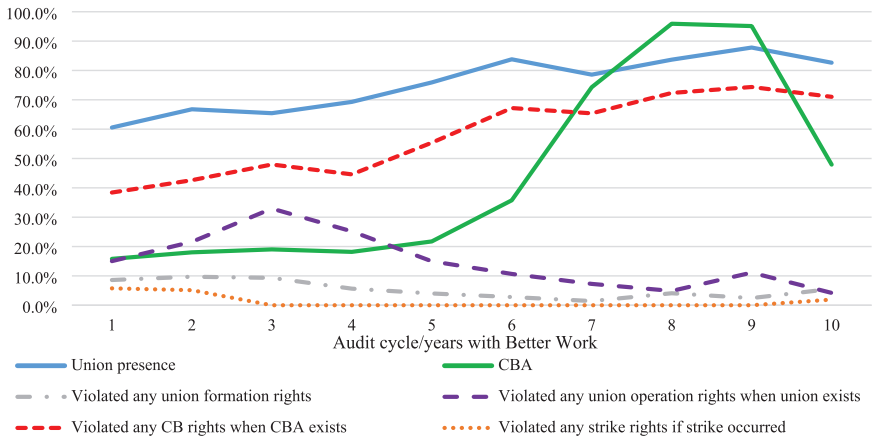
pressures from multiple actors channeled through BW. To formally test our first proposition, we use paired *t*-tests to compare violation rates of four FOA/CB elements recorded in all the audits.

Our second proposition takes correlation with compliance with other employment standards as a proxy of differential costs of distinct FOA/CB elements. BW assessments include an average of 177 items on other employment standards grouped into 7 clusters: occupational safety and health (59 items), discrimination (36), compensation (28), contracts and human resources (23), working time (14), forced labor (11), and child labor (6). We calculate *compliance with employment standards* as the percentage of items that the assessors did not find evidence of violation among the total number of items.

A crucial concern with the test of the second proposition is omitted variables, especially management quality, that may influence both FOA/CB rights and compliance with other standards. To reduce this concern—namely, that good managers choose to respect FOA/CB rights and comply, we focus on a fixed-effect model among factories with two or more audits. That is, we test *within-factory variation* in FOA/CB rights and compliance, holding constant all time-invariant aspects of the factory and country environment. As a robustness check, we also provide ordinary least squares (OLS) regression results with lagged dependent variables or the pooled sample to see whether alternative models provide convergent results.

To account for the impacts of changing management system or workforce in the factories, we control for several variables found to influence compliance with employment standards in prior research (Locke, Qin, and Brause 2007; Toffel, Short, and Ouellet 2015; Oka 2016; Bird et al. 2019).These include the *percentage of female workers* in the factory, *audit cycle/experience* (the number of years that the factory has been audited by BW), *factory age* (log years), *factory size* (log total workers), and the quality of *management system* (a 13-item index of human resource [HR] and occupational safety and health [OSH] practices such as whether the factory has a formal HR/OSH policy signed by top management, communicates these policies to workers, or assigns accountability to specific managers for implementing these policies). We also control for the *percentage of permanent workers* among total workforce as it may signal a "high road" strategy of stable employment and compliance (Distelhorst and McGahan 2022). We control for whether *strike(s) occurred* at the factory in the months prior to the audit to tease out its confounding impacts on compliance. *On-site audit* may capture more information on violations based on site inspections and in-person interviews, and this is a dummy variable with 1 indicating a regular on-site audit and 0 for virtual or hybrid (of virtual and on-site) audits in some countries during the COVID-19 pandemic. We include *year fixed effects* to control for global changes in purchasing practices and pressures on compliance across the years. Finally, since the FOA/CB rights and compliance are both measured

Figure 1A. FOA/CB Status in Countries with Mandatory Participation in Better Work



Notes: CBA coverage can be higher than the percentage of union presence because sectoral CBA in Jordan covered all factories, some of which do not have a workplace union. CBA, collective bargaining agreement; FOA/CB, freedom of association/collective bargaining.

in the same audit, we also control for *auditor*[5] *fixed effect* to account for potential common source bias such as the effect of auditor's gender and training on detection of violations (Short, Toffel, and Hugill 2016).

Results

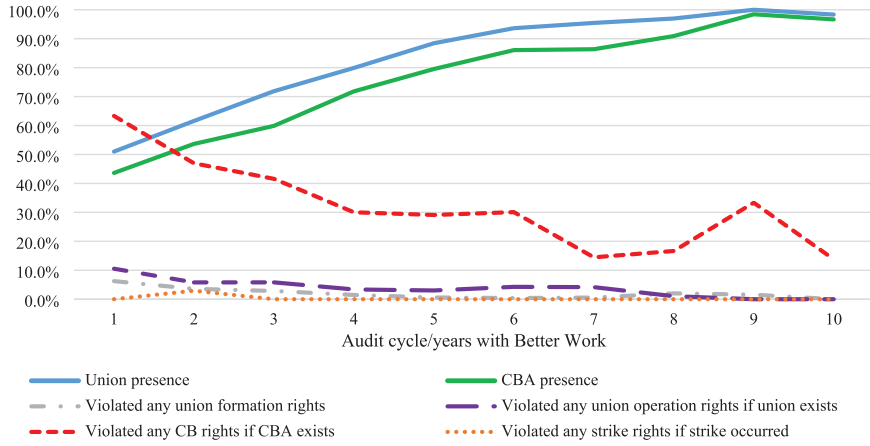
Comparing Violations of the Four FOA/CB Elements

We first present (potential) changes in FOA/CB status after joining Better Work for factories in countries with *mandatory* versus *voluntary* participation in BW. On top of pressure from BW and its partner brands, factories in Cambodia, Jordan, and Haiti face another layer of pressure from trade agreements with the United States that is conditional on improvements in labor standards and mandatory participation in BW. This extra external pressure may heighten legitimacy concerns for export factories who may (unwillingly) adopt legitimating structures such as union presence but continue to violate more costly CB rights. Figures 1A and 1B show steady increases in unionization rates along with audit cycle[6] or years with BW in both mandatory and voluntary countries, suggesting increasing adoption of workplace unions under pressure channeled through BW. These countries

[5]Two auditors' names appeared in each BW audit: "assessor 1" and "assessor 2." The auditors are equally likely to appear as "assessor 1" or "assessor 2," for example, one auditor's name appeared under "assessor 1" 73 times and "assessor 2" 68 times. This suggests potentially equivalent responsibility among the two assessors. We control for the fixed effect of the names under "assessor 2"—which contains 186 names— because these include a fuller set of auditor names than "assessor 1," which has 177 names.

[6]We find 1.7% audits that were in 11th to 16th audit cycle. We top-coded those cycles larger than 10 to avoid the influence of rare, long audit cycles.

Figure 1B. FOA/CB Status in Countries with Voluntary Participation in Better Work



Notes: CBA, collective bargaining agreement; FOA/CB, freedom of association/collective bargaining.

differ more in terms of collective bargaining rights: A slower increase[7] in CBA coverage along the first 6 audit cycles *and increasing violations of CB rights* in mandatory countries suggests less respect for more costly CB rights despite external pressure. By contrast, voluntary countries witness a steady increase in CBA coverage and *decreasing* violations of CB rights over audit cycles, which may reflect the factories' buy-in of high-road strategies (which is why they might choose to participate in BW in the first place). This comparison suggests that external pressures may be more effective in promoting union presence but less so regarding costly CB rights.

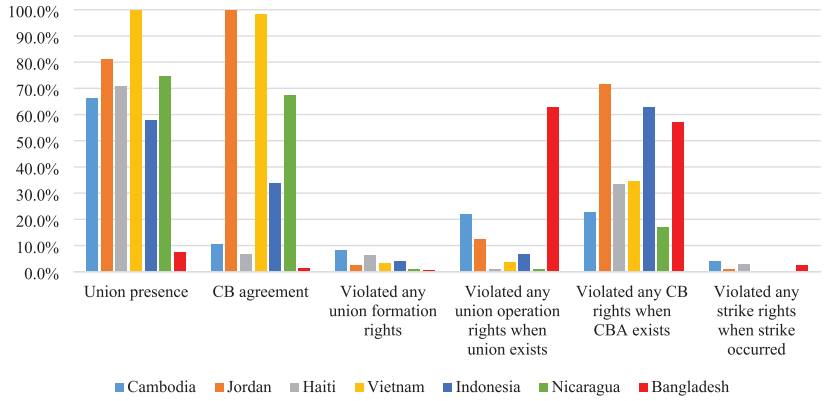
Figure 2 presents a more specific comparison of the FOA/CB elements across the seven countries. It shows high unionization rates in all the countries[8]—ranging from 57.8% in Indonesia to 99.9% in Vietnam—except Bangladesh, wherein only 7.4% of the audited factories have workplace unions. The extremely high union density in our data set of 496 Vietnamese factories in BW is not representative of the union status among the 6,000[9] garment factories in Vietnam. The average union density is 70.5% for the seven countries or 59.2% excluding Vietnam. We are

[7]The increase is even slower if we exclude audits in Jordan, which requires 100% coverage with its sectoral CBA.

[8]Workplace union in Jordan, which has one sectoral union, is coded based on union density in the factory with more than 1% membership counting as union presence. Audits in the other six countries directly ask how many active unions are in the factory.

[9]See https://www.antislavery.org/wp-content/uploads/2019/04/Pins-and-Needles-Vietnam-supply-chains-report.pdf.

Figure 2. FOA/CB Status across Seven Countries



Notes: CBA, collective bargaining agreement; FOA/CB, freedom of association/collective bargaining.

surprised by these high unionization rates—even higher than the union densities in many developed countries (Visser, Hayter, and Gammarano 2017)—and checked online global brands that indicate union status of their suppliers. We found four such brands/retailers[10]: H&M (2021), Marks & Spencer (2023), John Lewis (2023), and Benetton (2022). The companies that do publish union status of suppliers are likely to be progressive in the FOA/CB front, similar to Better Work. These four global buyers also reported[11] extremely high unionization rates among their supplier factories in Vietnam (83–100%), high in Cambodia (80–83%), moderate in Indonesia (45%), and low in Bangladesh (4–15.5% or higher considering worker committees). These alternative sources suggest high unionization rates similar to those in BW. Note that FOA in Vietnam is also influenced by a trade agreement with the European Union on FOA rights (Anner 2021), albeit without the requirement of mandatory participation in BW.

The coverage of CBAs varies vastly across the countries (see Figure 2). All Jordanian export garment factories are covered by its sectoral CBA, and 98.4% of Vietnamese factories have CBAs. When we exclude these two

[10]Online sources for these brands follow (all accessed November 18, 2023): H&M: https://hmgroup.com/sustainability/leading-the-change/transparency/supply-chain/; Marks & Spencer: https://interactivemap.marksandspencer.com/; John Lewis: https://www.johnlewispartnership.co.uk/content/dam/cws/pdfs/Juniper/ethics-and-sustainability/ES-reporting/JLP-Factory-List.pdf; and Benetton: https://www.benettongroup.com/en/sustainability/supply-chain/map-list/.

[11]Unionization rates among H&M suppliers relevant to our sample are Bangladesh 15% (226 suppliers), Indonesia 45% (67), Vietnam 100% (29), and Cambodia 83% (24). Marks & Spencer reported a 4% unionization rate among its 72 suppliers in Bangladesh, 100% in Vietnam (30 suppliers), and 80% in Cambodia (25). Benetton reported a 15.5% unionization rate among its 45 Bangladeshi suppliers in 2022 and indicated 55.5% have worker representatives. John Lewis considers both unions or worker committees and reports 75% coverage of such representation among its 20 suppliers in Bangladesh and 83% among its 35 Vietnamese suppliers.

countries, the average CBA coverage is 15.5% in the other five countries, a much lower rate than union presence.

We formally compare the various violations of FOA/CB rights averaged across the countries and report them in Table 3. Overall, violations of any *union formation* rights—5.1%—is the lowest. Although BW assessors may miss some subtle violations of this right, such as discriminatory punishment based on union membership, the high coverage of workplace unions provides corroborating evidence of low violations of union formation rights. In contrast to union formation, *union operation* rights are more likely to be violated: 8.37% of audits recorded at least one violation.[12] This violation rate became larger—11.98%—when we consider only those factories with a union presence. The most violated item in this element is the employer refusing to provide facilities for a union: This violation rate for unionized workplaces is 6.3%.

The most violated element of FOA/CB rights is *collective bargaining*, with 21.46% of audits finding violations of at least one of the constituent five items. The most often violated item is lack of consultation of workers (10.92%). Further, many of the violations concern CBAs, with nearly one-third (31.19%) of the CBAs violated in at least one of three ways assessed by BW: employer did not implement CBA (19.01%), did not provide better standards in CBA than those mandated by law (10.02%), or did not inform workers of the CBA (9.66%). These findings suggest that many CBAs may be symbolic without providing substantive benefits for workers.

The least violated FOA/CB element is *strike* rights: 0.25% of audits recorded any violations. This violation rate is still quite low—2.36%—even among the 635 audits (9.78%) that recorded strike(s) in the months prior to the audit. The general pattern of higher violations for collective bargaining, followed by union operation, union formation, and strike rights remains similar when we exclude the audits in Vietnam (see column (6) of Table 3).

We use paired *t*-tests to statistically test the difference in violation rates of any item within each FOA/CB element using the full sample of nearly 6,500 audits (reported at the bottom of Table 3). The test results show that violations of *collective bargaining* rights are statistically larger than *union operation* rights, which in turn are statistically higher than *union formation* or *strike* rights violations (see Table 3). The tests produce the same pattern of results if we limit the sample to audits that recorded the presence of union(s), CBA(s), or strike(s) only. Overall, the results support our expectation of high coverage of workplace unions and our first proposition.

[12]Note that BW recorded violations of union operation by the *employer* at the factory level and did not include potential control of unions by the government (e.g., in Vietnam) or political parties (e.g., in Cambodia [Oka 2018]).

Table 3. Violations of FOA/CB Rights among Better Work Factories (2015–2021)

FOA rights elements	*FOA/CB items*	*No. of audits*	*% of audits found any one item within each group was violated*	*% audits found item violated*	*% audits found item violated (excl Vietnam)*	*% audits found item violated (with union only)*	*% audits found item violated (with CBA only)*	*% audits found item violated (with strike only)*
Union formation	Workers freely form union	4,228	5.11	2.98	2.98			
	Employer requires workers to join a union	6,497		2.40	2.19			
	Firing workers for union membership/activity	6,497		0.43	0.58			
	Union has access to workers	6,497		0.28	0.38			
	Workers are free to meet	6,210		0.18	0.02			
	Threatening workers who join union/activity	6,479		0.12	0.15			
	Punishing workers for joining union/activity	6,485		0.12	0.15			
	Union membership/activity influences hiring	6,478		0.08	0.09			
	Employer dissuades workers from union	4,674		0.04	0.04			
Union operation	Employer provides facilities for union	6,196	8.37 (11.98% with unions)	4.45	5.60	6.30		
	Employer interferes with union	6,479		2.86	3.25	3.97		
	Employer deducts union dues as requested	6,213		1.69	2.27	2.38		
	Employer fires union leaders	6,318		0.76	1.00	0.99		
Collective bargaining	Employer consults with workers/union	5,862	21.47 (39.56% with CBAs)	10.92	4.14		19.30	
	Employer implements CBA	6,497		8.53	9.05		19.01	
	Employer informs workers CBA	6,209		4.51	2.95		9.66	
	CBA at least as favorable as law	6,023		4.10	4.36		10.02	
	Employer bargains in good faith	6,497		0.06	0.04		0.00	
Strike	Employer punishes workers for striking	6,497	0.25 (2.36% after strikes)	0.20	0.28			1.89
	Employer prevents workers from striking	6,212		0.06	0.07			0.48
	Employer replaces striking workers	6,219		0.05	0.05			0.32
	Employer calls police to break up strike	6,209		0.00	0.00			0.00

Paired *t*-tests comparing violation rates of any item in column (4) using full sample: collective bargaining > union operation: $t = 21.41$, $p < .001$; union operation > union formation: $t = 8.46$, $p < .001$; union operation > strike: $t = 23.52$, $p < .001$

Notes: The number of audits varies across items because some items were not asked in some countries because of local laws. CBA, collective bargaining agreement; FOA/CB, freedom of association/collective bargaining.

Table 4. Summary of Variables in Analysis

Variable	*Mean*	*SD*	*Minimum*	*Maximum*
Compliance with employment standards (%)	87.20	8.07	51.14	100
Symbolic union	0.09	0.28	0	1
Functioning union	0.64	0.48	0	1
CBA symbolic presence	0.20	0.40	0	1
Effective collective bargaining	0.30	0.46	0	1
Management system	7.43	4.00	0	13
Female workers %	76.48	17.03	0	100
Regular workers %	84.81	25.06	0	100
Total workers (R)	1,493	1,578.68	7	20,823
Factory age (R)	10.11	7.60	0	54
Strike(s) occurred	0.10	0.31	0	1
Audit cycle/experience	3.59	2.51	1	16
On-site audits	0.99	0.11	0	1

Notes: N = 5,373 audits. (R) indicates raw data that are log transformed to reduce skewedness for modeling. CBA, collective bargaining agreement; SD, standard deviation.

Varying Costs of FOA/CB Elements to Employers

Our second proposition suggests differential relationships between each of the FOA/CB elements and compliance with other employment standards as a proxy of their costs to factory management. For a rigorous test of this, we focus on a fixed-effect model to analyze how changes in FOA/CB status *within the same factory*[13] relate to different compliance rates with employment standards (the dependent variable). Table 4 presents descriptive information of the variables among the panel data used for the fixed-effect model with all control variables.

Table 5 reports the modeling results, with standard errors clustered by factory. M1 is the fixed-effect model without control variables (except year fixed effect). The pattern of results is similar when all control variables are included in the fixed-effect model reported in M2. We focus on M2 results.

For *symbolic union*, its coefficient is negative and significant: $b = -1.0$, $p = 0.015$. That is, the compliance rate becomes 1 percentage point *lower* if a factory moves from non-union status to having a union that does not truly function. Since the fixed-effect model holds constant time-invariant factory characteristics such as management orientation, this negative coefficient may result from a symbolic union being used by management as a *temporary* legitimacy tool to cover substandard work conditions. Another possibility might be that a symbolic union was undermined by conflicts with other unions in the workplace and turned a blind eye to violations, as suggested by a positive relationship between the number of workplace unions and non-compliance rates in Cambodia (Oka 2016: 659–61). When we exclude

[13]Among factories with two or more audits, 24.4% of factories changed regarding *symbolic union presence* across the years, 30.86% changed regarding *functioning union*, 34.56% changed on *CBA symbolic presence*, and 39.45% changed regarding *effective CB*.

Table 5. FOA/CB Rights and Compliance with Other Employment Standards

	DV: Compliance % with employment standards			
	M1 *Fixed effect*	*M2* *Fixed effect*	*M3* *Lagged DV OLS*	*M4* *Pooled sample OLS*
Symbolic union	**–1.248****	**–1.000***	**–0.738***	**–1.235****
	(0.463)	(0.412)	(0.351)	(0.416)
Functioning union	0.596	**0.634**†	**0.732****	**1.151*****
	(0.413)	(0.363)	(0.262)	(0.324)
CBA symbolic presence	–0.234	0.177	0.210	0.348
	(0.398)	(0.385)	(0.287)	(0.342)
Effective CB	2.125***	**1.645*****	**1.042*****	**2.506*****
	(0.370)	(0.357)	(0.273)	(0.319)
Compliance % prior audit			0.460***	
			(0.016)	
Management system		0.559***	0.657***	1.178***
		(0.035)	(0.030)	(0.032)
Female workers %		0.039**	0.004	0.018*
		(0.014)	(0.006)	(0.007)
Regular workers %		0.015†	0.003	0.027***
		(0.008)	(0.005)	(0.006)
Factory size (log total workers)		–0.870**	–0.169†	–0.282*
		(0.283)	(0.090)	(0.121)
Factory age (log years)		–1.713***	0.268*	–0.101
		(0.512)	(0.133)	(0.150)
Audit cycle/experience		1.272***	–0.107**	0.169***
		(0.247)	(0.040)	(0.046)
Strike(s) occurred		–0.790***	–1.610***	–1.577***
		(0.240)	(0.263)	(0.266)
On-site audit (1 vs. 0)		–0.754	–0.785	0.367
		(0.551)	(0.503)	(0.583)
Year fixed effect	Yes	Yes	Yes	Yes
Auditor fixed effect	No	Yes	Yes	Yes
Factory fixed effect	Yes	Yes	No	No
Country fixed effect	No	No	Yes	Yes
Constant	84.74***	85.10***	40.34***	69.83***
	(0.408)	(2.527)	(1.560)	(3.526)
Observations	6,035	5,373	3,977	5,749
No. of factories	1,525	1,512	1,459	1,888
*R*squared	0.117	0.392	0.756	0.642

Wald test comparing coefficients in M2 (two-tailed test): Effective CB > CBA symbolic presence: $F = 75.41$, $p < .001$; Effective CB > functioning union: $F = 3.9$, $p = 0.048$; Functioning union > symbolic union: $F = 37.89$, $p < .001$

Notes: Standard errors, clustered by factory, in parentheses. Boldface indicates the key *elements* of FOA and CB that were found to be significant. CBA, collective bargaining agreement; DV, dependent variable; FOA/CB, freedom of association/collective bargaining; OLS, ordinary least squares.
†$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed test).

audits in Cambodia from the sample, the coefficient for *symbolic union* becomes positive and nonsignificant ($b = 0.042$, $p = 0.949$), while the pattern of the other three coefficients remains the same. Overall, the results indicate that *symbolic union* presence does *not* relate to better compliance, that is, it does not increase costs for management.

Contrary to the effect of *symbolic union*, the effect of *functioning union* on compliance is positive ($b = 0.634$, $p = 0.081$) and marginally significant at the 10% confidence level. That is, a factory would experience a 0.634 percentage point increase in the compliance rate after shifting from no union status to having an active union with activities tolerated and supported by management. This result suggests the importance of the union operation element in enabling workers to achieve better work standards and imposing costs to management.

Regarding collective bargaining rights, the *CBA symbolic presence* (with collective bargaining rights violated) is not significantly related with higher compliance rates: $b = 0.177$, $p = 0.646$. That is, when a factory moves from non-CBA status to having a CBA but violates other CB rights such as not implementing the CBA terms, compliance with other employment standards is not significantly better. This result suggests the importance of daily collective bargaining rights beyond a CBA. Consistent with this, *effective collective bargaining* is related with significantly higher compliance rates: $b = 1.645$, $p < 0.001$. This finding indicates that a factory would experience a 1.645 percentage point increase in compliance rate when it moves from non-CBA status to respecting all CB rights including signing a CBA, with other factors unchanged.

A Wald test comparing the coefficients shows that the coefficient for *effective CB* is significantly larger than that for *CBA symbolic presence* ($F = 75.41$, $p < 0.001$) as well as that for *functioning union* ($F = 3.9$, $p = 0.048$). A Wald test also suggests that the coefficient for *functioning union* is statistically larger than that for *symbolic union:* $F = 37.89$, $p < 0.001$.

The pattern of results is largely similar when we include lagged[14] dependent variables as a way to control for the dynamic influence of compliance in prior year on focal compliance (see M3). Likewise, the pattern remains similar when we run OLS regressions among the pooled sample of all audits without factory fixed effect (M4), while controlling for other variables and country fixed effect. Overall, the three models produce similar patterns of results for the FOA/CB variables, providing converging evidence that compliance rates relate more strongly with *effective collective bargaining* relative to *functioning union*, and for *functioning union* relative to *symbolic union*. The pattern of results remains similar if we exclude the audits in Vietnam or Jordan, with slightly smaller coefficients for *effective collective bargaining* (perhaps reflecting the high coverage of CBAs and *high violations of CB rights* in Vietnam [34.6%] or Jordan [71.7%]). Overall, our second proposition is supported.

Turning to control variables, management system—an index of 13 HR and OSH practices—is related with better compliance with employment standards across the models. The percentage of female workers is related

[14]Angrist and Pischke (2009) suggested that the fixed-effect model of panel data and lagged dependent variable model should be used separately as supplemental evidence.

with better compliance in fixed-effect (M2) and pooled-sample OLS models (M4), consistent with Bird et al.'s (2019: 859) finding; this might result from female workers preferring voice on employment standards and male workers preferring exit or turnover in face of poor working conditions (e.g., Carswell and De Neve 2013). The percentage of regular/permanent workers is related to higher compliance (in M2 and M4), reflecting a potential high-road employment strategy of stable workforce and compliance. Factories tend to have lower compliance when they grow larger in size, perhaps resulting from more complex workforce issues with more workers. Factory age has mixed effects on compliance across the models, similar to Oka (2016); age may capture a combination of the effects of old technology (negative in fixed-effect model M2) and learning (positive in lagged dependent OLS M3). Audit experience/cycle is generally related to better compliance (in M2 and M4), but it may also reach a ceiling after controlling for compliance in prior audit (becoming negative in M3). Strikes are related with lower compliance across the models, but this might reflect reverse causality from low compliance that led to strike(s). On-site audits tended to find more violations (i.e., negative coefficients in M2 and M3), but this is not significant.

Discussion

This study takes a holistic view of how FOA/CB may operate in global supply chains, comparing potential legitimacy benefits and costs of four constitutive elements of FOA/CB to suppliers. We draw on granular data from 6,500 audits in 1,983 Better Work factories across seven countries from 2015 to 2021 to provide systematic evidence on the pattern of selective coupling of FOA/CB at supplier workplaces. Consistent with our first proposition, we find that violations are highest for the collective bargaining element, followed by the union operation element and then by the union formation and strike elements. The low violation of the union formation element is further evidenced by the high incidence of union presence in our BW factory data.

The high unionization rates in our data (averaging 70% across all the factories), which contradicts prior pessimistic views of FOA/CB in GSCs, merits discussion. Unionization rates in our BW data are much higher than general union density in the garment sector in many countries: for example, it is estimated to be 15% in Indonesia (Ford et al. 2023: 177), compared to 57.8% among BW Indonesian factories. These rates are also consistent with the limited data on supply chain unionization from selected progressive global apparel brands such as H&M. This high union coverage may result from multiple strong pressures as these factories are large suppliers to reputation-sensitive buyers belonging to the most ambitious MSI—BW—in the industry. For suppliers to less reputation-conscious buyers in other MSIs, and for the large majority of apparel factories that do not participate

in progressive MSIs, unionization rates would be lower as legitimacy may be less a concern among such suppliers.

Our study also differs from prior studies that have highlighted a generally low detection rate of FOA violations in GSCs. For example, Egels-Zandén and Lindholm (2015: 35) found that only 4% of factories violated FOA/CB rights in their analysis of FairWear data, while Anner (2012) also reported low FOA violations in FLA data. Our violation rates are higher because we take into account the presence of a union or a CBA in our data, for example, violations of CB rights almost doubled among factories with CBAs (e.g., from approximately 10% to approximately 20% as shown in Table 3). This finding suggests the importance of reporting FOA/CB violations among *applicable* factories by considering the presence of unions or CBAs for detailed union/CB rights violations. Including factories without unions or CBAs—where workers may not exercise such rights—in the denominator can significantly deflate violation rates.

We had proposed that suppliers are more likely to violate costly FOA/CB elements with the costs to suppliers descending from collective bargaining to union operation to union formation. We measured the relative costs by examining the relationship between these FOA/CB elements and compliance with other employment standards. As expected, factory fixed-effect models with our unbalanced panel data show that *effective collective bargaining* (no violation of CB rights) associates more strongly with compliance with other work standards than the association between *functioning union* (no violation of union operations) and compliance, which in turn is stronger than the association between *symbolic union* (allowing union formation while violating union operation rights) and compliance. Further, the symbolic presence of union or CBA is *not* related with significantly better compliance. This analysis yields nuanced findings beyond the effects of presence of union/CBA on compliance (e.g., Oka 2016; Bird et al. 2019). It is thus important to also consider their operations.

We contribute to the literature on FOA/CB in GSCs in several ways. First, our framework delineates various elements of FOA/CB rights. Second, we attempt to get a handle on supplier responses to these elements by comparing potential legitimacy benefits and costs of those elements (see Table 1). Third, we draw on large-scale longitudinal data from several different countries to depict the progress and limits of FOA/CB in GSCs, improving on prior case studies and limited quantitative analyses (for exceptions, see Anner 2012; Bartley and Egels-Zandén 2015; Graz et al. 2022). Together we provide detailed and nuanced evidence for *informed pessimism:* Faced with institutional pressures, suppliers may accept legitimating structures such as formation of unions but continue to violate their daily rights to operate and bargain to improve employment standards. That we find widespread violations of collective bargaining and union operation rights among ILO's Better Work factories suggests that these violations may be more severe in the larger number of factories that do not participate in BW.

That said, we present implications for additional research. Comprehensive data on FOA/CB in GSCs are rare, and more systematic data collection efforts are needed. While we focused on general patterns of selective compliance, future research may focus more on the variations across countries and what leads to better FOA/CB in different contexts. We have assumed that suppliers evaluate the four FOA/CB elements on the basis of their legitimacy benefits and costs to arrive at selective compliance and/or coupling decisions. Our data do not allow us to demonstrate causal influence from legitimacy or costs to distinct violation rates. Additional research is needed to more closely examine supplier strategies in various contexts to gain a more grounded perspective on how suppliers think about and implement FOA/CB.

Our findings have several practical implications. First, our delineation of specific elements of FOA/CB rights and the finding that collective bargaining is the most violated element followed by union operation rights suggests that brands, MSIs, and others can focus on these weak areas. For example, global buyers may work with global unions to strengthen local unions' monitoring and bargaining capacity. Second, auditing protocols can be revised to ensure that auditors record information on the presence or absence of a union or CBA *as well as* often-violated specific rights on union operation and collective bargaining, including whether the union has facilities or whether the employer consults workers, and whether the CBA is implemented and provides terms at least as favorable as those prescribed by national laws. Such information is crucial for accurate FOA/CB violation rates as well as signaling the importance of these metrics to suppliers. These often-violated FOA/CB rights could also form part of the metrics (Kuruvilla and Judd 2024) for implementation of the Corporate Sustainability Due Diligence Directive legislation in the European Union.

Conclusion

We analyzed detailed violations of four FOA/CB elements using longitudinal data (2015–2021) from 6,500 audits across seven countries to provide a comprehensive picture of progress and problems of this human right in global supply chains. We found that suppliers were most likely to violate collective bargaining rights followed by union operation rights, and less likely to violate union formation rights, thus possibly explaining the high unionization rates in our data. We also found differential associations of these elements with overall labor compliance. When collective bargaining rights are respected, compliance is highest. When union operation rights are respected, compliance is better but not as high. But better compliance is not related to whether a purely symbolic union exists in the factory. We suggest that suppliers engage in selective coupling with regard to FOA/CB: They comply with union formation rights because it helps them appear as a legitimate business partner or employer under pressures from brands, MSIs, and other stakeholders, but violate collective bargaining and union

operation rights that could impose higher costs on their operations through improving other employment standards. We call for more research on suppliers' strategies toward this crucial enabling right for workers in global supply chains.

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