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The portrayal of effectiveness of supplier codes of conduct in improving labor conditions in global supply chains: A systematic review of the literature

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Abstract

Even though workplace conditions worldwide are subject to local and international laws, labor conditions in global supply chains have continuously raised human rights concerns. In response to societal pressure, multinationals have taken on a certain degree of responsibility regarding workplace conditions in supplier factories, notably by adopting codes of conduct. Investigating the impact of this self-regulatory policy, scholars have examined whether and how codes shape labor conditions at the production level, but the results of their empirical studies diverge and sometimes contradict. To bring clarity to the field and gain an overarching understanding of the impact of codes, this literature review analyzes the question of their effectiveness as examined in 33 scientific papers gathered via a systematic selection of empirical studies. The review shows that supplier codes are not deemed unanimously and evenly effective by scholars and often fail to improve labor conditions. However, a range of factors are identified that facilitate the implementation of codes and ensure its effectiveness. This article develops a taxonomy of these factors and intends to contribute to understanding codes' decoupling and recoupling processes by investigating the gap between codes provisions and their intended outcome: the improvement of labor practices in global supply chains.

Keywords: code of conduct, labor conditions, supply chain, systematic review.

1. Introduction

The repetitive social and human rights scandals¹ on the conditions of workers in global supply chains expose the weaknesses of the current global production and the gaps in the international regulatory system on labor conditions. Globalization is said to leave a “governance gap” or regulatory vacuum, where nation-state powers are diminished while impactful private actors such as multinationals (MNEs) bear no legal accountability for practices along their supply chains.² Pressured to act responsibly by consumers and civil society, many corporations have taken on a certain degree of responsibility for workplace conditions in supplier factories, notably by adopting supplier codes of conduct (hereunder “supplier codes of conduct” or “SCs”). In these documents, MNEs pledge efforts to ensure that supply chain workers are no longer subjected to abusive and unethical labor conditions. As defined by Kaptein and Schwartz (2007), codes of conduct are a form of self-regulation containing a set of prescriptions developed by and for a company to guide present and future behavior issues. SCs most often include a set of requirements containing minimum labor standards and environmental obligations to be complied with at the supplier level. This private regulatory tool has attracted implementation criticisms as many instances of noncompliance arise, leading to a *decoupling* process between the text of SC and reality of supply chain working conditions. To redress this malpractice, it is salient to investigate *recoupling* to reduce the gap between SC principles and field reality. Although studies focusing on supplier compliance are scarce (Jedynak, 2018; Ruwanpura & Wrigley, 2011), an increasing number of scholars examine the extent to which SCs' adoption impacts labor conditions or suffers from decoupling (Babri et al., 2019). This systematic literature review aims to collect and compare the empirical results on the impact of SCs, to identify which conditions were demonstrated to reduce the policy–outcome gap, and which circumstances can lead to recoupling according to these studies. To

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the best of my knowledge, no review has documented how researchers measure the effect of SCs on labor conditions, although authors have already highlighted that the empirical results on SC impact are inconsistent and require further analysis (Kaptein & Schwartz, 2007). The papers selected for this review all answer, in one way or another, the question: to what extent are SCs creating a change of behavior toward the improvement of labor conditions in global supply chains? Reviewing all studies evaluating SCs' impact will contribute to the field in three ways: explain inconsistent results in the literature, propose a theoretical framework to help academics in their future research to measure SCs' impact, and give indication on what factors were identified that lead to decoupling and promote recoupling of SCs with practice. As a promising yet contested regulatory instrument to global labor rights issues, studying SCs' impact is salient in preventing supply chain labor risks and establishing their effective governance. This article is divided into four main sections. The first one lays down the methodology of the systematic literature review and the papers selected. The second investigates the research designs adopted to measure compliance and effectiveness with SCs, a fundamental challenge for empirical scholars (Rorie & Van Rooij, 2022). The third section gives an overview of the results on SCs' impact, and the last section develops a taxonomy of factors influencing SCs' compliance and effectiveness.

1.1. Theoretical framework

Compliance issues calls for SCs' analysis under institutional theory and goal displacement theory. The concept of decoupling has been discussed in institutional theories initially by Meyer and Rowan (1977), developed by Bromley and Powell (2012), and later adapted to the specific policy of SC (Bartley & Egels-Zandén, 2015; Bird et al., 2019). Decoupling occurs when there is gap between the formal policy and the actual practices, where a policy is formally introduced but not actually implemented in daily practice (de Bree & Stoopendaal, 2020). SCs are particularly prone to decoupling, as they provide an appearance of conformity to external expectations on paper, while making it easy for the parent company to insulate from those expectations, who may easily avoid their enforcement (Weaver et al., 1999). To ensure SCs' implementation, MNEs monitor supplier labor conditions to identify occurrences of noncompliance by using audits. In 1994, Power talks about the "explosion of audits," where he argues that audits are used to legitimize corporate actions and institutionalize the implementation process. In fact, even when implementation mechanisms are adopted, they can be ineffective in achieving the outcome intended, auditing becoming a "symbolic implementation" as per the formulation of Bromley and Powell (2012), hence unable to improve labor practices.³ This is referred to as the two stages of the decoupling process: the policy-practice decoupling and the means-end decoupling.

Goal displacement theory explains how idealistic goals of an organization are displaced by the inferior goals required to maintain the organization and keep its leadership in power (Michels, 1949). It is another useful theory to interpret SC decoupling: by adopting performance criteria in the audit, actors lose sight of the final policy outcome as they strive to maximize their performance rating (Bohte & Meier, 2000). It suggests that suppliers attempt to improve their compliance ratings in audits at the expense of working towards the improvement of labor conditions. These theories shed light on areas of conflict limiting SC impact, explaining why some studies identify little to no impact on labor conditions (e.g., Yu, 2008). However, Egels-Zandén (2007) shows us that, even when suppliers initially respond with symbolic actions and attempt to deceive auditors, SCs can lead to actual improvement of workers' rights over time and under certain circumstances (Egels-Zandén, 2007), thus giving us indications on the road to recoupling.

This review intends to feed these two theories by gathering results on SCs' impact on labor conditions and creating a taxonomy of factors influencing the decoupling and recoupling processes.

2. Method of the systematic literature review

2.1. The selection process

A systematic literature review uses scientific methods of identification, evaluation, and synthesis of sources on a chosen research problem (Petticrew & Roberts, 2006), to analyze existing theoretical concepts or empirical studies in a given field, in this case, to assess the impact of SC in improving labor conditions in global supply chains. This review followed Noort et al. (2019) steps for the systematic review, using the PRISMA three-phase flow diagram as detailed in Figure 1.

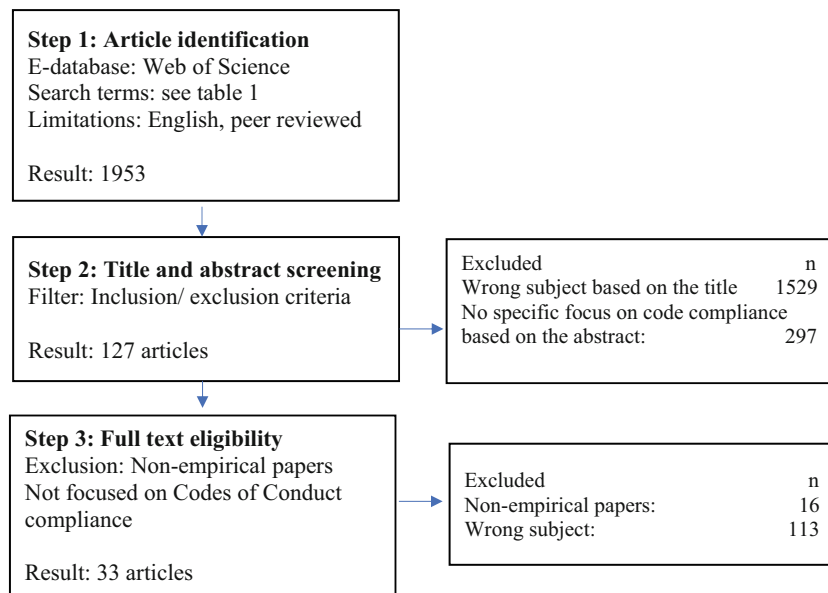


FIGURE 1 Flow diagram of the systematic literature review on supplier codes of conduct impact.

TABLE 1 Keywords for paper selection

Category 1: Supplier level	Suppl* Value chain*
Category 2: Codes of conduct	Private regulat* Self-regulat* code* of conduct Code* of ethics lab*r code
Category 3: Measurement of SC impact	Complian* Effectiv* Enforce* Implement* Coupl*

2.1.1. Identification

English peer-reviewed articles were identified using EBSCOhost database and selected based on 12 keywords, clustered into three categories (Table 1). Studies assessing SCs’ impact on supply chain labor conditions must fulfill three combining conditions, namely, the targeted subject must be suppliers or generally global supply chains (Category 1), using the tool of codes of conduct (Category 2) and measuring the codes’ impact via the assessment of its compliance or effectiveness (Category 3).⁴ For each of these categories, an extensive list of synonyms were developed to avoid excluding studies. To ensure that no papers were excluded, a sample of nine papers was preselected from a primary literature research. The inclusive vocabulary highlighted in Table 1 successfully englobed all nine papers preselected.

2.1.2. Screening and eligibility

After the initial identification by EBSCOhost resulting in 1953 papers, the title and abstract of the articles were screened based on the inclusion criteria. Finally, full-text articles were retrieved and checked for their eligibility.

2.2. Overview of the selected papers

A total of 33 papers met the inclusion criteria, as presented in Table 2. Columns 5, 6, and 7 give a first snapshot of the threefold focus of this study: empirical method used to study SCs' compliance, labor rights impacted, factors affecting code compliance. The last column depicts the results of SC's impact reached by the study. The papers were published in journals relating the legal and business management field and were all published after 2000. This was not a pre-required criterion but attests to the novelty of the discussion in those terms. Some authors used several times the same dataset (Jiang) or conducted more than one study on the topic (Egels Zanden, Locke, Yu). All studies investigated supply chain labor conditions in developing countries, most of them located in Southeast Asia or Latin America.

3. Research designs to measure compliance and effectiveness

Assessing compliance with a norm is a process that comes with many uncertainties (Rorie & Van Rooij, 2022), yet compliance with a policy does not ensure its impact. To accurately reflect SCs' effectiveness, (1) it is relevant to distinguish it from their compliance and (2) before assessing the methods adopted by empirical scholars to measure SCs' effectiveness. These components arguably impact study results and partly explain discrepancies among studies.

3.1. The difference between compliance and effectiveness

Compliance refers to a state of conformity between an actor's behavior and a specified rule (Raustiala, 2000). While measuring or evaluating compliance is conceptually straightforward, ascertaining why compliance or noncompliance occurs is more challenging. In fact, the mere fact of compliance with a given commitment tells us little about the utility and impact of that commitment, while effectiveness of a policy indicates the degree to which a rule induces changes in behavior and improves the state of the underlying problem. According to this definition, SCs' effectiveness means that there is an observable, desired change of behavior in supplier factories toward the improvement of labor conditions. In the sample of papers, most studies attempt to measure effectiveness apart from four studies (papers 6, 11, 12, and 26). Studies measuring effectiveness create complex designs to identify whether decent labor conditions can be attributed to the presence of a SC. This is a challenging task, as there are typically multiple factors underlying labor practices, such as the regulatory framework in which suppliers operate. To make sure that an identified change of labor practice can be attributable to SCs' presence and not stem from other causes (Barrientos & Smith, 2007), the studies attempt to "tune out" other factors likely to affect labor conditions, also called confounding variables or what I call "compliance factors". Compliance factors are opposed to "effectiveness factors",⁵ as the latter relate to conditions affecting the good implementation of codes and impactful factors in the way suppliers translate SCs into practice. In light of these considerations, it should be observed that SC compliance does not amount to SC effectiveness, and alternatively noncompliance does not signify that SC have no impact. By extension, a decoupled SC does not imply its ineffectiveness and a tightly coupled SC does not indicate its effectiveness, as compliance with labor standards may not stem from the code's adoption.

3.2. Designs used to measure effectiveness

Three key learnings are taken from the assessment of methods used to measure SCs' effectiveness: (1) studies elaborate two types of designs to measure SCs' impact, (2) which often involve a flawed measurement of labor conditions at supplier level, and (3) including perception biases.

Two types of designs are frequently used to assess codes' impact: the comparative design and the longitudinal design. Comparative designs have proven helpful to identify factors affecting codes' impact. Bartley and Egels-Zandén (2015) evaluate the working conditions of factories located in the same country (Indonesia) by comparing supplier factories governed by a code and those that are not. Using a control group of factories not exposed to codes is a convincing way to draw conclusions on codes' impact (Bartley & Egels-Zandén, 2015). Jiang (2009a, 2009b) compares labor conditions of suppliers considered "compliant" with suppliers considered "non-compliant" to highlight conditions under which suppliers commit to implement SC. Similarly, some studies compare

TABLE 2 Result overview of the systematic literature review

References	Sample characteristics	Methods	Labor rights	Factors of compliance and effectiveness	Results regarding effectiveness of SC
1 Barrientos & Smith, 2007	11 Ethical Trade Initiative member companies, 23 supplier site, 418 workers	Survey, comparative case study, interviews	Overall	4 -Compliance approach focused on technical outcome standards -Lack of awareness of workers on the existence of a code -Close relationship with suppliers -Serious commitment to ethical trade	Uneven impact
2 Bartley & Egels-Zandén, 2015	192 Indonesian factories producing apparel, textiles, electronics, or footwear in Indonesia.	Interviews, survey	Trade union rights Employment discrimination OHS	2 -Labor regulation -Labor inspection	Uneven impact Unclear if differences can be attributed to SC
3 Bird et al., 2019	8,323 audits of 3,276 suppliers in 55 countries on behalf of 102 buyers between 2012 and 2015.	Audit analysis	Employment practices Maximum working hours Minimum wages OHS	2 -Presence of trade unions -Factory payment policies (piece rate basis) and high-power productivity incentives	Comparatively more effective under certain conditions
4 Coslovsky & Locke, 2013	116 audits and 80 interviews were conducted between 2002 and 2008 at Coca-Cola suppliers in Brazil, in the sugarcane industry.	Audit analysis, interviews, field observation	All rights included	0	Identified improvement
5 Distelhorst et al., 2015	484 audits conducted in 261 Hewlett-Packard production facilities in 14 countries between 2004 and 2009.	Audit analysis, interviews, field observation	All rights included	2 -Salience of local regulatory institutions -Civil society freedoms and free transparent press	Uneven impact
6 Egels-Zandén, 2007	9 Chinese Toy suppliers from 3 Swedish toy retailers. Over 100 interviews with workers conducted in 2004.	Interviews, field observation	All rights included	0	No proven substantial improvement or only marginally
7 Egels-Zandén, 2014	9 Chinese Toy suppliers from 3 Swedish toy retailers. Over 100 interviews with	Interviews, field observation	All rights included	3	Identified improvement

(Continues)

TABLE 2 Continued

References	Sample characteristics	Methods	Labor rights	Factors of compliance and effectiveness	Results regarding effectiveness of SC
	workers conducted in 2004 and then 2009 (follow-up study).			-Number of audits and buyer company surveillance -Trusting relationship between supplier and buyer -External factors	
8 Egels-Zandén & Lindholm, 2015	288 audits conducted in 43 garment factories by Fair Wear Foundation between 2004 and 2012. The majority of suppliers are located in China, Tunisia, Turkey, Macedonia.	Audit analysis	All rights included	0	No proven substantial improvement or only marginally
9 Frenkel, 2001	4 factories in the athletic shoes industry in South China, from 2 different buyers. 80 interviews were conducted between 1998 and 1999.	Interviews, field observation	Management Employment relations Worker organization	1 -Local regulatory and institutional context	Uneven impact
10 Frenkel & Scott, 2002	2 supplier factories of Adidas (footwear sector) in China owned by a Taiwanese contractor in 2001.	Interviews, field observation	labor practices workplace performance OSH	2 -Supplier-buyer collaborative relationship -Supplier commitment to high labor standards	Identified improvement, especially under certain conditions
11 Hoang, 2019	40 interviews with managers, union representative, and workers at a garment factory in Vietnam in 2016.	Interviews, field observation	All rights included	1 -Supply workers dishonesty on labor conditions	Uneven impact
12 Hoang & Jones, 2012	20 interviews of female senior managers, union representative, production workers in three supplier factories in the apparel industry in Vietnam between 2008 and 2010.	Interviews, field observation	All rights included	3 -Direct supplier-buyer relationship -Short-term contracts with vendors at second or third tier of the supply chain -Strong independent trade unions	Uneven impact
13 Jayasinghe & Hunter, 2020	32 interviews with plan owners and managers, trade association and audit executive in the Sri Lankan apparel industry. Survey on 122 Sri Lanka apparel plans.	Interviews, field observation, survey	Wages OSH	0	Uneven impact

(Continues)

TABLE 2 Continued

References	Sample characteristics	Methods	Labor rights	Factors of compliance and effectiveness	Results regarding effectiveness of SC
14 Jang, 2009a	197 Chinese apparel and textile suppliers, 2006.	Survey	NA	3 -Mediating efforts from the buyer -Peer-to-peer governance -Price pressure	No proven substantial improvement or only marginally
15 Jang, 2009b	197 Chinese apparel and textile suppliers, 2006.	Survey	NA	3 -Cost pressure -Production complexity -Contract duration	Identified likelihood of compliance under certain boundary conditions
16 Lindholm et al., 2016	288 Audits from 229 garment factories conducted by Fair Wear Foundation between 2004 and 2012.	Audit analysis	OSH	1 Number of audits conducted	No proven substantial improvement or only marginally
17 Locke et al., 2009	300 interviews conducted between 2006 and 2007 in 210 supplier factories of an apparel company (confidential), located in China, India, Bangladesh, Dominican Republic, Honduras.	Audit analysis, field interviews, field observation	OSH Trade union Working time Wages	3 -Joint problem-solving with supplier -Information exchange -Diffusion of best practices	Uneven impact, but overall no substantial improvement
18 Locke and Samel, 2018	500 audit reports and 27 interviews from 276 suppliers of Hewlett-Packard between 2004 and 2009.	Audit analysis, field interviews, field observation	OSH, nondiscrimination, wages, working hours, employment status All rights included	2 -Type of products manufactured -relational governance systems VS transactional	Uneven impact
19 Locke, Qin, & Brause, 2007	800 of Nike's suppliers in 51 countries between 1998 and 2005.	Audit analysis		2 -Allowing suppliers to better schedule their work -Monitoring efforts combined with root cause tackling	No proven substantial improvement or only marginally
20 Locke & Romis, 2010	2 Mexican suppliers of Nike, 90 interviews conducted in 2005 in the US and in Mexico.	Audit analysis, field interviews, field observation	Wages Working time Trade union Employee representation Satisfaction Workers' voice	4 -Supplier factory size -Foreign ownership of supplier factory compared with domestic ownership -Complexity of products manufactured -Supplier/Buyer relationship	No proven substantial improvement or only marginally

(Continues)

TABLE 2 Continued

References	Sample characteristics	Methods	Labor rights	Factors of compliance and effectiveness	Results regarding effectiveness of SC
21 Loo & Nasruddin, 2015	16 purchasing managers interviewed from two facilities in Northern Malaysia in the electronics industry in 2014.	Interviews	All rights included	1 -Country where buying company is located 2 -Factory's technology -Supply chain governance	Comparatively more likely to improve under certain circumstances No proven substantial improvement or only marginally
22 Lund-Thomsen et al., 2012	127 interviews with football-stitchers in Pakistan, India, and China 9 (home-based, center-based, and factory based workers), carried out in 2009–2010.	Interviews, field observation	All rights included	3 -Control and monitoring beyond first-tier suppliers -Suppliers' independence to develop own strategies and solutions -Commitment and recognition to maintain buyer–supplier relationship	High levels of compliance with SC identified
23 Mejias et al., 2019	4 sustainability reports (Inditex, H&M, Fr, and Gap) of 2016 on their supply chain performance/compliance with code.	Audit analysis	All rights included	1 -Union presence (but the number of unions is irrelevant)	Uneven impact, but identified Improvement under certain conditions
24 Oka, 2016	579 Cambodian exporting garment from 2006 to 2013. 61 field-based interviews with factory managers, union federation leaders, buyer representatives, government officials, labor activists, industry consultants and foreign donors.	Audit analysis, interviews, field observation	All rights included	5 -Reputation-Conscious buyers -Size of supplier factory -Age of the factory -Union presence -Domestic ownership	Identified improvement under certain conditions
25 Oka, 2010	344 Cambodian exporting garment factories, from 2006 to 2008.	Audit analysis, interviews, field observation	All rights included	2 -Location of supplier -Stringency of labor laws on OSH	Uneven impact
26 Ruwanpura (2016)	2 Sri Lankan factories in the apparel sector, 60 interviews with factory workers in 2009–2010.	Interviews, field observation	OSH (gender component)		

(Continues)

TABLE 2 Continued

References	Sample characteristics	Methods	Labor rights	Factors of compliance and effectiveness	Results regarding effectiveness of SC
27 Schuster & Maertens, 2016	592 interviews in 78 villages in the horticultural sector in Peru between 2013 and 2014. Collection of characteristics from 171 companies export companies.	Survey	All rights included	5 -Supplier legal status -Presence of unions -Production diversity -Production size -Piece rate payment	Uneven impact, but overall, no substantial improvement
28 Sethi et al., 2011	Observation on the implementation of the Mattel code of conduct between 1997 and 2006.	Audit analysis	Focus on specific working conditions and components. All rights included	1 -Costs spent on compliance from the buying company	Universal progress on compliance levels
29 Short et al., 2020	8677 audits conducted at 4940 suppliers spanning 13 industries in 66 countries. Audits conducted between 2004 to 2009.	Audit analysis	All rights included	3 -Institutional pressure -Reputation-sensitive buyers -Trained auditors	Identified improvement under certain conditions
30 Sinkovics et al., 2016	3 Bangladeshi garment manufacturing firms among which 27 interviews were conducted in 2014.	Interviews, field observation	All rights included	0	Uneven impact. SC deteriorate certain labor conditions.
31 Toffel et al., 2015	44,383 audits of 21,836 supplier establishments in 47 supplier countries on behalf of 511 buyers in 12 countries from 2004 to 2009.	Audit analysis	All rights included	3 -Supplier location depending on country characteristics -Adherence to ILO standards -Market pressures on MNEs	Identified improvement of compliance rate under certain conditions
32 Yu, 2008	34 interviews conducted at Fortune Sports, Reebok's second-largest footwear supplier factory in China in 2002.	Interviews, field observation, documentary reviews	Wages Working hours Trade union	3 -Purchasing practices -Labor regime at local level -Buyer's investment in costs of compliance	No proven substantial improvement of labor standards
33 Yu, 2015	34 interviews conducted at Fortune Sports, Reebok's second-largest footwear supplier factory in China in 2002.	Interviews, field observation	OSH Employee representation Wages	1 -Commercial (reputation-driven) CSR agenda	No proven substantial improvement of labor standards

Note: The sample characteristics column includes information on the country of location of the study, industry, years data were collected, in some cases, the specific company studied, and indications on the sample size.

the working conditions of different factories collaborating with the same buyer to understand the underlying reasons behind compliance of certain suppliers and noncompliance of others (Locke et al., 2009; Locke & Romis, 2010). The longitudinal design involves measuring the evolution of labor conditions over time within the same supplier factories. Sethi et al. (2011) analyze the 9 years process of code implementation at the supplier factories of one single company. With the same intentions, Yu (2008) evaluated labor practices *before* and *after* the adoption of a code, to see whether a significant behavioral shift could be identified.

Both the comparative and the longitudinal design entail the evaluation of labor conditions at supplier level. Sixteen studies use the quantitative analysis of audit reports to assess SC compliance, as they provide for quantifiable data measuring the compliance with each labor standard. Audit reports are useful tools for companies to verify suppliers' claim of compliance but are often criticized for their flawed rating (Jiang, 2009a), as suppliers are easily able to cover up violations of codes' provisions while passing audits. While compliance with codes may appear to positively evolve through time due to progressing audit reports, suppliers may in fact learn to match their buyer's expectations, without fundamentally altering their behavior (Egels-Zandén, 2007). Under some conditions, however, audits have proven to be more transparent and have increased reliability. Compliance data collected by public bodies such as the Better Factory Cambodia (ILO monitoring program), or those controlled by NGOs such as Fair Wear Foundation (Egels-Zandén & Lindholm, 2015) are superior in quality to those compiled by private auditors, as they are externally financed and thus less likely to be biased by MNEs' interests (Oka, 2016). Short et al. (2020) also demonstrate that trained auditors generally conduct more neutral and informed audits. Aside from the compliance assessment, another method to assess labor conditions and measure behavioral changes is to use perception methods relying on insights and perceptions of labor conditions of different actors, by conducting surveys or interviews (used in 25 studies). Different sample of respondents were interrogated, which can be classified into different groups (see Table 3): workers or worker's representatives, managers at supplier level, and the MNE itself (e.g., the compliance officer). In some studies, specific groups of workers were targeted, such as female workers, who face specific challenges of labor conditions in their working environment.

When using perception methods, many authors refer to the difficulties to access transparent and reliable data, and present solutions or methodologies partially addressing this issue (e.g., Bartley & Egels-Zandén, 2015; Toffel et al., 2015). Perception data are potentially biased, as respondent groups are likely to have different insights on labor conditions and be influenced by individual interests or organizational agendas. To lessen the bias effect of the perception method, 12 studies have collected and compared answers from different group of actors (i.e., data triangulation), and 21 studies adopted a mixed-method approach to triangulate ways of data collection. These mixed approaches give the most complete overview. Studies relying on workers or workers' representatives' answers to assess SC effectiveness are also reliable, especially when the researcher has gained the trust of workers over a long course of time or is culturally and linguistically close and accessible by workers, as promoted in the designs of Barrientos and Smith (2007) or Hoang (2019). Similarly, Bartley and Egels-Zandén (2015) underline that relying on union representatives' opinions better reflects working conditions than auditors. They however acknowledge that even seemingly objective measurements of compliance are the result of imperfect judgments. Hoang (2019) considers that workers themselves can provide biased answers to support their managers in the hopes of compensation, or in fear of retaliation (Hoang, 2019; Ruwanpura, 2016). Egels-Zandén (2014) acknowledges this difficulty and try to counter this potential bias by performing unannounced interviews with workers outside of the factories and after working hours. This allows anonymized workers to speak freely about their views on working conditions (Egels-Zandén, 2014; Hoang, 2019).

TABLE 3 Overview of respondents in studies using perception data

Type of respondents	Papers
Multi-stakeholder ($n = 15$)	1, 4, 5, 9, 10, 13, 17, 18, 20, 24, 25, 28, 30, 32, 33
Buying company or purchasing managers ($n = 2$)	21, 23
Managers at supplier level ($n = 2$)	14, 15
(predominantly) Workers and/or worker's representatives ($n = 5$)	2, 6, 7, 22, 27
(predominantly) Female workers ($n = 3$)	11, 12, 26

4. Uneven impact of codes on labor conditions

After observing studies' methodological differences, we can provide an overview of the result on SCs impact. SCs' effectiveness to improve labor conditions is highly contested: most studies consider that SCs have limited to no impact on labor conditions as 10 studies have not identified any improvement or only marginally so.⁶ It is commonly agreed upon that the mere existence of a code does not activate ethical behavior of companies, and even studies observing a significant positive impact of SCs are nuancing their conclusion by acknowledging the limitations and conditional effect (e.g., Distelhorst et al., 2015). Sinkovics et al. (2016) and Yu (2015) even observed a negative impact of SCs on labor conditions, showing that compliance initiatives have, in some cases, torn down existing social values and led to the impairment of certain social, economic, and cultural rights. Scholars are particularly vocal about SCs' inability to promote collective bargaining and freedom of association and facilitate worker agency (e.g., papers 2, 9, 17, and 22). Many reasons are brought forward to explain this unfortunate result. First of all, SCs are more likely to focus on technocratic issues that are easily measurable but do not allow to challenge embedded labor relations or social norms underlying the production process (Barrientos & Smith, 2007; Bartley & Egels-Zandén, 2015). Second, freedom of association may be restricted by national law, such as in China where collective bargaining is prohibited or in Vietnam where only one trade union is recognized and active (Hoang, 2019). Suppliers cannot over-ride the national legal framework in which they operate. Finally, it appears that companies marginalize issues related to workers' freedom of association and bargaining power, as workers' voice are considered as less important in the monitoring process (Egels-Zandén, 2007).

Five papers however evaluate that SCs are effective in improving labor conditions, although nuanced, and eight studies have convincingly proven a positive impact specifically on occupational health and safety (OHS). That being said, classifying SCs impact as "effective" or "ineffective" in Table 4 proved to be challenging, as authors mainly identify a conditional effectiveness of codes, only found under specific circumstances. One repetitive conclusion in several papers is that SCs do not profoundly challenge the existing labor governance and thus root-causes issues for labor violations, as substantial issues remain untouched in supply chains. However, codes may have a positive effect on technocratic issues of OHS, mainly when the buyer and the supplier have a direct relationship (Hoang, 2019). In the same line of thoughts, some authors distinguish *process rights* from *outcome standards* to explain the uneven impact of codes (papers 1, 2, 7, 8, 16, and 25). Process rights are those providing a route to negotiation and access to other entitlements, such as freedom of association and prevention of discrimination. Those are seldom impacted by SC presence. Alternatively, outcome standards refer to specific conditions of employment, such as health and safety, living wage, and working hours, which are found to improve with SC presence.

5. Factors affecting compliance and effectiveness

From the literature, codes appear to be more effective under certain circumstances, their impact being dependent on the presence of a set of factors. Drawing inspiration from the paper by Asif (2020) in which a taxonomy of factors of compliance with socio-environmental standards is adopted, I propose a classification of compliance and effectiveness factors with SCs according to the institutional and managerial levels at which they play a role.

TABLE 4 Overview of SC impact findings per labor right

	All labor rights	OHS	Wages	Freedom of Association	Working Hours	Employment relationship
No impact	6, 11, 14, 15, 17, 19, 20, 32, 33	13, 16, [†] 26 [‡]	13, 2	2, 8, 9, 17, 22	18, 30 [§]	/
Positive impact	5, 7, 8, 23, 28	2, 4, 11, 12, 17, 18, 30	1, 27, [¶] 18	/	/	8, 13
Negative impact	/		30, 33	/	30, 33	30, 33

[†]Study focusing on chemical safety in the garment industry. [‡]Study focusing on the working conditions of pregnant workers.

[§]This study argues that codes of conduct have *decreased* labor conditions on the sample identified, the code creating unintended consequences leaving workers worse-off. [¶]This study observed that codes of conduct improve the likelihood of receiving minimum wages, but not increase wages in general.

TABLE 5 Overview of factors impacting SC compliance and SC effectiveness

	Papers	SC compliance	SC effectiveness
External contextual factors	2, 5, 7, 9, 26, 29, 31, 32	<ul style="list-style-type: none"> • Institutional legislative framework (supplier level) • Presence of civil society and press freedom (supplier level) • Economic context (supplier level) 	None
Buyer level factors	3, 6, 7, 14, 15, 16, 19, 21, 22, 23, 25, 27, 28, 29, 31, 32, 33	<ul style="list-style-type: none"> • Companies' purchasing practices and price pressure • Companies' characteristics (sector, size, location) 	<ul style="list-style-type: none"> • Monitoring and supervising suppliers' compliance and costs spent on compliance programs • Internal drive for social commitment • Reputation conscious buyers • Cooperation between suppliers and buyers • Long term; trusting and direct supplier–buyer relationships • Compliance approach compared to peer-to-peer governance • Supplier independence to develop own strategies
Buyer–supplier level factors	1, 7, 10, 12, 14, 17, 18, 19, 20, 22, 23	<ul style="list-style-type: none"> • Supply chain governance and transparency, contract duration, complexity of supply chain 	<ul style="list-style-type: none"> • Presence and independence of trade unions • Supplier commitment to high labor standards
Supplier level factors	1, 3, 10, 11, 12, 18, 20, 22, 24, 25, 27, 26, 33	<ul style="list-style-type: none"> • Employment practices and management • Supplier characteristics (size, ownership) • Production characteristics 	

Four categories of factors are identified from the analysis of the sample: external contextual factors, supplier level, buyer level, and buyer–supplier level, laid down in Table 5. Antecedents of compliance affect labor conditions regardless of the presence of a code (Asif, 2020), while effectiveness factors focus on SCs' impact and ways to improve their implementation. This dichotomy is not strict and contains overlaps, but the distinction of compliance factors from effectiveness factors is helpful to understand which factors lead to compliance with labor standards regardless of the presence of codes; and which factors facilitate or hamper the impact of codes.

In the below sections, not every factor is lengthily discussed, but only the ones requiring development and explanation. Factors identified for each paper are laid down in column 7 of Table 2.

5.1. External contextual factors

Two main external compliance factors are identified: the institutional legislative framework and the presence of civil society and press freedom.

First, eight studies observe that the supplier-level institutional framework is a central factor of SCs compliance. The legal and institutional framework, especially regarding suppliers' domestic labor laws, plays an important role in compliance with labor codes (papers 2, 5, 9, 26, 29, 31, and 32). As well articulated by Yu (2015), codes' impact on labor conditions can be undermined by the existing regulatory environment, as governments in developing countries may not support the enforcement of labor standards or in fact adopt labor regulation contrary to SC provisions. In these circumstances and despite best implementation efforts, SCs are unlikely to be complied with in countries with low protection of labor standards, while SC coupling is more present in countries with strong regulatory institutions enforcing labor rights effectively (Distelhorst et al., 2015; Locke, Kochan, et al., 2007; Toffel et al., 2015), including labor inspectorates (Bartley & Egels-Zandén, 2015). Toffel et al. (2015) go further in this analysis, by demonstrating how developing countries can create domestic legal environments that promote adherence to the global standards embodied in SCs. They found that countries with substantial connections to the international community and most compliant with international labor standards host supplier factories more likely to comply with SCs. They demonstrate that code compliance rates are higher for suppliers in countries that have ratified many ILO conventions, that have highly protective labor regulation, and high levels

of press freedom (Toffel et al., 2015). In this regard, international governance seems to interact with private regulation of supply chain, as international treaties amplify codes' effect.

Second, apart from the legislative framework, scholars also observe that press freedom and the presence of civil society are predictors of code compliance (Distelhorst et al., 2015; Toffel et al., 2015). In a study on HP suppliers, Distelhorst et al. (2015) showed that factories in countries with weak regulatory institutions but decent civil society freedoms outperformed factories surrounded by weaker presence of civil society. When both regulatory enforcement and local civil society were weak, SCs lack outside resources to incentivize and support improvements of labor conditions (Distelhorst et al., 2015). In fact, civil society actors can provide monitoring functions and expose wrongdoing in lieu of weak governmental inspection regimes in suppliers' countries. They can also significantly contribute to putting pressure on businesses to adopt codes of conduct and monitoring their compliance. However, it is only the presence of local NGOs close to workers that increases compliance with codes of conduct, by playing symbiotic roles of transnational advocacy networks (Short et al., 2020). These local NGOs bear a catalytic role in voicing workers' issues and create open information channels by deconstructing the opacity of labor rights' violations at the production level and information sharing on this topic is more likely to echo internationally and attract consumer and multinationals' attention.

5.2. Buyer level factors

At the buyer level, implementation and monitoring programs put in place by companies constitute factors of SCs effectiveness (1), while compliance factors relate to the characteristics of the company and their purchasing practices (2). Ultimately, a codes' impact is highly dependent on a company's intrinsic social commitment (3).

First, the type of SCs' implementation programs established by companies, including monitoring and surveillance mechanisms of supplier labor conditions, affects SCs' effectiveness as those programs are often flawed, unable to promote better labor standards. Locke et al. (2009) observe that most companies adopt the "traditional compliance model," a model of supplier governance based on unilateral surveillance of labor standards using factory audits. It is generally characterized by asymmetric power relations between global buyers and their suppliers, where the buyer scrutinizes suppliers' action with the ultimate threat of cutting ties and shift to another supplier (Jiang, 2009b). To avoid retaliation and sanctions, suppliers develop opportunistic behavior and learn tricks to hide SC violations without fundamentally altering their behavior (Egels-Zandén, 2007; Jiang, 2009a). It is demonstrated that audits can drive dishonesty, lack of openness, and even fraud, when suppliers feel forced to provide the "right" answer or face serious business implications (e.g., the threat of substitution; Jiang, 2009a, 2009b). With their study on Nike suppliers worldwide, Locke et al. (2009) show that the traditional compliance model is ineffective in practice: even though Nike conducted consistent monitoring of suppliers throughout the years and performed thorough audits, 80% of supplier factories failed to improve compliance over time, and some even experienced a decline in their compliance rating. In fact, unilateral monitoring regimes are argued to be designed *not* to protect labor rights or improve working conditions, but instead to limit the legal liability of global brands and satisfy institutional legitimacy demands (Bird et al., 2019). Far from protecting workers, these monitoring schemes eviscerate state regulation and undermine union power without replacing them with a viable alternative regime (Locke, Qin & Brause, 2007). However, good examples of effective monitoring system were also highlighted in some of the empirical studies, especially concerning audit methodology. For instance, Short et al. (2020) and Oka (2016) show that auditors, if properly trained to the local and sectorial labor issues, can have a pedagogical role when instructing factory managers how to remedy the violations and identify root causes to develop compliance solutions. Moreover, audits are most effective in improving labor conditions when controlled or supervised by certified external parties, such as NGOs or public bodies. Good examples include Fair Wear Foundation in the studies of Egels-Zandén and Lindholm (2015) and Lindholm et al. (2016), as well as Better Factory Cambodia (ILO monitoring program) in Oka's study (Oka, 2016). Monitoring efforts appear beneficial when combined with supplier empowerment (Locke, Qin, & Brause, 2007), or when companies enter a multi-stakeholder initiative involving NGOs, trade union, and government representatives to facilitate cross-sector learning (Lund-Thomsen et al., 2012). Finally, enforcement mechanisms should be included in SCs (Bird et al., 2019).

Second, supplier opportunistic behavior may be caused by the purchasing practices of buyers, whose economic incentives drive them to choose cost-efficient suppliers and put important price pressure on their subcontractors. Unreasonably high and increasing production demands or “high-powered productivity incentives” also impact SC compliance (Asif, 2020; Bird et al., 2019), as incentives to cut corners to produce more and quicker are associated with inferior labor practices and are likely to hinder workers’ engagement in SC implementation. As accurately underlined by Jiang (2009b), profit-based market governance alone is not sufficient to drive positive change in suppliers’ commitment to SC implementation.

Finally, these above-mentioned factors challenging SC compliance can be moderated by a condition of the MNE characteristic: their internally driven social commitment. The study of Sethi et al. (2011) analyzing the 9 years implementation process of Mattel Inc.’s SC exemplifies well this condition. Initially, Mattel’s code was effectively implemented and triggered a drastic improvement of labor conditions in supplier factories, notably due to a proactive attitude from the company involving sharing the economic burden of code’s implementation. After 3 years, the company’s commitment to code compliance started declining, as costs for the SC implementation were significant compared to the companies’ competitors (Sethi et al., 2011). This tells us that, not only must MNEs be socially committed to their SC implementation, but their commitment must also take the form of an economic participation to compliance costs on the long term. Observing a similar pattern, Oka (2010) observes that reputation-conscious buyers, by fear of consumer retaliation, show greater investment of time and resources in implementation programs and therefore opt for direct relationship with suppliers. In contrast, cost-conscious buyers prefer market-based transactions for efficiency reasons, which are less likely to trigger SC compliance (Oka, 2010). In most companies, there seems to be an unspoken accord that labor standards do not have the same weight and value than other contractual terms like price, quantity, and quality of services (Bird et al., 2019). From its field observation, Locke (2013) observes that most compliance officers investigating labor conditions have less influence than their purchasing or sourcing colleagues when deciding to place an order in a supplier factory. This relates to the work of Tilcsik (2010), who explains that an organization needs individuals with both *motivation* and *power* to carry out the policy in everyday practice, and implement it substantively. To counter decoupling, organizations must appoint compliance officers with strong incentives or ideological motivation to do so.

Ultimately, buyers’ intrinsic and genuine interest in producing ethically and put ethical commitment as a priority, notably by granting compliance officers with sufficient action power, and financial means, is the silver lining of all monitoring and implementation mechanism put in place.

5.3. Buyer–supplier level: The relational factor

As underlined by Oka (2010) and Egels-Zandén (2014), supplier–buyer relationship is the most important variable affecting code’s impact. Their cooperation (1), long-term and trusting relationship (2), and suppliers’ independence to develop their own strategies (3) constitute factors shown to increase SCs’ effectiveness.

First, the theory that a collaborative buyer–supplier relationship has a positive impact on compliance is referred to as the cooperation theory or peer-to-peer governance, opposing the buyer-to-supplier governance. Instead of relying on threats of sanction to comply with codes, this idea relies on social mutual adaptation in which idiosyncratic investments must be made on the buyer’s side, in cooperation with the supplier (Jiang, 2009a, 2009b). Others referred to the “joint problem solving” or “commitment-oriented” approach (Locke et al., 2009), where both buyers and suppliers’ responsibilities are “highly intertwined and mutually reinforcing” (Jiang, 2009a, 2009b). These approaches involve the incorporation of voices of suppliers, workers, and communities in the design of compliance mechanisms and monitoring. They aim to lead to policy recoupling, by ensuring that priorities of local actors are the ones shaping private regulation, instead of being driven by what western companies consider priorities. Unfortunately, the use of private regulation was criticized for its risks of neo-colonial ethno-centrism risk, as it insufficiently includes voices of suppliers in the talk (Lund-Thomsen et al., 2012).

Second, linked to the importance of supplier and buyer cooperation, is the type of relationship they maintain. Trusting buyer–supplier relationships is key to improve working conditions in global production networks (Egels-Zandén, 2014; Frenkel, 2001; Locke et al., 2009; Oka, 2010). In these studies, trust was measured by the

length of the relationship, the collaboration between the buyer and the supplier, the frequency of visits, and their open communication. Locke and Romis (2010) for instance have compared two Mexican Nike factories, referred to as “plant A” and “plant B,” to explain the compliance differences between those two factories. Plant A had more frequent visits and more open communication with Nike’s regional staff and management, which led to the development of greater trust and a better working relationship between these two actors, compared to Plant B. According to the authors, this relational difference is partly responsible for the more acute compliance in Plant A. In that sense, SCs are more impactful in direct buyer–supplier relationships (Hoang & Jones, 2012), underlying the importance for companies to extend their relationship with suppliers beyond the first-tier level (Mejías et al., 2019).

Finally, instead of implementing SCs in a top-down fashion via the imposition of sanctions and monitoring mechanisms, the alignment of buyers’ interests and suppliers’ working conditions will establish actual commitment by all parties of the supply chain. After all, it was demonstrated that suppliers are more compliant when given more schedule flexibility in their production schedule (Locke, Kochan, et al., 2007), which demonstrate the importance of leaving a margin of action and flexibility to suppliers.

5.4. Supplier level factors

At the local level, suppliers’ organizational structures and employment practices impact SCs’ compliance (1). Effectiveness factors include the supplier internal commitment to labor standards (2), and the presence of trade unions at factory level (3).

First, supplier characteristics and employment practices play a role in SC compliance. The study by Bird et al. (2019) focuses on suppliers’ structural specificities and demonstrates that factories paying workers on a piece-rate basis are less likely to see an improvement of labor conditions. In the same way that high-powered productivity incentives stemming from the buyer deteriorate labor conditions, factories favoring short-term productivity by paying workers by the piece produced instead of structurally are unlikely to invest substantial resources to improve labor practices. Other employment practices impact the likelihood of code compliance, such as the level of workers’ autonomy on the workplace, the multi-tasking of workers as opposed to single tasking and the production diversity (Schuster & Maertens, 2016), and workers’ regular trainings (Locke, Qin, & Brause, 2007). In fact, the work organizations and human resources management of suppliers predicts their capacity to adapt to the labor standards included in codes. Certification to management system standards, such as the ISO norms, are a good way to identify suppliers ensuring sustainable production practices (Bird et al., 2019), and in turn are associated with greater coupling of labor codes and labor practices. Two studies assess the impact of foreign ownership on supplier labor conditions but reach different results: Oka (2010) observes that Western ownership of supplier factories increases compliance with codes’ labor provisions in Cambodia, while Locke and Romis (2010) claim that foreign ownership and management negatively impacts labor conditions in supply chain factories in Mexico. The former considers that Cambodian-owned factories lack managerial know-how and financial means to comply with labor conditions, and the latter explains that linguistic barriers and the lack of incentives to improve labor standards explained lower rates of compliance in foreign-owned supplier factories.

Second, suppliers’ continuous commitment to employee welfare and well-being, and their internal motivation to provide decent labor conditions is an important factor of code recoupling (Frenkel & Scott, 2002; Locke & Romis, 2010). In some regions, it was shown that workers were partially or completely unaware of the existence of codes and lacked access to information and communication with their management, which hampered the improvement of working conditions (Barrientos & Smith, 2007). To tackle this miscommunication, suppliers need to appoint managers with an incentive or an ideological motivation to implement SCs at factory level and to carry out the policy in everyday practice (Tilcsik, 2010).

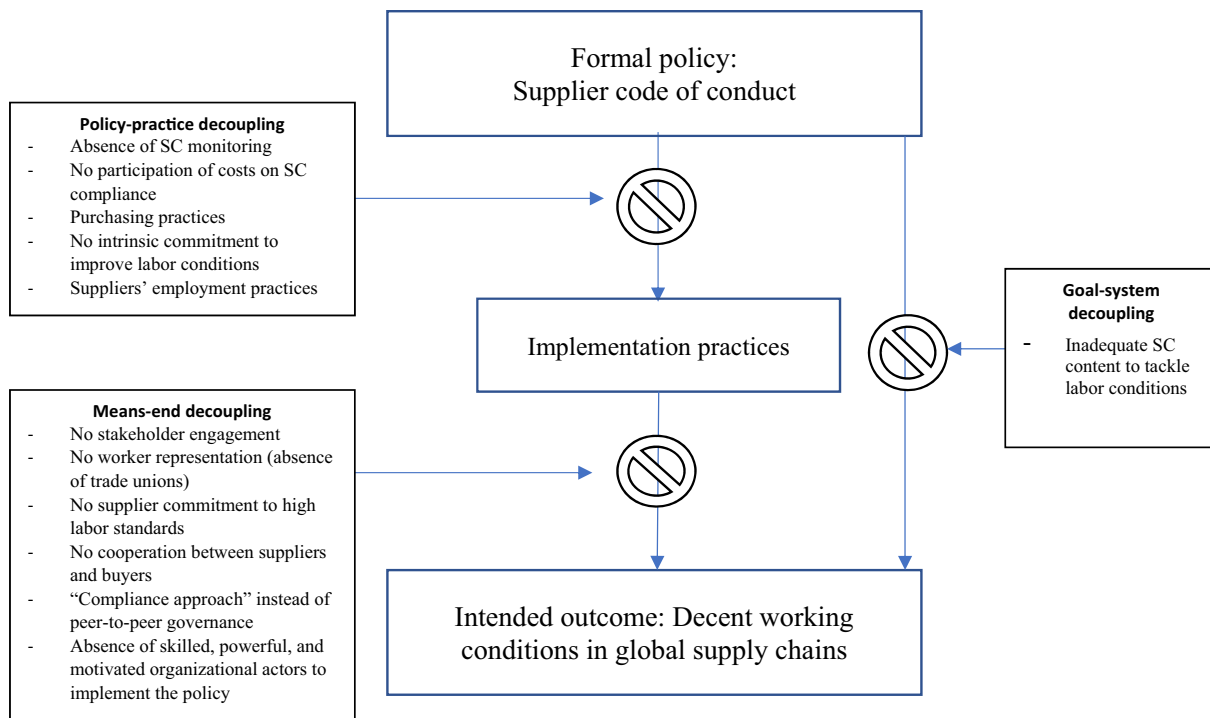
Third, the presence of trade unions at supplier factory level is proven to positively relate to enhanced code effectiveness (Bird et al., 2019; Oka, 2016). In Bird et al.’s research, unionized suppliers improved their labor practice score 20% faster than nonunionized suppliers, based on factory audits. Similarly, Oka (2016) conducted an empirical study on the impact of trade unions in the garment sector in Cambodia. Results show that union presence improves factories’ compliance with regard to wages, hours, and leave standards, but less so vis-a-vis

safety and health issues. The possibility and facilitation of collective bargaining at supplier level have also proven useful to empower workers and claim their rights.

6. Discussion

This review develops a systematic investigation of previous research on the relationship between supplier codes of conduct and the improvement of labor conditions in global supply chains. It can be safely concluded that the mere presence of SCs is not a direct predictor of ethical behavior or even of a change of behavior, both at the buyer and supplier level. Institutional theory and goal displacement theory may shed light on the decoupling and recoupling process. The conceptual model below merges Bromley and Powell (2012) and de Bree and Stoopendaal’s (2020) models of stages of decoupling and adapts it to the specific policy of supplier codes. The process leading from the formulation of goals in SCs to the improvement of labor practices, for example, the intended outcome, can be interrupted at three stages: there can be a goal-system decoupling, policy-practice decoupling, and a means-end decoupling.

Conceptual model: Process of supplier code decoupling



Conceptual model: process of supplier code decoupling

Note: Conceptual model adapted from the theory by Bromley and Powell and De Bree and Stoopendaal.

A goal-system decoupling occurs when the objective of insuring decent working conditions cannot be reached using SCs, as the policy itself is inadequate to solve the underlying goal (de Bree & Stoopendaal, 2020). For instance, if the goals are vaguely formulated, as often in SCs, this can easily lead to goal displacement (Abramson, 2009). Here, the study of SC content is paramount in understanding whether the goal of ensuring decent labor conditions is in line with the management system (the code). The policy-practice decoupling stage arises when SCs are not substantiated by daily practices such as monitoring or compliance mechanisms from the company’s end, hence when the policy is adopted symbolically but not substantially implemented (Bromley & Powell, 2012). Finally, the means-end decoupling occurs where organizations develop substantial resources to

implement policies, but those have a remote link to core goals or fail to reach the intended outcome, also called the “symbolic implementation” (Bromley & Powell, 2012). Many empirical papers in this review identify this phenomenon, the auditing process being largely criticized to satisfy institutional legitimacy demands without fundamentally addressing the root problems of labor right violations (Bird et al., 2019). This relates to Power’s criticisms on the audit society (Power, 1999) and Strathern’s audit culture (2000), as scholars notice that auditing and other monitoring activities to assess SC compliance can serve to limit MNEs’ legal liability instead of improving working conditions. Ultimately, excessive focus on compliance leads to goal displacement, compliance becoming the new goal (de Bree & Stoopendaal, 2020). As Paiement (2021) underlines, the system of transnational auditing labor conditions in global supply chains authorizes the auditors to make decisions on factories’ compliance regarding specific legal requirements, but disregards other instrumental aspects of workers’ protection such as buildings structural safety. This gap between the *real outcome* measured in audits and the *intended outcome* to improve labor practices can also occur due to supplier dishonesty in the auditing process and despite a motivated implementation process established by the buyer company. With the threat of substitution, especially in highly competitive sectors, suppliers may feel pressured to cheat on their compliance ratings and hide incidents of noncompliance (Jiang, 2009b). At this stage, some labor conditions seem to be decoupled more than others, as the auditing system favors the implementation of visible aspects of codes such as health and safety provisions and wages, but is less able to identify less visible and more deeply embedded aspects relating to workers’ rights and discrimination. Empirical studies in this review measured higher impact results for OHS provisions than for collective bargaining rights (see Section 3, Table 4). In fact, technical aspects of labor right violations are easily flagged in audits and can be addressed relatively quickly, whereas systemic issues of unfair treatment of workers deeply rooted in management and cultural systems is unlikely to be affected by companies’ implementation programs based on compliance rating. This is the difference identified between the *outcome rights* as compared to *process right* (Barrientos & Smith, 2007), a relevant distinction when studying supplier code’s impact on labor conditions.

Taking into account all factors of effectiveness identified by empirical scholars and classified in Table 5, a road to recoupling supplier code and global practice can be proposed. It was demonstrated that an initially decoupled SC may trigger behavioral changes and lead to the improvement of workers’ rights (Egels-Zandén, 2007). Indeed, a policy’s symbolic adoption can provoke a dynamic evolving phenomenon of recoupling if continuous pressure is exerted at different organizational levels (Tilcsik, 2010), hence gradually aligning human rights practices with policies after increased reporting and monitoring (Cole, 2005). At the institutional level, pressure to adopt a comprehensive SC may help aligning the goals and the system, by making sure that SC content includes the objective of improving labor standards. This institutional pressure can, in time, lead companies to transform their organizational structures, if new members such as quality managers and compliance officers enter the organization to implement the formal policy. Internal power dynamics where new committed professionals are appointed leads to the creation of new policies, if those are motivated both intrinsically and ideologically (Tilcsik, 2010). To recouple policy and practice, committed compliance officers should be given sufficient power to carry the policy in everyday practice, put in place intensive and long-term surveillance with many audits improve their labor conditions over time (Lindholm et al., 2016), and make sure that the buyer company financially participates in implementation costs that may arise. Finally, to recouple the means-end gap, it is necessary for corporations to transform global supply chain management systems and depart from the traditional compliance model to tackle root causes of workers’ rights violations. This new type of governance proposed by empirical scholars is called the *peer-to-peer governance* (Jiang, 2009a, 2009b) or the commitment approach (Locke et al., 2009), and necessitates the establishment of long-term and trusting buyer–supplier relationships involving stakeholder engagement in the implementation process, notably by granting a seat at the table to workers’ representatives.

Another contribution is important to bear in mind for empirical scholars. Assessing a causal relationship between the existence of SCs and a change in labor practices will never lead to certain results, as too many factors impact labor conditions. Here, importance to the methodological framework and its limitations should be highlighted in studies. When research designs rely predominantly on audits to measure the improvement of labor conditions, they in fact assess the improvement of *compliance* with labor conditions. This measurement may undermine the means-end decoupling possibility, thus giving incomplete results on SCs’ impact. Observing

compliance ratings improvement is insufficient to draw conclusions of SC effectiveness, instead measuring SCs' impact requires the evaluation of working conditions over the period of SCs' implementation, and the elimination of factors affecting labor conditions unrelated to presence, to the extent possible. Studying decoupling in motion by developing longitudinal studies allows to explore how responses to institutional pressures are formulated over time and are evolving, rather than studying responses at a single point in time, a recommended path for researchers (Tilcsik, 2010).

Finally, this literature review also highlights that the institutional legal and social context in which both suppliers and buyers evolve highly impacts SC compliance and the quality of labor conditions, which private actors are often unable to affect. Private regulation and supplier codes therefore have undeniable limits to improve labor conditions worldwide, thus are not stand-alone policies and need to be supplemented by public regulation. However, when raising the question of whether SCs are positively affecting labor conditions within their capacity of action, I conclude that it highly depends on the efforts developed both by buyers and suppliers in the code implementation and their intrinsic ethical commitments to prevail decent labor conditions, in line with previous studies investigating decoupling processes and the discrepancy of ideological beliefs between the policy and the decision makers (Tilcsik, 2010). Many pathways are recommended to increase SC impact, but all relate to one common criteria: ensure that both parties are committed to the code implementation in the long term, notably by establishing a collaborative relationship between the buyer and the supplier.

6.1. Limitations of the review

This review is limited by the key terms selected to be included in the review and the scope of its research question. The selection process after the keyword selection was done manually by a single researcher reviewing the papers. Moreover, nonempirical studies were not included, thus potentially limiting factors identified by other means. Additionally, papers not included in the EBSCOhost database are not considered. Finally, and more importantly, it is beyond the scope of this article to identify how public institutions should regulate the complex labor challenges of global supply chains. The impact of institutional pressures pending on corporations to adopt and implement SCs was not studied in depth, but is a necessary next step for research.

6.2. Suggestions for future research and practice

While 33 papers have tested SC compliance and effectiveness in different contexts and using varied methods, the field remains limited and further research is necessary to assess SC impact. As Hoang (2019) highlighted, research is especially scarce on SC impact on the “bottom” end of the supply chains, hence those that do not have a direct link with the MNE. At prima facie, SCs are mainly ineffective when there is no direct relationship with the supplier, which is concerning as most human rights violations occur at the bottom of the supply chain as they have little to gain from improving their labor standards (Hoang, 2019). Studies should indicate how companies could use their leverage and support code implementation among these suppliers. Moreover, further empirical studies should focus on factors of effectiveness rather than factors of compliance, notably by presenting best practices scenarios and identifying what works in practice to improve suppliers' labor standards. It would be particularly relevant to study stakeholder engagement and workers' empowerment in the implementation of SC, as it is an important factor of recoupling. As of today, few studies present good practice mechanisms to engage with different stakeholders in global supply chains, which is an important challenge for MNEs to overcome.

Short et al.'s study already considers the impact of planned and unplanned audits and highlight the pros and cons of unplanned audits as compared to the announced audits. Since this aspect is somewhat lacking in the other studies yet is highly discussed in the theoretical literature (Power, 1999), it would be good to further explore how monitoring approaches can be deployed and combined to leverage their comparative advantages (Short et al., 2020). It would be especially relevant to identify the best auditing techniques, which are first investigated by practitioners and then integrated with scientific work.

Finally, it is clear that SCs have a limited impact on labor conditions worldwide and are not self-sufficient. Global regulation of labor standards cannot be abandoned to private forms of governance. States must insure a “level playing field” and fair competition obliging decent labor standards for all industries. On their end, companies can continue to adopt SCs to create cooperative relationships with their suppliers on social and labor

matters, as this approach is proven to impact positively labor conditions in global supply chains. It is necessary to pursue research on how this relationship overlaps, and how can public power positively influence supplier–buyer relationship and global supply chain governance, notably to ensure the flow of information, pushing MNEs to be reputation conscious and fear consumer retaliation.

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Conflict of interest statement

None declared.

Data availability statement

The data that support the findings of this study are openly available in EBSCOhost at <https://www.elsevier.com>.

Endnotes

- ¹ While many can be mentioned, these contemporary exploitative practices undergoing in MNEs' supply chain are noteworthy: forced labor of Uyghur Muslims in detention camps in China; Abuses of workers manufacturing rubber gloves in Malaysia; last minute order cancellation from multinational buyers due to COVID-19 in the textile industry, leaving garment workers unpaid for work done.
- ² An extensive analysis on the global governance gap is provided by Eberlein (2019).
- ³ Symbolic implementation and symbolic adoption: Bromley and Powell develop that the decoupling process can occur at different stages.
- ⁴ The specifications concerning labor conditions were not included at this first selection stage, to avoid the exclusion of papers measuring compliance with environmental standards, as they are often dealt with jointly.
- ⁵ This distinction is used later in Section 4 in the development of a taxonomy of factors.
- ⁶ In this context, a *marginal impact* refers to studies identifying slight changes of labor conditions with the presence of a SC. Those were not considered sufficiently significant for authors to be able to attribute the change.

References

- Abramson, C. M. (2009). Who are the clients? Goal displacement in an adult day care center for elders with dementia. *International Journal of Aging and Human Development*, 68, 65–92.
- Asif, M. (2020). Supplier socioenvironmental compliance: A survey of the antecedents of standards decoupling. *Journal of Cleaner Production*, 246, 118956.
- Babri, M., Davidson, B., & Helin, S. (2019). An updated inquiry into the study of corporate codes of ethics: 2005–2016. *Journal of Business Ethics*, 168, 71–108.
- Barrientos, S., & Smith, S. (2007). Do workers benefit from ethical trade? Assessing codes of labour practice in global production systems. *Third World Quarterly*, 28, 713–729.
- Bartley, T., & Egels-Zandén, N. (2015). Responsibility and neglect in global production networks: The uneven significance of codes of conduct in Indonesian factories. *Global Networks*, 15, S21–S44.
- Bird, Y., Short, J. L., & Toffel, M. W. (2019). Coupling labor codes of conduct and supplier labor practices: The role of internal structural conditions. *Organization Science*, 30, 847–867.
- Bohte, J., & Meier, K. J. (2000). Goal displacement: Assessing the motivation for organizational cheating. *Public Administration Review*, 60, 173–182.
- Bromley, P., & Powell, W. W. (2012). From smoke and mirrors to walking the talk: Decoupling in the contemporary world. *The Academy of Management Annals*, 6, 483–530.
- Cole, W. M. (2005). Sovereignty relinquished? Explaining commitment to the international human rights covenants, 1966–1999. *American Sociological Review*, 70(3), 472–495.

- Coslovsky, S. V., & Locke, R. (2013). Parallel paths to enforcement: Private compliance, public regulation, and labor standards in the Brazilian sugar sector. *Politics and Society*, 41, 497–526.
- de Bree, M., & Stoopendaal, A. (2020). De- and recoupling and public regulation. *Organization Studies*, 41, 599–620.
- Distelhorst, G., Locke, R. M., Pal, T., & Samel, H. (2015). Production goes global, compliance stays local: Private regulation in the global electronics industry: Production goes global, compliance stays local. *Regulation & Governance*, 9, 224–242.
- Eberlein, B. (2019). Who fills the global governance gap? Rethinking the roles of business and government in global governance. *Organization Studies*, 40(8), 1125–1145.
- Egels-Zandén, N. (2007). Suppliers' compliance with MNCs' codes of conduct: Behind the scenes at Chinese toy suppliers. *Journal of Business Ethics*, 75, 45–62.
- Egels-Zandén, N. (2014). Revisiting supplier compliance with MNC codes of conduct: Recoupling policy and practice at Chinese toy suppliers. *Journal of Business Ethics*, 119, 59–75.
- Egels-Zandén, N., & Lindholm, H. (2015). Do codes of conduct improve worker rights in supply chains? A study of fair Wear foundation. *Journal of Cleaner Production*, 107, 31–40.
- Frenkel, S. J. (2001). Globalization, athletic footwear commodity chains and employment relations in China. *Organization Studies*, 22, 531–562.
- Frenkel, S. J., & Scott, D. (2002). Compliance, collaboration, and codes of labor practice: The ADIDAS connection. *California Management Review*, 45, 29–49.
- Hoang, D. (2019). Labour standards in the global supply chain: Workers' Agency and reciprocal exchange perspective. *Societies*, 9, 38.
- Hoang, D., & Jones, B. (2012). Why do corporate codes of conduct fail? Women workers and clothing supply chains in Vietnam. *Global Social Policy*, 12, 67–85.
- Jayasinghe, M., & (Chip) Hunter, L. W. (2020). The impact of Suppliers' adoption of voluntary labour codes/certifications on job quality in global supply chains: The Sri Lankan case of garments without guilt. *British Journal of Industrial Relations*, 58, 844–873.
- Jedynak, M. (2018). Systematic review of the literature on supplier code of conduct. *International Journal of Contemporary Management*, 3, 153–171.
- Jiang, B. (2009a). Implementing supplier codes of conduct in global supply chains: Process explanations from theoretic and empirical perspectives. *Journal of Business Ethics*, 85, 77–92.
- Jiang, B. (2009b). The effects of interorganizational governance on supplier's compliance with SCC: An empirical examination of compliant and non-compliant suppliers. *Journal of Operations Management*, 27, 267–280.
- Kaptein, M., & Schwartz, M. S. (2007). The effectiveness of business codes: A critical examination of existing studies and the development of an integrated research model. *Journal of Business Ethics*, 77, 111–127.
- Lindholm, H., Egels-Zandén, N., & Rudén, C. (2016). Do code of conduct audits improve chemical safety in garment factories? Lessons on corporate social responsibility in the supply chain from fair Wear foundation. *International Journal of Occupational and Environmental Health*, 22, 283–291.
- Locke, R., Amengual, M., & Mangla, A. (2009). Virtue out of necessity? Compliance, commitment, and the improvement of labor conditions in global supply chains. *Politics and Society*, 37, 319–351.
- Locke, R., Kochan, T., Romis, M., & Qin, F. (2007). Beyond corporate codes of conduct: Work organization and labour standards at Nike's suppliers. *International Labour Review*, 146, 21–40.
- Locke, R. M., Qin, F., & Brause, A. (2007). Does monitoring improve labor standards? Lessons from Nike. *Industrial and Labor Relations Review*, 61(1), 1–31.
- Locke, R. M., & Romis, M. (2010). The promise and perils of private voluntary regulation: Labor standards and work organization in two Mexican garment factories. *Review of International Political Economy*, 17, 45–74.
- Locke, Richard M. (2013). *The Promise and Limits of Private Power: Promoting Labor Standards in a Global Economy*. Cambridge: Cambridge University Press, 2013.
- Locke, R. M., & Samel, H. (2018). Beyond the Workplace: “Upstream” Business Practices and Labor Standards in the Global Electronics Industry. *Studies in Comparative International Development*, 53(1), 1–24.
- Loo, S. K., & Nasruddin, E. (2015). Purchasing social responsibility activities in Malaysia: A focus in labour, health, and safety. *OSCM: An International Journal*, 8(3), 154–161.
- Lund-Thomsen, P., Nadvi, K., Chan, A., Khara, N., & Xue, H. (2012). Labour in global value chains: Work conditions in football manufacturing in China, India and Pakistan: Labour in global value chains. *Development and Change*, 43, 1211–1237.
- Mejías, A. M., Bellas, R., Pardo, J. E., & Paz, E. (2019). Traceability management systems and capacity building as new approaches for improving sustainability in the fashion multi-tier supply chain. *International Journal of Production Economics*, 217, 143–158.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340–363.
- Michels, R. (1949). *First lectures in political sociology*. University of Minnesota Press.
- Noort, M. C., Reader, T. W., & Gillespie, A. (2019). Speaking up to prevent harm: A systematic review of the safety voice literature. *Safety Science*, 117, 375–387.
- Oka, C. (2010). Accounting for the gaps in labour standard compliance: The role of reputation-conscious buyers in the Cambodian garment industry. *European Journal of Development Research*, 22, 59–78.
- Oka, C. (2016). Improving working conditions in garment supply chains: The role of unions in Cambodia: Improving working conditions in garment supply chains. *British Journal of Industrial Relations*, 54, 647–672.
- Paiement, P. (2021). Transnational auditors, local workplaces and the law. *Transnational Legal Theory*, 12, 390–414.
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Blackwell Publishing.

- Power, M. (1999). *The audit society: Rituals of verification*. Oxford Academic.
- Raustiala, K. (2000). Compliance & Effectiveness in international regulatory cooperation. *Case Western Reserve Journal of International Law*, 32, 387.
- Rorie, M., & Van Rooij, B. (2022). *Measuring compliance: Assessing corporate crime and misconduct prevention*. Cambridge University Press.
- Ruwanpura, K. N. (2016). Scripted performances? Local readings of 'global' health and safety standards in the apparel sector in Sri Lanka. In D. Nathan, M. Tewari, & S. Sarkar (Eds.), *Labour in global value chains in Asia* (pp. 265–286). Cambridge University Press.
- Ruwanpura, K. N., & Wrigley, N. (2011). The costs of compliance? Views of Sri Lankan apparel manufacturers in times of global economic crisis. *Journal of Economic Geography*, 11, 1031–1049.
- Schuster, M., & Maertens, M. (2016). Do private standards benefit workers in horticultural export chains in Peru? *Journal of Cleaner Production*, 112, 2392–2406.
- Sethi, S. P., Veral, E. A., Shapiro, H. J., & Emelianova, O. (2011). Mattel, Inc.: Global manufacturing principles (GMP)—A life-cycle analysis of a company-based code of conduct in the toy industry. *Journal of Business Ethics*, 99, 483–517.
- Short, J. L., Toffel, M. W., & Hugill, A. R. (2020). Improving working conditions in global supply chains: The role of institutional environments and monitoring program design. *ILR Review*, 73, 873–912.
- Sinkovics, N., Hoque, S. F., & Sinkovics, R. R. (2016). Rana plaza collapse aftermath: Are CSR compliance and auditing pressures effective? *Accounting, Auditing & Accountability Journal*, 29, 617–649.
- Strathern, M. (2000). *Audit cultures: anthropological studies in accountability, ethics, and the academy*. London: Routledge.
- Tilcsik, A. (2010). From ritual to reality: Demography, ideology and decoupling in a post-communist government agency. *Academy of Management Journal*, 53, 1474–1498.
- Toffel, M. W., Short, J. L., & Ouellet, M. (2015). Codes in context: How states, markets, and civil society shape adherence to global labor standards: Codes in context. *Regulation & Governance*, 9, 205–223.
- Weaver, G. R., Treviño, L. K., & Cochran, P. L. (1999). Corporate ethics practices in the Mid-1990's: An empirical study of the fortune 1000. *Journal of Business Ethics*, 18, 283–294.
- Yu, X. (2008). Impacts of corporate code of conduct on labor standards: A case study of Reebok's athletic footwear supplier factory in China. *Journal of Business Ethics*, 81, 513–529.
- Yu, X. (2015). Upholding labour standards through corporate social responsibility policies in China. *Global Social Policy*, 15, 167–187.