

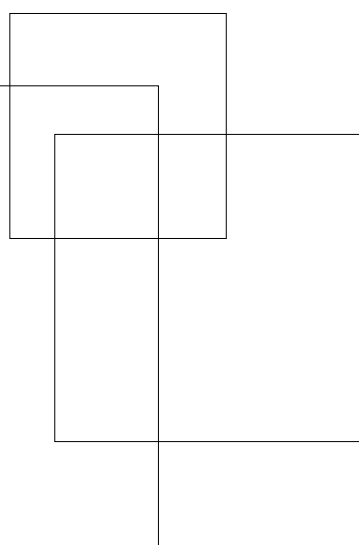


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Decent work in global supply chains: An internal research review

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I remain, of course, solely responsible for any errors that might be contained in the text.

Abstract

This article provides an inventory of the research carried out by the ILO on decent work in GSCs between 2014 and 2019 and helps to identify the challenges and remaining gaps in terms of research. The research undertaken by the ILO has covered a particularly broad spectrum of issues and embraced a large array of methods and disciplinary approaches. It has made a substantial contribution to the general knowledge of GSCs on three broad areas: first, the global functioning of GSCs and their impacts on jobs and development; next, their impacts on working conditions and labour rights; and, finally, the governance of labour within GSCs.

In the last decades, the global economy and the world of work have been deeply impacted by the spread of global supply chains. This production model provided new opportunities for many developing countries to participate in global trade and diversify. For many others, however, the level of integration and the capacity to upgrade have remained low. Nowadays, new questions are arising on the long-term viability of GSCs as a driver of development and decent work. Disruptive forces such as technological innovations, trade arrangements and environmental and climate protection already have important consequences on the conditions for countries to develop through GSCs and the possibility for social upgrading to accompany economic upgrading. At the same time, new governance initiatives by national or international, public or private actors are also regularly emerging to promote decent work in the global economy.

Many areas and issues remain to be addressed by the ILO in the domain. Except for certain segments of the value chains in a handful of industries, the organization is not currently able to provide a comprehensive vision of social and employment outcomes of GSCs. For many good reasons, a large share of the research resources has been concentrated on a limited number of labour intensive industries and countries. Moreover, our knowledge of the lowest tiers of GSCs is also often limited, as is our understanding of the involvement of certain actors, such as informal enterprises, and workers or home-based and family workers. Drawing on cutting-edge academic knowledge, the ILO must continue monitoring public and private initiatives and assess the current reshaping of the incentive structures of businesses towards sustainable and inclusive GSCs. In this regard, a particular focus should be placed on the conditions for an effective social dialogue at the different levels of GSCs. To be able to address these issues and provide a consolidated and systematic research perspective on GSCs would require the building of innovative partnerships with external actors, including other international organizations, national statistical institutes but also private companies.

1. Introduction

In 2016, the delegates at the International Labour Conference (ILC) debated the opportunities and challenges for the realization of decent work and inclusive development emerging from global supply chains (GSCs) and identified the respective roles of governments, business and social partners in this regard. At the conclusion of the conference, the ILC adopted a resolution that called upon the International Labour Organization (ILO) to develop a broad “programme of action”, stipulating, among other things, that the organization should “carry out further research and analysis to better understand how supply chains work in practice, how they vary by industry, and what their impact is on decent work and fundamental rights.” According to the resolution, the ILO could “become a knowledge centre to provide guidance and advice to stakeholders inside and outside the Organization and build the capacity of constituents.”¹ Following the conference, a plan of action has been developed which defined the actions to be taken by the ILO from 2017 to 2021 concerning the generation and dissemination of knowledge.

At the meeting of the Governing Body in November 2019, the Secretariat will have to report on the research and knowledge generation activities implemented since the 2016 conference. This paper aims at supporting the report to be presented to the Governing Body by (1) providing an inventory of the research carried out by the ILO and an overview of its main findings; and (2) identifying the challenges and remaining gaps in the research. It also seeks to help in pinpointing the priorities concerning the research related to GSCs for the forthcoming research strategy of 2020–2023.

The ILO has a long history of involvement in research on the issue of decent work in GSCs. As pointed out by Gereffi (2019), due to its tripartite governing structure, the ILO adopted the global value chains (GVCs) paradigm at an early stage — almost a decade before the global financial crisis of 2008 when it started to spread in other international organizations with a mandate related to economic development and in development agencies. The ILO became involved in different research projects and partnerships with various academic actors. In 2013, the Rana Plaza disaster in Dhaka, Bangladesh, brought to light the poor working conditions and safety standards in the garment sector and led the ILO in 2016 to initiate a discussion on decent work in GSCs. The paper covers a period that is slightly longer than the ILO’s programme of action (2014–2019) in order to provide research continuity and capture some of the groundwork performed in terms of research before the 2016 ILC and during its aftermath.

Although the ILO never agreed officially on a definition of GSCs, this paper draws on the most recent theoretical discussions about global supply chains and global value chains (Box 1). It keeps a rather broad perspective by articulating and discussing the maximum of research carried out, commissioned or published by the ILO and related to the cross-border organization of production and its fragmentation between different interlinked entities. Throughout the paper, an effort has also been made to resituate ILO research, its findings and the methodologies it employed and developed within the broader literature published by external researchers and other international organizations.

The review starts with a general mapping of the research activities related to GSCs that identifies their main characteristics (geographical and sectoral treatment, issues covered, methodologies and data used).

¹ International Labour Office (ILO), *Resolution concerning decent work in global supply chains, Report of the Committee on Decent Work in Global Supply Chains: Resolution and conclusions submitted for adoption by the Conference*, Provisional Record 14-1, International Labour Conference, 105th Session, Geneva, 2016 (Geneva).

This part is complemented by an online Excel file that introduces and briefly describes all ILO publications related to GSCs.² Next, the main findings of this research are presented in three subsections: (1) the functioning of GSCs and their impacts on jobs and development; (2) the impacts of GSCs on labour and working conditions; and (3) the governance of labour in GSCs. These subsections are supplemented by several boxes that summarize the main challenges and gaps in terms of research. These gaps derive mostly from the mandate of the ILO and, more particularly, from the objectives defined during the 2016 discussion and the subsequent plan of actions. The conclusions of the two meetings of experts organized in 2017 and 2019 on export processing zones and cross-border social dialogue have also been taken into account in this regard.

Box 1:

Snapshot on concepts and definitions

Definitions

The 2016 ILC Report on *Decent work in global supply chains* proposed a definition of GSCs which is rather broad and refers to all the cross-border organization of activities required to produce goods and services and bring them to consumers:

“... the cross-border organization of the activities required to produce goods or services and bring them to consumers through inputs and various phases of development, production and delivery. This definition includes foreign direct investment (FDI) by multinational enterprises (MNEs) in wholly owned subsidiaries or in joint ventures in which the MNE has direct responsibility for the employment relationship. It also includes the increasingly predominant model of international sourcing where the engagement of lead firms is defined by the terms and conditions of contractual or sometimes tacit arrangements with their suppliers and subcontracted firms for specific goods, inputs and services” (International Labour Office, 2016a).

However, most international organizations and a majority of researchers prefer to use the term “value chain” rather than “supply chain”. In ILO publications, both terms are often presented as synonymous. It is true that the definition provided in the 2016 report, although more detailed, does not contradict the usual definition of “value chains” (in which the role of foreign direct investments and international sourcing remains implicit):

“The value chain describes the full range of activities that firms and workers perform to bring a product from its conception to end use and beyond. This includes activities such as research and development (R&D), design, production, marketing, distribution and support to the final consumer. The activities that comprise a value chain can be contained within a single firm or divided among different firms” (Gereffi and Fernandez-Stark, 2016).

Using the term “supply chains” does not help in clarifying the terms of the discussion and might further limit the political influence of the ILO at the international level. This is all the more the case if we follow Sturgeon (2001), who argues that supply chains should rather be considered a subset of value chains. According to this author, they should be limited to the activities carried out by suppliers only³ and should not include those undertaken by the lead firm. However, it would also be appropriate to bear in mind that the interpretation of and approaches to GVCs by major international organizations have been very heterogeneous in the past two decades.⁴

² This file will serve as an online platform for knowledge sharing with constituents and will be regularly updated with the help of the ILO Library.

³ Sturgeon (2001, p. 11) defines value chains as “the productive (i.e. value added) activities that lead to and support the end use of a particular product or service”, *including* lead firm(s); he defines supply chains as “the productive (i.e. value added) activities that lead to and support the end use of a set of related products or services, less the activities of the lead firm(s)”.

⁴ Gereffi (2019) identifies three main approaches to GVCs by international organizations: the “neoliberal” interpretation, the “developmentalist” interpretation and the “partnership” interpretation. He classifies the ILO approach to GVC/GSC in the last category, which considers the partnership between public and private actors as a condition for development. This partnership approach has been implemented in particular through the ILO’s

From one product to another, value chains vary drastically in terms of spatial and organizational scales. The term “global” means that the different segments or threads are divided among multiple geographic spaces.⁵ Nevertheless, depending on the length and the complexity of the value chains, even in a *global* supply chain, some bundles of activities can be local or domestic. This is the case, for example, in the car industry, where car manufacturers can rely for certain parts on suppliers within their close geographical periphery as well as on suppliers from abroad for others. The same distinction can be made with these part suppliers and their own suppliers. Academic literature generally agrees also that the organizational scales of global value chains can in theory vary from a single company to a myriad of interconnected firms through commercial contracts or ownership relations (including parent companies, their foreign subsidiaries and their suppliers). Besides, even if in different industries — such as the electronics⁶ or car industry⁷ — a movement of de-verticalization (whereby main companies started to outsource some segments of their activities to concentrate exclusively on the most strategic ones) has been observed since the 1980s, the organizational architecture of value chains can vary substantially from one lead company to another for the same kinds of product.

Conceptual evolutions of the GVC framework

The GVC framework has proven to be particularly fruitful and has generated a large number of concepts that help to link the macro (global), meso (industry and country) and micro (firm) levels of analysis in order to better understand the challenges of economic globalization and the new division of labour. One of the most important achievements of this framework is the identification of different governance patterns in global value chains. According to Gereffi, Humphrey and Sturgeon (2005), three variables play a key role in determining the governance of GVCs: the complexity of transactions, the ability to codify transactions and the capabilities in the supply base. Depending on the configurations of these three variables, five ideal types of governance patterns (hierarchy, captive, relational, modular and market) can be established that range from high to low levels of explicit coordination and power asymmetry between the firms of the value chains.

One of the most intensely debated questions among scholars has been the issue of upgrading, i.e. the move, through GVCs, to higher value added activities for companies and/or countries. Barrientos, Gereffi and Rossi⁸ have proposed a typology of four kinds of economic upgrading: process upgrading (change in the production process aiming at increasing efficiency); product upgrading (the introduction of more advanced products); functional upgrading (the evolution in the activities or segments of the value chain performed by the enterprise); and chain upgrading (the shift to a more technologically advanced value chain). Relying on different case studies, these authors have shown that the relationship between economic upgrading and social upgrading, understood as “the process of improvement in the rights and entitlements of workers and social actors”, is far from automatic and can lead to different trajectories of development.

The GVC theoretical framework has undergone many evolutions since its first development in the early 1990s (at that time, it was referred as “global commodity chain”). According to Bair (2005 and 2008), the conceptual evolution triggered by Gereffi, Humphrey and Sturgeon (2005) even contributed to a reorientation of the research from a socioeconomic perspective to a more micro-oriented understanding of governance that drew increasingly on the transaction cost theory. However, this paper argues that more attention should be given to the institutional and structural environments in which value chains are embedded in order to understand their social and developmental outcomes. This criticism of the GVC approach is, on the whole, in agreement with the framework provided by a competing theoretical approach — the global production networks (GPN) — which originated from the field of geography and also describes the reality of the cross-border organization of production (see Neilson, Pritchard and Wai-chung Yeung, 2014; Henderson et al., 2002; and Coe, Dicken and Hess, 2008). Even if these two

Better Work Programme (Rossi, 2019).

References in footnotes marked in bold text are publications involving ILO staff; and/or are commissioned by the ILO; and/or are published by the ILO; and/or are undertaken in partnership with the ILO.

⁵ Sturgeon (2001) proposes to distinguish value chains according to their spatial scale: local (limited to community), domestic (limited to a country), international (between two countries at least), regional (confined to a trade bloc) and global (across at least two continents or trade blocs).

⁶ See Delautre (2017); Lüthje et al. (2013).

⁷ See Pardi (2019).

⁸ Barrientos, Gereffi and Rossi (2011).

frameworks often overlap, GPN generally differs from GVC by the importance it gives to the territorial, social and institutional embeddedness (including unions, states and other public authorities) of the networks of firms. As will be seen, a certain number of research reviewed in this paper clearly draws on the GPN conceptual framework.

Explicitly resorting to both the GVC and the GPN frameworks, Lakhani, Kuruvilla and Avgar (2013) made a valuable theoretical contribution, especially for those interested in studying the social outcomes of GVCs. The authors argue that the emergence of global value chains should lead to moving the focus of the analysis of employment relations from the perspective of individual firms to that of the interconnected networks to which these firms belong. For them, key elements of the employment relations — for example, the capacity of supplying companies to define autonomously their employment relations strategies and practices, the level of skill requirements, the stability of employment and the influence of national institutions — will differ according to the value chain patterns defined earlier.⁹

2. A mapping of ILO research activities

One hundred and fifty publications have been identified for the research review for the period from 2014 to 2019. The synthesis in Part 3 focuses on seventy to eighty core publications that can be categorized as research papers. These studies, which embrace approaches from different fields (economics, law, sociology and political science), are based in general on a precisely defined and proven methodology (econometrics, field studies, reviews of literature or legislation, etc.). They were primarily undertaken by ILO staff but also carried out by external researchers as commissioned papers or in partnership with the ILO (e.g. research using information from the Better Work Programme and conducted under a non-disclosure agreement). The ILO mainly published these research results as reports, working papers or articles in the *International Labour Review* (ILR). Much of this work has involved external academic researchers and/or led to academic outcomes such as publications in scholarly journals. In addition to this core of research publications, the mapping exercise in Part 3 has also included other publications that provide knowledge on decent work in GSCs. Although these publications may refer to the academic literature or may use secondary data for the purpose of analysis, they cannot be classified as research studies *per se*, as they generally consist of more policy-oriented work and aim at informing policy makers and constituents on specific issues. These papers can also be related to the ILO's technical cooperation (TC) activities in a specific country and/or industry. As the nature of these works presents difficulty in drawing out general lessons on GSCs and decent work, only limited reference has been made to them in the following synthesis.

GSCs is clearly a crosscutting topic of interest for the ILO. Key contributions in terms of research and knowledge generation have been provided by various departments under the Office of the Deputy Director-General for Policy (DDG/P): Research (including ILR), Governance and Tripartism (including Better Work), Conditions of Work and Equality, Sectoral Policies, Enterprises, Employment Policy, but also from the ILO Office for Asia and the Pacific, reflecting the number of TC projects related to GSCs in the region. Nevertheless, very few projects have been used as opportunities for joint work across

⁹ For example, in a purely market type configuration, a supplier should be able to keep the full control over its employment strategies and practices under the almost exclusive influence of local institutions (because of the low coordination between the lead firm and the suppliers) and rely heavily on a low-skilled and highly flexible workforce (because of low task complexity). At the opposite end of the spectrum, in a purely hierarchical type configuration (e.g. the relationships between a parent company and its vertically integrated subsidiaries), given that the tasks are highly complex and uncodifiable, it is more profitable to keep them in-house. In this case, the influence of the lead firm (or the parent company) on employment strategies will be high, taking place primarily via managerial control; the employees will be highly skilled, and policies will aim at retaining them.

departments and cross-fertilization; the work of each department or branch tends to represent a different segment of a supply chain study with a specific focus.

In accordance with the discussion in Box 1, the publications considered in this review cover research related to GSCs in a broad sense. In this respect, it should be pointed out that the research has encompassed an analysis of GSCs led by foreign direct investments (FDIs) by multinational enterprises (MNEs) in wholly owned subsidiaries as well as an assessment of GSCs relying on international outsourcing. However, the pros and cons of both business models for labour outcomes have rarely been discussed in recent ILO research.

By far the largest part of ILO research has had an industry level focus rather than a (global) supply chain focus. In fact, a very small part of ILO research can be considered as GSC or GVC analyses *per se*, as most work contributes to the discussion through a specific lens — MNE, FDI, corporate social responsibility (CSR), compliance, labour governance, trade, etc. ILO research has been highly concentrated on a small number of industries in which working conditions are known to be harsh and labour rights often poorly enforced. The garment/textile industry is by far the most analysed industry, followed by agriculture or agro-food. These two industries include important bundles of labour-intensive activities in developing economies. They are generally characterized in the literature as buyer-driven value chains, meaning that they are coordinated by large retailers or brand marketers that rarely own their own factories and must purchase their products from multiple suppliers.¹⁰ These industries are also of prime interest to TC projects, including Better Work, and, consequently, to donors. By contrast, other industries known for their poor working conditions (including assembly line manufacturing such as electronics) have received scant attention. More complex and higher value added industries — for instance, the automobile, aeronautics and pharmaceutical industries — have been much less frequently explored in depth or through case studies. Very little research has also been conducted on service industries.

In a strict sense, a value chain or supply chain analysis would examine the whole value chain of a product, from conception to end use. It would, therefore, focus not only on certain aspects of production, such as physical transformation, but also on the activities with higher value added, like R&D, design, and branding. Even if the analysis is limited to the process of physical transformation, a value or supply chain study would need to consider all the intermediate stages from the supply of raw material to the final product. Except for a very limited volume of research that relies (at least partially) on the value chain development (VCD) methodology developed by the Enterprise Department¹¹ to map value chains¹² or the ongoing studies by the Research Department on the electronics industry (which include a detailed mapping of the supply chain based on national statistical sources¹³), the research carried out by the ILO rarely takes into account the multiplicity of production stages in the process.

¹⁰ The GVC framework generally contrasts “buyer-driven” chains with “producer-driven” chains which are dominated by large manufacturing firms. The nature of the links between lead firms and suppliers are often very different from one type of value chain to another. Buyer-driven chains generally link legally independent firms, while in producer-driven chains, the linkages can be stronger and include linkage between affiliates.

¹¹ **International Labour Organization (2015a).**

¹² Such as the project led by LABADMIN/OSH (Labour Administration, Labour Inspection and Occupational Safety and Health Branch) on drivers and constraints for occupational safety and health improvement in food and agriculture global value chains or the TRAVERA (TRAde and Value Chains in Employment-Rich Activities) series of studies included in the STRENGTHEN project by the Employment Department.

¹³ These two projects are, however, limited to national value/supply chains: for LABADMIN/OSH on coffee in

Some research has tried to understand how the interactions among buyers, institutions and suppliers have an impact on decent work outcomes (e.g. the INWORK¹⁴ global supplier survey measuring business purchasing practices). This is of prime importance given that academic literature has demonstrated that the configurations of inter-firm relationships might lead to different outcomes in terms of employment relations in the suppliers' workforce (see Box 1). Yet, the implications of these business practices are generally analysed at one stage of the chain only, generally the first tier or the most labour intensive stages (such as final products/assembling), or they do not differentiate the various stages of production. Until now, very little research has addressed the issue of intermediate or lower tier suppliers, especially homeworkers or informal workers (or workers in informal enterprises). This can be explained by the technical and methodological difficulties in reflecting the voice of these actors in a survey. Moreover, due to this focus on individual industries and tiers, most ILO research does not examine the growing interconnections generated by GSCs between industries as well as the interconnections between manufacturing and services.¹⁵

From a methodological point of view, only a few projects have led to the collection of original quantitative data. Until now, the exceptions are the research carried out in the framework of the Better Work Programme and the INWORK global supplier survey (and other ongoing surveys). The STRENGTHEN project¹⁶ led by the Employment Department, and more particularly its TRAVERA component — which aims at identifying employment friendly export value chains and supporting stakeholders in the elaboration of strategies to develop value chains linking small and medium enterprises (SMEs) with international markets — has also carried out quantitative surveys in nine partner countries in specific sectors.¹⁷ The analysis of these data will lead to the publication of research findings in the near future. To complete the picture, the global estimates of GSC related jobs by the Research Department ought to be mentioned, as should the estimate of working children in GSCs by the Fundamental Principles and Rights at Work Branch and the Alliance 8.7 Working Group¹⁸, which are original ILO projects relying on external sources — the World Input-Output Database (WIOD) funded by the European Commission and the TiVA (Trade in Value Added) database of the Organisation for Economic Co-operation and Development (OECD). A large amount of ILO research relies on interviews and surveys at different levels of the chain (MNE headquarters, local suppliers, main stakeholders, etc.) and/or on secondary data.

Despite their increasing number,¹⁹ the role of Export Processing Zones (EPZs) in GSCs and their impacts on decent work and the protection of fundamental principles and rights remain virtually unknown due to the limited number of up-to-date empirical studies. In 2017, at the Tripartite Meeting of Experts to Promote Decent Work and Protection of Fundamental Principles and Rights at Work for Workers in EPZs, the ILO was called upon to improve the knowledge on this specific form of cross-

Colombia, palm oil in Indonesia and Litchi in Madagascar and for Research on electronics in Mexico.

¹⁴ That is, the ILO's Inclusive Labour Markets, Labour Relations and Working Conditions Branch.

¹⁵ An exception is **Kizu, Kühn and Viegelahn (2019)**.

¹⁶ Strengthening the Impact on Employment of Sector and Trade Policies.

¹⁷ Benin, Côte d'Ivoire, Ghana, Guatemala, Honduras, Morocco, Myanmar, Philippines and Rwanda.

¹⁸ Alliance 8.7 is a multi-stakeholder partnership committed to achieving target 8.7 of the 2030 Sustainable Development Goals related to the eradication of forced labour, modern slavery, human trafficking and child labour.

¹⁹ UNCTAD (2019).

border organization and its impact on many dimensions of decent work²⁰ and to intensify its collaboration with other international organizations in this regard. A survey of labour practices in EPZs (including gender discrimination, labour relations and social protection) is currently underway in cooperation with the United Nations Conference on Trade and Development (UNCTAD), and the results will be made available soon.

If the studies with holistic or global perspectives are excluded, Asia clearly stands out in terms of the share of research output, whereas very little research has examined African countries or firms.²¹ This is relatively logical given the primacy of this region in the past decades in certain supply chains (see Section 3.1) and the locations of many GSC related TC projects. However, while it is critical to keep monitoring the important changes in Asia, especially with regard to technological developments and trade arrangements,²² additional resources should be allocated also on other regions (including inter-regional relationships and trends) for research in the coming years. For example, the recent growth of a garment industry in Ethiopia has already started to raise questions in terms of decent work.²³ It is essential to look further into the implications of African and Latin American integration into GSC, especially in terms of development and on the obstacles to overcome in creating quality jobs. Additionally, when research takes into account the perspective of the lead companies in GSCs, the reference point is usually Western Europe and North America. However, research at the level of firms or MNEs is rare and remains limited to specific studies on certain aspects of labour governance (e.g. international framework agreements, CSR). Finally, analysing the impact of GSCs on the workforce of the Global North is rarely a topic of interest.²⁴

Box 2:
General challenges and research gaps

Global supply chains (in a broad sense) have clearly become a crosscutting topic of interest for the ILO, as illustrated by the research and study agendas developed by several departments and regional/country offices in recent years. However, this

²⁰ As stipulated in the conclusion of the meeting, “The focus of research could include: data collection on the number, location, size, form and function of EPZs; net effects of EPZs on job creation, respect for the fundamental principles and rights at work and decent work more generally, including social protection; impacts of EPZs on workers’ rights, including the right to organize and collective bargaining in enterprises inside and outside EPZs; impacts on recruitment practices inside and outside EPZs; impacts of EPZs on the rights of women workers, including gender discrimination in skills development and wages; impacts of EPZs on fundamental rights and decent work as compared to broader national labour markets; impacts of robotics and artificial intelligence on employment creation in EPZs against the background of changing needs and trends in the future of work; the role of industrial relations in creating positive impacts of EPZs; how supply chain management operations impact workers’ rights in EPZs and good practices in sharing benefits between buyers and workers in their supply chains; an assessment of which policies facilitate links to local producers; good practices for governments to undertake a cost–benefit analysis of their EPZ policies; and good practices concerning the use of investment policies, trade agreements or codes of conduct to promote fundamental principles and rights at work and decent work in EPZs;” Tripartite Meeting of Experts to Promote Decent Work and Protection of Fundamental Principles and Rights at Work for Workers in Export Processing Zones (EPZs), *Conclusions to promote decent work and protection of fundamental principles and rights at work for workers in EPZs*, MEWEPZ/2017/2, Geneva, 21–23 Nov. 2017, para. 18a.

²¹ Except for some Better Work studies on the case of Lesotho and research in the context of STRENGTHEN/TRAVERA on four sectors in four different African countries.

²² See, for example, **Yap (2014)**, **Sato (2014)** and **Techakanont (2015)**.

²³ See Barrett and Baumann-Pauly (2019).

²⁴ One of the few exceptions is the research commissioned to the IRES Institute on the automobile and aeronautics industries in France and Brazil (**Serfati and Sauviat, 2018**).

has come about without the initial elaboration of a consolidated systematic research perspective on GSCs. There would be ample space for an increased coordination among research projects in the future. Enhanced coordination through co-conception of activities would not only allow cross-fertilization of expertise, it would also help improving the coverage (in terms of geography, industry and stages of production) of the ILO's research and ensure, when necessary, cost efficiency for complementary projects. Efforts could also be directed towards a wider dissemination of research findings and make data more readily available for internal and external researchers.

The clear focus of most of the ILO's research on specific sectors and developing countries, but also the industry level perspective taken by most of the organization's analysis, is consistent with the its mandate. More particularly, it is in line with the programme of action that defines the ILO's approach to decent work in GSCs following the 2016 discussion.²⁵ However, research findings on decent work in GSCs might be specific to certain industries, countries or segments of supply chains and cannot be generalized to apply to other contexts. Until now, a large share of the ILO's resources has been placed on a limited range of labour intensive and buyer-driven industries, where working conditions are known to be particularly harsh and where labour rights are often poorly enforced. The organization would certainly benefit from expanding its scope to more complex industries and services and from analysing to what extent developing countries can integrate these chains and upgrade (economically and socially).

Many of the gaps in research result from the limitations in data availability, which should be addressed appropriately. GSCs are complex phenomena that challenge national and international statistical systems.²⁶ The cooperation of United Nations (UN) agencies, including the ILO, in this regard can help in overcoming some of these limits — for example, by the extension of the system of national accounts to provide details on the international contributions to national economies.²⁷ In the future, the ILO could provide a strong leadership in coordinating the measuring of labour outcomes of GSCs through the development or improvement of methodologies and the provision of guidance for practitioners. More efforts could also be expended on gaining access to quantitative data, from both public and private sources, and carry out specific data collection through surveys to improve our knowledge of the roles and impacts of GSCs on labour.

Regarding the functioning of GSCs, the multiplicity of stages of production is rarely taken into account in our analysis, which leads to a rather partial understanding of power relations and the way value added is distributed among the different actors and firms involved in the chain. Due to limited data availability, but also because of methodological and logistical difficulties, very few studies have until now covered the lowest tiers of GSCs (except for agriculture), where the rate of compliance is the lowest. Besides, the level of integration of certain actors such as informal enterprises or home-based and family workers remains difficult to assess accurately and would require specific investigation. Overcoming these limitations would entail coordinated efforts from the ILO's Headquarters, regional and country offices with national authorities. Building innovative partnerships, including partnerships with private actors, could also present a way to fill some of these information gaps and open up new perspectives for research. Likewise, the better integration in GSCs of certain countries and regions, especially in Africa, their potential in terms of the creation of quality jobs and the contribution to sustainable development could be further

²⁵ As stipulated in paragraph 7 of the ILO's programme of action: "Special attention will be paid to sectors most involved in global supply chains, small and medium-sized enterprises (SMEs) and export processing zones (EPZs) as well as to the role of women and to vulnerable populations. This will also focus ILO action on countries with weak governance of labour institutions, thereby facilitating positive effects within domestic supply chains as well." ILO, *Revised ILO programme of action 2017–21*, Governing Body, 328th Session, Geneva, Oct.–Nov. 2016, GB.328/INS/5/1(Add.1).

²⁶ Addressing all the limitations of national and international statistical systems to monitor GSCs is beyond the scope of this article. However, the most important limitations are related to the capacity of national accounts to describe international linkages between industries; the relatively poor information aimed at identifying FDIs and their allocations; international trade in services and international merchanting (where the merchant arranges the export of goods from country A to country B, without the goods ever crossing the borders of the country where the merchant is resident); and the frequent asymmetries in the recording of bilateral trade and investment statistics between countries.

²⁷ See the forthcoming *Handbook on Accounting for Global Value Chains: GVC Satellite Accounts and Integrated Business Statistics* by the United Nations Statistics Division.

explored in future research. Finally, it would be worthwhile to consider the growing role of emerging actors in GSCs, in particular multinational companies and customers from the Global South and their contribution to the decent work agenda.

Many TC projects related to GSCs have led to research in the field and, in some (rare) cases, to the collection of quantitative data. These projects are clearly a value added of the ILO vis-à-vis other organizations, but their potential for research and knowledge generation has not yet been fully explored due to the lack of adequate resources. Drawing on the example of the Better Work Programme, the lessons learned through TC projects could be more effectively shared and discussed (internally and externally), and independent research could be encouraged under non-disclosure agreements. The generation of additional research and original quantitative data from TC projects could also be considered, just as in the case of TRAVERA. In addition, as in the project on electronics value chains in Mexico, untapped sources could be explored with the help of national statistical institutes. The conduct of research and the execution of original quantitative and qualitative surveys could also be encouraged in TC projects. In this regard, the organization, the donors and the recipients might consider allocating sufficient resources for research as part of TC projects, particularly to allow for a better assessment beyond Tier 1.

GSCs are also a major topic of interest and action for other UN agencies and multilateral institutions. In accordance with its plan of action, the ILO has intensified its cooperation with other international organizations in recent years (as shown by the recent discussion with the World Bank on the upcoming *World Development Report* and the coproduction of the report for the Alliance 8.7 Working Group with the OECD). Opportunities for further development and cooperation in terms of research are currently explored, in particular by making the best use of external databases such as Eora (UNCTAD) and TiVA (OECD), as well as the World Bank's Exporter Dynamics Database.

3. Main findings on decent work in global supply chains

After this general mapping of the research activities on GSCs carried out by the ILO, the following part aims at synthesizing the main body of evidence and, whenever possible, provide information about ongoing research. The discussion is based mainly on the ILO's own research, but it also makes occasional reference to external investigations by other international organizations and scholars when these help in setting the context or providing a methodological or topical perspective.

Given the available material, the findings will be presented in three coherent and broad discussions. The first part relates to the functioning of GSCs and their impact on jobs and development. It covers most of the macroeconomic works that cover the impact of global drivers, such as globalization and technologies, on GSCs and the role of institutions in ensuring economic and social upgrading at the same time. The second part concerns the impact of GSCs on labour rights and working conditions. It covers most of the works carried out at the firm or inter-firm level and pays special attention to the impact of business relationships on labour. The third part presents research related to the various aspects of labour governance. In this section, the focus is placed on the role of actors and on their interaction in the governance of GSCs.

3.1. The functioning of GSCs and their impact on jobs and development

In the past decades, the world economy has been profoundly transformed by the increasing spread of GSCs. They have provided new opportunities for developing countries to participate in global trade and to diversify. In 2015, developing economies reached the same rate of GVC participation as developed economies, estimated to amount to 41.4 per cent of their total exports.²⁸ However, the level of involvement and integration of developing countries remains highly variable. In this new division of labour at the global level, multinational companies play a leading role, as about 80 per cent of global

²⁸ WTO (2019).

trade is now linked to their international production networks, through intra- or inter-firm linkages²⁹. South-south trade nowadays accounts for more than 50 per cent of the trading partners of developing economies due to the emergence of lead firms and local brands in the Global South.³⁰

The literature generally agrees on GSCs' increasing complexity but also on their relatively limited scope in total value added. According to WTO et al. (2017), the share of domestically produced and consumed value added remains vastly dominant, even if it has shrunk from 85 per cent in 1995 to less than 80 per cent in 2008. This change has primarily resulted from the rapid increase of "complex GVCs", i.e. those GVCs in which value added crosses national borders several times during the production process. At the same time, many signs point towards a growing geographic and organizational concentration of GSCs in various sectors. In such sectors as garments or electronics, many of the manufacturing nodes are now located in a few Asian countries, while Latin America and Africa remain providers of raw materials and commodity products, facing greater difficulties in diversifying.³¹ From an organizational point of view, after an initial movement towards the de-verticalization of main companies, we are currently observing a consolidation in the different key segments of the GSCs through a reduction in the numbers of both lead firms and main suppliers in very different industries, ranging from beverages to electronics and aeronautics.³² Another element of complexity is related to the growing share of services in GSCs, which often come as complements to manufactured goods (e.g. the service component in sophisticated manufacturing goods or the software in cars).³³ While the share of services in value added exports is generally above 50 per cent for most developed economies, it is also consistently rising in many emerging economies such as China, Mexico, and Viet Nam (where it already reaches 40 per cent). In the case of the European Union (EU), recent research has provided evidence that the servicification of GSCs may have contributed to sustaining the EU's manufacturing employment base.³⁴

3.1.1. The impact of GSCs on jobs worldwide

In its *World Employment and Social Outlook* (WESO) report in 2015,³⁵ the ILO provided an estimate of GSC related jobs and an analysis of their evolution since the mid-1990s. This work, which is based on information from WIOD, covers 40 countries³⁶ from 1995 to 2013, and has been deepened and expanded in a subsequent article.³⁷ The WESO estimate provided a valuable contribution to the existing literature³⁸ by estimating the number of jobs in GSCs³⁹, defined as the number of jobs in a specific country and sector that are dependent on global exports to another country and sector.

²⁹ UNCTAD (2019).

³⁰ WTO (2019).

³¹ Lee (2016).

³² Idem.

³³ WTO et al. (2017).

³⁴ Rueda Cantuche, Cernat and Sousa (2019).

³⁵ International Labour Organization (2015).

³⁶ The data set covers seven emerging economies (Brazil, China, India, Indonesia, Mexico, the Russian Federation and Turkey) and 33 developed economies (Australia, Canada, the EU-27 countries, Japan, the Republic of Korea, Taiwan (China) and the United States). These countries comprise two thirds of the global labour force.

³⁷ Kizu, Kühn and Viegelaahn (2019).

³⁸ See, for example, Jiang (2013); Timmer et al. (2014); and Arto, Andreoni and Rueda Cantuche (2015).

³⁹ This research does not provide an estimate of "new" jobs created by GSCs but of jobs that are currently integrated into GSCs. As shown by Farole (2016), it is fair to consider that, if GSCs can be a catalyst for job creation, their employment effects are in most cases complex and, on average, are relatively weak. Participation

The report presented a series of overall findings on the rapid increase of GSC related jobs (from 296 million in 1995 to 453 million in 2013, or more than one-fifth of all the jobs in the economies analysed) as well as their relative stagnation since the end of the first decade in the 2000s, mainly driven by declines in emerging economies, particularly in China.⁴⁰ It also pointed to the wide variation in the share of GSC related jobs across sectors. Due to the greater tradability of goods and a greater potential of fragmentation in the production process, the largest share of jobs is observed in different manufacturing subsectors (e.g. electrical and optical equipment). However, between 1995 and 2013, the service sector was rapidly catching up, becoming the largest contributor to the creation of GSC related jobs. This was especially the case in advanced economies, where services are responsible for three-quarters of the (job) growth. Finally, this research also showed the ongoing shift of emerging economies from outsourcing locations to integral members of GSCs. While the relative importance of exports to and among advanced economies, in terms of GSC related job creation, has declined, emerging economies have now become major export destinations. For example, the number of jobs related to global exports to China increased almost seven-fold during the same period.

In comparison with previous research (see Table 1), the ILO estimates cover a larger set of sectors (including agriculture and services) and consider the demand for both intermediate and final products. However, these estimates cover a relatively limited number of countries due to the current scope of the WIOD. Moreover, different methodological limitations — especially regarding the inclusion of the final production stages in the model and the underlying assumption concerning labour productivity — might lead to an overestimation of GSC related jobs. Research is currently undertaken to remove some of these limitations.

in GSCs indeed implies for enterprises that they deliver productivity growth, while countries can also seek to extend the reach of GSCs into the local economy and allow more local firms and workers to engage. The net effect of GSCs on jobs depends thus on multiple factors and, more importantly, on the sector and the stages of the value chain taking place in the country.

⁴⁰ To complement this first result, the ILO produced new global jobs estimates for formal exporting firms in its **2017 WESO report** on sustainable enterprises. The 2017 estimate partially overlaps with the WESO 2015 estimate of GSC related jobs, but is not comparable, as it leaves out all the firms locally supplying these exporting firms. According to this publication, 167 million workers were employed by exporting firms in 2016 in comparison to only 94 million in 2003. The share of these jobs started to decline after 2008 due to the global trade collapse. The 2017 WESO also provided estimates by levels of exports and imports, showing that the share of workers employed by heavy exporters was already displaying a downward trend before the financial crisis, and that heavy importers were particularly affected after 2008.

Table 1: Examples of GSC related job estimates⁴¹

Reference	Data	Scope	Definition of jobs estimated	Main findings	Main methodological limitations	Other methodological limitation
Jiang, X. 2013.	World Input-Output Database (WIOD)	40 countries (85 % of global GDP, 2/3 of global labour force)	The number of direct and indirect jobs that are dependent on <u>intermediate goods exported</u> to be used in exports of a foreign country.	In 2009, 88 million jobs are related to GSCs (an increase by 34% or 32 million from 1995 to 2009).	<u>Underestimation</u> : It does not take into account the segments of GSCs where final goods are produced (such as through final assembly). It equally ignores the cases where the initial stage of an otherwise domestic supply chain is outsourced or offshored.	Every analysis based on I/O tables relies on the assumption that the labour productivity of GSC-related and non-GSC-related activities within a sector is identical in each country.
Los, B.; Timmer, M.; de Vries, G. 2015.			The number of direct and indirect jobs generated by the total <u>final manufacturing demand by all countries</u> .	The publication does not provide a global estimate of the number GSC related jobs but detailed results for 21 countries and an estimate of the total increase between 1995 and 2008 (+131 million)	As the authors compute the number of jobs forming part of the supply chain producing manufacturing output, they are not distinguishing between purely domestic supply chains and global supply chains (<u>overestimation</u>). The methodology also ignores GSCs where the demanded output are services or agricultural goods (<u>underestimation</u>).	
WESO 2015 and Kizu, T.; Kühn, S.; Viegelahn, C. 2019			The number of direct and indirect <u>generated by a foreign demand</u> in both <u>intermediate and final goods</u> . ("jobs in a particular country and sector that are dependent on global exports to another country and sector")	In 2013, 453 million jobs worldwide were GSC-related (an increase by 53% since 1995 or 157 million)	<u>Overestimation</u> : Not all final goods trade represents final production stages within GSCs. To be able to distinguish, it would be necessary to know the country of origin of the lead firm	

3.1.2. GSCs and the global disruptive forces

While GSCs have been an engine of growth and, to some extent, a driver of job creation, questions have been raised as to whether integration in GSCs will remain a viable strategy for development and decent work in the future.⁴² One of the issues to be addressed in this regard is related to the impact of technology on the location of production. In recent years, many debates have focused on the possibilities of bringing some parts of the production process back to advanced economies (reshoring). The traditional labour cost advantage of developing countries could be challenged by an increased use of robots in developed economies.⁴³ In this scenario, robots are considered a close substitute for low-skilled workers. Moreover, in this regard, increasing labour costs in developing economies, a need for more flexible and reactive supply chains and growing uncertainties concerning international trade could act as catalysts in the coming years. The implication of such an evolution would be clearly detrimental to employment in middle and low income countries.

Early assessments produced by the ILO⁴⁴ showed very little evidence of reshoring in Europe through reversing trends of FDI outflows and inflows or the increasing share of domestic assets owned by European companies since 2008–2009. Recent research looked more specifically at the impact of robots on employment and trade.⁴⁵ Besides demonstrating a global negative impact of robots on the number of jobs (especially in emerging economies) during the period of 2005–2014, this study found that the deployment of robots in developed countries reduced offshoring and consequently depressed employment in emerging economies by 5 per cent in the same period. This result supports previous

⁴¹ The author is especially grateful to his colleagues Christian Viegelahn, Stefan Kühn and David Kucera for their inputs and discussions regarding the methodology of GSC related job estimates.

⁴² **International Labour Organization (2018)**; Rodrik (2018).

⁴³ UNCTAD (2016).

⁴⁴ **Sekerler Richiardi (2015)**. These estimates should be updated in the coming months.

⁴⁵ **Carbonero, Ernst and Weber (2018)**.

findings by the OECD⁴⁶ to the effect that the use of industrial robots in developed economies appears to be slowing offshoring rates. These initial results are supplemented by forthcoming research⁴⁷ that assumes a distinct qualitative and shop floor perspective through case studies in two highly labour intensive industries, apparel and electronics. The authors take a critical stand with regard to the mainstream discourse on the destruction of jobs because of rapid changes in automation technologies. They find that considerable technological bottlenecks, but also cost advantage trade-offs, in the apparel and electronics industries limit the deployment of these new technologies in the particularly labour intensive segments of the value chain, such as sewing or assembling.

Another looming threat to GSCs is related to the growing uncertainty with regard to international trade. The most recent research emphasizes the expansion of GSCs until the disruption caused by the 2008 financial crisis.⁴⁸ While trade rebounded quickly in the immediate aftermath of the crisis, no further expansion in trade and GVCs has been recorded since 2011. At present, it is impossible to tell if the process of deeper integration within GSCs has been brought to a standstill or if we are, more fundamentally, on the verge of a global reversal. Besides, additional trade barriers (both tariff and non-tariff barriers) have been introduced in recent years⁴⁹ in both developed and emerging economies. The impact of trade policy on firms and workers has for many years been an intense issue of debates.⁵⁰ Access to quality imported inputs is globally beneficial for firms' performance and consequently for their workers, so the negative impact of trade barriers may be multiplied in a context of GSCs, where inputs have to cross borders several times during the production process.⁵¹

Additional ILO research was also directed at assessing the impact of trade barriers on jobs in GSCs.⁵² Based on the same estimate of GSC related jobs mentioned earlier, this study assessed the external impact of one country's trade policy on the number of jobs located in another country. It took into account the effects along the entire supply chain as well as the growing complexity of inputs (both goods and services). The authors found clear evidence of negative impacts of trade barriers imposed on a certain sector on the number of jobs in the same sector ("own-sector effect") but also on other sectors that provide inputs to that sector ("cross-sector effects"). Cross-sector effects are, however, variable according to their types: barriers for goods have a stronger effect on service jobs than do barriers for services on manufacturing jobs. Finally, and more surprisingly to the authors, in the case of barriers on goods, the cross-sector effects on service jobs is even larger than the own-sector effect on manufacturing jobs.

The last global disruptive forces are related to environmental and climate sustainability. Environmental economics have provided evidence in recent years that GSCs are a cause of massive "carbon leakage" not only between developed and developing economies but also, and increasingly, within developing economies, which have generally relatively weaker environmental regulations.⁵³ If environmental

⁴⁶ De Backer et al. 2018.

⁴⁷ Kucera and Bárcia de Mattos (2019).

⁴⁸ WTO et al. (2017).

⁴⁹ See, for example, https://www.globaltradealert.org/global_dynamics.

⁵⁰ For a review of research on impacts of trade policy on labour, see **International Labour Organization (2017)**.

⁵¹ In the coming months, the research undertaken under the TRAVERA project should generate new findings on the possibilities for countries to develop and create quality jobs through their involvement in GSCs.

⁵² **Kühn and Viegelahn (2019)**. The study takes into account both tariff barriers on goods and non-tariff barriers on goods and services. For non-tariff barriers, it relies on indicators from the World Bank assessing the procedures in importing and exporting goods and service trade restrictiveness.

⁵³ Meng, Peters and Wang (2018).

policies have not yet been a major driver of international trade in recent years,⁵⁴ this might change drastically in the future. Their effects on the workers and firms involved in GSCs could, therefore, be more closely monitored by the ILO.⁵⁵

3.1.3. National institutions, structural transformation and global supply chains

The relationship between national institutions and regulations and the expansion of GSCs has always been a highly controversial issue. Recent research by the WTO⁵⁶ has shown that, other things being equal, countries with sounder institutions, such as stronger property rights and the rule of law tend to participate to a greater extent in value chains. The same research has shown also that the quality of institutions is an important determinant of the sophistication of the exported products and is, therefore, a factor of economic upgrading.

Regarding labour market institutions and labour rights, the academic literature has placed most of its focus on the relationship between labour rights and FDI. According to UNCTAD, the role of FDI as a driver of trade is growing fast. Around 80 per cent of global trade is linked to the production networks of multinational companies,⁵⁷ either through intra-firm or inter-firm linkages. While plenty of research has tried to measure the extent to which FDI may lead to a “race to the bottom” (in those countries that may lower their labour standards and labour rights to attract and retain foreign capital⁵⁸), the reverse relationship also deserves attention to better understand the location choices made by MNEs. Indeed, labour rights and labour institutions could also complement the pursuit of FDI by providing a clear and stable bargaining framework for investors.⁵⁹ The authors of two recent articles⁶⁰ have evaluated the effects of civil liberties, political rights and governance (as measured by different international indexes) — including such empowerment rights as freedom of speech, assembly and association — on FDI from American MNEs at the sectorial level in 54 countries. They conclude that these key democratic pillars have positive consequences on the amount of FDI at the aggregate level. However, the data used in these studies provide little information on the motives of investment. It is, therefore, difficult to judge to what extent these new operations undertaken by American MNEs aim at consolidating their GSCs or at reaching new final customers. Nevertheless, the effects are especially strong and positive on FDI for service industries, while, in manufacturing industries, they are insignificant in most cases. This might suggest that these positive effects are more related to market-seeking than efficiency-seeking requirements.

The role of the state as a key player in the structural transformation of national economies — especially in encouraging technological upgrading, supporting learning processes and accumulating capabilities — has been highlighted in previous ILO research.⁶¹ Nevertheless, the “premature deindustrialization” observed in certain developing countries might be particularly worrying for their long-term prosperity.⁶² The development of the manufacturing sector is generally considered a solution to absorbing a large

⁵⁴ Kozluk and Timiliotis (2016).

⁵⁵ The **WESO Green Report** of 2018, which provided most valuable estimates on the number of jobs affected by climate change, did not take a GSC perspective.

⁵⁶ WTO et al. (2017).

⁵⁷ UNCTAD (2013).

⁵⁸ See, for example, Blanton and Blanton (2012); Davies and Vadlamannati (2013); and Olney (2013).

⁵⁹ See Blanton and Blanton (2012).

⁶⁰ **Kucera and Principi (2014) and (2017).**

⁶¹ **Salazar-Xirinachs, Nübler, and Kozul-Wright** (eds) (2014).

⁶² Rodrik (2011) and (2016); de Vries, Timmer and de Vries (2015).

number of low-skilled workers coming from the primary sector (and providing them with reasonably stable jobs) and a factor of strong productivity gains. However, GSCs have significantly affected the processes of industrialization, as developing countries are less able to develop and build their own value chains but are invited to specialize in specific tasks and functions in order to capture more value added.⁶³ National strategies, and more specifically industrial policy, need thus to be responsive to the context of GSCs. In such a context, industrial policy development must consider the dynamics between industrial development and the interests and relative power of foreign lead firms in order to promote the capacity of domestic firms to upgrade.⁶⁴ The example of the location of Intel in Costa Rica provides useful insights in this regard, as its effects go far beyond a quantitative impact on the number of jobs and include positive impacts on general skill levels, wages and productive linkages between firms.⁶⁵ A forthcoming ILO research paper explores the differentiated patterns of GVC integration and development in various regions.⁶⁶ It helps to understand how institutions and national policies can promote a dynamic process of learning and structural transformation. For example, different Asian economies have achieved a gradual substitution of complex backward linkages with domestic supplies, while Latin American economies have been characterized to a larger extent by a process of decreasing complexity, declining innovation capabilities and the loss of manufacturing jobs.

3.1.4. Opportunities for economic and social upgrading into global supply chains

Generally relying on a firm level or sectorial perspective, considerable research in the past has shown that economic upgrading does not necessarily lead to improvements for workers, and that different trajectories of development are possible.⁶⁷ In the literature, it is increasingly recognized that upgrading can take different forms and may have different economic and social consequences. It is also acknowledged that social impacts are generally not uniform within the labour force.⁶⁸ For example, in the agro-food industry, forthcoming research suggests that steady economic upgrading within a local value chain has tended to increase the polarization between regular workers with secure jobs, on the one hand, and growers and contract workers, on the other.⁶⁹ The evidence also shows that, in the case of Latin America and the Caribbean, economic upgrading within a chain could have contrasting social effects, as it often implies fewer but better jobs in terms of skills, working conditions and formalization.⁷⁰

In the past few years, several studies by the ILO have sought to improve our understanding of the relationships between institutions and policies and the possibilities for upgrading. A forthcoming article, based on nine case studies of GSCs in Southern Cone countries,⁷¹ identifies three main tendencies in which economic and social upgrading is related in different ways: oppositional development; truncated development; and more integrated upgrading within the chain. In the first two cases, the process of

⁶³ Baldwin (2016).

⁶⁴ Milberg, Jiang and Gereffi (2014).

⁶⁵ Monge-González (2017).

⁶⁶ Nübler (forthcoming).

⁶⁷ Barrientos, Gereffi and Rossi (2011).

⁶⁸ Lee and Gerreffi (2015).

⁶⁹ Henry and Chato (forthcoming).

⁷⁰ Gereffi, Bamber and Fernandez-Stark (2016).

⁷¹ Reinecke and Posthuma (forthcoming). The nine case studies are Forestry and Wood and Global Services in Uruguay, Biodiesel industry in Argentina, Wine Industry and Textile and Apparel Industry in Chile, Smart phone Industry and Textile and Apparel Industry in Brazil and Automotive Industry and Textile and Apparel Industry in Paraguay.

upgrading of the lead firm comes at the expense of a downgrading from the suppliers. These development patterns are more frequent in GSCs that involve suppliers specialized in low value added natural resources or labour-intensive intermediary activities. This contrasts with cases where a joint upgrading of lead and supplier firms has been observed. In these cases, opportunities given by the lead firms to generate positive spillovers to suppliers (through technological upgrading, for example) but also the possibility to rely on strong labour institutions (such as regulation of subcontracting relationships or effective labour inspection) and social actors are crucial.

Another multidisciplinary research approach based on case studies in high value added manufacturing industries⁷² has shown that large corporations have a strong influence on the way GSCs are shaped both vertically and horizontally. It has also demonstrated that the conditions required for economic and social upgrading are strongly linked to public policy and institutions. In sectors such as automobile or aeronautics, for example, the relationship between large corporations and their home countries still can play a decisive role in national employment trends. In the case of the automobile industry, the internationalization of leading car manufacturers has led to different business models (or productive models), which, in turn, have brought different dynamics in terms of economic and social upgrading for both the countries of origin and the countries of operation.⁷³

An important dimension of social upgrading relates to the employment opportunities offered to women in GSCs. The global spread of GSCs has helped to mitigate persistent differences in employment trends across sexes.⁷⁴ In the 40 countries for which estimates are currently available, the share of women in total GSC employment is higher than the share of women in total employment; it has remained broadly constant, above 40 per cent, since 2000. The situation is, however, highly variable across countries. In emerging economies, women's share in GSC employment is higher than in total employment and is still increasing, while it accounts for a significantly lower and stagnant share in advanced economies due to retrenchment in female manufacturing jobs. However, this global positive impact of GSCs on women's employment opportunities might also deteriorate in the long run. Technological progress may impact in particular the labour intensive industries in which women are over-represented, such as garment or electronics. Forthcoming research⁷⁵ examines how changes in female employment shares in manufacturing are currently related to technological upgrading (proxied by change in labour productivity) in 14 industries of a group of developing countries that are strongly integrated GSCs. It shows that, in seven of these industries, female share decreases with labour productivity,⁷⁶ while it increases in three industries and displays mixed trends in four others. If no systematic differences with regard to integration into GSCs is associated with feminization or de-feminization as compared to the rest, feminization does occur with upgrading only within capital intensive or intermediate industries.

⁷² **Serfati and Sauviat (2018)** on GSC and national production systems (Brazil and France); **Pardi (2017)** on GVCs and firms' strategies in the automobile sector; and **Monge-Gonzalez (2017)** on the Intel case in Costa Rica.

⁷³ **Pardi (forthcoming)**.

⁷⁴ **WESO (2015)** and **Kizu, Kühn and Viegelahn (2019)**.

⁷⁵ **Kucera and Tejani (forthcoming)**.

⁷⁶ Textiles, electrical and non-electrical machinery and equipment, food, beverages and tobacco.

Box 3:**Challenges and research gaps related to the functioning of GSCs**

The effects of global disruptive forces on the functioning of GSCs and the quantity and quality of jobs are complex and need to be more closely monitored and better anticipated. In the future, technological changes and digitalization might reshape the architecture of supply chains by impacting both production processes (influencing the relationships between lead firms and suppliers) and business models (modifying the conditions of competition).⁷⁷ In conjunction with evolutions in trade and environmental arrangements, technological innovation may disrupt the conditions for countries to develop through GSCs and the way economic upgrading is accompanied by social upgrading.

Comparative research could be carried out at firm, industry and country levels in order to better understand how institutions and policies influence the social outcomes of the integration of developing economies into GSCs in the short and long term. A broad perspective should be considered in this regard, including labour law and inspectorate, employment and industrial policies, but also social protection, education and tax systems. A key question arising from previous ILO internal and external research in this regard relates to the conditions for a more effective spread of economic and social upgrading from lead firms and MNE affiliates to the local firms at the different tiers of the chains.⁷⁸ Such a research agenda requires to be innovative in collecting and exploiting data of different nature (Input-Output databases, enterprise surveys, labour force surveys, etc.) in collaboration with national statistical institutes and other actors and to carry out ad hoc surveys when necessary. The current project on the electronics industry in Mexico should engender important lessons and might be replicated in other contexts and industries.

More research is also needed to improve the understanding of emerging trends in the international division of labour and their implications in terms of development and jobs. New actors are taking on a greater role in GSCs, adhering to different business practices and delivering to different final customers, such as MNEs from the Global South. At the same time, new modes of production are introduced in GSCs, such as digital platforms, and new organizational patterns between leading companies, suppliers and contractors are explored; their impacts on the social outcomes for workers must be better known. The regionalization, in many sectors, of GSCs around manufacturing nodes, the increasing shares of services and South-South trade also raise new questions concerning the capacity of GSCs as a driver for development. The industrial strategy put in place by certain countries from sub-Saharan Africa and their implicit objective to integrate GVCs⁷⁹ in order to boost employment, exports and FDI could as well contribute to the future research agenda.

For the moment, the ILO estimates of GSC related jobs cover a relatively limited number of countries and leave entire regions outside the scope of analysis. Additional studies are currently implemented by the ILO's Research Department, in collaboration with the Regional Office for Asia and the Pacific and the Skills and Employment Branch, to expand the estimates, relying on the OECD's TIVA database, which covers more than 60 countries. More research could also be undertaken in collaboration with the Statistics Department to improve the accuracy of underlying assumptions of the estimates. Consequently, these estimates could be exploited for other research projects, such as analyses producing forecasts or measuring the effects of global disruptive forces on jobs.

⁷⁷ See, for example, Rehnberg and Ponte (2018) on the possible effects of 3D technology on manufacturing industries.

⁷⁸ This is also in line with the ILO's *Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy* (MNE Declaration), which stipulates: "To promote employment in developing countries, in the context of an expanding world economy, multinational enterprises, wherever practicable, should give consideration to the conclusion of contracts with national enterprises for the manufacture of parts and equipment, to the use of local raw materials and to the progressive promotion of the local processing of raw materials. Such arrangements should not be used by multinational enterprises to avoid the responsibilities embodied in the principles of this Declaration." ILO, Governing Body 204th Session, Geneva (Nov. 1977); amended at its 279th Session, (Nov. 2000), 295th Session (Mar. 2006) and 329th Session (Mar. 2017), para. 20.

⁷⁹ Gereffi (2019).

3.2. The impacts of global supply chains on labour and working conditions

The relationship between the participation in GSCs of an enterprise or a country, on one side, and labour rights and working conditions, on the other, is a very difficult question that has been the subject of many debates. From a theoretical point of view, this relationship might indeed be subject to paradoxical influences between the potentially positive effects of learning and upgrading on human resources management and the (also potentially) detrimental effects of price competition on workers' rights. At the same time, firms involved in GSCs might also be subjected (via their customers) to more indirect foreign consumer pressure than purely domestic firms, and, consequently, might have to show their compliance with certain labour standards.⁸⁰ Besides, one of the key achievements of the GVC literature has been to highlight the complexity of governance patterns between enterprises in supply chains (see Box 1). Depending on the type of products and their capabilities, power relationships between leading and supplying companies may vary substantially, and the capacity of suppliers to define their own employment strategies and practices autonomously may be of greater or lesser importance.⁸¹ For example, when a leading firm's demand relates to highly standardized goods, suppliers can be placed in a situation of price competition, which may result in negative effects on such working conditions as wages, working time and non-standard forms of labour. In extreme cases, this type of situation can be prone to leading to problems of violence or harassment.

Due to numerous limitations in data collection from developing economies and the difficulty to capture GSC realities in common statistical tools, research findings from comparisons of firms that are involved in GSCs and those that are not (or regarding their different levels of participation in GSCs) are still very limited.⁸² For these reasons, case studies remain in general the preferred method to investigate their impacts on labour and working conditions. Consequently, it is difficult to provide an overall picture of the relative employment quality in GSCs. Nevertheless, the ILO has made some progress in this area in the past few years. For example, it relied on its GSC jobs estimates that is available for 40 countries to assess the association between GSC participation and a limited number of items related to working condition. While valuable, this type of exercise does not, however, help in understanding the underlying logic of decent work deficits in GSCs. Another example is the global survey carried out in collaboration with the Ethical Trading Initiative (ETI) covering 1,500 suppliers, which aimed at assessing the effects of purchasing practices of lead companies on the suppliers' capacity to provide decent work conditions (see Section 3.2.2).

3.2.1. GSCs and fundamental principles and right at work

ILO research has mainly relied on case-studies when trying to investigate the interplay of labour rights and GSCs. Regarding freedom of association, Better Work has proven to be a particularly rich field of inquiry and analysis, particularly through the introduction of an innovative mechanism of social dialogue, the Performance Improvement Consultative Committees (PICCs). This mechanism aims at developing social dialogue inside the workplace in a context characterized by poor autonomy and a lack of freedom for labour movements, but its effectiveness could be limited by the rigidity of lead firms' business practices.⁸³ In another context, local union mobilization has proven to be a key factor in strengthening the institutions responsible for domestic labour regulation.⁸⁴ The Better Work Programme

⁸⁰ Distelhorst and Fu (2018).

⁸¹ Lakhani, Kuruvilla and Avgar (2013).

⁸² Distelhorst and Fu (2018).

⁸³ Anner (2017) and (2018).

⁸⁴ Amengual and Chirot (2016).

had resulted in several research papers that will be presented in greater details in Sections 3.3.2 and 3.3.3 given their high relevance for the understanding of labour governance in GSCs.

Discrimination related to gender has been analysed particularly in the case of the garment and footwear industries, with specific focus on the gender pay gap and sexual violence. The ILO Regional Office for Asia and the Pacific has recently provided new insights⁸⁵ on the size and the underlying factors of gender pay gaps in nine countries of the region.⁸⁶ It showed that the average raw gender pay gap is approximately 18.5 per cent in the region but can reach 42.2 and 57.3 per cent, respectively, in countries like India and Pakistan. When applying the Blinder-Oaxaca decomposition method, individual observable characteristics such as age, education and experience have a relatively limited explanatory value for the observed gender gap, which tends to indicate a prominent influence of gender-based discrimination. Research based on a field study in the fast growing garment industry in Myanmar, a sample of 16 foreign-owned and/or foreign-managed factories indicates that prejudices on the part of management are a key factor in explaining the gender discrimination.⁸⁷ These beliefs, in particular, lead to more limited career perspectives for women and fewer opportunities to learn new skills.

A number of studies provided new findings on the circumstances that may lead to workplace sexual violence and harassment. The first of these was produced within the framework of the Better Work Programme and was based on a micro dataset collected in four different countries.⁸⁸ It demonstrated that asymmetric incentives and power asymmetries between supervisors and workers are generally reliable predictors of sexual harassment. Yet, the impact of organizational awareness by human resources (HR) managers is highly variable, depending on the institutional and cultural context. The second example concerns agricultural workers and is based on different case studies in Africa, Asia and Latin America.⁸⁹ It clearly shows that supervisors and senior workers are most often the perpetrators, in part because of their power with regard to recruitment or contract extension, wage setting, working conditions, workers' social standing and other advantages. Structural environments, cultural norms, limited labour law coverage and poor labour inspection also play a critical role in the occurrence of sexual violence and harassment.

Finally, the ILO has also generated new findings with regard to child and forced labour in GSCs. For example, a comparative study carried out as part of the International Programme on the Elimination of Child Labour (IPEC) in Thailand helped to measure the incidence of child labour, especially in migrant communities, and the labour conditions of children in the shrimp and seafood supply chains.⁹⁰ It showed that working children in this industry are more frequently exposed to workplace hazards, and that migrant children also work longer hours on average than Thai children. However, the report also indicates that the pressure from overseas buyers in the tuna industry (in comparison with the shrimp industry) resulted in a marked improvement in labour standards. The high fragmentation and diversity of the shrimp industry are obstacles that impede its regulation by government authorities.

⁸⁵ **Huynh (2016) and Pillay (2018).**

⁸⁶ Bangladesh, Cambodia, India, Indonesia, Lao People's Democratic Republic, Pakistan, the Philippines, Thailand and Viet Nam.

⁸⁷ **ILO Country Office for Myanmar (2018).**

⁸⁸ **Lin, Babbitt and Brown (2014).**

⁸⁹ **Henry and Adams (2018).**

⁹⁰ **Asia Foundation and International Labour Organization (2015).**

As part of broader research project on gaining insight into the economic settings in which child labour and forced labour occur, the ILO as part of Alliance 8.7 collaborated with the OECD, the United Nations Children’s Fund (UNICEF) and the International Organization of Migration (IOM) in a report for the G20 on child labour, forced labour and human trafficking in GSCs. This research, which will be made available in November 2019, aims at providing quantitative evidence on the prevalence of child labour in GSCs. Relying on the OECD TiVA dataset and available survey data, the study applies the Input-Output methodology to child labour (and, to the extent possible, to forced labour and human trafficking) in order to link industries and countries where child labour occurs with final consumption of goods and services. The report helps to identify the determinants and risk factors and provide a review of policy responses. Three types of critical factors are discussed: (1) the socioeconomic vulnerabilities of the workforce (including poverty, discrimination and informality); (2) the gaps in legislation, enforcement and access to justice; and (3) the pressures faced by suppliers, which may lead to a recourse of abusive labour practices. Regarding policy responses, the report examines the policies taken by “host” countries where child and forced labour occur, as well as the policies taken to influence GSC lead companies, such as due diligence initiatives and measures promoting business compliance. The report benefits from background papers, including analyses of the evolution of child labour sectoral rates at country level and corresponding forward and backward linkages of those sectors in GSCs.

3.2.2. Business practices and their impacts on working conditions

The role of business practices (or “purchasing practices”) as a driver of poor working conditions has gained prominence in academic literature in the last decade.⁹¹ More and more, scholars have tried to look beyond the production side of markets — where problems manifest — and have sought to assess the influence of upstream policies and practices of lead firms. For example, recent research in the Indian garment sector has resulted in some evidence of a “squeezing effect” of purchasing practices on the quality of employment relations, in particular with regard to wages, employment stability and working intensity⁹².

In recent years, the ILO has moved forward in this direction through a research series focused on business and procurement practices and their impacts on working conditions.⁹³ A global survey on purchasing practices and working conditions was carried out in 2016 in collaboration with the joint ETIs of almost 1,500 suppliers from 87 countries.⁹⁴ This work helped to understand how purchasing practices can put pressure on suppliers in terms of timeline, prices and delivery, and consequently have detrimental effect on the capacity to provide decent wages and working conditions. The investigation focused, in particular, five business practices in the relationship between buyers and suppliers: contracts

⁹¹ See for example the work of Richard Locke and his colleagues on the case of Hewlett Packard and its suppliers in South East Asia (Locke, 2013; Locke and Samel, 2018).

⁹² Anner (2019).

⁹³ The issue of business practices and working conditions in the GSCs had already been addressed in previous research carried out by the ILO. See, for example, the following contributions in Rossi, Luinstra and Pickles (eds.) (2014): Daniel Vaughan-Whitehead (2014) on fair wage practices and corporate social responsibility; Doug Miller (2014) on multinational’s living wage code commitment; and Leonhard Plank, Arianna Rossi and Cornelia Staritz (2014) on the effects of fast fashion on jobs quality.

⁹⁴ See Vaughan-Whitehead and Pinedo Caro (2017).

clauses; technical specifications; order placement and lead times; prices and market power; and requests for social standards. The study also reported that codes of conducts are a widely used tool by lead firms.⁹⁵ However, the demand for adherence to social standards is usually not accompanied by a significant financial assistance on the part of lead firms and can thus add further pressure on suppliers' margins. Finally, the report showed that social dialogue seems to have a positive impact on wages and number of hours worked.

Since the publication of this paper, the large scale global supplier survey (Phase 1) has been complemented by two other sources of data: 31 case studies among suppliers in five countries of three continents⁹⁶ (Phase 2) that provided new evidence of the influence of purchasing practices not only on wages and working hours but also on occupational health and safety and the probability of suppliers to rely on temporary work and outsourcing. A global buyers' survey (Phase 3) closed the loop and presented the perspective of global buyers and helped better understand root causes, identify best practices and define some improvements in policy. The results of this research will be made available in the course of 2019–2020.⁹⁷

The research carried out within the scope of the Better Work Programme has also paid special attention to the adverse consequences of sourcing pressure in the specific case of the garment industry. The independent evaluation of the programme carried out by Tufts University⁹⁸ showed that certain sourcing practices —rush or uncertain orders, size orders, changing technical requirements, and late penalties — are a major concern for managers in Better Work factories and can affect firms' compliance outcomes, especially concerning working hours and safety and health. A study from Better Work showed, for example, that, while buyers tend to direct larger orders in the first instance to the suppliers with the best compliance reports, the risk of non-compliance with regard to working hour standards increases with order size.⁹⁹

In the specific case of global garment industry, a publication in INWORK's Conditions of Work and Employment series¹⁰⁰ produced several interesting findings related to labour costing and the definition

⁹⁵ More than 90 per cent of the surveyed suppliers were expected to follow a code of conduct.

⁹⁶ Bangladesh, China, India, Turkey and South Africa.

⁹⁷ The entire field work was completed in a period of three years (2016–2019) and made it possible to collect a very rich set of data on both purchasing practices and working conditions. Its various outcomes will be presented in a series of working papers.

⁹⁸ **International Labour Office (2016b)**

⁹⁹ **ibid.** This result is consistent with a recent study by **Amengual, Distelhorst and Tobin (2019)** who analysed factory labour audits and purchase orders from an apparel and equipment retailer. These authors showed the effects of private compliance initiatives on the improvement of certain factories and the termination of orders with factories with poor labour compliance. However, in the long term, purchase orders do not improve with the upgrade of labour standards and, even worse, factories with declining labour standards tend to see their orders increase. The authors blame the lack of flexibility in buyer/supplier relationships for this “missing middle” in incentives for compliance.

To conclude this point, another recent article by Distelhorst and Locke (2018), based on data from a global sourcing company which primarily serves retailers and wholesalers in advanced economies shows, that compliant exporters generally receive *more* orders from importers. When firms moved from noncompliance to compliance, their average orders increased on average by 4 percentage points. However, the only exporter industry in which effects are statistically different from zero is clothing.

¹⁰⁰ **Miller and Hohenegger (2016).**

of wages.¹⁰¹ By deconstructing labour costing in different national contexts and for different products, the authors of this study managed to show that there was room within buyer margins for a redistribution of value added. At the same time, they also provided a critical review of recent efforts by buyers and suppliers from different countries to address the issue of living wages in codes of conduct. They called for industry wide collective bargaining in key garment and textile sourcing countries, to be supported by world class manufacturing standards and responsible purchasing practices.

This research was complemented by another study in the same series¹⁰² that examined 14 brands and retailers, mostly SMEs, which implemented a “living wage” policy at their supplier factories. The empirical results show that a single (albeit voluntary) actor can face great difficulty in improving wages. These difficulties originate at different levels, from global competitive pressure to national standards that are set too low and not revised regularly. In the same vein, an INWORK publication on the South African clothing sector¹⁰³ provides an empirical analysis of collective bargaining over wages and productivity initiatives and examines five case studies of enterprise strategies aimed at improving competitiveness. The study raises the question of the appropriateness of sectorial collective bargaining when manufacturers are in value chains dominated by retailers, and it discusses alternative approaches.

An approach that had previously received little attention — various models aimed at constraining lead buyers in their purchasing practices through the involvement of workers’ representatives — was documented and conceptualized in a recently issued Working Paper that grew out of a development project on the Asian garment sector.¹⁰⁴ These models, according to the authors, present “substantive, enforceable agreements between lead firms and unions or worker-based organizations”¹⁰⁵ and can be found in different industries, time periods (from the 1930s to the present day) and locations. They can be more or less formalized and codified into public agreements, but always involve concrete changes to lead the practices of lead firms. While very diverse in practice, the models share the same factors of success, such as the provision of positive incentives (preferential sourcing) and retaliation mechanisms (loss of orders) for suppliers based on decent work criteria; they also include the obligation of lead firms to help fund improvements by suppliers through costing mechanisms (or sometimes directly, when suppliers are not economically capable of remediating labour violations). The enforcement of the commitment also relies on a wide spectrum of governance mechanisms, from co-governance between workers’ and employers’ structures to action in court.

3.2.3. Drivers for occupational safety and health and social protection

ILO research on occupational safety and health (OSH) in GSCs has been relatively limited, except for the project — led by the Labour Administration, Labour Inspection and Occupational Safety and Health Branch (LABADMIN/OSH) — on three case studies in agricultural value chains.¹⁰⁶ The objective of this research was to identify and discuss the drivers and constraints for OSH in three countries: Colombia (coffee), Indonesia (palm oil) and Madagascar (lychee). The ILO conducted a mapping of

¹⁰¹ Concerning another important buyer driven industry, electronics, the following research should also be consulted: **McFalls (2017)** on procurement practices and their impact on labour rights and forms of employment; and **Delautre (2017)** for a review on the distribution of value added among companies and among countries.

¹⁰² **Starmanns (2017)**.

¹⁰³ **Godfrey, Elsley and Taal (2017)**.

¹⁰⁴ **Blasi and Bair (2019)**.

¹⁰⁵ *Ibid.*, p. 4.

¹⁰⁶ **International Labour Office (2017)**.

each value chain structure and external environment and an in-depth qualitative analysis.¹⁰⁷ Three types of key drivers for the improvement of working conditions were identified in these value chains: institutions, new market conditions and national labour laws related to OSH. For example, the research highlighted the contribution of the National Federation of Coffee Growers (FNC) in Colombia to the safety and health of workers in coffee farms as a promotor of OSH. In all three cases, it also sheds some light on the new market trends of consumers' willingness to pay higher prices in exchange for more responsible and sustainable products as a significant driver of improvement. Additionally, national labour laws and legislations that promote safer and healthier working conditions are, of course, crucial drivers. One example are certification systems, such as the Indonesian Sustainable Palm Oil (ISPO) scheme established by the government, which includes OSH related labour regulations. On the other hand, the lack of resources of OSH related policies and limited access to social protection services in rural areas are the two main constraints identified by the research. In Colombia, despite the existence of labour offices and an extensive legal framework, workers in rural areas still have only limited access to OSH. The study also found that despite the OSH regulatory framework, Indonesian smallholders have relatively limited resources to allocate to this issue. In the case of Madagascar, temporary work contracts and the absence of non-contributory social protection schemes are major limitations to workers' access to social protection and safe and healthy work environments.

ILO Research on the access to social protection for workers involved in GSCs addressed two distinct areas. The first of these areas is microeconomic and concerns the compliance of enterprises with social security requirements. Two studies were aimed at testing the argument that these requirements threaten firm survival and performance by increasing labour cost. In fast growing developing economies, entrepreneurs can be tempted to adopt short-sighted strategies and do not appreciate properly the long-term benefits of social security for their employees (while the effects of increasing costs can be perceived almost immediately). An article in the *International Labour Review*¹⁰⁸ examined the impact of social security provision on the performance of small and medium-sized firms in Viet Nam during the period of 2006–2011. The authors find that an increase by 10 per cent of the social security coverage is associated with a revenue gain of 1.4–2.0 per cent per worker and a profit gain of up to 1.8 per cent, depending on the survival time of the firm. The second study, a *Better Work Discussion Paper*,¹⁰⁹ is based on the example of 600 Cambodian garment factories and compares the survival of these enterprises according to their compliance strategy. It shows that an increased compliance with local requirements is associated with a reduced odds ratio of factory closure. Possible explanations for these results might involve multiple factors (enhanced motivation of the workforce, lower turnover, improved reputation, etc.). In the coffee sector, where GSCs involve a myriad of small enterprises and individual workers, another research result¹¹⁰ highlighted that the level of information of workers concerning this type of mechanisms is often very low and their access to social protection very dependent on the support from cooperatives or farmers groups and local government.

The second area of research concerns the burgeoning initiatives voluntarily taken by several pioneering MNEs as part of their CSR and HR strategies. The objectives of these companies are to extend the benefit of social protection beyond their legal obligations to all their employees. This type of initiatives goes further than most CSR normative tools that generally place little or no emphasis on social

¹⁰⁷ The methodology of the project was originally adapted from the VCD approach.

¹⁰⁸ Lee and Torm (2017).

¹⁰⁹ Jetha and Linsen (2015).

¹¹⁰ International Labour Office (2019).

protection in comparison with human rights or health and safety issues. A survey conducted by the ILO's Social Protection Department of 15 French MNEs which report on social protection provided a first mapping according to their motives and concrete implementation.¹¹¹ It showed that the levels of commitment vary significantly among companies, even if a few of them have a strong and centralized leadership over the definition of the guarantees to be covered. This is the case, for example, of L'Oréal, through its Share & Care programme that includes benefits related to employees' welfare, healthcare, parenthood and quality of life at work and aims at filling the gaps in national legislations when necessary. Recent research looked at the implementation of the programme and provides a preliminary evaluation of its impacts on firm performance.¹¹²

3.2.4. GSCs, productivity and wages

Based on the ILO estimates of GSC related jobs, the 2015 WESO report¹¹³ provided important findings regarding productivity and wages in a sample of 40 countries. This research demonstrates that participation in GSCs (analysed at the sectoral level) is associated with higher labour productivity in general and, more particularly, in sectors that are strong suppliers of intermediate products (forward participation) — although the effect is less significant in emerging economies. At the same time, the sectoral analysis suggests that participation in GSCs does not have a significant impact on wages.¹¹⁴ On average, wages of workers in a particular sector do not depend on the greater or lesser participation of this sector in GSCs. As a result, the interaction between the increased labour productivity and the absence of impact on wages leads to lower wage shares and higher income inequality.

Covering a larger sample of enterprises,¹¹⁵ but with less detailed information on their participation to GSCs, the 2017 WESO report gave some indication on the impacts of trade and GSCs on labour outcomes. It showed that firms involved in trade were more productive than non-trading firms (total factor productivity and labour productivity), but their wage premium¹¹⁶ was also significantly lower than the productivity premium, which means that the efficiency gains related to exporting and importing are not fully translated into wage gains of the same magnitude. Previous research generally agreed on the fact that export manufacturers in emerging markets generally pay higher wages than non-exporters.¹¹⁷ However, exporting companies are a different and only partially overlapping category with firms involved in GSCs (which also include local suppliers in the lowest tiers). In addition, the WESO 2017 report provided a special focus on exporting firms that contribute to GSCs¹¹⁸ in comparison to other exporters. It stated that input suppliers are more productive than other exporters (both in terms of

¹¹¹ **Tessier, Schwarzer and Stern Plaza (2013); Tessier and Schwarzer (2013).**

¹¹² **Sekerler Richiardi and Arbo (2019).**

¹¹³ **International Labour Organization (2015).**

¹¹⁴ The study compares couples of country and sector according to their level of integration in GSCs.

¹¹⁵ The research is based on the World Bank Enterprise Survey covering 68,000 formal, privately owned manufacturing firms with at least five employees from 132 countries. **International Labour Organization (2017a).**

¹¹⁶ The wage premium of exporting firms is also confirmed in the specific case of Africa in a later research by **Duda-Nyczak and Viegeln (2018)**. The authors found that exporters pay on average higher wages to their workers than non-exporters due to economies of scale. In contrast, there is no evidence for a positive firm-level wage premium of importing firms.

¹¹⁷ **Distelhorst and Fu (2018).**

¹¹⁸ Firms contributing to GSCs are distinguished from other exporters by the requirement that the demand for their products (inputs or final goods in case of assembling) originates from foreign lead firms rather than foreign consumers.

total factor productivity and labour productivity), which can be explained by the economies of scale allowed by outsourcing and offshoring. However, the wage premium is smaller than the labour productivity premium for GSC input suppliers.¹¹⁹ Nevertheless, care must be taken when analysing the disconnection between productivity and wages.¹²⁰ Beyond the participation to GSCs, many other factors, including institutions, unionization level and technologies, have been advanced to explain the fall of the labour share, and their respective role needs to be better assessed.

3.2.5. Compliance and firms' performance

The research carried out within the framework of the Better Work Programme has placed a special emphasis on the issue of the relationship between compliance with labour standards and economic performance. While limited to a specific industry in the countries implementing the programme, this research has generated interesting findings and could inspire future studies in other industries and institutional contexts. First, an ex-post evaluation study showed that the programme has by itself a positive impact on the productivity in countries such as Vietnam and Indonesia. It also showed that the rise in unit costs resulting from a better compliance with wage requirements is more than compensated by the effects of improved business orders, such as higher prices or larger orders.¹²¹ In this sense, the programme helps to improve working conditions through a redefinition of the conditions of sourcing from international buyers. Second, a series of studies on Cambodia¹²² and Vietnam¹²³ has also demonstrated that a higher overall compliance and improved human resource management at the supplying factory level can be associated with higher performance as measured by labour productivity, profit margin and employment.

The Better Work Programme also paid much attention in its research to the structure of incentives in firms and the way they can influence, at the same time, labour outcomes and the performance or the competitiveness of the firms. The issues of piece-rate pay systems, occupational hazards and working conditions,¹²⁴ compliance with social protection requirements,¹²⁵ verbal abuse¹²⁶ and the interaction between sexual harassment and management practices¹²⁷ have been particularly investigated. While these studies result in interesting findings at the factory and programme levels, they do not in general address the potential connection with the issue of the governance of supply chains, such as business practices between buyers and suppliers. An exception is the case of verbal abuse, for which evaluation showed that external pressure from buyers, such as late delivery penalties and rush orders, is clearly a factor leading to this type of decent work deficit.¹²⁸

¹¹⁹ This is in line with the findings of the WESO 2015 report mentioned above.

¹²⁰ This research will be extended in the coming months to provide more results by sector and level of development.

¹²¹ **Brown, Dehejia and Robertson (2018)**. In the case of Jordan, the results suggest, however, that the participation in the programme may have temporarily increased costs and lowered profits for individual firms. But with the Jordanian apparel industry becoming more profitable over time, it might suggest a positive country reputation effect in the longer term.

¹²² **Asuyama, Fukunishi and Robertson (2017)**.

¹²³ **Brown et al. (2015)**.

¹²⁴ **Davis (2018); Borino (2018)**.

¹²⁵ **Jetha and Linsen (2015)**.

¹²⁶ **Rourke (2014)**.

¹²⁷ **Truskinovsky, Rubin and Brown (2014); Lin, Babbitt, Brown (2014)**.

¹²⁸ **International Labour Office (2016b)**

Box 4:**Challenges and research gaps related to the impacts of GSCs on working conditions**

The impacts of GSCs on working conditions — such as wages, working time, employment contracts, health and safety and access to social protection — and on the protection of fundamental principles and rights are not well known. As stipulated in previous sections and boxes, except for certain segments of value chains in a handful of industries analysed through case studies, the ILO is not currently able to provide a comprehensive vision of labour outcomes of GSCs. This is due to many limitations in data collection from developing economies and the difficulty to capture GSC realities in common statistical tools. Providing such a vision would require coordinated efforts within the organization and with external partners in order to get access to high quality and relevant quantitative data (see Boxes 2 and 3). This would also help in exploring important macroeconomic research issues, such as the observed disconnection between wages and productivity and the role of GSCs in labour share. The respective influences of institutions, business models, technologies and skills on wages and productivity need to be better assessed in this regard. More quantitative data would also help in evaluating the pros and cons for enterprises and their workers of the integration in GSCs.

Beyond an overall analysis, other gaps need to be filled through qualitative research, case studies and comparative works. It is now widely recognized in the literature that business relationships between lead firms and their suppliers and the way lead firm coordinate production networks can have a significant impact on working conditions and labour rights. More research is thus necessary to understand the diversity of these relationships according to industries, products and countries. It is of prime importance to acquire a better knowledge on how certain elements of this relationship — such as sourcing practices, commercial arrangements, technical specifications and conception — are shaped by industrial and institutional contexts and influence, in return, labour outcomes in the supply chain. This would be a clear added value for the ILO in comparison with other international organizations that generally focus their efforts more on macro aspects of GSCs. Purchasing practices of global buyers are still not well understood, and, except for a few case studies in the garment industry, there is little precise knowledge about how compliance reports (when they are available) influence the selection of suppliers. Case studies are also needed to understand under which conditions business relations can become more sustainable and lead towards mutual learning and benefits for both lead firms and suppliers.

The issue of social protection in GSCs would also deserve special attention. CSR normative tools and private regulation mechanisms set up by major MNEs rarely incorporate the necessity for suppliers to comply with mandatory social security requirements. It would be necessary to identify and analyse the conditions for the success of practices of lead buyers that integrate social protection in their responsible supply chain management policies. In this domain, there is room to analyse how the interaction between public and private regulations can lead to positive outcome (cf. the next section). The extension of social protection implemented by a limited number of MNEs needs also to be documented to gain better insight into the motives of these companies, the concrete implementation of the initiatives and their impacts on the workers.

New forms of due diligence initiatives relying on technological innovations, including blockchains, are emerging. Their potentialities of monitoring labour practices in the suppliers' workplace, especially beyond Tier 1, need to be better assessed. More generally, it is vital to understand how due diligence duties are taken into account by enterprises and what are their impacts on organizations and business practices. More knowledge should also be generated on the role of stakeholders in these processes, including workers' representatives (see Box 5).

3.3. The governance of labour in global supply chains¹²⁹

Scholarly literature generally agrees that the function of labour governance is not specific to governments (public governance) but also includes the actions taken by companies, such as mechanisms of private compliance initiative and CSR (private governance), as well as the different societal groups

¹²⁹ The use of the term “governance” makes reference to the rich academic literature in Law and Political Science which widely discusses the concept, provides typologies of modes of governance and analyses their evolution in the era of globalization. Revisiting this literature is far beyond the scope of this paper. For a comprehensive discussion of the specific case of labour governance (or governance of work), readers can refer to the forthcoming literature review commissioned by the ILO and carried out by **Hardy and Ariyawansa (2019)**.

(social governance), including trade unions.¹³⁰ In the past decades, the coexistence of different types of labour regulations (inter-governmental or national, public or private) and the emergence of new mechanisms of enforcement relying on both hard and soft law¹³¹ have contributed to the increasing complexity of global labour governance. Many scholars consider that the world of work has entered a new phase characterized by a “hybridization” of regulatory modes and mechanisms, combining public and private actors and initiatives alongside of traditional international labour law.¹³² Within this increasingly complex framework, one of the main questions has been to identify the possibilities of complementarities or synergies between the various forms of governance.¹³³ In fact, the ILO contributed in recent years to the creation of new configurations of coordinated governance in order to promote social upgrading in GSCs.¹³⁴

The research carried out by the organization while covering the three dimensions of public, private and social forms of labour governance also addressed the challenges of its increasing complexity and hybridization in different ways. The following sections reflect the diversity of this research mainly through the lens of actors. The first section focuses on the actions taken by public authorities, mostly from developed economies, in order to influence firms’ practices in GSCs, mainly through instruments of disclosure or due diligence requirements. The second section discusses the challenges and opportunities of private compliance initiative mechanisms, while the third section outlines the growing discussion on their interactions with public regulation. Finally, the last section expounds the specific contribution of MNEs in the labour governance, in particular through international framework agreements signed with global union federations.

3.3.1. Driving lead firms’ practices in GSCs through public initiatives

In recent years, one way in which public authorities have tried to influence enterprise practices has been through legislative measures requiring public disclosure of information on specific aspects of business operations in their supply chains. These initiatives generally depend on the economic leverage of better informed consumers and investors in order to draw attention to labour rights and working conditions. Analysing the rise of these disclosure legislations as a new GSC governance approach was the objective of the work undertaken by a group of researchers in the ILO’s Research Department.¹³⁵ It provided one of the first systematic mappings of this type of initiatives (17 local, national, or regional disclosure legislations from developing and developed economies).¹³⁶ The ensuing paper evaluated the capacity of

¹³⁰ Mayer and Posthuma (2012).

¹³¹ **Hendrickx et al. (2016)**.

¹³² Readers can also refer to the research published in **International Labour Office (2016c)**, which maps and analyses some of the governance mechanisms engaged in GSC and was used to feed the 2016 ILC report. Nevertheless, the two issues of global labour governance and GSCs are rarely connected in the literature, and the specialists of the first still tend to consider the global economy in traditional market terms. See Mayer, Phillips and Posthuma (2017).

¹³³ For a comprehensive literature review on the issue of the diversity of public and private compliance initiatives and their interactions in transnational business governance, readers can refer to **Hardy and Ariyawansa (2019)**.

¹³⁴ **Posthuma and Rossi (2017)** illustrate this role played by the ILO through three examples: the revision of the Forced Labour Convention in 2014; the Better Work Programme; and the Accord on Fire and Building Safety in Bangladesh.

¹³⁵ **Phillips, LeBaron and Wallin (2018)**.

¹³⁶ It included, among others, the United Kingdom Modern Slavery Act and the California Transparency in Supply Chain Act, both of which directly target forced labour and human trafficking in supply chains. It also included legislations with a larger scope, such as the India 2013 Company Law on Corporate Social Responsibility or the EU directive 2014/95 requiring large public entities to prepare a non-financial statement as a part of their annual report.

these legislative efforts to steer corporate behaviour in the area of labour standards and captured some of their current limits. Among these limits, the authors particularly pointed out the lack of specific standards in terms of reporting, which complicates the task of measuring the effectiveness of specific measures. They also drew attention to the fact that these legislations are generally limited to ensuring compliance with reporting requirements rather than improving performance in relation to labour standards in GSCs. Additional research is currently being carried out with regard to the effectiveness of different initiatives in addressing decent work deficits and their contribution to closing governance gaps. For example, the Research Department and the ILO Office in France launched a project that seeks to study the implementation of the 2017 French Law on due diligence¹³⁷ by different major French companies. Another project that has recently been launched examines different domestic initiatives in global and domestic supply chains. It will provide a comparative analysis of legislation (including public procurement) to address decent work deficits, including such issues as forced labour and other Fundamental Principles and Rights at Work, as well as occupation safety and health.

Moreover, while not directly addressing the issue of GSCs, the research project on labour provisions in trade agreements has provided important findings on the positive impacts of this type of mechanism on a series of labour outcomes, such as the access of women to employment, the narrowing of the gender pay gap and, more generally, the reinforcement of labour market institutions.¹³⁸ The research showed that the involvement of stakeholders is critical in this prospect. In recent years, mainly due to the rise of GSCs, references to CSR commitments in trade and investment agreements have become increasingly widespread and started to draw researchers' attention.¹³⁹ Their work has shown that these provisions have helped to disseminate more widely the existing international frameworks, such as the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (MNE Declaration), the UN Global Compact, or the OECD Guidelines for MNEs. Consequently, they contributed to increasing the recognition of the role of businesses in promoting labour rights in a manner complementary to the role of States. Further research is needed in this area to understand to what extent CSR provisions (and also labour provisions) may trigger a race to the top. One of the main questions to be answered is how these provisions can be used and monitored by workers, businesses and States through the implementation mechanisms that are provided in trade agreements.

3.3.2. Private compliance initiatives: challenges and opportunities

The new global division of labour and the failure of some governments from developing economies to implement and enforce the law explain the rise of private compliance initiatives (PCIs) in the management of GSCs. The 2016 ILC report on decent work in global supply chains¹⁴⁰ defined PCIs as “private mechanisms voluntarily established by lead firms or groups of enterprises to monitor compliance with codes of conduct or other specific standards”. The issue of the effectiveness of PCIs to address decent work in GSCs has been extensively debated in the research, and their limitations are

¹³⁷ The French Law on Duty of Care of parent and subcontracting companies introduces two major innovations in French law: (1) an obligation of companies to draw up a vigilance plan to prevent risks, among others, related to human rights and the rights of the workers, their own activities and those of their subsidiaries, subcontractors and suppliers, both in France and abroad; (2) the possibility for victims and stakeholders in the event of an accident to bring to enforce this obligation in court and to demand the effective implementation of the plan. The ILO has commissioned a consortium of sociologists and management specialists from the Paris-Dauphine and Paris-Sorbonne universities to conduct this research, which will put a special focus on the development process of the due diligence plans. The first results of this research should be available by the end of 2019.

¹³⁸ **International Labour Office (2016).**

¹³⁹ **Peels et al. (2016).**

¹⁴⁰ **International Labour Office (2016a).**

now well known. Drawing on a large body of research, the 2016 report underlined some of their strengths and limitations.¹⁴¹ For example, it is well established that PCIs have had some success in addressing the most easily detectable violations in terms of labour standards, such as those related to wages, working hours and occupational health and safety. But, as these mechanisms are mostly enforced through contracts between lead companies and upper tier suppliers, they generally leave aside the lower tiers where most of the noncompliance occurs. PCIs are also criticized for their selectivity in terms of standards and rights to enforce. Even when codes of conducts include explicitly such enabling rights as freedom of association and non-discrimination, social audits often fail to detect violations of these rights, partly due to the difficulty of measuring and monitoring them. Finally, another recurrent criticism, in the scholarly literature, pertains to the lack of inclusiveness of these mechanisms. It arises from the low levels of the involvement of workers at the top — in the design and the monitoring of the PCIs — as well as at the bottom, as the assessment of their rights is often entrusted to a third party, the external social auditor.

Drawing on cases from agriculture and the textile industry, the ILO's Governance Department published an in-depth analysis of private compliance initiatives with regard to occupational safety and health (OSH) based on desk review, interviews, observations and group discussion.¹⁴² This research identified a rather low alignment of PCI requirements with key components of OSH management systems, in particular with a formal requirement for a continuous improvement approach in line with the ILO-OSH 2001 Guidelines. It also found too few references to national legislation or policies on OSH. For the authors, in the long run, this strong focus on controlling and reducing certain pre-identified hazards and risks does not contribute to building a culture of prevention in the workplace. Also based on the agro-food supply chains, a study in the Research Department Working Paper series¹⁴³ provided a comparative analysis of five leading certification schemes that integrate criteria for labour rights and protection. The examination helped to identify gaps in these schemes in terms of governance and transparency, reach (especially in the coverage of small-scale farmers) and references to labour standards.

An article in the *International Labour Review*,¹⁴⁴ after providing a detailed presentation of the numerous limitations of PCIs,¹⁴⁵ discusses the possibility of overcoming them through mechanisms aimed at empowering local and global stakeholders, such as complaint and dispute-settlement systems. These authors demonstrate that the effectiveness of this type of mechanism depends on the incentives for workers and local stakeholders to file a complaint, which are conditional on several contextual political and economic factors. Among these factors, they point out the rule of law, the competitiveness and the tightness of local labour markets (that allow for more or less bargaining power among workers) and the nature and level of the sanctions attached to violations of labour rights. In addition, the authors argue that the likelihood of developing this type of mechanism depends on an external demand (from customers or governments) for a more stringent system.

¹⁴¹ Regarding specifically the issue of social audits, readers can also refer to **Barraud de Lagerie (2016)** which traces the history and provides an overview of the main debates and criticisms of this type of tool. The study also presents an in-depth analysis of one of the most frequently used social audit frameworks from the Business Social Compliance Initiative (BSCI) (only available in French).

¹⁴² **Tessier, Faudot-Miguët and Buxaderas Rierola (2017)**.

¹⁴³ **Henry and Pechevy (2018)**.

¹⁴⁴ **Marx and Wouters (2016)**.

¹⁴⁵ In their article, the authors arranged these limitations in four groups: (1) the selectivity of audits; (2) the quality of information used; (3) the competition between private governance systems; and (4) the inherent difficulties in monitoring complex and transnational supply chains.

The article also points out the need to improve our understanding of the conditions under which private compliance initiatives can be effective. This question has inspired a new strand of research in recent years.¹⁴⁶ It has tried to move away from the earlier literature largely inspired by the models of GVC governance defined by Gereffi and his associates¹⁴⁷ (see Box 1). Inspired by the competing theoretical framework of Global Production Network,¹⁴⁸ the idea of these authors is to complement the largely vertical perspective of GVC studies with a horizontal perspective that takes into account the socio-economic context in which the enterprises operate. Such an approach allows indeed for a better integration in the discussion of local and national public authorities, in addition to other resources and constraints to workers' mobilization.¹⁴⁹ Better Work, which is certainly the most evolved form of hybrid governance mechanism (i.e. it features both public and private regulations and involves local, national and global stakeholders at the same time) has been a very rich ground for research in this perspective. For example, a paper drawing on an analysis of the programme's adaptation to Nicaragua¹⁵⁰ shows the necessity of taking into account the complex interplay between domestic and global forces when looking at the effectiveness of compliance mechanisms.¹⁵¹ In the case of Better Work Nicaragua, these dynamics have led to substantial changes from the original design implemented in Cambodia (Better Factories), where participation was mandated by the government. One of the main difficulties faced in Nicaragua was the issue of providing incentives for suppliers to participate in a context in which brands and retailers are constantly reconfiguring their sourcing networks. Consequently, enlisting global buyers in the programme was envisaged as a response to this dilemma.

The complex interplay between vertical and horizontal dynamics is also illustrated by two studies on the establishment of factory-level social dialogue bodies, the so-called Performance Improvement Consultative Committees (PICCs), in the case of Better Work Vietnam (BWV). These bodies aim at addressing non-compliance issues detected in Better Work factory assessments. The research relies on the examination of BWV reports, a survey of BWV enterprises advisors and a field survey. The first analysis,¹⁵² issued in the Better Work Discussion Paper series, insists more on the local context in exploring the relationship between this form of social dialogue and the likelihood of wildcat strikes. The author puts advances four necessary, but insufficient, factors concerning worker members to ensure the effectiveness of these committees and the reduction of strikes (free election, consultation and reporting, protection and empowerment to address non-compliance issues). However, as the author points out, these four criteria are rarely met in the factories covered by BWV, and they often revealed as insufficient in a context characterized by unions' poor autonomy and freedom. In the second article,¹⁵³

¹⁴⁶ See, for example, **Bair (2017)**; Stroehle (2017); Louche, Staelens and D'Haese (2018).

¹⁴⁷ Gereffi, G., Humphrey, L., Sturgeon, T., 2005

¹⁴⁸ See Henderson et al. (2002).

¹⁴⁹ For example, Louche, Staelens and D'Haese (2018) proposed a framework integrating both vertical and horizontal perspectives for the analysis of workplace unionism in agricultural value chains. For this case, they defined four vertical forces: (1) the seasonal demand for the produce and demand fluctuations; (2) flexibility and just-in-time orders; (3) downward pressures on prices; and (4) the adhesion to private social standards. In addition, they identified the following five horizontal forces: (1) livelihood strategies; (2) spatial location of workers; (3) gender issues; (4) the regulatory framework; and (5) the union tradition.

¹⁵⁰ **Bair (2017)**.

¹⁵¹ "Yet even more fundamentally, my research underscores the need for careful consideration of how we conceptualise local political contexts. This is because efforts to close the putative governance gap, while always playing out *in situ*, are shaped by both global and domestic forces. In other words, the local contexts for compliance initiatives must themselves be contextualised within the transnational field in which they are embedded." *Ibid.*, p. 171.

¹⁵² **Anner (2017)**.

¹⁵³ **Anner (2018)**.

the author argues that the poor outcomes of the activities of PICCs are also the results of global forces such as the “sourcing squeeze” imposed by lead firms on supplier factories. By pressuring on price and time allocation, the lead firms undermine the efforts by these consultative committees to address challenges related to costing, such as wage and overtime violations. Yet, at the same time, short lead time increases the workers’ strike leverage and strengthens the potential of their voice in the bargaining process, as is noticeable in the percentage of strikes that resulted in positive outcomes for workers.

3.3.3. In search of positive synergies between public regulation and private initiatives

Also considering the complex interplay of local and global dynamics, two research studies drawing on the experience of Better Work in Indonesia (BWI) provided a demonstration of the positive outcomes of the interactions between public and private actors and the manifold complementarities between transnational and national regulations. In the first study, Amengual and Chirot¹⁵⁴ sought to identify the conditions under which transnational initiatives can reinforce institutions of domestic labour regulation. They used a mixed-method approach based on case studies, analyses of local labour laws, field interviews and factory-level data. By looking more specifically at the issues of temporary contract and minimum wage settings, the study examined the conditions under which different layers of regulations can yield positive results, specifically in cases where transnational supply chain initiatives such as BWI are layered on top of state institutions. The authors found that two conditions must jointly occur to make the reinforcement likely: the mobilization of local unions and an actor¹⁵⁵ (BWI) that supports a stringent interpretation of local rules and therefore forces local employers to engage with more constraining institutions. The study points out that BWI’s work was especially positive in the renegotiation of the minimum wage by disseminating information and incentivizing compliance. An example of synergetic layering was the case in which the Ministry of Manpower and Transmigration (MOMT) offered guidance and interpretation of domestic laws and BWI provided on-the-ground knowledge of factories, leading to a well supervised minimum wage renegotiation. In this case, BWI essentially functioned as a bridge between the state and the factories. While the earlier literature has tended to insist on the role of transnational advocacy on labour compliance, this paper presents another perspective by showing the potential of local actors, especially unions when they put pressure on the State, as key resources for the success of private regulations.

Another analysis of BWI¹⁵⁶, issued as a Better Work Discussion Paper, provided complementary results on the same issue. Using empirical data from the programme, this paper finds that the labour inspection was strengthened due to its interactions with BWI. The authors studied this relationship by using an analytical model developed by Kolben,¹⁵⁷ called “dialogic regulation”, which uses formality and intentionality as descriptive categories.¹⁵⁸ They conclude that the labour inspectorate was strengthened through its interactions with BWI and formal interactions, including the formation of advisory and ad hoc committees and the seconding of Indonesian officials to the ILO, which created opportunities for better informal interactions. For example, BWI seems to have contributed to the deployment of “Labour

¹⁵⁴ Amengual and Chirot (2016).

¹⁵⁵ The authors present Better Work Indonesia as an “active transnational regulator”, which is a rather ambiguous designation.

¹⁵⁶ Dupper, Fenwick and Hardy (2016).

¹⁵⁷ Kolben (2015) provides a conceptual model to empirically analyse regulatory interactions between private and public labour regulations in GSCs. The author conducted an empirical case study of Better Work Jordan to illustrate how the analytical framework could function in practice.

¹⁵⁸ The model divides the interactions into four scenarios – formal and intentional, informal and intentional, informal and unintentional, and formal and unintentional.

Norms Cadres” in the enterprises and to have positively influenced the interaction between the central and district levels of the Indonesian inspection. In this specific case, the roles of the inspection and BWI can be seen as complementary.

Finally, the study by Posthuma and Bignami¹⁵⁹ examines a very unique initiative that emerged among lead firms from the Global South in the context of the strengthening of public labour inspection. It concerned a CSR initiative introduced by the Brazilian Association of Apparel Retailers (ABVTEX) aimed at monitoring and promoting the upgrading of working conditions in the supply chains of leading apparel retailers operating in São Paulo (Brazil). This initiative was taken in response to a scandal involving forced and trafficked labour, uncovered by the public labour inspection in 2006, and the publication of a report that concluded that apparel retailers should develop a more stringent system to monitor labour conditions among their suppliers and subcontractors.¹⁶⁰ Relying on qualitative and quantitative sources, the study shows that this initiative helped in creating a fruitful interaction between retailers and the labour inspection due to the concomitance and complementarity of both processes. It also allowed to impact different segments of the supply chains through the creation of a pool of certified suppliers and subcontractors and the rejection of the uncertified firms.¹⁶¹

This series of papers, which is to be supplemented by the results of ongoing research projects,¹⁶² have demonstrated that decent work deficits in GSCs can find positive solutions in the fruitful interaction of the three forms of governance (private, public and social).¹⁶³ However, one-size-fits-all solutions rarely exist in labour governance, and the nature of complementarities between private, public and social actors is in general contingent on a number of factors. It should serve as an encouragement to undertake more research of this type in different institutional contexts and industries.

3.3.4. Understanding the role of MNEs’ strategies

While it is important to understand the influence of local and global dynamics and their effect on labour compliance in the workplaces of the Global South, it is also crucial to understand the various forces shaping the strategies of leading multinational companies and their impact in terms of decent work in GSCs. The MNE Declaration called on governments to study the impact of multinational enterprises. However, as shown by the different methodological works carried out by the Enterprises and Statistic departments, data limitations pose significant challenges to clearly identifying this impact on employment and labour related issues.¹⁶⁴ This might explain the relatively small number of quantitative research studies undertaken by the ILO that are based on firm-level data (and, more particularly, data on MNEs). In addition to the research already mentioned in Section 3.2. on the labour outcomes of the

¹⁵⁹ Posthuma and Bignami (2016).

¹⁶⁰ The commission’s report also issued a recommendation that apparel retailers should be considered as legally liable for working conditions throughout their entire supply chain.

¹⁶¹ The certification scheme covers the following labour standards: child labour, forced labour, irregular migrant labour, discrimination, abuse and harassment, health and safety at work, working hours, workers’ benefits and freedom of association, including the right to collective bargaining.

¹⁶² For example, the ILO’s Research Department is currently conducting a research project on the smartphone industry in Brazil and the role of local trade unions in improving labour compliance.

¹⁶³ On this point, readers can also refer to the recent article by **Barrientos, Bianchi and Berman (2019)**, which explores the role of multi-stakeholder initiatives in combating gender discrimination.

¹⁶⁴ See, for example, **Galhardi (2018)** for an overview on the measurement of MNEs’ activities. See also **Carrillo and Bensusán (2017)** and **Bensusán, Carrillo and Florez (2018)**, two studies using collated data provided by the National Institute of Statistics and Geography of Mexico (INEGI) through the national employment survey, the establishment survey and the economic census to evaluate the strengths and limitations of each approach.

firms involved in trade, a study involving the ILO Research department should also be mentioned¹⁶⁵ in this respect. It is based on a sample of foreign-owned and domestic firms in Sub-Saharan Africa provided by the United Nations Industrial Development Organization (UNIDO).¹⁶⁶ The study shows that foreign-owned firms tend to offer better working conditions than domestic firms: they offer more stable job conditions (as measured by the share of permanent and full-time jobs), are less likely to offer unpaid work, have a higher average training intensity and pay a higher average wage. Nevertheless, these labour outcomes are also dependent on the legislation and institutions in the respective countries of operation as well as on those in the countries of origin. Indeed, the job stability and security advantage of foreign-owned firms is smaller in countries with higher firing costs and higher governance quality, while the job quality advantage of foreign-owned firms depends also on the location of their parents, their mode of establishment (greenfield FDI or M&As), their main business purpose and the investment incentives received from the host country.

In a corresponding area, a growing body of scholarship has in recent years taken a critical stand towards a vision of corporate social responsibility (CSR) presented as a purely voluntary practice by MNEs. For these researchers,¹⁶⁷ firms' diversity in terms of CSR practices must be analysed with regard to their institutional embeddedness. From this perspective, CSR should be resituated in a social space between voluntary practices and socially binding responsibilities. Research by the ILO's Sectoral Policies Department¹⁶⁸ showed that there were notable differences in the type of private compliance initiatives according to sector, and that four factors appeared to have an influence on the uptake of different initiatives across sectors: consumer awareness, visible brand identities, pressure from civil society and internal collaboration among different supply chains. Multinational companies are indeed exposed to a broad set of stakeholders in their country of origin and abroad, with more or less conflicting interests. They also face substantial differences in terms of public regulation and compliance mechanisms. Following this theoretical approach, recent research has enabled an understanding of how CSR policies implemented by European companies can work both as a complement of institutionalized stakeholder power in their country of origin and as a substitute for its absence in their countries of operation.¹⁶⁹ Drawing on this framework, ILO research¹⁷⁰ demonstrated that, while MNEs' behaviours might be dependent on certain economic characteristics related to their visibility (internationalization, size and age), labour related institutions in their country of origin — such as labour rights and the degree of involvement of workers in corporate decisions — seem also to play an important role in shaping CSR policies towards internal employees and, to a lesser extent, towards external stakeholders (among them the suppliers' workforce).¹⁷¹

The diversity of MNE practices has also been analysed through more qualitative research. The issue of cross-border social dialogue, and more particularly international framework agreements (IFAs), has

¹⁶⁵ **Blanas, Seric and Viegelahn (2019)**

¹⁶⁶ UNIDO (2011).

¹⁶⁷ See for, example, Aguilera and Jackson (2003); Campbell (2007); and Brammer, Jackson and Matten (2012).

¹⁶⁸ **International Labour Office (2015)**.

¹⁶⁹ See Jackson and Rathert (2017).

¹⁷⁰ **Delautre and Abriata (2018)**.

¹⁷¹ This research also suggests the existence of a positive crosscutting relationship between the commitments made by the companies in terms of freedom of association on the other dimensions of CSR.

received special attention.¹⁷² For example, research from by the ILO's Sectoral Policies Department¹⁷³ based on three IFAs signed by three European MNEs showed how these mechanisms have matured over time and started to differentiate in scope, focus areas and, in terms of implementation, monitoring and dispute settlement. While the research found some signs of improvement in the relationship between management and workers in these enterprises, one of the main lessons was that IFAs provide a coherent framework for labour relations throughout the entities and help to develop the image of the MNE as one global entity. Nevertheless, the inclusion of references to suppliers and contractors in IFAs, which is one of main innovations in recent years,¹⁷⁴ has not yet proven to be particularly effective in improving working conditions further down the supply chain. In-depth research based on ten monographs of French MNEs¹⁷⁵ with IFAs reached quite similar conclusions. The study highlights the heterogeneity of IFAs and shows a diversity both in their intended purposes and in the negotiation and implementation processes. Some of them, especially the oldest ones, are conceived as "frameworks" and are generally limited to the promotion of fundamental labour standards and the definition of some accepted rules in the relationship with a global union federation. However, other agreements appear denser and more diversified, with more precise commitments related to the implementation of a CSR strategy and relying on negotiated procedures and mechanisms at the transnational level. In addition, the research shows that IFAs can also be conceived as an alliance between the management of the parent company and trade unions to monitor the subsidiaries in the implementation of CSR policies.¹⁷⁶

Box 5:

Challenges and research gaps related to the governance of labour

The previous literature review showed that the globalization of the economy and GSCs has contributed to add more complexity to labour governance in the past decades. It is of prime importance for the ILO to continue monitoring these ongoing changes at the international, regional and country levels, to help understand their underlying logics and to measure the concrete impacts of these policies on firms' practices, working conditions and labour rights. In recent years, in developed economies (but not only), public initiatives aimed at more transparency and due diligence of MNEs (and lead firms) on labour standards in their supply chains have multiplied, as have innovative policies seeking the promotion of business responsibility. Due to the size of public spending and the strong bargaining power of public administrations,¹⁷⁷ social provisions in public procurement processes are recognized as a policy tool that could have a potentially significant effect on workers' rights and working conditions along GSCs. Their effects must be better known.

In that respect, the ILO must contribute to the mapping of public, private and multi-stakeholders' initiatives (including their requirements in terms of reporting, adopting specific measures, involvement of stakeholders, coverage, etc.) and to the evaluation of their conditions of success. In addition, the need to better take into account the reshaping of the incentive structures of businesses towards sustainable and inclusive growth, as stipulated in the ILO Centenary Declaration,¹⁷⁸ should

¹⁷² **Luterbacher, Prosser and Papadakis (2017)** have also provided a more theoretical analysis of IFAs through a modelling of underlying bargaining processes, showing that this type of mechanism can be expected when both bargaining sides exhibit risk aversion (even if the agreement will tend to favour the less risk-averse side, i.e. in most cases the employers).

¹⁷³ **International Labour Office (2018)**.

¹⁷⁴ See **Hadwiger (2015)**.

¹⁷⁵ **Bourguignon and Mias (eds) (2017)**.

¹⁷⁶ On this issue, see also **Bourguignon, Garaudel and Porcher (2019)**.

¹⁷⁷ **International Labour Office (2016a)**.

¹⁷⁸ "Promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all through ... policies and incentives that promote sustainable and inclusive economic growth, the creation and development of sustainable enterprises, innovation, and the transition from the informal to the formal economy, and that promote the alignment of business practices with the objectives of this Declaration." **International Labour Office (2019a)**.

also be reflected in the research undertaken by the organization. Other drivers of business responsibility beyond legislations—for example, reputation and pressures from customers or investors and innovative instruments such as fair trade or Socially Responsible Investment—could also be analysed in order to understand the diversity of firms' and brands' practices.

In recent years, the literature (including research drawing on ILO experience) has identified several examples from different industries and institutional contexts in which the positive complementarities between public, private and social governances have led to improved compliance and the reinforcement of local labour institutions. It would be significant to complement these first results with other research, including comparative analyses, in other sectors and institutional contexts. Moving beyond the argument of symbolic adoption of private regulation practices,¹⁷⁹ it is fundamental to better assess the power relations and the capabilities of the different actors (lead firms and their subsidiaries, suppliers and contractors, the State and workers) involved in the governance of GSCs and the complex interplay of global and local forces in which they are embedded. This requires undertaking a series of field and desk research projects relying on a multidisciplinary approach and taking into account at the same time the legal, economic, sociological and managerial challenges of GSCs. The increasing role of digital platforms in value chains should also be studied in order to evaluate to what extent this new form of business organizations could contribute to more governance gaps.

The conditions for an effective social dialogue at the different levels of GSCs should be given a particular focus. The meeting of experts on cross-border social dialogue explicitly called on the ILO to conduct research on the content, scope and impact of these initiatives, the challenges and opportunities in regional or sub-regional social dialogue processes and institutions and in sectoral agreements. For example, lessons could be drawn from innovative agreements, such as the maritime sector agreement signed between the International Maritime Employers Council (IMEC) and the International Transport Workers' Federation (ITF) in order to assess to what extent they could be effectively replicated elsewhere. Several MNEs or GSC lead companies have also made commitments to promote social dialogue within their subsidiaries and require their suppliers abroad to engage in this area. More research is needed in order to understand how these commitments are concretely implemented and to measure their real impacts. IFAs, for example, are increasingly promoted by MNEs as an instrument supporting their responsibility in terms of due diligence, but their conditions of implementation locally are still not well known.

4. Conclusion

In the last decades, the global economy and the world of work have been deeply impacted by the spread of global supply chains. This production model provided new opportunities for many developing countries to participate in global trade and diversify. For many others, however, the level of integration and the capacity to upgrade have remained low. Nowadays, new questions are arising on the long-term viability of GSCs as a driver of development and decent work. Disruptive forces such as technological innovations, trade arrangements and environmental and climate protection already have important consequences on the conditions for countries to develop through GSCs and the possibility for social upgrading to accompany economic upgrading. At the same time, new governance initiatives by national or international, public or private actors are also constantly emerging to promote decent work in the global economy. GSCs are clearly a moving target: their functioning, scope and governance are continuously transforming. It is a challenge for the ILO to cope with this constant and complex process of change.

This article has been intended to provide an inventory of the research carried out by the ILO on decent work in GSCs and identify the challenges and remaining gaps in terms of research. It has shown that knowledge generation on this topic has become a crosscutting topic of interest for the organization. The

¹⁷⁹ Using new arguments from institutional theory and empirical analysis, **Kuruvilla et al. (2019)** demonstrate that the decoupling between private regulation and their concrete impacts in terms of labour standards stems from the field opacity. This opacity comes from the multiplicity of practices adopted by actors, the difficulty in assessing suppliers' behaviours correctly (behavioural invisibility) and the difficulty to define causality due to the interconnections of actors and factors (causal complexity).

research undertaken by the ILO, on many occasions in collaboration with external actors, has covered a particularly broad spectrum of issues and embraced a large array of methods and disciplinary approaches. There are good reasons to think that the ILO can become in the future a central player in terms of research on GSCs and afford a distinctive voice on their implications for decent work and social justice. Its global perspective, its presence in many countries and its tripartite structure give guarantees that the complexity of issues will be reflected in the research outcome.

In the past few years, the ILO has made a substantial contribution to the general knowledge of GSCs on topics that can be divided into three broad areas: first, the global functioning of GSCs and their impacts on jobs and development; next, their impacts on working conditions and labour rights; and, finally, the governance of labour within GSCs.

Regarding the first discussion, the organization has brought new insights on the contribution of GSCs to employment and has started to assess the potential impact of digitalization and automation on offshoring and reshoring of production capacities. It has also helped to understand how national institutions and policies influence the architecture of production networks and the capacity for countries to achieve jointly economic and social upgrading. Regarding working conditions and labour rights, despite many limitations in data collection from developing economies and the difficulty to capture GSC realities in common statistical tools, the ILO has been able to produce valuable insights to understanding the role of business practices between lead firms and suppliers as a driver of poor working conditions. In addition, numerous case studies have provided important findings on different aspects of working conditions and on the protection of fundamental principles and rights at work in various key sectors and countries involved in GSCs. The ILO has also shown how GSCs could be characterized by a gap between wages and productivity that could possibly lead to more global inequalities. Finally, ILO research has addressed the issue of the increasing complexity and hybridization of global labour governance by monitoring emerging public and private initiatives and assessing the nature of their potential complementarities through specific case studies. A new series of field research has helped to identify the conditions for positive complementarities between public, private and social governances, which can in turn ensure lasting progress in compliance.

Despite this substantial contribution, many areas and issues remain to be addressed. Except for certain segments of the value chains in a handful of industries, the ILO is not currently able to provide a comprehensive vision of labour outcomes of GSCs. For many good reasons, a large share of the research resources has been concentrated on a limited number of labour intensive industries and countries. The organization would, however, certainly benefit from expanding its scope to more complex industries and investigate their implications and potential for other regions in terms of job creation and social upgrading. The meaning of growing South-South relationships for decent work, regional value chains and the emergence of new global firm leaders from developing economies should also feed a renewed research agenda on GSCs. Moreover, our knowledge of the lowest tiers of GSCs is often limited, as is our understanding of the involvement of certain actors, such as informal enterprises, and workers or home-based and family workers. Finally, it is of prime importance for the ILO to help comprehend and evaluate the current changes in labour governance coming from public and private actors in the countries of production but also in the countries of origin of global buyers. In recent years, in developed economies (but not only there), public initiatives pursuing more transparency and due diligence of lead firms on labour standards in supply chains have multiplied; the same is true for innovative policies aiming at the promotion of business responsibility. Drawing on cutting-edge academic knowledge, the ILO must continue monitoring these initiatives and the current reshaping of the incentive structures of businesses towards sustainable and inclusive GSCs. In this regard, a particular focus should be placed on the conditions for an effective social dialogue at the different levels of GSCs.

To be able to address these issues and provide a consolidated and systematic research perspective on GSCs would require the coordination of research efforts within the organization, the definition of priorities and the building of innovative partnerships with external actors, including other international organizations, national statistical institutes but also private companies. The generation of more original quantitative data through surveys, especially in TC projects, could be encouraged. Furthermore, GSCs are a challenge for national and international statistical systems. The current public statistical instruments, with the exception of Input-Output databases, are not well adapted to reflect the reality of cross-border and outsourced activities and their impacts on jobs and working conditions. In this regard, the ILO could provide a strong leadership in order to coordinate the measuring of labour outcomes of GSCs through the development or improvement of methodologies and the provision of guidance for practitioners.

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