



ILO Americas
TECHNICAL
REPORTS
2016/1



International
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Promoting Decent Work in Global Supply Chains in Latin America and the Caribbean

KEY ISSUES, GOOD PRACTICES,
LESSONS LEARNED AND POLICY
INSIGHTS

Gary Gereffi
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First published (2016)

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Promoting Decent Work in Global Supply Chains in Latin America and the Caribbean. key issues, good practices, lessons learned and policy insights. Lima: ILO Regional Office for Latin America and the Caribbean, 2016. 120 p. (ILO Technical Reports, 2016/1).

Value chains, decent work, good practices, Latin America, Caribbean

ISBN: 978-92-2-131248-2 (print)

ISBN: 978-92-2-331102-5 (pdf)

Also available in (Spanish): *La promoción del trabajo decente en las cadenas mundiales de suministro en América Latina y el Caribe. Principales problemas, buenas prácticas, lecciones aprendidas y visión política*. (ISBN: 978-92-2-131180-5 (pdf), Lima, 2016).

ILO Cataloguing in Publication Data

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Printed in Peru

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Acronyms

BPO	Business Process Outsourcing
CAFTA-DR	Central American Free Trade Agreement - Dominican Republic
CARICOM	Caribbean Community Single Market
CSR	Corporate Social Responsibility
DWA	Decent Work Agenda
EPZ	Economic Processing Zone
EU	European Union
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
FLA	Fair Labour Association
FORLAC	ILO Programme to Promote Formalization in Latin America and the Caribbean
GE	General Electric
GFA	Global Framework Agreement
HOPE	Haitian Hemispheric Opportunity through Partnership Encouragement
IDB	Inter-American Development Bank
IESI	Institute of Labour Union Studies, Peru
IFC	International Finance Corporation
ILO	International Labour Organization
ILRF	International Labour Rights Forum
INA	National Training Institute - Costa Rica
ITO	Information Technology Outsourcing
KPO	Knowledge Process Outsourcing
LAC	Latin America and the Caribbean
MNC	Multinational Company
MRO	Maintenance, Repair and Overhaul
NAFTA	North American Free Trade Agreement
NGO	Non-governmental organisation
OECD	Organisation of Economic Cooperation and Development

OSH	Occupational Safety and Health
R&D	Research and Development
SPS	Sanitary and Phytosanitary Standards
STR	Rural Workers Union (Brazil)
TEC	Costa Rica Institute of Technology
TPL	Trade Preference Levels
UN	United Nations
UNAQ	National Aeronautical University - Queretaro, Mexico
UNCTAD	United Nations Commission on Trade and Development
US	United States
WEF	World Economic Forum
WRAP	Worldwide Responsible Accredited Production

Preface

Global supply chains (GSCs) have grown over the past three decades to become a large part of global trade, linking producers, suppliers and consumers worldwide. It is estimated that between 60 and 80 percent of global trade is currently conducted through GSCs (UNCTAD, 2013). The importance of GSCs and their implications for the economies of all countries, has been widely recognized and explored by different international agencies from their respective mandates, including the World Trade Organization (WTO), the United National Conference on Trade and Development (UNCTAD), the World Bank, the Organization for Economic Cooperation and Development (OECD) and even the G20. Yet, among these organizations, only the ILO has the ability, because of its mandate and governance structure, to examine the operation, impacts and implications of GSCs for the world of work from a tripartite perspective. And it is to do precisely this that the ILO constituents decided to have a General Discussion on “Decent work in global supply chains” in the 105th Session of the International Labour Conference in Geneva in June, 2016.

The present study has been conducted by the Regional Office for Latin America and the Caribbean (LAC), in collaboration with the Sectoral Policies Department (SECTOR) of the ILO, to increase understanding and provide an overview of key questions around the operation and impacts of GSCs in Latin America and the Caribbean and also as an input to the background document for the 2016 ILC General Discussion.

The report is based on a desk-based review, drawing upon existing studies of GSCs to examine their impacts and implications for the development of domestic firms, their contribution to productive transformation and structural change and their impacts on the quantity and quality of jobs in the LAC region. It situates the expansion of GSCs in the region within an analytical framework that recognizes both the economic and social upgrading dimensions and the impacts also on both firms and workers. Special attention is given to the mechanisms for governing the terms and conditions of engagement between firms and between firms and workers in GSCs, with the aim of identifying ways to jointly pursue the goals of raising competitiveness and of promoting productive employment and decent work.

GSCs are complex, diverse, dynamic and continuously evolving structures, with features that may vary across sectoral, national and institutional contexts and that adapt to factors such as market opportunities, competitive conditions, technological capabilities of enterprises and skills of workers. They are also impacted by government policies, investment promotion and regulatory efforts, and the activities of the Social Partners in organizing the interests and needs of employers and workers in their respective contexts.

This report was written by Prof. Gary Gereffi, Professor of Sociology, and Ms. Penny Bamber and Ms. Karina Fernandez-Stark, Senior Research Analysts, at the Center on Globalization, Governance and Competitiveness (CGGC) at Duke University. Anne Posthuma, from the ILO Office in Brasilia, coordinated the preparation of the study. We gratefully acknowledge the comments received from colleagues and their active participation in a research planning meeting in Lima, including: María Arteta, Carmen Benitez, Fabio Bertranou, Juan Chacaltana, Sabine de Bruijn, Fernando Garcia, Gerardina Gonzalez, Florencio Gudiño, Martin Hahn, Jorge Illingworth, Julia Lear, Andrés Marinakis, Olga Orozco, Rainer Pritzer, Gerhard Reinecke, David Seligson, Philippe Vanhuynegem, Roberto Villamil, Andrés Yurén and Erick Zeballos.

This study falls within the scope of the regional priority of work on the theme of “Productive development policies for inclusive growth and more and better jobs”. It is our hope that this report will contribute to a better understanding in Latin America and the Caribbean in relation to the expansion and operation of GSCs in the countries of the region with a view to better policy and practice to capitalize on the opportunities and meet the challenges posed by GSCs.

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1. Introduction

The global economy is increasingly structured around global supply chains (GSCs),¹ which are estimated to account for between 60 and 80% of world trade (UNCTAD, 2013).² These GSCs link firms, workers, governments through their trade policies and consumers around the world through complex production and trade networks that span multiple countries. This reorganization of international trade has created diverse opportunities for developing countries to integrate into the global economy. Sustaining and improving the terms of participation by developing country firms and workers in these competitive chains, however, is challenging.

The ILO uses the term GSCs to refer to “...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.”³

GSCs in today’s world are dynamic and place high demands on participating firms and their workforce to continuously reduce costs, guarantee quality and delivery, and improve productivity. On the one hand, these demands can stimulate technology transfer and the adoption of more updated forms

1 In the academic and trade literature on the coordinated supply and production chains that have emerged at a global level, a number of different terms are used in addition to global supply chains, including global value chains, global production networks and global commodity chains. GSC will be used on this report, in line with the title of the forthcoming General Discussion on “Decent Work in Global Supply Chains” in the framework of the International Labour Conference in June 2016, in Geneva.

2 This 80% refers to intra-firm or inter-firm trading inputs and outputs in cross-border value chains of various degrees of complexity.

3 This definition is quoted from the report on “Decent work in global supply chains” (Report IV), produced for the General Discussion of the International Labour Conference, 105th Session, 2016. Report available at: http://www.ilo.org/ilc/ILCSessions/105/reports/reports-to-the-conference/WCMS_468097/lang-en/index.htm

of production and human resource management, as well as for upgrading competitiveness and productivity. On the other hand, experience has shown that this type of commercial relationship can place requirements for cost reduction together with pressures to raise quality and respond to short delivery schedules on suppliers, meanwhile embedded in outsourcing practices that, in certain circumstances, can raise important implications concerning responsibility for the employment relationship.⁴ Such circumstances can lead to shortcomings in Decent Work conditions if firms and countries resort to raising their comparative advantage by shifting the pressure to reduce costs onto workers, rather than pursuing investments and strategies aimed toward raising value-added and boosting their competitive advantage. Understanding the conditions under which positive outcomes through participation in GSCs can be achieved for both firms and workers thus has important implications for governments and policy design at the national, regional and international levels.

The International Labour Organization (ILO) has addressed these concerns in the General Discussion on “Decent Work in Global Supply Chains” that took place in June 2016 during the annual International Labour Conference, in Geneva. The goal of this present research report is to provide technical inputs on the issue of Decent Work in GSCs with a focus on the region of Latin America and the Caribbean (LAC). Specifically, this desk-based research report has drawn upon existing studies in order to develop an analysis that provides ILO constituents from the region with an analytical framework in which to understand how firms and workers from LAC engage in GSCs. Furthermore, the report examines the role played by prevailing mechanisms for governing the terms and conditions of that engagement in order to identify under which circumstances the goals of raising economic competitiveness together with promoting decent work can be jointly pursued.

The issue of inclusive and sustainable engagement in GSCs is of growing importance to the region as countries from LAC participate in diverse industries, engaging an increasing number of regional firms and workers. In addition to traditional resource-based GSCs in the extractive (mining, oil and gas) and

4 As addressed in ILO Employment Relationship Recommendation, 2006 (No. 198), which recognizes in its Preamble “... the difficulties of establishing whether or not an employment relationship exists in situations where the respective rights and obligations of the parties concerned are not clear, where there has been an attempt to disguise the employment relationship, or where inadequacies or limitations exist in the legal framework, or in its interpretation or application...” (Preamble) (ILO, 2006).

agricultural sectors, LAC countries also participate in global production networks in a wide variety of new export industries, from aerospace and medical devices ranging to knowledge-intensive services (Blyde, 2014; Fernandez-Stark et al., 2014; OECD, 2015). This access to developed country markets can offer Latin American economies an opportunity to support their development goals by driving employment creation, adding value to their local industries and diversifying their economies, when these investments and sourcing arrangements are made through fair negotiation processes that protect workers' rights and ensure the development of domestic enterprises. For example, between 2002 and 2012, as engagement in GSCs increased, regional unemployment declined by 3 million people (ILO, 2013), and several countries have undergone structural transformation of their economies (Salazar-Xirinachs et al., 2014). While it may not be possible to draw a direct causal effect between both trends, the growth of GSCs nevertheless would very likely have played an important role in stimulating a significant share of this new employment generation. Given the policy goal to ensure that participation in GSCs will generate decent work opportunities, a key issue in this study is: *what types of engagement in GSCs have generated opportunities to learn, grow and raise the value-added of products and services, while workers have simultaneously benefited from the creation of decent work opportunities?*

As the LAC region's participation in GSCs deepens, the question of how this trade through participation in GSCs can better contribute to sustainable development goals becomes increasingly relevant. Over the past two decades, there has been an implicit assumption that economic improvements would lead to social gains, i.e., the improvement of the well-being of workers in the chains. Yet, recent evidence from around the world suggests that economic upgrading is not automatically accompanied by social upgrading (Barrientos et al., 2011; Kaplinsky, 2005; Lee et al., 2011a; Milberg & Winkler, 2011, 2013; Rossi, 2013). There are competing pressures that sometimes create difficulties to ensure these two outcomes walk hand-in-hand within global industries. Facing intense competition, firms seek ways to meet customer needs for higher quality goods while maintaining their flexibility and reducing costs. In this context, supplier firms in GSCs may resort to labour strategies that include the use of temporary labour, lowering wages, extending working hours, labour subcontracting and minimizing investments in areas of health and safety at work. While such labour practices may suit the needs of workers who seek temporary work situations, they may be considered to

increase the social burden for workers engaged in these chains that would prefer a full-time, formal employment relationship.

An inclusive and sustainable path for development through GSC engagement requires countries to balance economic and social goals. This requires appropriate policies, strong domestic institutions and supra-national engagement with other actors around the world (Salazar-Xirinachs et al., 2014). Fostering policies that support these goals requires a solid understanding of the conditions under which GSC participation can contribute to both economic growth and social development. To provide more and better work opportunities, firms must remain competitive by delivering a product or service at the right price and time with the quality and consistency required by their buyer. Supporting policies, from trade and investment to infrastructure and human capital development, are required within an institutional framework that protects and promotes fundamental principles and rights at work (Bamber et al., 2013).

The LAC experience offers up numerous examples in a range of sectors in which countries demonstrate their ability to upgrade both economically and socially. This report examines these experiences to identify lessons learned in the region, in an effort to inform policy formulation to foster sustainable GSC participation. The report is structured as follows: Section two provides an introduction to the GSC analytical framework, including the types of jobs available in these chains and decent work challenges they face, how economic and social gains from participation are conceptualized, and how the governance of GSCs shapes these outcomes. Section three examines aggregate economic and social indicators to see where upgrading is, or is not, being achieved within LAC and its labour force. In section four, a number of country cases are presented from five different sectors in which LAC countries are engaged, giving special attention to social upgrading issues involving job creation, quality of employment, rights at work, skills development and the policy actions that contributed to these gains. Finally, the report concludes with a discussion of the key policy issues and governance considerations for government, employers and workers.

2. Analytical Framework: Jobs, Economic and Social Upgrading and Governance in GSCs

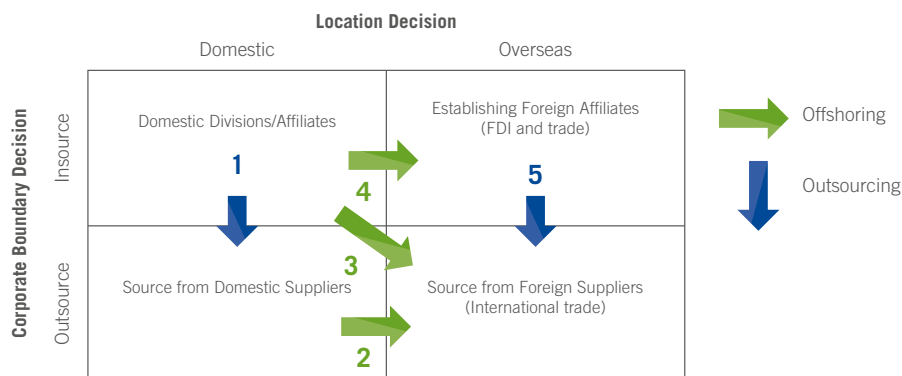
The GSC perspective looks at how globalization has affected the risks and opportunities for engagement in the global economy, as well as the quantity and quality of jobs in the global economy. GSC analysis provides an integrated framework with which to analyse the full range of activities required to bring a specific product from its conception to its end use and beyond (generally referred to as segments of the chain), the firms and workers employed, and the specific locations in which this work is performed (Gereffi and Fernandez-Stark, 2011).

The growth of GSCs has been gathering pace since the 1970s. This process combines two quite distinct phenomena (see Figure 1).

- ▶ *“Outsourcing”* is a standard aspect of all businesses, which need to make the decision to “make or buy” specific inputs and services. While companies regularly decide whether they wish to produce goods and services “in house” or buy them from outside vendors, the tendency in recent years has shifted in the direction of “buy.”
- ▶ *“Offshoring”* refers to the decision to move the supply of goods and services from domestic to foreign locations. These activities may be carried out in facilities owned in whole or in part by the parent firm, by transnational suppliers, or by local suppliers in the host country.

In recent decades, production has shifted from advanced industrial economies such as the United States (US), England and Germany to low-cost economies in countries such as China, Mexico, Hong Kong, and Singapore, and over time eventually to almost all regions of the world. These decisions directly affect the location of jobs and the conditions of that work.

Figure 1. Outsourcing and Offshoring



Source: (Sako, 2005).

Notes: Trajectory 1 describes a firm's decision to outsource processes locally; 2 shows the firm's decision to outsource processes to a foreign provider instead of a domestic supplier; 3 shows the trajectory for firms that make the decision to outsource to a foreign supplier; 4 describes the firm's decision to source from an overseas location, but it maintains full control of the operations; and 5 shows the shift from service provision by a foreign affiliate to provision by a foreign supplier.

In recent years, mounting evidence suggests that improved economic performance in GSCs is not always accompanied by social upgrading and improvements in the conditions of work (Barrientos et al., 2011; Gereffi & Lee, 2014a; Mayer, 2014; Selwyn, 2013). The remainder of this section presents an overarching framework to understand these challenges by focusing on: (1) the nature of jobs in GSCs; (2) how economic and social upgrading relate to the ILO's Decent Work agenda; and (3) how governance by the ILO's tripartite constituents (employers, workers and policy makers) can shape the rules of the game and affect the potential for joint economic and social gains.

2.1 Jobs in Global Supply Chains

From a GSC perspective, the industrial structures of the advanced countries are intrinsically linked with networks of suppliers and workers across the world. A striking feature of contemporary globalization is that a very large and growing proportion of the workforce in many GSCs is now located in developing economies. In this process, the centre of much of the world's industrial production increasingly

shifted from the North to the South of the global economy. As part of the evolution of dynamic GSCs, a more recent trend involves the growth of South-South trade between developing economies, which has grown rapidly to around 25 per cent of global trade in 2013. This more recent trend has been accompanied by the emergence of lead firms and local brands in the global South, reflecting the ability of some developing countries to capture the developmental and innovative potential of GSCs.

Global supply chain theory would lead us to expect that relatively labour-intensive and low-technology tasks, such as assembly or other routine production activities, would be performed in low-wage locations, while the higher-value design, product development, and sophisticated manufacturing stages would be retained in the relatively advanced economies. Indeed, relatively unskilled farm and factory work has been moving offshore from the industrialized countries to developing countries for decades. Recently, however, there have been striking increases in cases where higher value activities in production, design, marketing, logistics and finance are also moving abroad. Strategic investments in infrastructure, science, technology and innovation policies, education and skill development in developing countries have yielded unprecedented increases in the supply of offshore pools of low-wage, technically skilled workers in both manufacturing and services (Polaski, 2004; Roach, 2003). As a result, any discussion about jobs in GSCs by policy makers in developed and developing countries alike must cover a broad range of tangible and intangible activities involved in each chain.

The participation of workers in GSCs can be viewed through the lens of job categories defined by skill level in order to understand the conditions of the workers in these chains and the challenges they face. Each skill level can be loosely associated with stages of the value chain (Gereffi, Fernandez-Stark, & Psilos, 2011) and has different implications for the Decent Work agenda in GSCs.

Table 1 distinguishes five main types of jobs in GSCs:⁵

5 This scheme is based on Barrientos et al. (2011) and Gereffi, Fernandez-Stark et al. (2011) This classification scheme is not intended to refer to all jobs in the global economy; rather, it only applies to jobs linked to the offshore production of goods and services. Future research on this issue in the LAC region could estimate the quantity of employment created in relation to the level of investment made via GSCs.

Table 1. Types of Work in Global Supply Chains

Job Category	Examples of Conditions of Work	Education Level	Examples
Informal SME or household work	May or may not be compensated; precarious conditions; unregulated work hours	Low; often less than primary education	Small producers in agricultural supply chains
Low skilled labour-intensive work	Formal; job insecurity, low wages, weak organization due to subcontracting	Low; often primary education or less	Workers on apparel or electronic assembly lines
Moderate skilled work	Formal; increased job security, potentially poor working hours	Completed secondary education	Procurement and logistics handling jobs in apparel and automobile chains
High skilled technology-intensive work	Formal; high job security, higher paid work, working hours & work-life balance challenges	Post-secondary technical education	Specialized component production and assembly in aerospace and medical devices chains
Knowledge-intensive work	Formal; potentially freelance, higher paid work, working hours & work-life balance challenges	Completed university education, including advanced degrees	Accounting, engineering and design jobs

Source: Authors based on Barrientos et al. (2011) and Gereffi, Fernandez-Stark et al. (2011).

i. Informal small and micro-enterprise or household-based work

Work in informal small and micro-enterprises or households can be found in many GSCs in developing countries and particularly in agriculture and light industries such as apparel and textiles. Production takes place in or around the household, with limited separation between commercial productive activity (i.e., making saleable goods) and unpaid reproductive activity (e.g., household

subsistence and childcare). Income derived from these activities is generally low, and production involves both paid and unpaid family labour (Bamber & Fernandez-Stark, 2013), often including child labour. Education levels vary, but often they are very low. Working hours or health and safety conditions can be precarious. As these workers are informal, their income and working conditions are highly precarious, fluctuating with the quantity of orders received, and they lack coverage of social protection or labour rights that would come with a formal work contract. In addition, fragmentation of the labour force across a large number of small firms weakens the potential for any collective activity.

ii. Low-skilled, labour-intensive work

Labour-intensive production uses waged labour in a formal setting. It involves a relationship between an employer (who may be the producer or an agent) and a worker, based on a wage. This relationship may be temporary or permanent based on a work contract. In this type of work, it is not uncommon for a core workforce to be on permanent contracts, complemented by temporary workers (often women and migrants) who are hired according to fluctuations in demand (Barrientos et al., 2011; Lee & Gereffi, 2015). The engagement of temporary workers through sub-contracting arrangements in part fragments this group of workers, and often involves informal work relationships, making it difficult to organize workers as well as promote and protect their labour rights and ensure their access to social protection (Barrientos, 2013b). Workers engaged in these stages of value chains typically have up to six years of education. Access to low-cost labour for labour-intensive production was one of the primary drivers of early offshoring, and accounts for a very large share of global employment in supply chains.

iii. Moderate-skilled work

Moderate-skilled work is associated with production that requires specific technical knowledge, such as machine operators and pattern makers, often in capital- and technology-intensive supply chains, such as automobiles and electronics. Work is typically formal in nature, and these workers usually have completed their secondary education. Depending on skills supply in the specific labour market, these workers may hold permanent contracts due to investment that must be made by the firm in training on specific equipment required to perform core operations. A skills shortage can lead to long working hours. Unionization and other collective action are dependent on the local institutional context.

iv. High-skilled, technology-intensive work

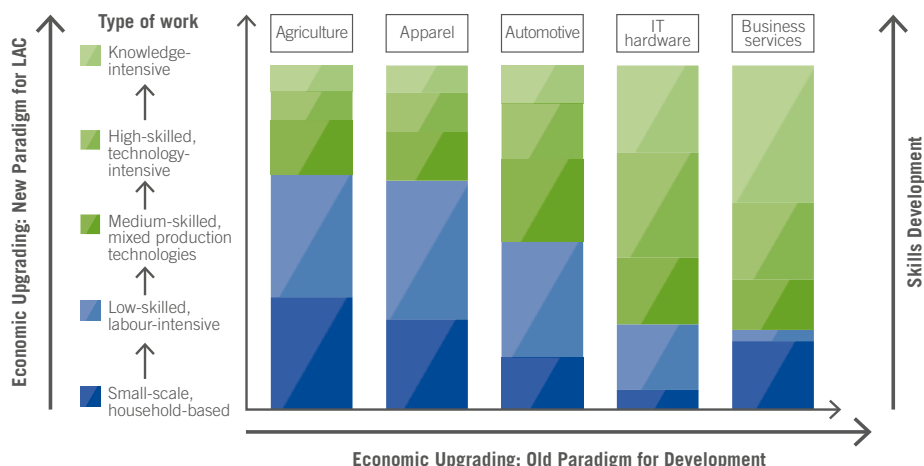
The offshoring of high-skilled, technology-intensive work emerged in the 1980s and 1990s. Lead firms in capital- and technology-intensive sectors, such as automobiles and electronics, set up international production networks not only to assemble their finished goods, but also to develop a supply base for key intermediate items and sub-assemblies. Due to the capital and technology intensive nature of this work, this accounts for a smaller share of employment in GSCs. Since these workers often hold “bottleneck” positions (Gereffi, Fernandez-Stark, & Psilos, 2011), the threat of strike action can be very effective. At the uppermost tiers of these production networks, the suppliers tend to concentrate ‘good’ jobs in relatively few locations. Skills scarcity can contribute to improved wages and employment terms, but this may also involve long working hours and poor work-life balance. Workers in these activities generally have completed at least post-secondary technical education.

v. Knowledge-intensive work

Knowledge-intensive work opportunities have been created by a new wave of offshoring in services at the international level, but involving certain countries and firms in Latin America and the Caribbean (Gereffi and Fernandez-Stark 2010). Knowledge-intensive service jobs include advanced business services, such as finance, accounting, software, medical services and engineering, and are increasingly seen as an opportunity for developing economies to attain both economic and social benefits, with technological learning, knowledge spillovers and higher income. Workers in this category may choose freelance work over permanent contracts to provide them with flexibility, but with lower levels of social protection (Beerepoot & Lambregts, 2015). On average, the size of employment in this work category is relatively small considering the requirements for high skills and advanced degrees. Skills surplus in this category in developing countries can lead to a loss of motivation at work, and some cases have been reported of a transfer of important skills away from core but relatively lower paying jobs (such as teaching) and ‘brain drain’ (OECD, 2013). Furthermore, work-related stress is an important problem.

Figure 2 shows graphically how these five types of work and skill levels are distributed across different GSCs.

Figure 2. Workforce Composition Across Different GSCs



Source: Authors, based on Barrientos et al. (2011).

The composition of a country's workforce in GSCs changes as it undergoes economic upgrading. Two dimensions of economic upgrading can be highlighted: traditional development paradigms that stress 'structural transformation' from primary products to manufacturing and service jobs in the economy (shifting from left to right on the figure); and the new 'GSC paradigm' of upgrading to higher value activities within any specific industry (moving from the bottom to top of each column) (Gereffi, Fernandez-Stark, & Psilos, 2011; Taglioni & Winkler, 2015). This is of particular importance for firms and workers in Latin America and the Caribbean, as will be discussed in Section 3, given the region's advantage in industries such as agriculture that are perceived to be relatively "low value" and low-skilled sectors.

2.2 Economic and Social Upgrading and the Decent Work Agenda

Economic and social upgrading are core concepts of GSC analysis and central to the discussion of achieving decent work in the global economy. Economic upgrading is essential for the creation of more and better jobs, while social

upgrading contributes to the improvement of standards and rights at work and access to social protection.

Economic upgrading is the process through which enterprises move from low-value to relatively high-value activities in GSCs, thereby increasing the value generated from a country's engagement in the chain, using either the firm or the industry as the unit of analysis. As cheaper locations vie to join chains, those already participating must develop strategies to sustain their inclusion, such as increasing their total factor productivity, specializing in higher value operations or niche sectors that are more insulated from competition (Humphrey & Schmitz, 2002). This encompasses both "structural transformation" as well as upgrading into more sophisticated, higher technology work within existing chains.

Table 2 describes the main types of economic upgrading and how they are measured.

Table 2. Most Common Economic Upgrading Trajectories in GSCs

Type of Upgrading	Description	Potential Implications for Labour	Measures
Process upgrading	Improvements in productive efficiency leading to higher productivity, such as the use of more sophisticated technology, or the incorporation of lean manufacturing techniques	Automation can result in decline in manual job, but provide higher paid work for technicians; improved management techniques can improve work environment	Total factor productivity; Labour productivity (output/employee)
Product Upgrading	Shift into the production of a higher value product	Training opportunities with increased complexity; potential increase in employment if labour-intensity for new product is higher	Unit value of exports; increase in exports of products in higher unit value categories

(continues...)



Type of Upgrading	Description	Potential Implications for Labour	Measures
Functional Upgrading	Movement to new segments in the supply chain	This requires workers with an entirely new set of skills; higher wages for more technology-oriented segments.	Unit value of exports; shifting composition of exports; change in workforce composition by education and salary.
Chain Upgrading	Leveraging capabilities developed in one chain to move into an entirely new sector	Existing labour can shift from one industry to another with specific training – reduced job loss in exit from one industry	Increase in exports of products in related chains
End-Market/ Channel Upgrading	Incursion of firms into new end market segments, either industrial (e.g., from textiles to medical devices) or geographical (e.g., regional markets in LAC to Europe)	Potential increase in job security through longer production periods; more diversified market reduce fluctuations	Increase in total number of export markets; increase in exports to new markets

Source: Authors, based on (Bamber & Fernandez-Stark, 2013; Gereffi, 1999; Humphrey & Schmitz, 2002; Kaplinsky et al., 2011).

These economic upgrading patterns differ by both industry and country. Product-based sectors often follow linear functional upgrading paths and countries must gain expertise in one segment of the value chain before upgrading into the next segment. Service industries usually present multiple upgrading trajectories that can occur in parallel (Fernandez-Stark et al., 2012). Both upgrading and downgrading can occur in an industry, as firms may opt to improve their performance at a lower value segment and profit from higher volumes with lower risks rather than pursue more complex or capital-intensive functions within the chain (Ponte & Ewert, 2009).⁶

⁶ For example, South African wine producers opted to focus on the production of lower value, bulk wine rather than producing 'icon' wines. The production of the latter involves significant risk, investment and skill, compared to the former, where although margins are lower, so are the risks. Producers maintain a stable income by guaranteeing sales to brand labels and earn their profits through a volume business (Ponte & Ewert, 2009).

The ILO seeks to promote an enabling environment for sustainable enterprises (ESEE) that will help entrepreneurs to expand their activities and create incentives for them to formalize their businesses (ILO, 2007). This concept involves not only firm-level interventions, but also the broader political, economic, social and environmental aspects of doing business. These broader aspects of institutions and policies can encourage firms to innovate, improve their operations, boost growth and raise profitability as a part of economic upgrading, while also linking with social upgrading in terms of generating employment and investing in human resources.

Promoting an enabling environment for sustainable enterprises is especially relevant for small and medium enterprises (SMEs). The enabling environment seeks to improve the economic prospects for firms, overcome shortcomings in decent work conditions for workers and ensure that economic activities are environmentally sustainable.

Conditions that facilitate economic upgrading in GSCs are highlighted in Box 1.

Box 1. Conditions for Economic Upgrading at a Country Level

Case literature uncovers five key dimensions affecting a country's potential for economic upgrading in GVCs (Bamber et al., 2013; Cattaneo et al., 2013; Taglioni & Winkler, 2015). These include: (1) productive capacity (including skilled human capital, standards and certifications, and national systems of innovation); (2) infrastructure and services (transportation, energy, water, and ICT); (3) business environment (macroeconomic stability, ease of opening a business, and access to finance); (4) trade and investment policy (market access, import tariffs, export-import procedures, border transit times and industry-specific policies); and (5) industry institutionalization (industry maturity and public-private coordination). The relative importance of the factors listed above varies significantly across sectors (see Table 3), although, notably, the role of human capital is a priority for competitiveness in all industries.

Table 3. Top Five Policy Dimensions for Economic Upgrading, By Sector

Agriculture	Extractive Industries	Manufacturing	Offshore Services
Human Capital	Human Capital	Human Capital	Human Capital
Standards and certification	National innovation systems	National innovation systems	National innovation systems
Transportation infrastructure & services	Energy, infrastructure, transportation & services	Standards and certification	Standards and certification
Industry Maturity	Public governance	Transportation, energy & water infrastructure & services	Telecommunications infrastructure & services
Access to finance	Access to finance	Trade and investment policy and facilitation	Geographic location

Source: (Bamber et al., 2013)

Some of the emerging quantitative work undertaken by the OECD using the updated 2015 Trade-in-Value-Added (TIVA) database applies econometric models to test the validity of these factors identified in the case literature. In addition to structural factors such as market size, industrial structure and level of development (encompassing education policy and innovation systems), this analysis concludes that trade policies (e.g. tariffs, participation and nature of free trade agreements), trade facilitation and logistics, quality of infrastructure, good institutions, intellectual property protection and reliable electricity supply are all particularly important (OECD, 2015).

Social upgrading is the gradual process leading to decent work in the GSCs. The concept of social upgrading maintains a balance with the process of economic upgrading and is aligned with the four “inseparable, interrelated and mutually supportive” strategic objectives of the ILO Decent Work Agenda: employment, social protection, social dialogue and rights at work, alongside gender equality and non-discrimination as cross-cutting objectives. Building on the 1998 Declaration on the Fundamental Principles and Rights at Work, the promotion of decent work ensures that work is performed under conditions of freedom, equity, security and human dignity, in which rights are protected and adequate remuneration and social protection are provided (ILO, 1999).

Academic research has supported the importance of examining the role of labour, working conditions and labour rights as part of a balanced approach to economic and social upgrading in GSCs (Barrientos et al., 2011; Milberg & Winkler, 2011, 2013; Rossi, 2013). Social upgrading involves both increased quantity of jobs and also the qualitative aspects of employment. It involves the promotion and compliance with applicable national laws and international labour standards, including the Fundamental principles and Rights at Work. Speaking directly to the competitive pressures that arise within the context of a global economy, the ILO Declaration on Social Justice for a Fair Globalization states that the violation of fundamental principles and rights at work cannot be invoked or otherwise used as a legitimate comparative advantage and that labour standards should not be used for protectionist trade purposes (ILO, 2008).

In this report, and using the reports and other secondary sources available, the concept of social upgrading in GSCs that is used encompasses three key elements: (1) **job creation** –the quantity and quality of jobs and implications for social protection; (2) the promotion, enforcement and improvement of **health and safety at work, earnings, freedom of association/collective bargaining⁷ and other labour rights** and (3) **skills development**, which allows workers to adapt to the changing requirements in GSCs for new capabilities, skills and knowledge and also facilitates worker mobility in to more challenging and better remunerated stages of the chain (Gereffi, Fernandez-Stark, Bamber, et al., 2011).

Table 4 highlights the close alignment between the Decent Work agenda and social upgrading indicators.

⁷ Enabling rights are those considered to provide workers with the ability to organize and collectively negotiate the conditions of their employment.

Table 4. A Preliminary Framework for Harmonization of Decent Work and Social Upgrading Indicators

Decent Work Pillars	Decent Work Indicators	GSC Social Upgrading Indicators
Promoting Work	▶ Employment Opportunities ▶ Adequate earnings & productive work	▶ Creating jobs in conditions of decent work ▶ Wages ▶ Skills development
Social Protection	▶ Social Security ▶ Combining Work, family & personal life	▶ Nature of contracts (Formal/Informal) ▶ Maternity protection ▶ Working hours
Rights at Work	▶ Decent Working time ▶ Safe Work Environment ▶ Equal Opportunity & Treatment in employment	▶ Working hours ▶ Working conditions (OSH) ▶ Non-Discrimination/ Gender
Promoting Social Dialogue and Tripartism	▶ Social Dialogue ▶ Workers' Representation and Employers' Representation	▶ Freedom of Association ▶ Collective Bargaining

Source: Authors based on (ILO, 2012a).

The assumption has often been that by achieving economic upgrading, social upgrading will follow. However, empirical research on sector case studies has shown that this link is neither automatic nor inevitable: economic upgrading may occur without bringing social upgrading together with it, and social upgrading in GSCs may act as either a driver or deterrent for economic upgrading (Lee et al., 2011b; Milberg & Winkler, 2013). Rather, the challenge is to lay down the conditions through elements such as policies and social dialogue to ensure that social and economic upgrading should go together as interdependent factors as stated in the ILO Declaration on Social Justice for a Fair Globalization (ILO, 2008).

2.3 Private, Public and Social Governance: Considerations for Economic and Social Upgrading and Decent Work

Economic and social upgrading outcomes are affected by the governance structures in GSCs.⁸ These governance structures can be categorized as public, private and social forms of governance (Gereffi & Fernandez-Stark, 2011; Mayer & Gereffi, 2010b).

- ▶ *Public governance* includes the body of national and international laws and norms, which provide a legal framework in which supply chains operate.
- ▶ *Private governance* is led by enterprises, employers' associations or industry associations. This involves the market power and technological and marketing assets that enable these private sector actors to set performance criteria in terms of price, quality and delivery standards for their supplier firms (Humphrey & Schmitz, 2004; Lee & Gereffi, 2015).
- ▶ Finally, *social governance* encompasses civil society pressure on business from labour organizations and non-governmental organizations that can alter sourcing operations (Gereffi & Lee, 2014a; Ponte & Sturgeon, 2014).

Table 5 highlights the governance roles that the ILO's constituents and other key actors in the chain play in structuring how firms and workers interact in these global networks.

⁸ This section draws on Gereffi and Lee (2014) and Lee and Gereffi (2015).

Table 5. Governance Role of Key Actors in Economic and Social Upgrading in GSCs

	Actor	Governance Role in Economic Upgrading	Select Examples Economic Upgrading Mechanisms	Governance Role in Social Upgrading	Select Examples Social Upgrading Mechanisms
PUBLIC	National governments	Design and implement trade, investment, infrastructure, education policy and shaping the business environment	Trade facilitation: improving customs procedures and port infrastructure; Reduce procedures and costs for formal enterprises Business incentives (e.g., tax exceptions)	Design, implement and enforce labour market regulation. Reduce informality, enhance education and health policy Broaden coverage of social security	Minimum wage regulation Working conditions regulations and inspection Rights for trade unions and for employers' associations, & collective bargaining Training incentives
	International Organizations	Promote access to key chains, through trade agreements, financial and/or technical support to help developing countries meet high quality and process requirements Policy advice, technical cooperation, and knowledge sharing	E.g. WTO: Coordinates trade policy agreements to reduce tariff and non-tariff barriers and facilitate trade	Norm setting in their specific areas of expertise, at the international level. E.g. The ILO's body of international labour standards, which are normative instruments, including the 189 Conventions and 204 Recommendations and its Declarations. E.g. The United Nations Guiding Principles on Business and Human Rights and its framework of "Protect, Respect and Remedy"	E.g. ILO: Disseminating labour information among countries good practices Commit countries to respect international norms Technical assistance in training labour inspectors

(continues...)

	Actor	Governance Role in Economic Upgrading	Select Examples Economic Upgrading Mechanisms	Governance Role in Social Upgrading	Select Examples Social Upgrading Mechanisms
PRIVATE	Lead firms and Employers' Representative Organizations	Control who participates in their supply chains	Quality and process standards and price and delivery requirements for suppliers Employers' representative associations, including for suppliers in the GSC	Determine acceptable labour practices within their own chains; some influence over other lead firms	CSR codes of conduct, auditing & certification Human capital development programmes
SOCIAL	Workers' Representatives	Shape the cost and availability of labour, particularly in labour-intensive stages of the chain	Worker committee on occupational health and safety contributes to increased productivity	Organize and represent workers interests in acceptable and unacceptable forms of work (e.g. through collective bargaining)	Set the agenda for key policy areas Right to trade union activities Public information campaigns (both national & transnational)
	Civil Society	Generate niche opportunities for higher value products based on consumer willingness to pay for certain supply chain conditions	Move into new products: (e.g. organic or Fairtrade)	Increase consumer awareness of labour standards within the chain by monitoring and publicizing firm labour practices	Set the agenda for key policy areas Certification and auditing of supply chain firms Using publicity & consumer spending to drive compliance

Source: Authors.

- **Public Governance** is exercised by various actors, which include governments at different levels within nation-states,⁹ and supra-national organizations. Public governance at the country level involves formal rules and regulations set by government. National labour laws, for instance, directly impact the conditions of workers in GSCs by regulating various aspects of labour conditions, workers' rights and labour standards, including the ratification at the national level of ILO Conventions. The role of the public labour inspection services in promoting compliance with national labour law is also an important public labour governance function. Other public governance measures, such as trade policy and investment regulations also can affect social upgrading outcomes in export production industries.¹⁰

At the supra-national level, organizations such as the ILO and the World Bank contribute to economic and social upgrading in GSCs by establishing internationally recognized norms as well as technical cooperation with governments, and employers' and workers' organizations. The normative role of the ILO is important for establishing a set of international labour standards. Even if not ratified by individual countries, these standards serve as internationally accepted guidelines for implementation by its member states. The Better Work Programme provides another example, conditioning access to financing through the International Finance Corporation (IFC) to compliance with the ILO Decent Work agenda (Rossi, 2015). The eight IFC Performance Standards on Environmental and Social Sustainability are another example of establishing standards that a client must comply with under an IFC loan; the Performance Standards may also be applied by other financial institutions. The ILO's Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (known as the MNE Declaration) and the OECD Guidelines for Multinational Enterprises are important mechanisms to ensure responsible business conduct by obeying the law and observing internationally-recognized standards and societal expectations for sustainable development.

9 State power comes from various levels, including government ministries and Supreme Courts at a national level to labour inspectors at a local level.

10 Investment incentives and workforce development initiatives in key investment zones can attract firms with strategies that base competitiveness on productivity rather than cost reduction.

Public governance in GSCs can also be exercised through bilateral or multilateral trade agreements –if the processes of the trade agreement also empower developing countries to negotiate fair conditions and considerations for promotion of labour standards– such as the 1994 North American Free Trade Agreement (NAFTA) and the 2008 EU-CARICOM agreement. The principles and complaint mechanisms included in NAFTA’s labour side agreement NAALC (the North American Agreement on Labour Cooperation) and labour chapters integrated into trade agreements are examples of mechanisms that aim to include labour rights and labour conditions as related to international trade (Polaski, 2003). The inclusion of labour provisions in trade agreements has grown in frequency, as well as displaying an evolution in the content of these provisions which increasingly make reference to the ILO’s Core Labour Standards (Ebert and Posthuma, 2011).

In contrast to private voluntary standards set by firms, often within the framework of corporate social responsibility (CSR), public governance, particularly government regulations, are legally binding and have a legal basis.¹¹

- **Private Governance:** Private governance of labour standards in supply chains is usually driven by lead firms, including global manufacturers, retailers and brands, who impose private standards that dictate to their suppliers what products are to be made, by whom and the price, quality and delivery conditions affecting their distribution and sale to the final consumer. While this mainly pertains to economic transactions between firms, it can also involve social (and environmental) dimensions, such as working conditions or child labour (Khara & Lund-Thomsen, 2012; Nathan & Sarkar, 2011). Leveraging their purchasing power vis-à-vis suppliers, global buyers use codes of conduct to require their suppliers to address social concerns in their operations (Locke et al., 2009; van Tulder, 2009). While supply chains may involve various tiers of firms, in practice, these codes of conduct are most frequently applied to first-tier

11 There is a trend in which CSR standards are included as part of the contractual agreement between the parties, and which is legally binding (as part of the private governance of the purchasing contract, not as public governance). For example, the requirement to implement a certain standard, or obtain a certificate, or achieve a minimum grade during a social or environmental audit can be linked as a requirement for the supplier to obtain a certain status or to continue as a supplier. For example, the Disney Company has adopted this practice in contractual relationships with suppliers.

suppliers. In many cases, the contractual relationship passes the social responsibility to ensure compliance with national labour legislation to the first-tier supplier in the event that further outsourcing or subcontracting of production is involved. The demands of buyers may at times involve some factors that are difficult to reconcile by the supplier –for example, reduction of costs is a challenge while simultaneously complying with the buyers’ labour codes that entail costs to ensure compliance (Barrientos, 2013a).¹² Lead firms frequently use third party auditors to monitor supplier compliance with their labour codes.

- **Social Governance** describes the interaction between the social partners at enterprise, sector, national or international levels. In social governance, unions, enterprises and employers’ organizations engage in a process based on negotiations and collective bargaining to define and implement joint labour governance. Unlike private governance mechanisms, which are unilaterally designed and adopted by enterprises, social governance involves workers (and/or their representatives) and the employers.¹³ International (or Global) Framework Agreements (GFA) have been used by multinational enterprises and global union federations as a tool to support improvement of working conditions in some GSCs where such agreements have been signed.

Civil society actors and non-governmental organizations (NGOs) have also been involved in efforts to raise awareness concerning working conditions and labour rights violations in global supply chains and have promoted campaigns and activities including boycotts, petitions and protests to address these issues. In some cases, employers, trade unions and NGOs have engaged in multi-stakeholder initiatives (MSIs) as a means to formalize collaborative approaches to GSC governance.

¹² There is considerable variation in how different lead firms engage with their supply chains on these issues (Barrientos et al., 2011; Giuliani et al., 2005; Milberg & Winkler, 2011). Some firms opt for longer term, more stable relationships in which they support supplier development and compliance in return for increased productivity and reputational gains in their key markets (Rossi, 2015). Other lead firms are forced by cost pressures into a mixed-approach of high quality and low-cost employment, which facilitates both adherence to quality standards and cost flexibility. This is reflected in the simultaneous use of regular and irregular workers on any given site.

¹³ In some cases, the time-sensitive nature of many GSCs which operate on just-in-time principles and the increased need for skilled workers to achieve quality requirements have been conducive to social upgrading and labour organizations have been able to bargain and negotiate for social upgrading goals (as in the agricultural sector during peak harvesting season) (Selwyn, 2013).

Non-governmental organizations influence potential social upgrading via leverage points on the demand end of supply chains, through reputation effects by increasing consumer awareness of labour conditions within the chain. These organizations help to coordinate consumer action by using certifications to communicate to buyers which products and services comply or do not comply with certain key interests.¹⁴ In doing so, NGOs shape the perceptions of firms in the specific end-markets in which they are located, and can thus influence supply chain management and sourcing practices.

Core issues with respect to workers' rights and labour conditions include the implementation of the ILO conventions in GSC operations, such as the enabling conventions on freedom of association and collective bargaining as well as those related to occupational health and safety and minimum wage.¹⁵ A major challenge under social governance is to promote organization and representation of workers in the informal economy, at the lower tiers of GSCs and among home-based or piece-rate workers.

The potential of each of these governance systems in isolation to ensure simultaneous economic and social upgrading is limited. Over the past decade, the private led model of governing GSCs through private standards aimed at improving quality, social and environmental outcomes has proven inadequate to address these concerns.¹⁶ The application of international norms is limited to national ratification and enforcement, yet the individual country settings in which GSCs are embedded differ in their capacity and political will to do so. In these cases, international and civil society organizations have played a role by complementing existing public resources by fulfilling monitoring and auditing roles (Gereffi & Lee, 2014b).

As a result of these shortcomings, alternative approaches are being sought to address shortcomings in Decent Work conditions, in order to enforce compliance

¹⁴ For example, the Fairtrade mark indicates to consumers that certain specific labour standards and treatment of suppliers were respected in the production of that good.

¹⁵ Particularly informal workers and those in EPZs which are least protected by national labour legislation enforcement and monitoring.

¹⁶ Indeed, the economic cost of supplier compliance with the overlapping codes of multiple buyers is often problematic for all but the largest of suppliers. This, in turn has led to rationalization of supply chains and the exclusion of smaller firms.

with national and international labour standards, and to promote labour rights for workers in the informal sector and those workers in non-standard forms of employment. MSIs that bring all relevant parties together have received a lot of attention concerning their potential to act as more comprehensive governance mechanisms (Amengual, 2010; Mayer, 2014). For example, the Accord on Fire and Building Safety in Bangladesh, which is a legally-binding agreement signed on 15 May 2013, brought together global brands, retailers and trade unions with the aim of upgrading the health and safety conditions in the ready-made garment industry in Bangladesh after the collapse of the Rana Plaza building that killed more than 1,100 workers and injured more than 2,000 people. Global Framework Agreements (GFA) and international accords such as the Bangladesh Accord bring together both employers in large MNCs and global labour representatives (Hadwiger, 2015).¹⁷ ILO participation in these agreements lends them credibility and legitimacy. Likewise, coordination between labour organizations in host countries and civil society organizations in key markets can help to provide cross-national social governance (Mayer, 2014; Mayer & Gereffi, 2010a).

17 In GFAs, corporations consent to respect workers' rights and to promote decent work globally within their subsidiaries and along their global supply chain (GSC). These agreements address a wide range of issues including fundamental labour and social rights, working conditions, industrial relations, health and safety conditions, training, and environmental protection provisions in more than one country and often worldwide. Furthermore, the connection of these agreements with pre-existing international instruments and principals has also increased, particularly over the past 6 years (Hadwiger, 2015).

3. Latin America and the Caribbean in Global Supply Chains

This section provides a general introduction to LACs participation in GSCs to date. As a region, LAC is considered a latecomer to GSCs with a lower participation than other regions (Blyde, 2014; Hernandez, Martinez-Piva, et al., 2014; UNCTAD, 2013). Furthermore, low domestic value added (16%), compared to an average of 28% for developing countries, suggests that the overall participation of LAC firms and workers tend to be concentrated in low value-adding stages of GSCs (UNCTAD, 2013) (see Table 6).

Table 6. Select GSC Indicators for Latin America and the Caribbean, 2005-2010

Region	GVC Participation (2010)	Participation Growth Rate (2005-2010)	Domestic Value Added
Latin America & the Caribbean	40%	4.9%	16%
South America	38%	5.5%	14%
Central America	43%	4.1%	22%
Caribbean	45%	5.7%	27%
Developing Countries	52%	6.1%	28%
Global	57%	4.5%	22%

Source: (OECD, 2015; UNCTAD, 2013)

Notes: The GVC participation rate is the combination of ‘upstream’ participation, that is, the share of imports (or foreign value add) used in a country’s exports, and ‘downstream’ participation, that is, the share of a country’s exports that are used in the exports of a third country, divided by the country’s total exports (UNCTAD, 2013).

Industry and firm-level research by country find that the region's role in GSCs is, in fact, quite heterogeneous.¹⁸ Different countries in the region participate in a range of GSCs, from agriculture to mining, manufacturing and services with varying degrees of upgrading success. Table 7 illustrates this diverse engagement in GSCs in five different types of industries that were selected due to their significant capacity to generate important benefits in terms of employment generation, export earnings and contribution to GDP in the region. These industries are: high value agriculture, apparel, advanced manufacturing, extractive industries, and offshore services. Regional disparity is due to a number of factors, including rich resource endowments, varied distances from the world's main manufacturing hubs in US, Europe and Asia, internal geographic barriers, disparate market size and differing levels of development and GVC-oriented policy stances, amongst others (Hernandez, Martinez-Piva, et al., 2014; OECD, 2015). Several of these differences and their implications for engaging in GSCs are discussed below.

Table 7. Selected Examples of Regional Participation in GSCs

Country	Select Value Chains	
Agriculture & Livestock	▶ Argentina (Soya) ▶ Brazil (Beef, Soya) ▶ Chile (Fresh fruits) ▶ Colombia (Coffee) ▶ Dominican Republic (Cacao) ▶ Ecuador (Bananas, Cacao)	▶ Guyana (Sugar & Rum) ▶ Honduras (Asian Vegetables) ▶ Panama (Bananas) ▶ Paraguay (Stevia & soya) ▶ Peru (Fruits & vegetables) ▶ Uruguay (Beef & forestry and cellulose)
Extractive Sector	▶ Argentina (Mining, Oil & Gas) ▶ Brazil (Mining, Oil & Gas) ▶ Chile (Mining - Copper) ▶ Colombia (Mining - Coal)	▶ Jamaica (Mining) ▶ Mexico (Mining) ▶ Peru (Mining - Copper) ▶ Trinidad and Tobago (Oil & Gas)
Low Tech Manufacturing	▶ Haiti (Apparel) ▶ Nicaragua (Apparel) ▶ Peru (Apparel)	

(continues...)

¹⁸ For example, the more advanced economies in the region, such as Argentina, Brazil, Chile and Mexico, have higher levels of domestic value added between 40 %and 46% (OECD-TIVA Database, 2015).

Country	Select Value Chains	
Advanced Manufacturing	▶ Argentina (Automotive - Parts) ▶ Brazil (Aerospace, Electronics) ▶ Costa Rica (Medical Devices)	▶ Mexico (Aerospace, Automotive, Medical Devices) ▶ Nicaragua (Automotive)
Offshore Services	▶ Argentina (IT & Call Centres) ▶ Chile (Engineering) ▶ Colombia (BPO) ▶ Costa Rica (BPO, KPO)	▶ Guatemala (Call Centres) ▶ Jamaica (BPO) ▶ Panama (Logistics, Financial Services) ▶ Uruguay (IT & BPO)

Source: (Bamber & Fernandez-Stark, 2013, Forthcoming; Bamber & Gereffi, 2013a, 2013b; Blyde, 2014; Center for Caribbean Competitiveness, Forthcoming; Fernandez-Stark & Bamber, Forthcoming; Frederick et al., 2014; Frederick & Gereffi, 2013; Gereffi & Sturgeon, 2013; Giuliani et al., 2005; Hernandez, Martinez-Piva, et al., 2014; Hernandez, Mulder, et al., 2014; ILO, Forthcoming; Lopez et al., 2011; Sturgeon et al., 2015).

- ▶ **Rich resource endowments:** In South America (e.g. Chile and Peru) and the Caribbean (e.g., Trinidad and Tobago and Jamaica), primary commodities have provided the basis for a historically strong integration in GSCs in agriculture and the extractive sectors. Indeed, these resources dominated LAC's exports as a whole for much of the past two decades; the top ten exports include raw and semi-processed raw materials such as fuels, copper, gold and iron ores and concentrates, and agricultural raw materials such as soya beans and related semi-processed soya products and raw cane sugar, with their share of exports increasing from 33% in 1995 to 40% in 2013 (OECD, 2015). Viewed from trade statistics alone, it is arguable that the concentration in these goods during the global commodities boom has dampened the demand for economic transformation into more highly processed and higher value-added goods, as well as the impacts upon sustainable development, such as the case of commercial soya production.

Nonetheless, there are numerous cases of economic upgrading within these chains in the region. Not only have resource-based exports increased in absolute and relative terms, but higher value packaging and processing activities have taken place in most countries, increasing

unit values of exports in certain product categories, while others have functionally upgraded into the more lucrative service export segments.¹⁹

- ▶ **Proximity to US manufacturing hub and market:** Central America, driven particularly by Mexico and Costa Rica, has used GSC-oriented trade policy to leverage relatively low-cost labour and its proximity to the US to integrate into manufacturing chains for that market. These two countries have entered and upgraded in numerous chains, advancing from low-tech production (e.g., apparel) to high tech operations (e.g. aerospace and medical devices) (see Cases 4.4.1 and 4.4.2). Important differences occur even here, where Mexico's large labour force has allowed for continued expansion in labour-intensive nodes, leveraging low and moderately skilled labour, Costa Rica's tight labour pool has forced firms in the country to upgrade into more highly-skilled segments of GSCs in order to remain competitive.

Following the experience of these two countries, together with regional trade policies,²⁰ neighbouring countries in the CAFTA-DR (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Dominica Republic) region have also entered into GSCs (Giordano et al., 2014). For example, apparel and automotive manufacturers are basing labour-intensive functions such as cut, make and trim and basic wire-harness assembly in Nicaragua (see Case 4.3.1). While Central America has long been an assembly and production base for the US regional production networks, today several of these countries have increased their integration in global chains, diversifying their imports to include Asia for further processing and export to the US (OECD, 2015).

- ▶ **Large Domestic Markets:** Argentina and Brazil, as resource-based countries with large domestic markets, higher levels of development and relatively more restrictive trade policies, have lower overall participation

¹⁹ For example, Peru has improved its packaging operations in the fruits and vegetables sectors (see Case 4.1.1), Ecuador is increasingly focusing on high value rather than commodity cacao (Lehmann & Springer-Heinze, 2014), Paraguay has invested in R&D to increase the quality of stevia production, while Chile and Uruguay have upgraded into service segments in the mining (see Case 4.2.1) and beef chains exporting a range of services from standards compliance systems and engineering services to national herd tracking software to increase traceability in livestock sectors (Abraham et al., 2014).

²⁰ In 2011, for example, Mexico and the CAFTA countries signed an agreement simplifying rules of origin requirements, allowing firms to source with low or no tariffs from any of the six countries. This has facilitated backward linkages in the region.

in GSCs with 30% and 35%, respectively (OECD, 2015). However, these aggregate figures obscure the importance of backward linkages in the local economy. Due to their size and level of development, many inputs for exports are sourced locally.²¹ At the same time, Brazil has attained participation in some high value sectors, such as aerospace and medical devices manufacturing; the country is the only developing country to manufacture and sell planes into the global commercial jet market (Sturgeon et al., 2015). Argentina exports automotive components to leading car and motorcycle manufacturers around the world (Blyde, 2014).

- **The Caribbean:** Small economies, poor connectivity and lower levels of economic development have challenged the Caribbean's deep integration into product-based GSCs (Center for Caribbean Competitiveness; Draper et al., 2015). However, numerous Caribbean countries participate in GSCs to some degree in the high value agriculture sector (e.g., tropical fruits from St. Vincent and the Grenadines), tourism, and the financial services sector (e.g., The Bahamas, St. Kitts and Nevis). Tourism, overall, is a key contributor to export revenues and GDP²² (Wilson et al., 2014).

3.1 Mapping LAC GSC Participation by Workforce Composition

Analysis of trade and firm-level participation in GSCs is key to understanding economic upgrading. Figure 3 employs a workforce composition perspective to understand LAC's evolving labour participation in the same five sectors discussed above. Using the available data for the region,²³ the figure illustrates the change

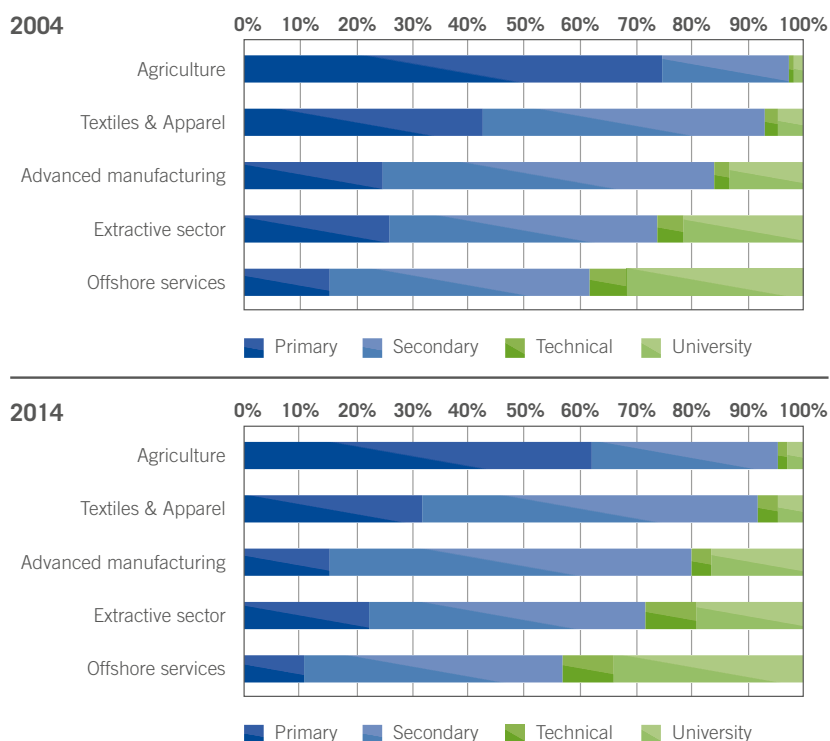
²¹ The countries rank in the lowest ten of the OECD-TIVA database for backward linkages to other countries in GVCs (OECD, 2015)

²² Tourism's share of GDP is as high as 77% in Antigua and Barbuda.

²³ As many firms serve both the domestic market and the foreign market simultaneously, it is often not possible to distinguish employees that work only in export-oriented firms. Thus, we use total employment by industry to determine general trends. This is not an ideal measure, but is illustrative of trends in these sectors. Due to challenges of statistical representation, relative rather than absolute values are used to identify these broader trends.

in job creation by skill level over the past decade at an aggregate level (in order to establish trends that can be linked to the GSC discussion in this report).

Figure 3. Workforce Composition in Key Sectors in South and Central America



Source: Authors, based on national household surveys in Brazil, Colombia, Costa Rica, Ecuador, Honduras, Panama, Peru, Mexico, Nicaragua and Uruguay.

Notes: This figure is based on data compiled from national household surveys on employment in ten countries in the region. (1) These ten countries which account for approximately 75% of the region's population; (2) 2004 includes data based on that year for all countries except Mexico (2005) and Uruguay (2006); (3) 2014 data: Colombia, Ecuador, Honduras and Panama; 2013 data: Brazil, Costa Rica, Mexico, Peru and Uruguay; and 2012 data: Nicaragua; (4) Agriculture includes both agriculture and agrifoods, advanced manufacturing includes the aerospace, automotive and electronics sectors; (5) Data includes country-wide information.

Three key points can be surmised regarding worker participation in GSCs during this period and their implications for the Decent Work agenda:

- (1) **LAC supply chain participation varies in terms of job opportunities for unskilled, semi-skilled and skilled labour, although the vast majority of jobs are still in on a lower skill level.** In 2013/14, over 80% of the workforce in the agricultural and textile and apparel sectors consisted of workers with only primary and secondary education. Advanced manufacturing and the extractive sectors offered more opportunities for technical and university-educated workers, but they too remain dependent on unskilled and semi-skilled workers. Offshore services offered the greatest opportunities for skilled workers among these five sectors; over 30% of workers in the sector held university degrees in 2013/14. Thus addressing the specific Decent Work shortcomings for less-skilled workers remains a core issue for the region.
- (2) **Job creation by sector illustrates increased engagement in non-traditional sectors.** There has been a slight shift of jobs from agriculture and low-tech apparel and textiles into higher value sectors. Total employment in agriculture has declined by 0.5% compared to an increase in advanced manufacturing and offshore services of 5% over the past decade. While the number of jobs offered in these less labour-intensive sectors is obviously much smaller than in agriculture –the total number of jobs in the four other sectors combined only accounted for approximately half the number jobs in agriculture– twice as many jobs have been created in these latter sectors than have been lost within agriculture.²⁴ The shift into new sectors highlights a strategic approach to look beyond more traditional agriculture and apparel export sectors to the needs of workers in relatively new industries.

²⁴ Employment creation generally reflects upgrading in these sectors. However, the total number of jobs created, particularly in labour-intensive sectors, can also reflect low labour productivity. This is problematic in the region. Situating itself slightly above the world average of US\$22,000 per worker, LAC is not closing the gap with developed economies levels and also has lost ground vis-à-vis the world average (ILO, 2013, p. 66). This trend is expected to continue in the medium term, eroding potential competitive advantage in the region from lower cost labour. For example, in the fresh grape sector in Peru, labour productivity is just half of that in Chile, which despite being the world's largest grape exporter, is only half of California's output. Put slightly differently, for every worker engaged in the grape harvest in California, and two in Chile, four are required in Peru. Thus although wages in Peru are half of those in Chile, the net wage bill for total output is the same (Fernandez-Stark & Bamber, Forthcoming).

(3) Economic upgrading both within ‘lower value’ GSCs and in more sophisticated chains requires higher skill profiles. The production of higher quality products, the incorporation of more sophisticated technologies or the addition of new industry capabilities require employees with higher skills. Although the total number of workers in the agricultural sector has declined by 5% over the past decade, the number of employees in the higher value agro-foods packing and processing activities has increased by 19%.²⁵ Process upgrading in the extractive sector, including the rising use of more sophisticated equipment, tripled the number of technical employees, while jobs for university graduates increased by 40%. Low-skilled employees in the advanced manufacturing and offshore services sectors accounted for just 12% of the workforce in 2014, declining by 6%, while highly skilled workers accounted for 29%, increasing by 3% during this time period. These workers may be better informed regarding their labour rights and operate in much tighter labour markets, offering them a stronger bargaining position vis-à-vis employers (Mosley, 2008). Nonetheless, they face new challenges (such as work-related stress and work-life balance) and more freelance work, requiring a new approach to strengthen access to social protection for workers.

²⁵ The share of the workforce in agriculture with primary education or less dropped from 75% to 62%, with a simultaneous increase in workers with high school education from 22% to 33%. While this may be attributable in part to increased demand for higher skilled labour in more sophisticated jobs in agricultural value chains, such as precision agriculture and standards management, supply-side factors, such as increased access to secondary education in the region, are probably also involved.

4. Experiences of Economic and Social Upgrading in GSCs: Case Studies from the Region

In this section, selected examples of economic and social upgrading in GSCs in LAC are discussed in order to help identify the conditions under which economic and social upgrading can occur together and the policies that may shape these upgrading outcomes. We focus on GSC participation in the same five industries analysed in Table 7 and Figure 3: high value agriculture; apparel; advanced manufacturing; extractive industries; and offshore services. Taken together, these GSCs indicate the great regional diversity of economic development experiences within Latin America, they offer examples of upgrading in both traditional and new sectors in the region, and they underscore social upgrading experiences in a wide range of job categories.

A review of a selection of existing case study literature was used, supplemented by desk research. Due to time and resource constraints, no new field research was carried out. Three important methodological considerations should thus be kept in mind when assessing the results of these cases. First, the existing literature on economic upgrading of LAC countries in GSCs is limited. As a result, some regions such as the Caribbean are regrettably under-represented in the sample. Second, most of the extant GSC literature in the region was developed without an explicit focus on social upgrading or Decent Work. Thus, coverage of these elements is based on secondary desk research, and as a result, is disparate across the cases. Third, the case studies selected in this paper tend to highlight relatively positive social and economic outcomes. Our analysis should thus be viewed as illustrative of some of the potential for economic and social upgrading to be more closely aligned, without overlooking the types of challenges that have arisen in these cases, but it is important to bear in mind that this overview report cannot be considered a comprehensive study on all the conditions contributing to or undermining economic and social upgrading.

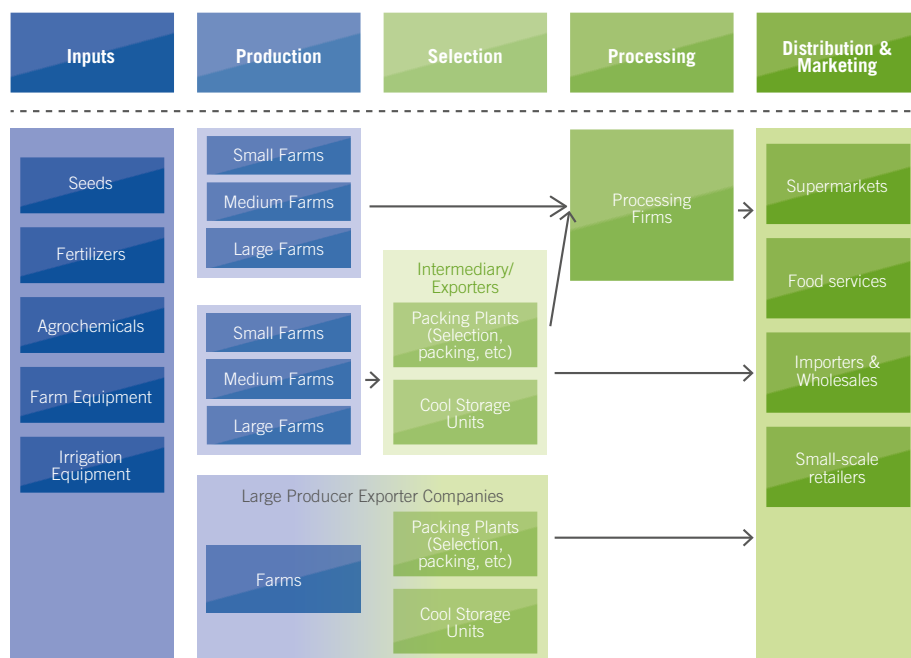
The cases studies are structured in three main parts: (1) an initial description of the GSC for each industry selected, in terms of its principal activities and value adding stages; (2) for each industry, one to three countries from the region are presented, illustrating different degrees of economic upgrading and social upgrading implications in order to show the main challenges with differing levels of upgrading; and (3) key economic and social upgrading outcomes are highlighted, along with the policy mechanisms that may have contributed to these improvements.

4.1 High-Value Agriculture GSCs

High-value agricultural or agro-food products are non-bulk agricultural commodities that either require special handling, such as fresh fruits and vegetables, or are processed in one or more post-harvest stages prior to reaching the end market, such as specialty coffee, asparagus and honey.²⁶ These products tend to be significantly more labour intensive than cereal crops and other traditional agriculture, largely because mechanization is complicated by the need to prevent damage to fragile produce (Joshi et al., 2004). Labour is thus one of the most important factors in the production of these high quality crops. Modern export agriculture requires a more skilled labour force, ranging from farmers who must adopt sophisticated production techniques to quality control operators in packhouses and on processing lines of food factories (Fernandez-Stark et al., 2011b). Figure 4 illustrates a typical high-value agriculture GSC.

²⁶ The terms high-value agriculture and high-value agro-foods are used synonymously in the literature to refer to this broad range of non-traditional agricultural crops.

Figure 4. Example of a High-Value Agriculture GSC



Source: Duke CGGC.

Latin American and Caribbean nations are important global suppliers of these products. Although these countries traditionally exported to the US market, over the past decade the number of export destinations have increased. Today, fruits and vegetable from LAC are also frequently exported to Europe and Asia. The region's basket of agricultural export products has also diversified. Caribbean and Central American countries are well known for their high quality coffee, cacao and tropical fruits such as coconuts. Chile excels in fresh fruit exports and is the top global exporter of apples, blueberries, cherries and grapes amongst others. Honduras has specialized as a supplier of Asian vegetables. Brazil and Peru have also emerged as strong exporters of fresh fruit and vegetables; today, for example, Peru has emerged as the world's largest exporter of asparagus, although the conditions for workers, in particular women workers, under the Peruvian Agro-Export Promotion Law (N°27360) must be examined in greater depth to maintain a balanced view toward the relationship between economic and social upgrading in this case. Latin American and Caribbean countries have all seized the opportunity

to participate in these GSCs by supplying the Northern Hemisphere with quality produce during their low season.

This process has yielded important economic and social outcomes for Latin American nations. High-value agriculture has important consequences for poverty alleviation in rural areas of developing countries due to its potential to increase incomes and create employment (Weinberger & Lumpkin, 2007). In addition, it is a key source of knowledge transfer in modern farming techniques and improved capabilities to meet strict quality and sanitary and phyto-sanitary (SPS) standards of global markets (Fernandez-Stark et al., 2011b). Economic upgrading has helped these export sectors become important contributors to foreign reserves and national employment. Social upgrading has been strong in terms of job creation. However, the case studies also bring to light important challenges that prevail in the overall improvements of wages, working conditions and labour rights in these sectors in several countries, including the need for special attention toward the labour conditions among micro, small and medium enterprises in supply chains where informality is prevalent and freedom of association and collective bargaining are limited. Therefore, activities to ensure the promotion of the decent work agenda have a crucial role to play in these sectors for realizing the potential that economic and social upgrading can go hand-in-hand in GSCs.

4.1.1 Peru²⁷

Over the past two decades, Peru has emerged as an important global supplier of high quality fresh produce. Non-traditional agricultural exports grew from US\$ 226 million in 1994 to US\$4.2 billion in 2014, with a five-fold increase between 2004 and 2014. Peru's new agri-business "miracle" began with the production of simple non-traditional crops and quickly evolved to more sophisticated and higher value products; producers began with asparagus, followed by paprika, avocado and citrus then grapes and, most recently blueberries (Meade et al., 2010).

Cultivation of asparagus started in the late 1980s in the valley of Ica and production expanded rapidly over the next decade driven by a favourable climate, soil conditions, new irrigation projects and high productivity (Fernandez-Stark & Bamber, Forthcoming; O'Brien & Rodríguez, 2004). By 2003, Peru became the largest exporter of asparagus in the world. While growth in asparagus has

²⁷ This case is based on Fernandez-Stark and Bamber (Forthcoming).

subsequently slowed as the sector matured, other products such as grapes have continued to expand. In 2014, fresh grapes became the largest agricultural export, representing 14.9%, followed by asparagus (13.5%), avocado (7.3%), quinoa (4.6%) and mangoes (4.6%).

This growth has been led by large-scale, vertically integrated commercial enterprises that have aggressively invested for the sole purpose of serving the export market. These commercial operations have been very successful due to a series of factors, including: land privatization; the expansion of irrigation projects; excellent climatic conditions; leveraging foreign expertise, particularly that of Chile; and explicit efforts to open up new markets, including the US and Europe.

Job Creation: Between 1999 and 2010, commercial agriculture in Peru created more than 1.5 million new direct jobs and more than 2.3 million indirect jobs, primarily in rural areas where previous unemployment levels were high (Camposol, 2015). Job creation has been very successful due to high labour-intensity of the products being cultivated.²⁸ Companies in this sector are among the largest employers in the country.²⁹

Although most jobs created in the production stage have been for manual labour that must use modern techniques to meet rigorous SPS standards, strict buyers' requirements and increased productivity, this has also generated opportunities for agricultural technicians and skilled professionals. At the packing stage, the labour force must be competent in food handling and they must follow strict health and safety protocols. Women and men are equally employed, with female participation above 40% (Apoyo Consultoría, 2012; IESI, 2014). This is increasing rapidly as firms upgrade their packing operations; these activities draw primarily on female labour who tend to be more adept at handling delicate fruit and avoiding unnecessary losses (Bamber & Fernandez-Stark, 2013). Interestingly, these women workers earn higher incomes than men working in production operations (León, 2012). The majority of these workers were drawn from Peru's subsistence agriculture sector, where women often worked as uncompensated labour on family farms.

²⁸ For example, grape production can require as many as 6-7 workers per hectare (Field Research, 2015). With an estimated 30,000 ha under cultivation in 2015, this required some 180,000 farm workers during the peak of the season.

²⁹ One of the largest agro-export companies estimated that it will require as many as 20,000 workers on staff once it reaches its full capacity; by 2013, it had already hired 13,000 employees during the peak season (Field Research, 2015).

Conditions of Work, Employment and Labour Rights: Unlike the widespread use of informal labour, both in Peru and globally in the agricultural export sector, employment in the Peruvian agro-export industry is generally formal, although temporary (León, 2012). Workers are hired under the agricultural labour regime, using temporary contracts lasting from 3 to 11 months based on the needs of each agricultural activity (IESI, 2014). Permanent contracts are scarce, but certain firms are beginning to shift workers with four years of seniority onto indefinite contracts (Solidarity Center, 2013). Salaries must be equal or higher to the minimum monthly salary (US\$ 238 in 2014). Most workers' income exceeds the minimum daily wage by working overtime or meeting production incentives.³⁰ Formality ensures vacation days³¹ and other social security benefits (healthcare, bonuses, unemployment fund) are included for temporary workers, prorated on the numbers of days worked, as well as compensation for arbitrary dismissal.³² Labour benefits are lower than in other sectors, although most employers compensate their workers with other in-kind benefits, including transport, food and in some cases housing and child day care (Fernandez-Stark & Bamber, Forthcoming). In addition, unions have been established at several of the large agro-exporters and tripartite social dialogue has been initiated (Solidarity Center, 2013). These advances in formal employment, nonetheless, have been accompanied by charges of abuses of temporary contracts, unlawful dismissal of union leaders, failure to adhere to collective bargaining agreements (ILRF, 2015) and freedom of association (US Department of Labour).³³

Skills Development: Training has been primarily driven by the private sector in an effort to improve the low labour productivity, and agro-export companies have implemented a series of training programmes to improve the skills of their workers. Meeting the standards required by export markets requires a complex labour process; for the grape sector, this can require up to 30 operations per harvest

30 On average, a worker receives between US\$64.70 and US\$95.20 weekly (IESI, 2014), with daily wages increasing during the high season.

31 Vacations are limited to 15 days per year, compared to 30 days for other sectors.

32 In case of arbitrary dismissal, employees are rewarded a maximum of 15 days of wages for each year worked.

33 According to the report of the US Department of Labor (2016) reviewing the labor chapter of the United States-Peru Trade Promotion Agreement, there are "significant concerns about whether the current system to protect the right of freedom of association of workers employed on unlimited consecutive short-term contracts in Peru's non-traditional export sectors is sufficient. In addition, the report raises questions about the effectiveness of the country's labor law enforcement while recognizing the number of positive steps taken by the Peruvian Government to improve its labor law enforcement since signing the Peru Trade Promotion Agreement in 2007" (US Department of Labor, 2016).

cycle compared to less than ten for the local wholesale market (Selwyn, 2013). In order to carry out these operations, exporting farms rely on an increasingly skilled and hard-working labour force. Training programmes thus range from teaching very basic techniques such as pruning and harvesting to correct application of pesticides. Low productivity levels can be attributed to the country's limited experience in the production of these crops, a weak education and training sector to develop the required skills, and the poor living conditions of the rural population, amongst others.

Key Policy Actions:

► **A combination of incentives and public investment in infrastructure helped to promote both sector competitiveness and formal employment:**

The Agro-Export Promotion Law (Law N°27360) contains both tax and labour-related regulations that are largely attributed by employers with helping competitiveness of the industry. Agro-export operators argue that Peru's comprehensive national labour legislation,³⁴ together with the high administrative burden of operating formal enterprises, was too restrictive to allow the newly emerging industry to compete. In addition, ambitious and targeted public infrastructure and favourable international market prices for a number of products played a role in creating the agri-business production and employment growth achieved in this sector. Nonetheless, agriculture workers and their trade union representatives argue that the special labour regime modifies and deteriorates their working conditions compared to the general regime and undermines their individual and collective rights (PLADES, 2012).

► **The US-Peru Trade Agreement (2009) conditions market access to compliance with ILO core labour standards and creation of a forum for labour disputes while contributing to cross-border union collaboration:**

The United States-Peru Trade Promotion Agreement signed in 2009 incorporates protection of labour rights, including numerous capacity building initiatives (USTR, 2015). USAID-funded efforts to support the adoption of these standards include strengthening existing agricultural

³⁴ Peru's national labour legislation includes the core elements of the Decent Work framework promoting social upgrading, including the freedom of association and the right to collective bargaining. In addition, the country has ratified all eight of the ILO's fundamental conventions. Nonetheless, implementation and monitoring remain a challenge as a result of scarce resources, capabilities and corruption (US-Department of Labor, 2007).

unions in the sector through knowledge programmes; connecting them with the US Food Workers Union; and establishing connections with the International Trade Union Confederation and the World Bank to include labour conditionality in international loan agreements (Solidarity Center, 2013). Furthermore, the agreement has provided a mechanism for trade unions to appeal labour law violations in Peru that are not addressed by the national government (ILRF, 2015).

Box 2. Union Action Drives Social Upgrading in the Horticulture GSC in São Francisco Valley, Brazil

The São Francisco valley in the interior of the Brazilian North East is home to a fast-expanding region of export horticulture. As in Peru, the expansion of irrigation operations has facilitated the production of high quality grapes and mangoes for developed country markets. Initially, working conditions in the valley were very poor, with low pay, limited job security, long working hours and dangerous health and safety conditions with workers applying agrichemicals without minimal protective clothing. In some cases, this also included the use of child labour.

At the end of the 1990s, using the threat of strike action, which can cripple and even break the time-sensitive supply chain for perishable fruit exports, the local rural workers' union, Sindicato dos Trabalhadores Rurais (STR), began an on-going campaign to improve workers' pay and conditions.

Improvements to conditions and rights at work included a focus on the creation of formal employment (with the Brazilian signed work card, the *carteira assinada*) that provides workers access to a retirement pension and other worker rights such as paid maternity leave for female workers, specified working hours, payment above the minimum wage, higher pay for overtime, the provision of protective clothing and the right for the STR to represent, organize and visit workers on farms during the working day. These improvements have been codified or 'institutionalized' within a collective convention, between the employers' organization (VALEXPORT) and the STR, overseen by the Ministry of Labour.

In an effort to reduce the power of the unions, employers have responded by providing a range of benefits directly to workers, such as housing and health care to increase employee loyalty.¹ Union power has decreased through such actions. While the workforce has gained important material benefits, there have been losses in other areas; for example, through increased costs for childcare and paid maternity leave, employers have reportedly reduced their reliance on their predominantly female workforce (Selwyn, 2013).

¹ Such action is contrary to fundamental conventions, in particular the ILO Convention No. 98 on the Right to Organize and Collective Bargaining, 1949 and ILO Convention No. 135 on Workers' Representatives, 1971.

4.1.2 Dominican Republic³⁵

Although the Dominican Republic has steadily upgraded into more sophisticated sectors (Schrank, 2013), banana production remains an important contributor to the country's agricultural exports. Banana production is the second most important agricultural export of the Dominican Republic after sugar and it represents a key source of rural employment and income (ILO, Forthcoming). Production growth in recent years has been noticeable, with exports doubling since the 2008 crisis, reaching US\$330 million in 2014 (UN Comtrade, 2015). Although productivity remains low, the key to the country's success in the banana GSC has been upgrading into the Fairtrade banana niche. This niche distinguishes Fairtrade bananas from trade in conventional bananas, which is dominated by larger, more competitive producers such as Ecuador. By 2013, over 60% of the Dominican Republic's banana exports were Fairtrade or organic certified. In addition, preferential access to the EU market has helped improve competitiveness.

The Dominican Republic is the world's most important Fairtrade banana producer, the majority of which are destined to the United Kingdom. It is the second largest supplier in that market (UN Comtrade, 2015), serving the country's leading supermarkets: Sainsbury's; Waitrose; Asda; Tesco's; Co-Op; and Morrison's (ILO, Forthcoming). Three of these companies –Sainsbury's, Waitrose and the Co-Op– have made all their bananas Fairtrade. Product upgrading into this niche market segment has resulted in increased margins, at both the producer and exporter levels (Vagneron & Roquigny, 2011).

Job Creation: The banana sector in the Dominican Republic involves an estimated 80,000 workers (ILO, Forthcoming), although a smaller portion of these employees work in the segment dedicated solely for export markets and statistics in recent years show a decrease in export levels. Jobs are predominantly in lower skill activities such as land preparation, planting, cultivation and product packaging. Haitians make up the majority of workers on bananas plantations. The industry provides waged employment for both plantation workers and those on smallholding plots. Two labour models have emerged: (1) *the plantation model*, which consists of both permanent and full-time workers; and (2) *the smallholder model*, which consists of workers who work for a few days each week. Both models employ

³⁵ The information for this case was drawn primarily from ECLAC/ILO (2013).

temporary workers however these workers are not seasonal per se as there is no real boom season in banana production.

Conditions of Work, Employment and Labour Rights: Some gains for workers have been made, in this sector where overall conditions are considered to be poor, and unionization and collective bargaining are limited due to high levels of unemployment and fear of being fired. Child labour and forced labour have been reported in the production of bananas at the plantation level, although important efforts have been implemented to eradicate this practice; meanwhile, children still contribute to some activities in production on family-owned smallholdings. Dominicans working in banana plantations tend to have access to permanent contracts, providing them with access to social security such as healthcare and supplemented food. Haitian migrant workers, however, experience significant difficulties as they are mostly undocumented and are hired on a temporary basis with no contracts. This creates a dual labour force in which one segment of workers faces considerably inferior conditions to the other segment.

Work for both Dominicans and Haitians on certified Fairtrade operations is considered to be better than in the alternative agricultural operations in conventional banana production and the sugar plantations. Fairtrade plantations have also provided opportunities for migrants to access work visas, by requiring and helping migrants to hold passports (Fairtrade International, 2012). These plantations must also offer free health insurance and paid time off.

At the smallholder producer level, there has been increased collective action. High transaction costs for exporters working with smallholders has led them to require producers to associate with each other. This process has enabled smallholder producers to access additional social benefits, including stipends for education and medical care amongst others.

These improvements in working conditions and labour rights in the banana export sector have brought about examples of social upgrading. However, Decent Work shortcomings continue, within a broader national context in which child labour, poor working conditions, low wages and widespread unemployment with limited social security are prevalent.

Key Policy Actions:

- **Access to the US market tied to improved labour inspection:** Although the banana trade is predominantly with the UK, the sector has

benefited from institutional capacity building as a result of the incorporation of labour provisions in trade agreements with the US (Schrunk, 2013). As early as 1991, the national government began to focus on improving its labour legislation to protect its trade exports to the US. These labour provisions were once again included in the CAFTA-DR trade agreement in 2008. As a result, the Dominican Republic government has improved the capacity of labour inspectors,³⁶ who have subsequently earned a reputation for professionalism. Labour inspectors go beyond sanctioning firms and provide technical assistance with respect to improving processes. The labour ministry also has the power to revoke export licenses of firms that fail to comply with national laws (Schrunk, 2013). The labour inspectors face a number of challenges in applying their expertise, and in further strengthening their action, that can bring forward valuable experience in the promotion of decent work conditions and social upgrading in the framework of the agriculture GSC in the Dominican Republic. The ILO Labour Inspection Convention, 1947 (No. 81) is a central governance instrument in this regard, together with the Labour Inspection (Agriculture) Convention, 1969 (No. 129), the Tripartite Consultation (International Labour Standards) Convention, 1976 (No. 144) and the Employment Policy Convention, 1964 (No. 122).

- ▶ **The Fairtrade certification has been pivotal in improving working conditions as well as reducing child labour in the sector.** In addition, the organization has directly engaged with the ILO and the national government in dialogue on how to protect Haitian migrant workers through granting them residency status and access to social security, while at the same time requiring certified plantations to establish social dialogue with the government to address this situation (Fairtrade International, 2012).
- ▶ **International organizations engaged in capacity development have helped to promote Decent Work social dialogue in the industry:** Several international organizations have established programmes to support

³⁶ Labour inspectors tend to be well-qualified (more than half in 2000 were lawyers), salaries have been raised in order to deter the potential for corruption, and the recruitment process has raised its technical requirements and become much more competitive (Schrunk, 2013).

upgrading in the country. For example, a four-year Joint UN agency programme “Strengthening the banana value chain through the growth of inclusive markets” has engaged 7 UN agencies, including the Food and Agriculture Organisation (FAO), United Nations Development Programme (UNDP) and the ILO, in order to promote Decent Work, train producer associations in workers’ rights and health and safety issues, and to promote social dialogue, particularly with respect to migrant labour (MDG Achievement Fund, 2013). A similar EU initiative from 2013-2016 focuses on increased competitiveness and improved worker conditions (ILO, Forthcoming).

4.2 Extractive Sector GSCs

The extractive sector includes those economic activities based on the exploitation of mineral and oil and gas natural resources. Although there are relatively few GSC studies on the extractive sector (Morris et al., 2012), the following main stages of the value chain can be identified: exploration; extraction/production; processing/refining; distribution; and marketing. Other important activities include R&D for process improvement, transportation, and trading.

Depending on the commodities involved, functional upgrading can be particularly difficult to achieve in this sector. Upgrading into upstream activities such as exploration is often limited by lack of risk capital and expertise; meanwhile downstream upgrading into processing activities can be inhibited by a number of factors, such as: (1) FDI in mines is driven by firms seeking raw materials for existing processing capacity at home (e.g., China and Japan in Chile) (Bamber et al., 2014); (2) transportation costs of unprocessed products are lower than processed (e.g., Brazil in oil); and (3) processing can be very capital intensive, with requirements for highly skilled human capital.

However, several countries have focused on strengthening backward linkages to capture additional value from their natural resources, either through equipment manufacturing for the sector or through service provision. The development of the mining equipment sector, for example, has attracted increasing attention from mining countries in recent years. Although the industry remains dominated by the US, Germany and Japan, where the leading firms are located, numerous other

mining countries, including Australia, China, Chile and South Africa have entered the industry over the past three decades.³⁷

With some of the largest world reserves, the extractive sector has been a crucial driver of LAC's growth. Chile is the world's largest producer of copper (ICSG, 2013); Peru is the second-largest silver producer and third-largest copper producer (EY, 2014b), and it has already identified important oil and natural gas reserves. Argentina, Brazil, Guyana, Mexico, Suriname and Trinidad and Tobago are important producers of minerals and oil and gas. Chile and Peru are primarily in the extraction stages of the value chain, with some downstream processing occurring; Argentina, Mexico and Brazil have stronger mid-stream processing in the petrochemicals and steel sectors.

This section analyses the experiences of Chile in the services sector for mining, which exemplifies countries trying to follow a more explicit upgrading path.

4.2.1 Chile's Development of Mining Services³⁸

With significant reserves of copper and other metals, mining is a major industry in Chile. The country has followed a trajectory of upgrading into service provision for the mining sector, a growing share of which is contracted by both domestic and foreign mining firms seeking to focus on their core business. Many services, particularly those related to the investment side of the value chain –exploration and establishment of new mines–, tend to be cyclical and vary with the global demand for commodities. Other services that are focused on productivity enhancements and/or reduction of costs tend to be favoured during slow periods. This case examines three types of services carried out by Chilean firms: Equipment maintenance; sophisticated engineering services; and R&D in new processes.

Maintenance: Sending mining equipment abroad from Chile for maintenance and repairs to original equipment manufacturers in the US or Europe is not cost effective, either in terms of shipping costs or downtime. As a result, these skills

³⁷ Australia has been particularly successful in developing these linkages, both in terms of equipment and services provision for the mining sector. In 2013, these firms generated approximately US\$80 billion in revenue, US\$24 billion in exports and employed 386,000 people (Austmine, 2014).

³⁸ This case examines the higher value services segment in Chile's mining sector and does not examine social upgrading or labour conditions in mining operations per se, which have been highlighted by some actors as precarious with a high degree of subcontracting. In 2014, 69.7 per cent of the mining workforce in Chile was subcontracted (up from 61.6 per cent in 2004) (Servicio Nacional de Geología y Minería, 2015, p. 182) compared to below 30% in Australia and the US.

were developed locally; by 2014, a regional services hub had begun to develop in Antofagasta with representation from most of the global lead firms. These plants typically cover all aspects of after-market services: installation; commissioning; maintenance; repairs; and overhauls or rebuilds (Latinominería, 2013). These maintenance and repair centres today also service equipment from neighbouring countries (Minería Chile, 2013, 2014). Maintenance, repairs and overhauls (MRO) become crucial in downturns; mining companies seek to maximize the return on investment of existing equipment rather than investing in new machines.

Engineering Services: By 2010, Chile had parlayed its experience in engineering for mining into services sales, emerging as one of the leading global centres of engineering services for mining (Fernandez-Stark et al., 2010b). As international mining companies moved to Chile to tap the country's tremendous mineral wealth, their large global engineering partners also began to set up operations in the country to support them (Arze, 2009; Sanchez & Boolan, 2009). These firms, including Hatch, Fluor, SNC-Lavalin, Bechtel and Ara Worley Parsons, established a significant presence in Chile in the 1990s (Arze, 2009). The companies started out by providing lower value design drawings for Chilean mining operations, but by the end of the 2000s, five of them had established global centres of excellence for the copper industry in Chile and many of the projects in copper mining around the world are led by Chilean teams. Engineering service exports related to mining peaked at an estimated US\$275 million in 2011. At the time, this was the largest offshore service export sector in Chile, accounting for one-third of service exports (Asociación de Empresas Consultoras de Ingeniería de Chile, 2010; IDC Latin America, 2009).

R&D for Process Upgrading: Since the early 2000s, a wide range of firms in the country have begun to undertake R&D to develop new, innovative technologies to improve production efficiency (BHP Billiton, 2015). This is particularly important in periods of declining prices, where mining companies are under pressure to increase productivity and curtail operating costs. One example is BioSigma, a firm engaged in developing new biotechnologies for mineral extraction. The firm has over 17 patents for microorganisms that accelerate the process of removing copper from low-grade ore (Fernandez-Stark et al., 2010a). Other projects range from remote control systems and automated sampling from smelters to scanners that can identify materials on the conveying belts that will jam the crushers, increasing operational safety and efficiency.

Job Creation: While mining is not a labour-intensive sector,³⁹ the quality of the jobs created in the related services sector is particularly important. The labour force of these services firms now consists primarily of skilled and highly skilled personnel. In 2012, in engineering services, 62% of employees held professional degrees and a further 21% had technical diplomas; these two skills categories accounted for half of the workforce (Fundación Chile, 2014). Employment in R&D services often requires even higher qualifications.⁴⁰ In addition, the number of start-ups that have emerged to serve the sector has created opportunities for skilled entrepreneurs to enter this chain (Fundación Chile, 2014).

Conditions of Work, Employment and Labour Rights: Work in the mining services sector is characterized by high wages and strong adherence to occupational health and safety standards demanded by multinational lead firms. With a relative shortage of qualified labour both in Chile and globally, the field is one of the highest paid in the Chilean labour force. Engineers with both university and technical degrees are the highest paid professions for their respective levels of education, earning approximately 20-30% more than the next best-paid professions (Meller & Brunner, 2009). This trend continues despite the downturn in commodity exports, with only jobs in the medical profession earning similar amounts (mifuturo.cl, 2015). High demand for skilled labour has also enhanced contracting opportunities for suppliers. For every ten internal employees, there is only one subcontracted employee;⁴¹ the relationship is inversely correlated in size, with large providers engaging fewer subcontractors than small firms (Fundación Chile, 2014).

One area where additional upgrading is required involves the issue of gender equality. The mining sector as a whole continues to be male-dominated and female participation is low (P. Salinas, 2015). The two professions with the highest participation of women in the workforce are geologists and processing engineers at 19% and 16%, respectively (CCM, 2015).

Skills Development: Of the three service groups covered here, engineering firms contribute the most to developing the skills of their workers (Fundación Chile,

³⁹ At the height of the copper boom, only around 3,500 engineers were employed by engineering firms serving the Chilean mining sector (Fernandez-Stark et al., 2010b)

⁴⁰ BioSigma, for example, employs 15 scientists with doctoral degrees, in addition to a large number of engineers who are responsible for developing its plants on site (Badilla, 2009).

⁴¹ Compared to 65% subcontracting in mining operations.

2014). Multinational companies provide access to both e-learning and online courses and on-site courses both in Chile and abroad (Julio, 2009; Sanchez & Boolan, 2009), as well as introducing professional performance evaluation to continued employee development (Julio, 2009). According to companies in the industry, the additional training received post-graduation provides Chilean engineers with a significant competitive advantage over engineers in both Argentina and Brazil (Maiz, 2009). A large number of engineers working in engineering sectors in Chile have also completed graduate engineering degrees either in Chile or abroad (Comisión de Educación, 2005). Training in maintenance operations is limited; in 2012, workers in this sector received on average just 8 hours of training (compared to 42 hours for engineers) (Fundación Chile, 2014). Nonetheless, these operations place a heavy emphasis on learning through on-the-job and apprenticeship work.

Key Policy Actions:

- ▶ **Large foreign and domestic mining companies improved their safety & working conditions to reduce accidents:** The working conditions for mines and their service suppliers are generally governed by the strict standards of the multinational mining firms operating in the country. The accident rate for the mining sector and its service providers was the lowest in the Chilean economy, despite the widely held perception of the industry as a dangerous one. In 2012, for example, the reported accident rate was 1.6% for the Chilean mining industry as a whole (including all registered mining companies and also suppliers that indicated the mining sector as a key activity), a lower rate in comparison with both financial and government services jobs at 1.8% and 2.1% respectively. In addition to complying with OSH standards of their buyers, by 2012, 51% of suppliers to the mining industry had also developed Codes of Conduct to govern their labour practices (Fundación Chile, 2014). This private governance in safety has been complemented by improvements to public inspection via the Mining Safety Programme launched in 2014.⁴²

⁴² An online system accessed by both inspectors and firms allows for real-time tracking of accidents, inspections and violations. In 2014, 200,000 subcontractors were interviewed to ensure labour conditions were being met (Ministerio de Minería (Chile), 2015).

► **The 2007 Subcontracting Law placed the responsibility on lead firms to ensure compliance with labour law among firms in its supply chain:**

Although this law only applies to firms that provide continuous or regular services to mining operations, the 2007 Subcontracting Law was an important step forward in placing legislation that extends the same labour rights of formal workers to subcontracted labour within the supply chain of the same lead firm. As seen in other case studies of this report, similar initiatives that seek to promote responsibility for working conditions among firms in the supply chain are being introduced in Argentina, Uruguay and Brazil. In this way, the Chilean law requires lead firms in the mining GSC to assume responsibility for subcontractor compliance with labour laws, working conditions, wages and social security benefits (Dirección del Trabajo-Gobierno de Chile, 2015). The Subcontracting Law can partially explain the low levels of subcontracting amongst large mining firms in Chile.

4.3 Apparel GSCs

Many developing countries have joined the global manufacturing sector through assembly-oriented production in the apparel industry.⁴³ Indeed, over the past two decades, the apparel sector has provided an important springboard for LAC countries into GSC trade. At the same time, the apparel industry has been a locus for labour rights violations. In response, various governance instruments have been implemented. Among these responses are supra-national initiatives and multi-lateral or bilateral trade agreements with labour provisions. Private sector CSR initiatives have also been particularly active in terms of codes of conduct and social monitoring in apparel GSCs.

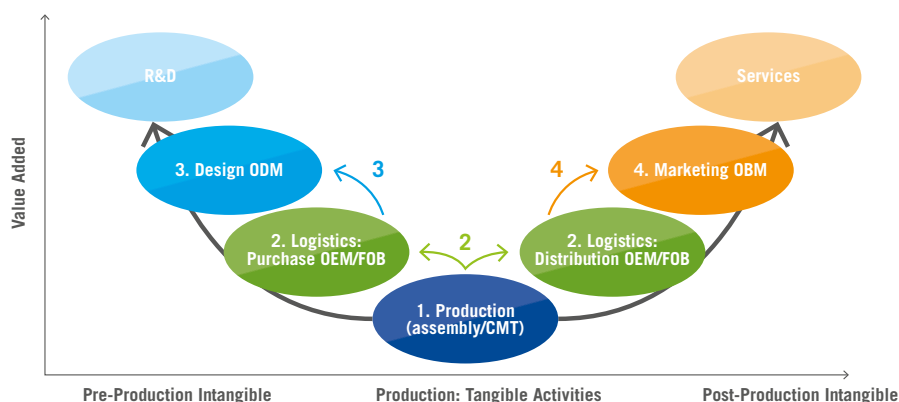
In the face of rising competition from Asia, combined with significant pressure from global buyers to improve quality and turnaround while cutting costs, the

⁴³ Although child labor historically has been an important issue in the labor-intensive segments of the apparel industry around the world, in general this has not been a major problem in the LAC region in recent years.

region as a whole has lost ground in the apparel export sector (Frederick & Gereffi, 2011).⁴⁴ Two exceptions to this general rule are Nicaragua and Haiti.

Figure 5 illustrates economic upgrading trajectories in the Apparel GSC.

Figure 5. Apparel Global Supply Chain



Source: Duke CGGC

The main stages of upgrading in the apparel value chain are:

- 1. Assembly/Cut, Make, and Trim (CMT):** Apparel manufacturers cut and sew woven or knitted fabric or knit apparel directly from yarn.
- 2. Original Equipment Manufacturing (OEM)/Full Package/Free on Board (FOB):** The apparel manufacturer is responsible for all production activities, including the CMT activities, as well as finishing. The firm must have upstream logistics capabilities, including procuring (Sourcing and financing) the necessary raw materials, piece goods, and trim needed for production.
- 3. Original Design Manufacturing (ODM)/Full Package with Design:** This is a business model that focuses on adding design capabilities to the production of garments.
- 4. Original Brand Manufacturing (OBM):** This is a business model that focuses on branding and the sale of own-brand products.

⁴⁴ Local manufacturing, nonetheless, continues for local markets. For example, see Posthuma and Bignami (Forthcoming) and Reinecke (2010) for discussions on labour compliance in the respective Brazilian and Chilean apparel sectors.

4.3.1 Nicaragua⁴⁵

Apparel is Nicaragua's most important manufacturing sector, and clothing accounted for one-third of the country's exports to the US in 2011. This sector saw strong export growth between 2005 and 2012, the majority of which was destined to the US. Growth was fuelled by tariff preference level (TPL) agreements provided to this sector under the CAFTA-DR trade agreement with the US. The TPLs enabled Nicaraguan exports that do not meet the yarn-forward rule of origin established under CAFTA (e.g., items made from fabrics originating in Asia instead of the Americas) to access the US market duty-free for a 10-year period (2004-2014).⁴⁶ The apparel export industry is based almost exclusively in export-processing zones (EPZs), with some 54 factories. These firms are mostly foreign owned, primarily by US and Korean corporations. In 2012, apparel firms accounted for 70% of employment in the country's EPZs.

Nicaragua's main apparel product is knitted garments, especially shirts, but in recent years its exports of woven apparel has also grown rapidly. Knit apparel manufacturing is integrated in a full-package model with Honduras where fabric is formed in Honduras and sewn in Nicaragua before the garment is exported to the US. The majority of woven apparel companies offer some services beyond cut and sew, most typically the laundering that is a standard part of the production process for jeans and some twill pants for buyers such as Dockers. Several companies also provide various pre- and postproduction processes as well, including pattern marking, grading and some product development, all indicative of product and process upgrading in the apparel supply chain.

Job Creation: In an economy characterized by a high degree of informality (almost two-thirds of the workforce), the 70,000 jobs in the apparel sector are a critical source of formal employment. However, Nicaragua's apparel exports are very dependent on trade policies, such as the temporary TPL provisions, and if these policies change, apparel exports and employment could shift dramatically.

⁴⁵ Information for this case is drawn primarily from Bair and Gereffi (2013), (Frederick et al., 2014) and Frederick et al. (2015).

⁴⁶ In 2011 Honduras ranked first among CAFTA exporters to the US. El Salvador and Nicaragua currently rank second and third, with Nicaragua edging slightly ahead of Guatemala this past year. Nicaragua's exports to the US nearly doubled in value between 2005 and 2011; all other countries in the CAFTA region except El Salvador declined during this period. In 2005, Nicaragua claimed only 8% of the region's apparel exports to the US; by 2011, this had increased to 17% (Frederick et al., 2014).

Conditions of Work, Employment and Labour Rights: Nicaraguan garment factories are generally not associated with systematic abuses of workers' rights and there is broad agreement that the industrial relations environment in Nicaragua has improved markedly in recent years. Compared with other lower- or middle-income countries with large apparel-exporting industries, Nicaragua boasts a particularly active and independent trade union movement (Anner, 2013), although there are lingering concerns about the degree to which workers are able to exercise their rights to collective bargaining. The country boasts a relatively high degree of institutionalized social dialogue, as represented by the Tripartite Commission formed in 2009 to help the country face the mounting pressures of the financial crisis and recurrent pressure from buyers to reduce costs.

Skills Development: This remains an area of weakness for the Nicaraguan apparel sector. Few firms offer anything in the way of formal training. Limited training is focused on bringing new workers up to speed and is carried out on the job, lasting an average of just one month. Training is more prominent in woven firms than in knit firms. In general, human capital formation and skills development among Nicaragua's garment workers is modest.

Key Policy Actions:

- ▶ **Nicaragua's Tripartite Agreement signed in 2009 provided a forum for dialogue and cooperation** between organized labour, the private sector, and the government –represented by both the Minister of Labour and the head of the EPZ authority. This agreement created the Free Zone Tripartite Labour Commission as a forum for dialogue and cooperation, with the goal of strengthening the industry and preserving jobs in the textile and apparel sector. Along with negotiated industry wide minimum wage increases through 2013, it mandated the government and the private sector to work together to establish commissaries to provide workers basic commodities, such as cooking oil, beans and rice, at lower prices than can be found in retail outlets. Companies were generally positive about the Tripartite Commission and the two Agreements it had negotiated, seeing this as a proactive effort on the part of the government to create a more predictable environment for local firms.
- ▶ **Firms voluntarily opted into audited certification programmes:** Many employers apply the FLA Code of Conduct and receive Independent

Monitoring from the brands or the FLA itself. Some employers enrolled in certification programmes such as Worldwide Responsible Accredited Production (WRAP, an industry-organized certification system). Frustration with meeting multiple buyer codes of conduct, however, was one of the factors that encouraged firms to join the ILO's Better Work Nicaragua programme, which offered a harmonized auditing operation which most buyers are prepared to accept in lieu of their own auditing.

- **ILO- IFC Better Work programme linked access to market and finance to labour conditions:** Nicaragua joined the Better Work programme in 2011. As discussed in Box 3, Better Work offers technical and advisory services to help factories improve their compliance with the ILO's Decent Work agenda as well as establishing mechanisms to increase social dialogue. It also links international loans from the IFC to improvements in labour conditions (Rossi, 2015). While many countries have engaged in the Better Work programme in order to improve their labour conditions, Nicaragua has leveraged its participation in the Better Work programme to demonstrate to buyers that it is a responsible business location. However, the programme has had lower economic impact than was hoped. The 2014 mid-term programme review suggests that these improvements have not translated into higher orders or contracts and thus its impact on economic upgrading has been minimal (OAI, 2014). Such an outcome should be expected in light of the expiration of the TPL agreement in 2015. However, on the other hand, it would be important to consider how the responsible business environment may help to maintain the loyalty of buyers who are reputation-sensitive, even in a period of slower global growth and expiration of the TPL agreement.

Box 3. The ILO-IFC Better Work Programme in Nicaragua and Haiti

The Better Work programme seeks to improve working conditions in global textile and apparel supply chains. By monitoring factories' compliance with national labour laws and international labour standards, Better Work promotes better conditions for workers, develops competitiveness by providing technical assistance to factories that need to improve their compliance, and informs major brands and buyers of labour conditions in the sector. Multinational apparel brands use that information to make business decisions and help determine where to place their orders. Nicaragua and Haiti are the first two countries in Latin America and the Caribbean to participate in the Better Work programme.

Nicaragua

Nicaraguan garment factories are generally associated with efforts to improve working conditions and respect for workers' rights. Since the accession of former Sandinista leader Daniel Ortega to the presidency in 2007, Nicaragua's record of labour law enforcement, and the industry's compliance with those laws, has improved. In this context, the Nicaraguan government has viewed participation in the Better Work programme not only as a way to improve working conditions in its free trade zones but also as an opportunity to publicize what it perceives to be the country's existing strengths as a 'high-road' exporter.

The Better Work programme is based on the Free Trade Zone Tripartite Labour Agreement (2010), to which trade unions, employers and the Ministry of Labour are all parties. This agreement laid out a number of social provisions in exchange for stability in wages over a set period. In addition, through the programme, Nicaragua has also gained access to the Global Trade Supplier Financing programme –a joint effort of Better Work and the IFC which enables companies to access low cost trade finance to manage the cash flow problems that can result from delays between invoicing and receiving payment which can often take up to 60 days (Bair & Gereffi, 2013).

Haiti

Like Nicaragua, Haiti's entry and growth in the apparel GSC has been driven by preferential trade access in recognition of its status as the least developed country in Latin America. The TPLs for Haiti are more generous than Nicaragua's in terms of quantity and duration, since they extend through 2020.¹

¹ These agreements initially extended through 2018, but expiration was postponed following the devastating 2010 earthquake (Rossi, 2015).

(continues...)

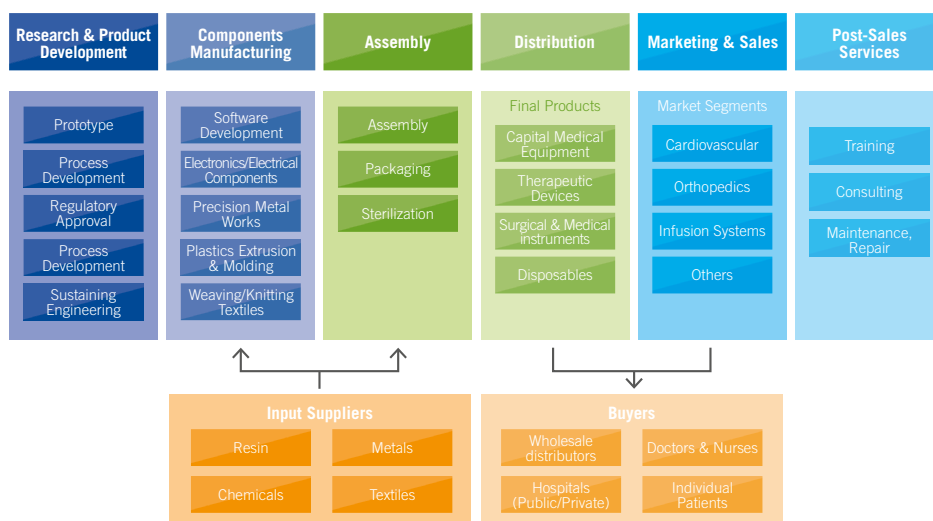
The preferential trade agreements provided to Haiti through the Haitian Hemispheric Opportunity through Partnership Encouragement (HOPE) Act explicitly includes the Better Work programme. “The implementation of the agreement was linked to the establishment of an ILO programme designed to assess and promote compliance with core labour standards and national labour law in the factories that are eligible for tariff advantages under HOPE II” (Rossi, 2015, p. 8). Access to the TPL is directly contingent on compliance with both core labour standards and national labour legislation, and can be revoked on a firm-by-firm basis. Compliance is assessed by Better Work Haiti, and audit results by individual firms are publically available. In addition, Haiti was required to establish an independent Labour Ombudsperson appointed by the President of the Republic in consultation with the private sector and the trade unions (Rossi, 2015).

4.4 Advanced Manufacturing GSCs

Advanced manufacturing sectors tend to be driven by ongoing technological changes and relatively large capital outlays. These sectors include medium and high-tech sectors such as aerospace, automotive, electronics, and medical devices manufacturing, amongst others. While aspects of these chains may differ slightly according to the specific industries, there are six main segments of these chains: (1) R&D; (2) design; (3) raw material and components procurement and manufacturing; (4) assembly; (5) distribution; and (6) marketing.

Figure 6 illustrates the GSC of medical devices. R&D and design services along with distribution and marketing –typically the highest value activities in the chain– have generally taken place in developed countries, while components manufacturing and assembly are located in developing countries. While these lower-value segments of the chain are usually more labour-intensive, employment is typically much lower than in sectors such as agriculture and apparel. As illustrated in Figure 2, however, the skill level of the workers engaged in these low stages of the advanced manufacturing chains tend to be higher than those of the low stages of the agricultural and apparel sectors.

Figure 6. Medical Devices Global Supply Chain



Source: (Bamber & Gereffi, 2013b).

In LAC, participation in advanced manufacturing GSCs are concentrated in Central America, Mexico and Brazil. Costa Rica and Mexico serve the US market, while Brazilian operations tend to be more inward looking and serve the local market (Blyde, 2014; ECLAC, 2009; OECD, 2015; Sturgeon et al., 2015). Typically LAC has entered advanced manufacturing GSCs in assembly operations, often through FDI with the establishment of a lead firm assembly operation. Upgrading has tended to involve process and product upgrading, as new technologies, often imported, are introduced to increase productivity, and diversify the range of products being fabricated.

This following section discusses two of the region's most successful experiences in advanced manufacturing GSCs: Costa Rica in medical devices and Mexico in aerospace. These cases highlight significant economic upgrading, measured by rapid growth in the quantity and technological content of exports along with increased professionalization of the labour force, as well as social upgrading by extending national labour legislation and inspections to include the EPZs where medical device and aerospace firms are located.

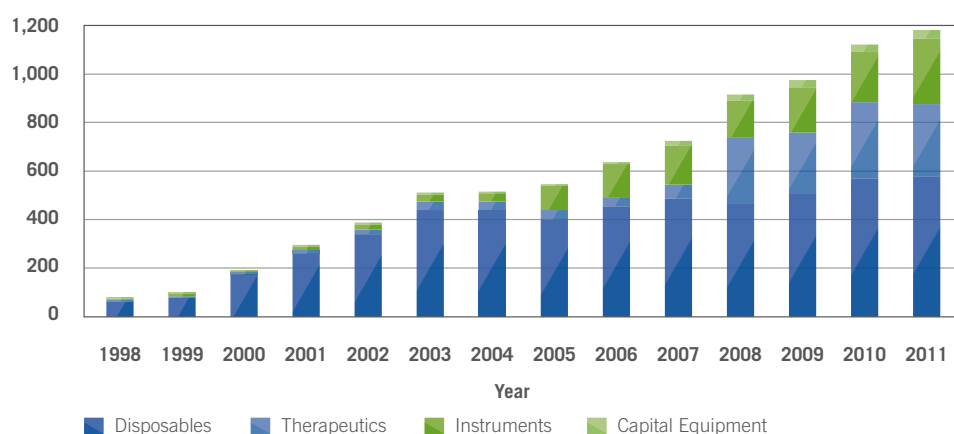
4.4.1 Costa Rica in the Medical Devices GSC

The Costa Rican medical device industry dates to 1985, when the first device company established operations in the country. By 2014, exports had reached US\$1.4 billion. Accounting for 12% of the country's total exports, medical devices thus became the largest export industry in Costa Rica (UN Comtrade, 2015).⁴⁷ In 2015, more than 50 mostly foreign firms were participating in the medical device supply chain in Costa Rica, with an additional 16 companies providing packaging and support services. Companies in the sector are concentrated in the production segments of the value chain, with 70% of them manufacturing components or assembling final goods.

Economic upgrading has been achieved with respect to products, processes, functions and market diversification. There has been a general increase in the complexity of medical devices manufactured in Costa Rica since 2005, with the country shifting from mainly disposable items, such as intravenous catheters, to more sophisticated products, such as bovine heart valves (see Figure 7). In addition, there has been an increase in the number of highly regulated life-supporting or life-sustaining devices produced in the country, indicating a growing confidence in the ability of Costa Rican plants to follow strict regulatory protocols. The establishment of two specialized sterilization plants between 2010 and 2012 facilitated direct distribution from the plants to key overseas markets.

⁴⁷ This is due both to sector growth, as well as the closure of Intel's semiconductor plant in 2014. Prior to shutting down operations, Intel's exports accounted for approximately 25% of Costa Rica's total exports.

Figure 7. Costa Rica: Medical exports by product category, 1998-2011 (USD, Thousands)



Source: (Bamber & Gereffi, 2013b)

Economic upgrading has been driven by human capital, coupled with political and macroeconomic stability, supportive policies and the country's strategic location. Although multinational medical device companies were initially drawn to Costa Rica to take advantage of its strategic location, low-cost labour and political and economic stability, the presence of human capital with experience in the sector quickly became ranked as more important than cost in attracting investment. Once they determined the capacity of Costa Rica's labour force to adapt to new demands, these firms quickly began to expand activities performed in their production plants in the country. Today, many manufacturing operations are completely vertically integrated, with firms receiving raw materials and performing activities including extrusion, moulding and assembly of final goods.

Job Creation: The growth of the medical devices sector has created approximately 17,500 jobs in Costa Rica between 2000 and 2015, with approximately 2,000 jobs being added each year since 2012. This job creation has provided opportunities for both men and women; 46% of the workforce is male and 54% female (CINDE, 2012). Furthermore, the types of jobs created by the medical devices sector involve higher skills requirements and are better remunerated than earlier manufacturing activities, which had primarily been dominated by unskilled labour-intensive apparel operations. The medical devices industry relies on a more highly skilled

workforce. By 2012, 10-20% of the workforce was comprised of engineers and 10-15% technicians. The remaining 60-80% of direct production workers initially drew from the unskilled labour pool that had served the apparel sector. However, even these positions have begun to require a minimum of technical high school education, which is 9 years primary and secondary education followed by 3 years of technical education. Higher qualifications have helped to raise the average wages in the sector.

Conditions of work, Employment and Labour Rights: The quality of jobs in the sector has also improved over time, in terms of widespread permanent contracts, increased wages, and better working conditions. Two key factors have contributed to these changes: (1) a tightening of the labour market due to the growing number of firms being established and expanding in the country's EPZs; and (2) global industry regulations that require very strict processes to ensure the integrity of the final products.

First, the tightening of the labour market as a result of the constant inflow of new firms in the country's EPZ in the last 5-10 years has resulted in significant increases in labour attrition. For example, in 2012, turnover rates for the industry as a whole were approximately 15% and increasing (CINDE, 2012); that same year, attrition rates of engineers in particular was as high as 35%. This is problematic for firms in the sector; due to high levels of regulation in the industry, quality control is essential and the integration of new staff thus requires significant training in firm protocols and processes.⁴⁸

Firms thus began to take a more proactive approach to the retention of human capital. This translated not only into improved wages, but also to increased job security through permanent contracts with over 90% of employees hired as permanent by 2012. Although the salaries paid by the great majority of EPZ firms were already higher than the reported median salary paid in the Costa Rican local economy for the same occupation group in 2005 (Jenkins, 2005), these salaries increased by as much as 88% between 2005 and 2011, considerably outpacing inflation (Bamber & Gereffi, 2013b).⁴⁹ In addition, the vast majority of MNC subsidiaries operating in the country are managed by Costa Rican nationals.

⁴⁸ For example, on average, line workers take six to eight weeks to reach full productivity, in addition to one- to two-week induction training and constant on-the-job supervision and development.

⁴⁹ Other benefits included meals, transportation to and from work, training, and financial support for continued education amongst others.

The global regulation of the sector has also contributed to a culture of health and safety and improved working conditions. Since firms require the sector-specific ISO 13845 quality management system certification in order to participate in the GSC, and they must meet the Food and Drug Administration and European Community requirements for sale in those markets, operations are subject to regular inspection by foreign public auditors. This is further supported by a strong general shift in the Costa Rican private sector towards occupational health and safety.⁵⁰

Costa Rica has ranked in the top 15 of the World Economic Competitiveness Forum's "Labour-Employer Relations" global ranking numerous times between 2010 and 2015 (WEF, 2011, 2012, 2013, 2014, 2015). Nonetheless, freedom of association and the right to strike continue to be limited in practice. Although Costa Rica has legally established the framework allowing for freedom of association, the right to organize, the right to collective bargaining and the right to strike, and has ratified the ILO's eight core conventions, it has a history of limited trade union activity.⁵¹ "Solidarity associations" tend to have greater importance in the sector; these are collectives at the firm level which provide members with benefits such as interest free credit and housing loans.

Skills Development: There have been important advances in the area of skills development in medical devices, which has enhanced labour mobility across the sector. In 2012, a one-week introduction to the medical devices sector course was launched at the National Institute for Learning (INA), which covers sector wide issues of good manufacturing practices, working in cleanrooms and documentation. A Medical Devices Engineering programme was created at the Instituto Tecnológico de Costa Rica (TEC), launching in 2015 with 46 students in its first year (TEC, 2015). Numerous other industry specific training programmes are also in the pipeline at the technical level (Prensa Libre, 2015).

Key Policy Actions:

- **Investment policy focused on attracting firms in high-skilled sectors:** Since the mid-to-late 1990s, Cinde, a private entity charged with promoting

⁵⁰ Many of the large firms in the medical devices sector, including Boston Scientific, Baxter and Hospira, have been recipients of the national "Preventico" award, recognizing exceptional commitment to worker health and safety.

⁵¹ Some reports highlight that union leaders are openly discriminated against with dismissal, as the law does not require employers to justify termination of contracts (ITUC, 2007; Mosley, 2008).

FDI in the country has actively sought high-skilled manufacturers, with a higher tendency to remain in the country, to make capital-intensive investments in the country. These higher skilled workers appear to be more satisfied with their working conditions than those that had been engaged in lower value apparel operations (Moran, 2002).

- ▶ **Employers standardize job titles to facilitate recruiting, enhancing mobility:** Firms have instituted standardized job titles and categories that allow HR departments and hiring managers to better understand candidates' level of experience, expertise and training across different companies (WEF, Forthcoming), which has enhanced labour mobility across the sector.
- ▶ **National Labour legislation extends to EPZs:** Unlike many countries around the world, national labour legislation and inspections in Costa Rica are equally applied to EPZs and the rest of the economy. Nonetheless, there is low unionization in the country as a whole (Jenkins, 2005).
- ▶ **Labour Provisions included in key Trade Agreements:** As a member of CAFTA-DR, this agreement helped to consolidate the country's position as a key contributor to the industry (Koehler-Geib & Sanchez, 2013). As a result, Costa Rican trade is also subject to the labour provisions included in the trade agreement with the US.

4.4.2 Mexico in the Aerospace GSC

Mexico's growth in the aerospace sector has been dramatic; exports have increased approximately 20% per annum for the past 15 years and the country had become the 15th largest exporter, by value, in the industry by 2015. Although Honeywell and Westinghouse have been manufacturing basic components in the country since the 1970s (Carrillo & Hualde, 2013; EY, 2014a), work in the aerospace sector really began in the mid-1990s, when GE established a large engineering operation in Queretaro. Mexico led global investments in aerospace between 2001 and 2011. By 2014 there were 289 companies operating primarily manufacturing facilities in the country and US\$6.5 billion in exports.

Significant product upgrading has occurred. Aerospace activities are no longer confined to lower value manufacturing, but now included more sophisticated

products, sub-assemblies as well as some engineering and design. Mexico is strongly engaged in the North American regional production network. The majority of investment is from the US (41%) and Canada (40%), although 80% of firms by number are of US origin.

A proactive industry development policy articulated in the 2007 and 2014 National Flight Plans, as well as *Pro-Aerea* 2012-2020 focused on establishing ways in which the different aerospace clusters across the country can work together to develop alternatives for the entire Mexican value chain, including highlighting niche areas for development in different clusters. Three states dominate the sector's growth to date: Baja California, Queretaro and Chihuahua, accounting for 70% of sector investments respectively between 1999 and 2014 (PWC, 2015). Of the three, Queretaro generates the highest exports per revenue and accounts for almost half of Mexico's aerospace investment.

Querétaro's aerospace cluster accounts for one-sixth of the country's aerospace exports. Queretaro's development was anchored by GE Aviation and Bombardier, which established operations in 1994 and 2006, respectively. The French group Safran and Spanish airframe manufacturer Aernnova quickly followed suit, establishing operations in 2007. The state has developed capabilities in airframes, engines and MRO operations, and its long-term strategy is focused on precision-machining capabilities along with continued MRO services. By 2014, there were 34 firms operating in the state, almost all foreign and with a number of direct suppliers to the global leaders, Airbus and Boeing.

Job Creation: Aerospace employment in Queretaro alone is approximately 6,500 - 8,000 (EY, 2014a), and the combined national workforce of 45-50,000.⁵² While job creation in Queretaro has been lower than in other parts of Mexico, the plants operating in the state have invested in a more highly skilled labour force, with an emphasis on engineering talent including aerospace and manufacturing engineers. Other states draw heavily on a manufacturing workforce that also services the automotive and electronics industries.

Conditions of Work, Employment and Labour Rights: Although foreign aerospace manufacturers such as Bombardier have invested in Mexico to take advantage

⁵² References vary on the exact number of employees in the sector. However, six of the large aerospace MNCs (Airbus Helicopters, Bombardier, GE Aviation, Honeywell, Safran and Zodiac Aerospace) employed 22,250 people between them (Bamber & Gereffi, 2013a; EY, 2014a; PWC, 2015).

of labour arbitrage opportunities,⁵³ wages are higher than in other manufacturing sectors in Mexico (Gallant, 2014). In addition, with the influx of firms over the past ten years, employers have competed for new recruits based on additional job perks, including meals and transportation. In foreign firms such as Bombardier, working hours are typically respected and overtime is reportedly only on an occasional basis.

Due to the zero-defect nature of the aerospace industry, a work culture that encourages ongoing learning through human error recognition is essential. Organizations such as Bombardier and Gulfstream thus seek to promote open lines of communication between workers, supervisors and management in their Mexican plants (Martínez, 2012).⁵⁴ Union activity is permitted as well as collective bargaining (R. Salinas, 2014).⁵⁵ Analysis of collective agreements at 14 of Mexico's aerospace firms suggests that these agreements provide considerable flexibility to employers in terms of working hours, task adjustment and working conditions (R. Salinas, 2014). Despite record orders on the books, aerospace is characterized by low volume, high mix production which necessitates a multifunctional work team (Bamber & Gereffi, 2013a).

Skills Development: Queretaro's well-educated and skilled workforce is the main attraction for aeronautical manufacturers. Queretaro has over 50 higher education institutions in the state, with a strong focus on engineering. In 2009, engineering graduates accounted for 41% of undergraduate degrees, while 65% of master's degree programmes available in the state were in engineering fields. The industry is characterized by continuous improvement requirements (stipulated by lead firms), which translates into ongoing job training in all suppliers.

Key Policy Actions:

- **Industry safety regulations necessitate significant and open lines of communication between workers and management providing a forum for dialogue and for the reinforcement of collective agreements, in particular, in framework agreements:** Private governance mechanisms

⁵³ Labour costs provide a 30% discount to manufacturing in the US, including additional transportation costs (R. Salinas, 2014).

⁵⁴ Gulfstream has been named among the top 20 Great Places to Work in Mexico for the past four years.

⁵⁵ Although early CBA's determined that the unions would provide firms with all the necessary labour, in reality, firms take care of the recruiting and employees enrol in the union almost as an administrative requirement (2014). This has raised the concern that these are "ghost unions".

in the aerospace GSC require suppliers to develop a formal ongoing process improvement system, designed to help increase efficiency but also decrease the potential for human error which can have fatal consequences. These systems must be in place to qualify as a supplier for the major firms, Airbus, Boeing, Bombardier and Embraer, and in turn their direct suppliers. This has helped to foster greater communication and openness between workers and management than in other GSCs.

- ▶ **Collaborative investment in an industry university provides access to global labour mobility:** A key initiative in building the sector was the creation of the National Aeronautics University of Queretaro (UNAQ) in 2007, which housed several technical programmes developed in public-private initiatives and it created the first aerospace engineering programme in the country. State investments in UNAQ amounted to US\$21 million by 2009. In addition to training teaching staff in both Canada and Spain, UNAQ draws teachers from aerospace firms working in the region. By 2012, there were 488 technical and professional students at UNAQ (Bamber & Gereffi, 2013a). UNAQ's human capital development in the state and scholarship programmes specifically for the industry complemented an already strong engineering training base. Global demand for aeronautics professionals is high due to industry growth and the need to replace the aging workforce; it is estimated that by 2020, over half Boeing's current employees are expected to retire (Murray, 2014; PRISM, 2012).
- ▶ **Collective bargaining and union-government collaboration is active from early stage of investment:** In the state of Queretaro, control of labour in these firms has been assigned to unions. Collective bargaining agreements between employers and these unions are facilitated by the state (R. Salinas, 2014). The power and influence of these unions is, nonetheless, disputed.
- ▶ **NAFTA labour provisions.** In late 1990s the U.S. negotiated the North American Agreement on Labor Cooperation (NAALC), a side agreement to NAFTA. Each member state is responsible for effectively enforcing labour protections. This is the first time worker protections were included in an American free trade agreement, setting the precedent for future labour free trade negotiation in the region, including CAFTA-DR, Chile and Peru. (O'Donovan, 2007).

Box 4. Brazil in the Aerospace GSC

Although Mexico has made significant progress as a components supplier and assembler, Brazil is the only developing country globally to design and manufacture final aircraft. Brazil's participation in the aerospace sector was driven by the state-owned company, Embraer established in 1969. In early years, the company focused on meeting demand in the region –as certification for the world's more developed markets in Europe and the US was difficult. This allowed the firm to build a brand, prove its reliability, and for the government to negotiate safety agreements and train inspectors. Privatized in 1992, Embraer continues to compete with world leaders Airbus, Boeing and Bombardier in the market for mid-size commercial jets, as well as producing planes for the defense sector both domestically and regionally. In addition to Embraer, companies active in the Brazilian commercial aircraft industry include multinational Tier 1 suppliers, local tier 1 suppliers, and local SME suppliers serving both local and multinational Tier 1 suppliers. Brazil has lifted import tariffs on aircraft components, allowing Embraer to source from global suppliers which is important for its competitiveness.

Brazilian aerospace exports in 2010 amounted to approximately \$5 billion. Of these exports, 80% can be attributed to exports of final aircraft, with the remaining 20% consisting of exports of parts and components. Embraer dominates exports of final craft, accounting for \$3.65 billion of the \$4 billion in exports of final aircraft. The industry draws on skilled and semi-skilled labour, although it employs less than 40,000 people (The Brazil Business, 2016). Embraer alone accounts for approximately half of the employees in the sector (17,000). This industry provides important job opportunities for highly skilled workers such as aeronautical, electrical, electronic and mechanical engineers.

Sources: (Haakensen, 2010; Industry Week, 2014; Reuters, 2014).

4.5 Offshore Services GSCs⁵⁶

Offshore services have emerged as a dynamic global sector in the past two decades, providing developing economies in Latin America with the opportunity to upgrade into service-sector exports (Gereffi et al., 2009). Given that human

⁵⁶ This section is drawn from Duke CGGC's extensive work on the offshore services global value chain. An overview of these studies can be found at <http://www.cggc.duke.edu/GVC/project.php?proj=165>

capital is the central input for offshore services, this sector is an important source of employment for more highly skilled members of the workforce.

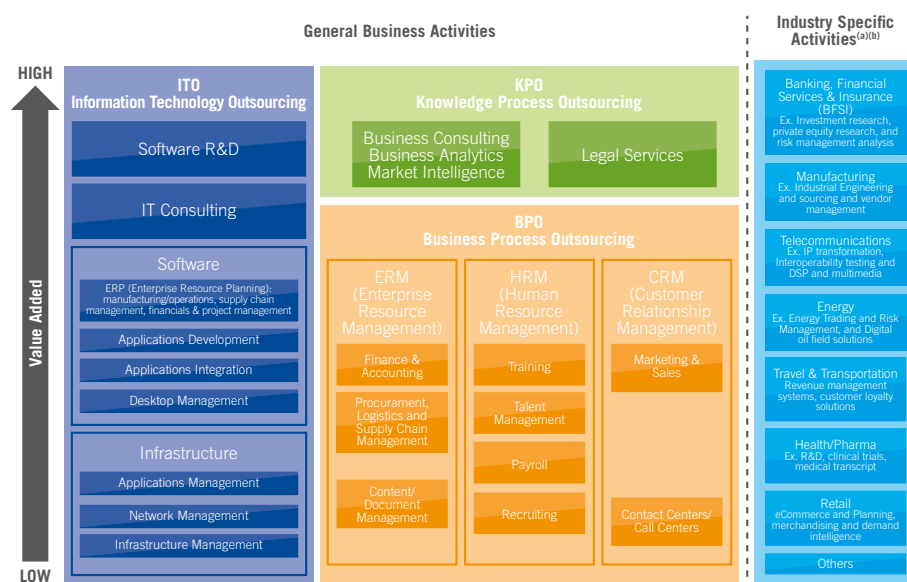
Figure 8 illustrates the offshore services GSC. This includes three broad types of offshore services that can be provided across all industries (general business services): *information technology outsourcing (ITO)*, including software design and development; *business process outsourcing (BPO)*, such as back office functions in call centres, accounting and payroll operations; and *knowledge process outsourcing (KPO)*, such as market and legal research, as well as those services that are industry specific.

Firms providing general business services tend to be process-oriented, while those in the vertical chains must have industry-specific expertise and their services may have limited applicability in other industries. Within these services, ITO contains a full spectrum of low- middle- and high-value activities of the offshore services chain; BPO activities are in the low and middle segments, while KPO activities are in the highest-value segment of the chain.

As a relative latecomer to the industry, LAC has complemented the established offshore service centres around the world, with Argentina, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico, Peru, and Uruguay all opening centres of varying size and expertise (Hernandez, Mulder, et al., 2014). Chile has developed exports in industry-specific services in retail and mining, Costa Rica has excelled as a general service provider in BPO and KPO, while Uruguay has gained a reputation for ITO services. Numerous countries in the Caribbean, including Antigua and Barbuda, Barbados and the Bahamas, provide a wide range of services in the financial sector.

Given the potential gains for sustainable economic growth via this industry, LAC is strategically positioned as a hub for offshore services. The continent offers two distinct advantages over other low-cost locations: Time-zone positioning and language skills. Bilingual employees with Spanish and English skills are essential for serving the growing Hispanic population in the US. This section examines the experiences of Uruguay, Costa Rica and Argentina in the sector.

Figure 8. The Offshore Services Industry Global Supply Chain



Source: Gereffi & Fernandez-Stark, 2010a.

Notes: (a) Industry specific: Each industry has its own value chain. Within each of these chains, there are associated services that can be offshored. This diagram captures the industries with the highest demand for offshore services.

(b) This graphical depiction of industry-specific services does not imply value levels. Each industry may include ITO, BPO, KPO and other advanced activities.

4.5.1 Uruguay

Offshore services, and the IT services industry in particular, represent key economic sectors in Uruguay. Global services exports accounted for US\$1.3 billion worth of revenues in 2013, almost doubling between 2010 and 2013 (Couto & Capobianco, 2012; Uruguay XXI, 2015). Uruguay's software industry began to develop in the 1980s, and now includes more than 370 IT companies. In 2015, exports from this industry alone totalled close to US\$500 million (Correa, 2015). Uruguay's ITO sector includes a growing number of strong domestic companies,

such as De Larrobla, Top Systems, Solur, Memory, Artech, Quanam, Infocorp and Conex (Couto & Capobianco, 2012, Uruguay XXI, 2015).

The arrival of Tata Consultancy Services (TCS) –the leading Indian offshore services company– in 2002 introduced new competencies and forced domestic firms to become more competitive. The entry of TCS ultimately strengthened the competitiveness of the local industry and its ability to provide high-end services. In addition to IT services, Uruguay has expanded its presence as a regional shared services provider, logistics hub and financial services centre. The country has also developed specialized industry-specific software for traceability in its powerful livestock sector that it has begun to export. The majority of firms in these non-traditional service export operations are based in EPZs in or around Montevideo.

Job creation: The offshore services sector employed an estimated 63,000 people in 2015; while three quarters work in a range of non-voice backoffice, finance and logistics functions, approximately 18,000 were employed in the ITO services sector, 80% of whom were highly qualified engineers, analysts, programmers, ITO technicians, and other professionals (Couto & Capobianco, 2012; Uruguay XXI, 2015). Both backoffice functions and ITO positions draw heavily on young employees; younger employees generally find it more difficult to enter the workforce in LAC.

Conditions of Work, Employment and Labour Rights: Based on a largely professional workforce, positions are well compensated. For example, an average monthly wage of a senior procurement specialist is US\$2,500 (Uruguay XXI, 2015). Also, Uruguay has sectoral collective agreements that cover more than 90 percent of the national labour force, which enables social actors to negotiate better conditions for all workers. Employment in the industry is formalized, providing workers access to 20 days paid vacations per annum, a thirteenth monthly salary and social security benefits, including health insurance, pensions and unemployment insurance. These benefits are the same for all Uruguayan workers, as in other industrial, services or commercial activities (only foreigners workers in an EPZ would have the right to choose to affiliate themselves to the social security system or not (ILO-FORLAC, 2014). Working hours, conditions and minimum wages are negotiated through collective bargaining at the industry level.⁵⁷ These benefits are provided

⁵⁷ Working hours provide flexibility for the industry; in call centres, which require 24-hour operations to support clients, the agreement allows for a 6-day work week, but at 39 hours.

to workers on both temporary and full time contracts. Freedom of association was reinstated in 1985 with the democratic election of Mr. Sanguinetti following the military government. The tripartite Wage Councils were reactivated in 2005 to negotiate sectorial wages and other working conditions. Primary concerns for occupational health and safety are focused on stress and physical problems from sedentary positions.

Skill Development: The industry draws on a generally well-educated population in Uruguay; free education through university level, combined with mandatory English language and computer science classes in high school has contributed to high literacy rates, language proficiency and closed the digital divide. Skills development is also central to employer plans.⁵⁸ Several specific training programmes are available through government incentives for the sector as discussed below.

Key Policy Actions:

► **Investment training incentives increase productive work opportunities:**

Investing firms can access a wide range of investment benefits in Uruguay's EPZs, including income tax exemption, duty free imports of equipment and additional benefits. The EPZs have attracted a large number of foreign companies that have set up operations for the export of knowledge services (such as BPO and KPO). In addition, utilities can be contracted as the firm chooses, rather than being obliged to hire public enterprises, and up to 25 percent of total employees may be foreigners. The government also offers access by investing firms to its "Finishing School" –i.e., a programme which subsidizes between 40 and 70 percent of job training costs in specific skills required for the company in sectors including business services, information technology, pharmaceuticals and health, architecture and engineering. Access to these benefits is linked closely to the number of full-time positions provided. Firms in the shared services operations specifically are also required to establish detailed training programmes from Uruguayan professionals. Firms also have access to the government's

⁵⁸ For example, shared services centres are required to present a year-long development and training plan for their Uruguayan employees in order to qualify for EPZ benefits

“Smart Talent” website which serves as a centralized recruitment and job search website for the industry.⁵⁹

- ▶ **Sector-wide Tripartite Wage Councils offer a forum for collaboration on Decent Work issues:** In Uruguay, laws provide for industry-specific tripartite wage councils⁶⁰ that include employers (represented by the National Chamber of Commerce and Services and the Chamber of Industries of Uruguay (CIU)),⁶¹ union representatives and the Ministry of Labour and Social Security, which establish minimum wages for the industry. Individual negotiations and collective bargaining agreements can provide for higher, but not lower, wages (ILO, 2012b).⁶² These councils extend to the EPZs, as well as other national labour law regulations.
- ▶ **Subcontracting law passes responsibilities for social protection onto buyers:** Labour subcontracting is permitted by Law 18,099 (passed in 2007), but buyers are held responsible for ensuring that all service suppliers in their supply chain make the appropriate contributions to employee pension and health funds stipulated by law. Buyers are held jointly liable in the case that these social security contributions are not paid (PwC, 2014).

⁵⁹ The Finishing Schools and Smart Talent programs have been partially funded through the Inter-American Development Bank’s Global Services Support Program.

⁶⁰ Specifically, an amendment to Act 18.566 on Collective Bargaining in 2009 established the institutional framework required by funding the Tripartite Council.

⁶¹ The CIU represents employers in the Wage Councils in a wide range of industries. Both the Chamber of commerce and the CIU are members of the International Employers’ Organization.

⁶² Uruguay is the only country in Latin America with 100% collective bargaining coverage (ILO, 2015).

Box 5. Argentina in the Offshore Services GSC

Argentina is the leader in IT services exports in Latin America, as well as a strong performer in the call centre and back office accounting and legal services segment (ECLAC, 2008; Lopez et al., 2011). The industry began to take shape in the late 1990s, and its IT services exports alone totalled US\$1.5 billion in 2013. Operations have upgraded into more sophisticated functions, although low-medium value services still dominate (Lopez & Ramos, 2014). The establishment of large firms including Motorola, EDS and Intel in Cordoba were important drivers of the industry's growth (Bastos Tigre, 2009; Gereffi et al., 2009). Growing by 112% between 2003 and 2013, the offshore services industry has been the fastest growing jobs generator in the country; by 2013, there were approximately 69,000 employees in the sector (Lopez & Ramos, 2014). More than half of these are university graduates.

The principal constraint impeding further growth in the IT services sector is the shortage of engineering talent. Over the past decade, despite strong employment growth in the sector, the number of students enrolled in engineering courses has been constant, with a relatively high level of attrition in the last years of schooling. In order to address this challenge, in 2012 the government launched a **Strategic Plan for the Development of Engineers**, which aimed to increase the number of graduating engineers by providing students in both public and private universities with a ARG\$25,000 bonus for completing their studies (Lopez & Ramos, 2014).

4.5.2 Costa Rica⁶³

Costa Rica is a pioneer in attracting offshore services to Latin America. Since the mid-1990s the country has been a preferred location for MNCs looking to reduce costs in this industry. These MNCs have set up both captive centres and third party service providers in Costa Rica focused on backoffice operations, which allow companies to use the country as a platform to export competitively priced services. This 'first mover' strategy produced excellent results. In 2005, there were 33 MNCs employing 10,802 people and exporting around US\$387 million. In 2011 there were close to 100 offshore services MNCs operating in the country, exporting US\$1,390 million (CINDE, 2012f).

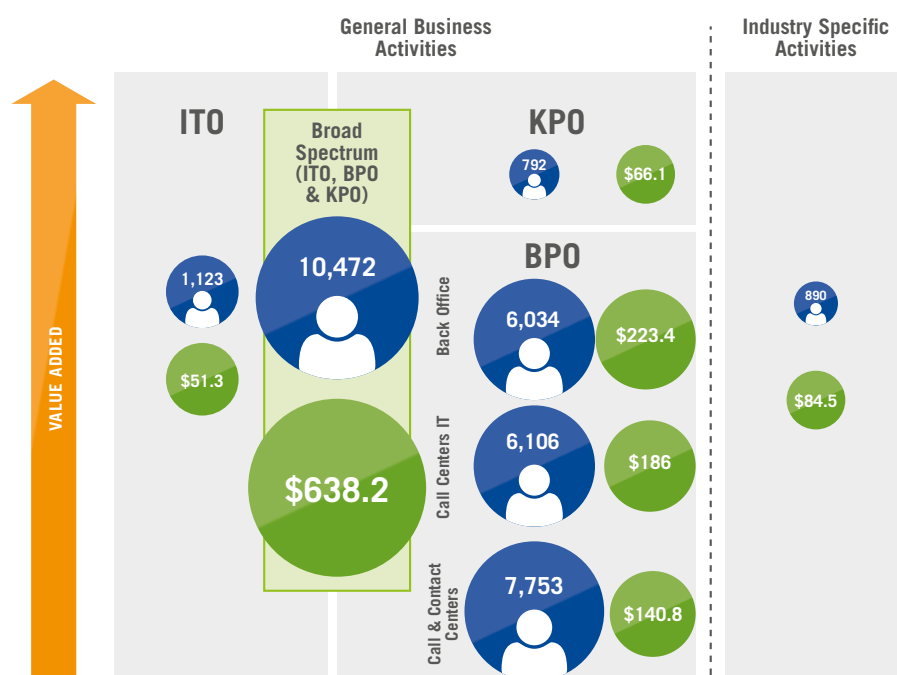
Job Creation: By 2011, the offshore services industry employed 33,170 workers, 1.3% of Costa Rica's total labour force.⁶⁴ After this strong initial growth, however,

⁶³ This case is based Fernandez-Stark, et al. (2013).

⁶⁴ This information is from MNCs operating in the Free Trade Zone (FTZ) regime. According to CINDE, the Costa Rican Central Bank estimates that in 2011 the offshore services industry employed 37,049 and exported almost US\$1.6 billion.

the sector has begun to show signs of human capital limitations. Figure 9 illustrates Costa Rica's participation in the offshore services GSC, based on both the number of firms and employees in each segment. Costa Rica's employees are concentrated in the BPO segment, which accounts for 60% of employment within the industry (19,893 employees), compared to 3% (1,123 employees) in ITO, 2% in KPO (792 employees), 32% in Broad Spectrum firms offering BPO, ITO and KPO services and 3% in Industry-Specific services (890 employees). Employees are generally moderately or highly skilled, and graduated from technical schools (BPO) or university (ITO & KPO). Competition for technical graduates is intense, with recruitment teams offering contracts to grade 10 students, who still have three years of school remaining before graduation (Field Research, 2012).

Figure 9. Offshore Services Industry in Costa Rica: US\$ Exports (Millions) and Number of Employees by Segment, 2011



Source: Duke CGGC based on 2011 data provided by CINDE.

Note: Green circles illustrate exports in US\$ million; blue circles show number of employees.

Conditions of Work, Employment and Labour Rights: The offshore services industry in Costa Rica is beginning to show signs of saturation, with a limited supply of human capital to support the influx of MNCs, demonstrated by both high attrition rates and salary inflation. According to CAMTIC, there is a shortage of as many as 7,000 employees in Costa Rica's offshore services sector (Field Research, 2012).

These labour shortages have forced companies to offer a variety of benefits to workers, including: higher salaries to decrease the labour turnover; flexible schedules to allow workers to continue their formal education in technical centre or universities; fast track career development, extended vacations and signing bonuses and perks like gym facilities and discounts in retail stores.

Skills Development: The industry draws from a generally well-educated population, with a high degree of proficiency in English, cultural affinity with the US, and a global perspective. Since the industry's launch in Costa Rica in the late 1990s, MNCs have served as critical conduits of knowledge within the service sector. Companies have their own internal training programmes and also provide incentives for employees to continue with their careers. These firms place a premium on training focused on technical skills, interpersonal abilities and languages. Well-developed internal training programmes have allowed these firms to respond rapidly to the skills needed to compete in the global market. In addition to significant on-the-job training, they have close relationships with universities, technical high schools and the national training institute INA, among others.

In addition, MNCs in Costa Rica have encouraged employees to continue with their professional development by facilitating and partially financing university studies. Firms, especially in the BPO sector, mentioned that around 70% to 75% of their employees are studying to obtain a university degree and some companies reimburse up to 50% of the tuition costs. Unlike other countries participating in the offshore services industry, in Costa Rica, firms also pay for workers' certifications in certain technologies, usually a cost assumed by the individual.

Key Policy Actions:

- ▶ **Firms investing in skills for long term economic upgrading, facilitating access to better jobs in the future:** The private sector is focused on developing a talent pipeline for human capital with a view to upgrading into higher segments of GSCs. Firms in the sector recruit high-school students to join the workforce in basic technical positions. Vocational training is provided to help them fulfil their entry-level functions. They

are then encouraged to pursue further education, with time off for study and, in some cases, even the reimbursement of tuition fees for those pursuing university degrees. Firms work proactively with universities to design curricula to ensure that their long-term needs are met.

- **Language training integrated into public schools increases employment access in better paying jobs:** Concurrently, Costa Rica's Ministry of Public Education has established bilingual public high schools with a focus on the call centre sector to meet strong demand for staff fluent in English in the offshore services industry, thus ensuring an ongoing supply of entry-level graduates for the industry, but also expanding access to the industry for segments of the population that previously could not afford English classes. In 2008, the government launched Costa Rica Multilingüe, a not-for-profit organization to improve communication skills for greater personal and professional development. Central to the organization's strategy is the National English Plan, which aims to ensure that all students graduating from high school have an intermediate or advanced level of proficiency in English by 2017.

5. Key Issues, Good Practices and Lessons Learned

This section examines the LAC experiences presented in the case studies to identify lessons learned in the region and to inform regional policy for sustainable GSC participation in line with the Decent Work agenda. Our cases in the report provide examples of effective mechanisms for achieving economic and social upgrading in a wide range of industries and countries with diverse levels of economic and institutional development. These cases further illustrate where targeted industrial policies have deepened integration into GSCs covering investment promotion and incentives, trade facilitation and openness, and infrastructure development amongst others. The section first discusses the types and nature of work created as a result of economic upgrading in GSCs, followed by an analysis of the public, private and social governance mechanisms that contributed to social upgrading achievements.

Six general findings regarding the types of jobs and nature of work created by the participation in GSCs can be identified.

- (1) **The quantity and quality of jobs created in GSCs are interconnected and relate to the stage of the particular value chain in which a country is positioned; the process of “GSC economic upgrading” within any one chain generally leads to fewer but better jobs in terms of skills intensity, conditions of work, formal employment contracts and wages.** Job creation is highest in the lower-value segments of the GSC, while upgrading into higher value segments generally creates fewer but better quality jobs. For example, Peru’s agricultural sector employs approximately 1.5 million people, although employment of professionals was comparatively very small. In Chile’s engineering sector at the height of the global copper boom, mining-related engineering services employed less than 3% of the 180,000 service jobs. In the Costa Rican medical devices sector, only 10-20% of the

workers are engineers working in the more sophisticated stages of the chain, such as in the Boston Scientific R&D centre, while 60-80% (11,400- 15,200) are in assembly-line operations. Thus, entry of LAC countries into the labour-intensive segments of their respective chains has generated a large number of jobs. These jobs are generally at lower stages of the value chain, which are more vulnerable to changes in GSC competition. However, due to the need to meet international standards of global buyers, these workers are typically more skilled than those in similar positions that serve the local economy.

- (2) **Yet, economic upgrading across sectors via “structural transformation” changes the skill level of labour required at the lowest stages of the value chain and has important implications for the Decent Work agenda.** The labour-intensive stages of the value chains in agriculture and apparel require lower-level skills than the manual labour stages of the advanced manufacturing chains such as aerospace and medical devices. Assembly production in higher-value sectors such as advanced manufacturing requires higher skill levels (via formal education or technical training), provide better wages, and better working conditions than in a low-value sector (like Nicaragua’s apparel sector). Quality standards, levels of automation, certification requirements, and requisite technical skills all rise when countries move into advanced manufacturing. The cases of Costa Rica, Mexico and Uruguay in higher-value industries all illustrate that the widely acknowledged Decent Work shortcomings, such as lack of access to productive work, adequate remuneration, and formal contracts, is less prominent than in agriculture and apparel sectors. In the case of Costa Rica, the country’s participation in BPO call centres, which comprise the lowest stage of the offshore services GSC, provided workers with not only the flexibility but also the financing to continue their education. Thus, GSC policy supporting upgrading into higher value chains can have important gains for labour conditions in international trade.
- (3) **Participation in the lower value stages of less sophisticated supply chains contributes to poverty alleviation through job creation by generating employment for lower skilled workers, but this also be accompanied by challenges for decent work that should be addressed**

in order to align opportunities for economic and social upgrading. In agriculture and apparel, jobs were generated for the primarily low-skilled, unemployed labour forces in rural Brazil, Dominican Republic, and Peru, rather than for family labour on subsistence farms. Rural poverty levels in coastal Peru –areas that have played a key role in Peru’s agricultural boom– declined from 69% in 2004 to 38% in 2013 (INEI -Encuesta Nacional de Hogares, 2014). Today, in several of these areas, such as Ica, labour market conditions are tight in most job profiles (Field Research, 2015). Similarly, Nicaragua’s apparel sector, which employed some 70,000 in 2012 (Frederick et al., 2015), drew heavily on previously unemployed and self-employed segments of the labour force. Conversely employment in the lower value segments of more sophisticated chains, such as aerospace and medical devices, generates fewer jobs (e.g. medical devices in Costa Rica employed less than 20,000 after 15 years in the industry) and workers must have at least a high school education. Thus, in the formulation of GSC policy as it relates to social gains, more technology-intensive value chains should not be expected to solve the unemployment problem among impoverished segments of the population.

- (4) A gendered division of labour is most apparent in lower-value stages of the GSCs in which LAC countries participate, partially as the result of perceived labour skills.** In agricultural chains, commercial farming tends to be male dominated (e.g., where strength is required), while the packhouses have a much higher percentage of female labourers due to perceived dexterity in handling fragile produce.⁶⁵ Women tend to earn more as they move to higher value stages of the chain.⁶⁶ However, in labour-intensive sectors like apparel, women tend to be concentrated in the lower-value assembly segments of the chain, and in some countries globally, women can account for up to 90% of this labour force (ILO, 2014). In Nicaragua, 63% of the labour force is female (Fernandez-Stark & Frederick, 2011). These perceptions, and the gender-specific roles they have helped to create, have greatly

⁶⁵ For example, in the Dominican Republic and Peru, upgrading into the packing segment has a distinct female employment focus. In Peru, 70-80% of the packing plant labour at the three leading asparagus exporters are women (León, 2012).

⁶⁶ In Peru’s asparagus and grape operations, they earn 10% more than men on average (León, 2012)

increased the participation of women in GSCs. Thus, GSC analysis can contribute toward the formulation of policies that will promote gender parity by identifying chains where the roles and opportunities for men and women fit the conditions of the local labour force, and where labour can lead efforts for men and women to receive equal pay for the same work.

- (5) **Formal sector jobs are concentrated in export-oriented segments of GSCs, although in cyclical and seasonal industries, such as apparel and agriculture, there is a high incidence of temporary or informally contracted labour.** This appears to hold true across industries and value chain segments. Formality, even in the case of temporary contracts, provides access to social benefits, such as health care, vacation days, workers compensation, amongst other benefits. This is particularly notable in economies such as Peru and Nicaragua, where informality is as high as 60-70% (Bair & Gereffi, 2013; ECLAC/ILO, 2013).
- (6) **Skills development plays a critical role in improving labour gains and economic upgrading.** Our preceding analysis illustrates that workers with higher skill levels can access higher stages of the value chain and face fewer Decent Work shortcomings than workers with lower skills. Thus, the implementation of policies to strengthen skills development can contribute to social upgrading in three main ways: (1) it can help labour mobility between firms, encouraging firm recruiters to improve wages and working conditions to attract talent, as in Costa Rica's offshore services sector; (2) it can promote cross-border labour mobility, as in the aerospace sector in Mexico and mining in Chile, where global labour demand is high for a relatively small pool of specialized workers; and (3) it can foster upgrading for workers in one stage of the chain into a higher value stage of the chain with better wages and working conditions, as in the Peruvian horticulture sector where even on-the-job training in packaging operations resulted in higher wages for women.⁶⁷

⁶⁷ The role of skills development in economic upgrading is already well established in the literature (Gereffi, Fernandez-Stark, & Psilos, 2011).

Governance Mechanisms to Support Upgrading

The cases in this report show that, under appropriate conditions and policy frameworks, economic and social upgrading can go hand-in-hand. In many instances, strategic policy interventions have been a crucial stimulus in shaping these outcomes. Economic upgrading and social upgrading in LAC have been affected by the interaction of not just private, but also public (governmental) and social (representative trade unions and organized civil society) actors. The relationship between these spheres is complex; there are tensions, conflicts, displacement, complementarity and synergy between public, private, and social forms of governance,⁶⁸ and the roles played by each actor often vary by country and sector. We will try to distill a few key patterns below.

Table 8 provides a summary of our sectoral and country cases, followed by a discussion of GSC governance mechanisms observed. While each of the cases highlights improvements along at least one of the three dimensions of social upgrading (job creation, conditions of work and labour rights, and skill development), social upgrading across all three dimensions simultaneously was rare. In the context of Decent Work, therefore, we see improvements along some indicators, but shortcomings remain in other areas.

⁶⁸ See Section 2.3. on Private, Public and Social Governance: Considerations for Economic and Social Upgrading and Decent Work for a more generalized discussion of these roles.

Table 8. LAC Case Examples of Social Upgrading in GSCs and the Role of Key Actors

	Case Examples	Lead Actor & Governance	Main Mechanisms to Drive Social Upgrading	Social Upgrading Outcomes (the process of achieving decent work in GSCs)	Summary of key areas of Decent Work Impacts
HIGH VALUE AGRICULTURAL	Brazil – Horticulture GSC – Production & Packing	Sindicato dos Trabalhadores Rurais (STR) (Social) Ministry of Labour (Public) Employers association VALEXPORT (Private)	Threat of strike action critical in time sensitive sector	Enhanced working conditions: Increase in formal employment and access to social protection; improved health and safety – provision of protective clothing	- Adequate earnings - Social security - Decent working time - Safe work environment
	Dominican Republic – Bananas GSC – Production & Packing	Fairtrade International (Social) Labour Inspectorate (Public)	- Certification and audits of plantations to gain access to niche market - Training and professionalization of labour inspectorate	Enhanced working conditions: Increased in formal employment, improved health and safety. Reduction of worst forms of child labour.	- Social security - Decent working time - Safe work environment
	Peru – Horticulture GSC- Production & Packing	National government (Public) US government (Public)	- A combination of factors, mainly tax and labour incentives in the Agro-Export Processing Law and investment in infrastructure - Labour provisions included in the trade agreement with the US	- Job creation, Access to Social Protection: Significant increase in formal employment in subsistence farming area; poverty reduction; driver of female employment in higher paying jobs - Increase access to formal employment	- Employment opportunities - Adequate earnings & productive work - Social security - Safe work environment - Equal opportunity & treatment in employment

(continues...)

	Case Examples	Lead Actor & Governance	Main Mechanisms to Drive Social Upgrading	Social Upgrading Outcomes (the process of achieving decent work in GSCs)	Summary of key areas of Decent Work Impacts
EXTRACTIVE SECTOR	Chile – Services in the Extractive Sector (Mid, High value stages)	National government (Public) MNCs (Private)	▶ Subcontracting law places burden for compliance with formal work and contributions to social security funds with lead buyer ▶ Standards of leading MNCs require strict adherence to safety standards ▶ Incentives for training	▶ Enhanced working conditions, access to social protection, and skills development: Increase in access to formal employment; improved health and safety conditions in mining operations	▶ Employment opportunities ▶ Adequate earnings & productive work ▶ Social security ▶ Safe work environment
APPAREL	Nicaragua and Haiti – Apparel- Cut-Make-Trim	US Government (Public) International organizations (ILO and IFC) (Public) National government (Public) FLA and codes of conduct among major brands (including for example Levis, Fruit of the Loom and Sara Lee) (Private)	▶ Government signed on to the Better Work programme ▶ Labour provision in trade agreements to access US markets for least developed countries in LAC based on compliance with core labour standards & national labour legislation ▶ Financing conditioned to compliance with Better Work programme	▶ Job creation & enhanced working conditions and social protection: Increase in access to formal employment.	▶ Social dialogue ▶ Employment opportunities ▶ Adequate earnings & productive work ▶ Social security

(continues...)



	Case Examples	Lead Actor & Governance	Main Mechanisms to Drive Social Upgrading	Social Upgrading Outcomes (the process of achieving decent work in GSCs)	Summary of key areas of Decent Work Impacts
ADVANCED MANUFACTURING	Costa Rica -Medical Devices – Components-Assembly (Low & Mid-value segments)	Lead firms (Private)	▶ Standardizing job titles, training and experience across industry	▶ Skills Development: Facilitated hiring and increased labour mobility	▶ Employment opportunities ▶ Adequate earnings & productive work
	Mexico – Aerospace-Components-Assembly (Low & Mid-value segments)	Lead firms (Private) Government of Queretaro State (Public)	▶ Establishment of industry-specific university as a result of cooperation between firms & state government	▶ Skills Development: Access to highly technical education with high international labour mobility	▶ Employment opportunities ▶ Adequate earnings & productive work
OFFSHORE SERVICES	Costa Rica – Offshore Services (Low & Mid-value segments)	Lead firms (Private) Educational institutions	▶ Cooperation between firms & educational institutions on curriculum design ▶ Incorporation of key industry skills into national education curriculum at high school level	▶ Skills Development: Financing & schedule flexibility for completion of university	▶ Employment opportunities ▶ Adequate earnings & productive work
	Uruguay – Offshore Services (Low & Mid-value segments)	IDB provided technical assistance and finance (Public) National government – Ministry of Finance (Public) Uruguay XXI (Public-Private agency)	▶ Implementation of ‘finishing schools’, access to which was linked directly to size of job creation	▶ Job Creation & Skills Development: Specific skills development for the fast growing offshore services industry – including soft skills	▶ Employment opportunities ▶ Adequate earnings & productive work ▶ Social dialogue ▶ Workers representation

Source: Authors.

Public Governance (National and Foreign Governments and International Organizations):

At the national level, strong examples emerged in the case studies examined in this report regarding the formal sector and increased access to social protection. For example, in Peru, a combination of incentives in the Agro-Export Processing Law, heavy and targeted public investment in infrastructure and favourable international prices fostered increased formal-sector employment in a setting that is typically characterized by high degrees of informality. In Chile and Uruguay, legislation regarding subcontracting that places the responsibility with the lead firm to ensure compliance with labour legislation by contracting firms in its supply chain also helped to protect employees of labour-recruitment agencies from informal and vulnerable work. This introduced incentives for lead firms to be more selective regarding the suppliers that they contracted. Finally, although labour abuses in EPZs are a broader concern for Decent Work in GSCs, the countries examined in LAC either facilitate GSC participation through EPZs (e.g., Argentina, Brazil and Chile) or did not exempt the firms in EPZs from national labour legislation (e.g. Costa Rica, Dominican Republic and Nicaragua.) In the Dominican Republic, capacity building, improved wages, more demanding skill requirements in recruitment and the professionalization of the public labour inspectorate helped to reinforce inspection capacity and resulted in improved compliance with labour standards.

International organizations, such as the ILO, have played an important role in encouraging national legislation to address social upgrading issues, including the elimination of labour abuses. In 2011, the United Nations Human Rights Council endorsed the UN Guiding Principles on Business and Human Rights (UNGPs), often referred to as the Ruggie Principles, under the framework of “protect, respect and remedy”. The UNGPs articulate distinct but complementary duties and responsibilities of States and businesses and apply to all States and business enterprises, both transnational and others, regardless of size, sector, location, ownership or structure. They are not legally binding, but they do build on the implications of existing legal obligations that States have adopted under international human rights law. The UNGPs have had a great influence in the upgrading of social standards and brand codes of conduct. The UNGP reporting framework refers to company due diligence as: “An ongoing risk management process that a reasonable and prudent company needs to follow in order to identify, prevent, mitigate and account for how it addresses its adverse human rights impacts. It includes four key steps: assessing actual and potential

human rights impacts; integrating and acting on the findings; tracking responses; and communicating about how impacts are addressed.”

In relationship to GSCs, according to the UNGPs, the responsibility of a business enterprise to respect human rights extends beyond its first-tier supplier relationships to cover all activities and relationships. In this light, companies should “...seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.” The operationalization of the due diligence concept to prevent human rights abuses has been a complex challenge (ILO, 2016).

For example, the inclusion of labour side agreements or other types of labour provisions in trade agreements⁶⁹ with the US, including NAFTA, CAFTA-DR, Chile, Haiti (HOPE) and Peru –a key market for LAC in GSCs– was an important driver for improvements in the region. In the Dominican Republic, these instruments contributed to the professionalization of the labour inspectorate and promotion of a model of compliance through dialogue and training as opposed sanctioning firms or “driving them out of business” (Schrank, 2013, p. 305). In Haiti and Nicaragua, exports to the US through the TPLs and access to international financing through the IFC, were linked to compliance with labour standards laid out by the ILO-IFC Better Work programme. In Peru, the 2009 FTA with the US included compliance with core labour standards as well as capacity building initiatives to strengthen unions and improve dispute-resolution mechanisms in the country. Most codes of conduct are inspired by the ILO’s Core Labour Standards (CLSs), also referred to as the fundamental conventions.⁷⁰

69 The same can be said for the inclusion of a labour chapter in the Economic Partnership Agreement (EPA) between the EU and CARIFORUM.

70 The CLSs derive from eight labour conventions:

- ▶ Freedom of association and the effective recognition of the right to collective bargaining (Convention No. 87 & No. 98)
- ▶ The elimination of all forms of forced and compulsory labour (Convention No. 29 & No. 105)
- ▶ The effective abolition of child labour (Convention No. 138 & No. 182)
- ▶ The elimination of discrimination in respect of employment and occupation (Convention No. 100 & No. 111)

The ILO’s Declaration of 1998 is rooted in the rights and principles emanating from these fundamental conventions; members states are expected to respect and promote (according to Article 2 of the Declaration of 1998) the principles and rights referred to in the fundamental conventions. Nevertheless, the obligations of the Declaration of 1998 are not identical to the binding effects of a ratified convention (as Declarations are not binding, but ratified conventions are binding).

At the international level, the International Programme for Eradication of Child Labour (IPEC) of the ILO has implemented a campaign on “End child labour in supply chains - It’s everyone’s business!” commemorated during the World Day Against Child Labour on 12 June 2016.⁷¹ Similarly, a Child Labour Platform has been created, which is a business-led forum for tackling child labour in supply chains, with the aim of identifying obstacles to the implementation of the ILO Conventions in supply chains and surrounding communities, proposing practical ways of overcoming these obstacles and catalysing collective action on these initiatives.

Private Governance (Lead Firms): Private governance was strongest in the skills development dimension and with respect to health and safety conditions, where these directly affect the economic performance of firms. This was prominent in more sophisticated sectors and in higher value stages of GSCs, although all cases contain training to support productivity improvements for firm-level competitiveness.⁷²

In Chile and Peru, the strict global health and safety standards of the MNC mining firms, eager to avoid the costly shut-downs associated with accidents, required service firms to adhere to advanced safety requirements before national legislation and enforcement had caught up.⁷³ These standards have also influenced the formulation of national policies in health and safety in both countries. This illustrates private sector leadership, especially by foreign companies, that sets high social upgrading standards.⁷⁴

In isolation, these efforts have been important. Nonetheless, cooperation and coordination with other actors could enhance the impact of these initiatives on Decent Work and improve overall competitiveness in the sector. For example, while on-the-job training develops skills at a personal level, it has limited ability to improve labour mobility without formalization via certification programmes linked with national educational and training institutions.

⁷¹ The World Day campaign page is available at: www.ilo.org/ChildLabourWorldDay

⁷² Mechanisms for skills development varied. On-the-job training was a widely used tool. More direct mechanisms of social upgrading via skills development included the offshore services sector in Argentina, Costa Rica, and Uruguay, where firms allowed workers flexible scheduling so that students could complete university degrees while working. In the case of Costa Rica, some firms even offered tuition reimbursement.

⁷³ In Chile, mining has the lowest accident rate in the economy.

⁷⁴ There is a large literature on the corporate social responsibility initiatives of private firms (e.g., Gereffi and Lee, 2014), but we don’t highlight that in our case studies in order to retain a focus on workplace conditions and labor initiatives.

Social Governance (Workers & Civil Society Organizations):

The case of organized labour and its potential for industrial action in Brazil underscores the efficacy of the threat of a strike in time-sensitive GSCs as a means to improve workplace conditions. It also highlights an important tendency, observed in several cases, that employers have responded to the threat of strike action by unions with their own company initiatives aimed at increasing worker loyalty to the firm via added benefits and social improvements. This is apparent in Costa Rican GSC participation, the Peruvian agricultural sector and the Mexican aerospace sector. In these cases, 'solidarity associations,' firm-led unions or simply HR practices have offered a variety of benefits, ranging from training, bonuses, housing, meals, child care facilities and transportation to access to low-cost credit. Although collective action was not engaged, the threat of this potential action to undermine investment spurred private firms towards proactive improvements.⁷⁵ Nevertheless, the asymmetrical bargaining power between workers and firms (involving the fear of being fired, as mentioned in the case of the Dominican Republic) remains a strong constraint to worker organization and collective action.

The strongest case of civil society organization activity to drive social upgrading is Fairtrade International in the Dominican Republic's banana export sector. Product upgrading into this niche market segment was fundamental for the country's continued competitiveness in the banana sector. Fairtrade has simultaneously helped to improve the conditions for both Dominican and undocumented Haitian migrants working on certified plantations by improving access to documentation for Haitian migrants, improving access to health insurance and paid time off and facilitating social dialogue with governments and employers to address the poor working conditions of migrants in particular. It also helped reduce the worst forms of child labour on plantations.

Multistakeholder Collaboration (Public, Private & Social Actors):

In practice, coordinated multi-stakeholder governance mechanisms for social upgrading were more common than independent initiatives in the cases analysed. These were generally led by firms, the national government, labour or international organizations (like the ILO), and strengthened by other stakeholders

⁷⁵ In Peru's agricultural sector, organized labour efforts have increased thanks to access to capacity building and links with international labour unions, such as the International Confederation of Trade Unions. Firms were pressured to improve social upgrading by conditioning their access to trade finance via the IFC.

complementing policy action based on their respective areas of expertise. For example, in Nicaragua and Uruguay, tripartite commissions helped to determine sector-wide minimum wages and working conditions in the apparel and offshore services sectors respectively. In the Dominican Republic, the US engaged in capacity building support for the labour inspectorate as a result of the US-Dominican Republic trade agreements.

Multi-stakeholder action was also strong with respect to skills development in Chile, Costa Rica, Mexico and Uruguay. In Chile, the government provided direct tax incentives for firms to develop worker skills. Firms were then free to work with either educational institutions or training providers to engage in workforce development. In Costa Rica, medical devices firms worked with the National Training Institute, financed by a 2% fee on salaries, to provide an industry-wide introductory course to help prepare workers to access job opportunities in the sector. In Mexico, the state government financed the establishment of specialized university for the aerospace sector, while companies provided both the curriculum and equipment with staff serving as teachers in the university. This ensured a match between the skills provided and the needs of firms. In Uruguay, the IDB together with the national government established finishing schools and the Smart Talent platform to improve skills for the industry and facilitate labour mobility. Firms provided input on the relevant skills required.

Increased stakeholder participation in these initiatives has helped to institutionalize the support for social upgrading and ensure its sustainability over time. For example, the STR agreement with employers in Brazil's São Francisco valley is now negotiated annually between STR, VALE Export –the employers' association and overseen by the Ministry of Labour. Box 6 highlights an additional recent example from Brazil regarding the case of forced labour. This successful example shows how numerous stakeholders from the public, private and social spheres of government can work together to achieve gains for workers participation across a range of different industries.

Box 6. Multi-Stakeholder Action for the Eradication of Slavery in Brazil

Brazil's fight against forced labour has been internationally recognized as a successful and innovative multi-stakeholder governance initiative. This case highlights how the government, in synergistic collaboration with both private and social stakeholders has used accountability to design a strategic approach to integrating core labour standards into national supply chains operations.

In 1995, the Brazilian government acknowledged the existence of “work in conditions analogous to slavery” in rural areas and established the Executive Group for the Repression of Forced Labour (GERTRAF) and its Special Mobile Inspection Group (GEFM). Later in 2003, the National Commission for the Eradication of Slave Labour was established including government officials, worker and employer representatives, and civil society organizations. The National Commission was able to build trust with companies and design strategies tailored to the different sectors involved. As momentum against forced labour grew, enterprises adopted policies to address the source of these labour violations in their supply chains. At the same time, the labour inspection, the labour prosecutions office and the judiciary have been strengthened to enforce labour legislation at all levels. Expertise has been developed by the labour inspectorate in challenging areas such as eradication of child labour and forced labour in rural sectors including cattle farming, soy production and sugar cane harvesting. Between 1995 and 2013, almost 50,000 workers were rescued from so called conditions analogous to slave labour by the Ministry of Labour and Employment.¹

In 2005, the earlier work of the National Commission was complemented with the launch of the National Pact for the Eradication of Slave Labour. Led by two civil society organisations, the Ethos Institute and NGO Reporter Brasil, together with the ILO, the Pact required signatory companies to sever commercial ties with businesses in their value chain that use forced labour. By promoting shared responsibilities and commercially restricting suppliers caught exploiting forced labour, companies voluntarily acknowledge accountability over unacceptable labour practices in their supply chains. By 2014, some 400 foreign and domestic companies had signed on, agreeing to include anti-slavery clauses in their supplier contracts and to be monitored. In utilizing transparent supply chain dynamics, the Government instilled a culture of compliance focused on the abolition of forced labour in Brazil.

Source: (Posthuma & Bignami, 2016).

¹ The definition provided in Article number 149 of the Brazilian Penal Code considers a worker is in conditions analogous to slavery if found in: (i) forced labour; (ii) debt bondage; and (iii) exhausting workday and/or degrading conditions of work.

6. Looking to the Future

Latin America and the Caribbean have the opportunity to increase their integration into the global economy and at the same time create new jobs, enhance the conditions of work, ensure formal, high quality employment and improve worker skills. This study has presented numerous industry cases in which private, public and social actors working together have created mechanisms to gainfully take advantage of their participation in GSCs by stimulating economic upgrading and ensuring that social upgrading goes hand-in-hand. Striving to achieve decent work is feasible and compatible with remaining competitive in the global economy, under certain conditions; the case studies examined in this report seek to highlight good practices that have led to outcomes that reinforce the synergies between economic upgrading and social upgrading. We derive three key policy insights from this analysis:

(1) Development policies for participation in GSCs need both economic and social dimensions to ensure inclusive and sustainable outcomes.

Economic development policies will not necessarily drive social upgrading on their own. Some kinds of social policies, such as workforce development programmes that contribute to productivity gains, can facilitate economic upgrading, but they don't encompass the full range of workplace and labour rights conditions that a broad conception of social upgrading entails. Designing effective policies that balance both economic and social aspects is essential. The following factors are particularly important in seeking sustainable development outcomes: poverty alleviation; gender concerns; and improving the information and regulatory backing needed to address decent work shortcomings. Multi-stakeholder approaches to GSC policy at the national level complement institutional initiatives by international organizations that help local actors to participate in GSCs in a fair and balanced manner.

(2) Differences across and even within GSCs have important policy implications for economic and social upgrading.

In certain sectors, and especially in lower value-added segments of GSCs that utilize lower skilled workers, firms may not be inclined to invest in social

upgrading if this increases their costs. In more technologically oriented sectors and supply chain segments that require higher skill levels, however, firms are more likely to invest in social upgrading in order to retain talent. Thus, policies regarding social upgrading should be sector and segment-specific, driven by an understanding of the type of work needed at different levels of each GSC. While LAC has a broad mix of extractive, manufacturing and service-sector GSCs, the ILO's Decent Work agenda can be promoted to strengthen local policies and institutional capabilities in order to allow workers to obtain the skills needed to move to higher value activities and employment niches within GSCs.

- (3) **Given the rich variety of countries, development levels and subregional variation within LAC, a more integrated and collaborative approach between the public, private, social and/or civil society governance actors can be highly conducive to promoting the synergies between both economic upgrading and social upgrading.** The LAC experiences analysed in this report have illustrated that firms will invest in improved conditions for workers and compliance with labour rights when they perceive direct economic benefits, such as through profits or increased market share due to efficiency gains, or when shared value can be identified for both workers and firms in a particular setting. In conditions and contexts in which firms do not take this initiative, other stakeholders need to be more proactive in driving social upgrading. In this report, we have identified how the organization and governance of GSCs shapes the economic and social upgrading trajectories of countries, firms and workers. Integrating both economic upgrading and social upgrading often requires collaboration between private, public and social actors within GSCs. This type of synergistic governance and active collaboration, while not easy to achieve, offers a promising pathway to bring together governmental, employer and labour actors in a global setting to ensure both economic and social gains are achieved.

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Promoting Decent Work in Global Supply Chains in Latin America and the Caribbean

KEY ISSUES, GOOD PRACTICES,
LESSONS LEARNED AND POLICY
INSIGHTS



International
Labour
Organization

