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ILO brief

Research Brief

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The post-COVID-19 garment industry in Asia*

Key points

- The COVID-19 crisis has caused considerable damage and hardship across the global garment industry, affecting brands, manufacturers and workers in various ways. The pandemic also has exposed acute vulnerabilities in garment supply chains and the impact that sourcing decisions (by global buyers) has on supplier factories and their workers. With the bulk of global garment production in Asia, the region remains the front line of the adverse effects rippling through the supply chain.
- The crisis also has opened a window of opportunity for new alliances and new thinking about the future of the industry and, most critically, how it can be reshaped for a more resilient, sustainable and human-centred future.
- Prior to the pandemic, the garment industry was experiencing increased market concentration among global buyers and consolidation among leading manufacturers, many of which are based in Asia. "Fast fashion" had become the industry's predominant business model. Advances in automation and near-shoring of production remained relatively limited.
- With the pandemic keeping consumers at home and prompting businesses to rethink their supply chains, e-commerce and digitalization have received a boost. Customization and "circular fashion" will remain important in the recovery period and beyond. The burgeoning effects of climate change, from rising sea levels to workplace heat stress, are becoming existential challenges for the sector as it is currently configured.
- Looking to the post-pandemic period, this research brief outlines three scenarios of trajectory for industry recovery, encapsulated as *repeat*, *regain* and *renegotiate*. These scenarios are described with a particular focus on the actions of brands and policymakers and the downstream impacts in Asia.
- Without any deliberate changes and structural reforms for the post-pandemic reconfiguration of the industry, the *repeat* scenario is likely to have unequal impacts on workers, particularly women. Some workers will benefit from consolidation and automation, but potentially many workers will be left unemployed or in low-quality jobs. In this *repeat* scenario, decent work deficits will persist in large swathes of the industry.
- The other two possible scenarios are transformative: *Regain* envisages an acceleration of the pre-crisis trends and the further bifurcation of the industry, with both positive and negative connotations for decent work. The *renegotiate* scenario includes wide-ranging and deliberate reforms that reimagine the business model, with social and environmental sustainability assuming an integrated and integral role at its core.
- This research brief argues that the only viable way to a just transition, amid these possibilities, is a *renegotiate* scenario that is built on social dialogue and guaranteed worker protections, with investment in enterprise growth and productivity that benefits all in the garment supply chain.

* This research brief was jointly written by Arianna Rossi (Better Work, Geneva), Christian Viegelahn (ILO Regional Economic and Social Analysis Unit, Bangkok) and David Williams (Decent Work in Garment Supply Chains Asia, Bangkok). It is based on research by Jason Judd and J. Lowell Jackson of the New York State School of Industrial and Labor Relations' New Conversations Project at Cornell University, in collaboration with the International Labour Organization and published in Judd and Jackson (2021). This brief is a companion piece to the recent research brief: *The Supply Chain Ripple Effect: How COVID-19 is Affecting Garment Workers and Factories in Asia and the Pacific* (ILO 2020a).

▶ Introduction

The COVID-19 pandemic has caused considerable damage and hardship across the global garment industry, affecting brands, manufacturers and workers in various ways. These impacts are perhaps none more evident than in Asia, a region often referred to as the garment factory of the world.[1] The decline in global consumer demand, together with government-mandated workplace closures in the region and beyond, led to a collapse in global garment trade in 2020. Imports from Asia's garment-producing countries plunged by up to 70 per cent in large consumer markets.

The pandemic has underscored the profound and far-reaching consequences that brand and retailer decisions, such as those made amid collapsing consumer demand in 2020, can have on the viability of businesses throughout the global garment supply chain. In turn, these dynamics have impacted the lives and livelihoods of millions of factory workers in Asia and across the developing world, the majority of whom are women.

The typical garment worker in Asia lost out on at least two to four weeks of work in the first six months of 2020 and faced a high chance of not being called back to work at all by the second half of the year (ILO 2020a). Many workers, particularly women, endured increased violence and harassment, influxes in care work and an inability to afford basic necessities as a result of the disruptions. The garment industry is among the manufacturing sectors that have experienced the largest employment and working hour losses as a result of the COVID-19 pandemic. In a sample of 17 countries, 34 per cent of working hours and 15 per cent of jobs in the garment sector were, on average, lost in 2020 Q2, compared with the year before. Even though the situation slightly improved in the second half of the year, the sector still saw substantial working hour and employment losses in 2020 Q3, at, respectively, 15 per cent and 6 per cent on average (ILO 2021).

The impact of the crisis has undoubtedly been harsh, exposing structural vulnerabilities in the business model and demonstrating the need for reforms and improvements to strengthen long-term resilience and sustainability. In that sense, the crisis has created a window of opportunity for collective stakeholder action to reshape the future of the industry.

The purpose of this research brief is to turn a light on the trends that were shaping industry growth and sustainability prior to the pandemic, including industry consolidation, automation, e-commerce, sourcing patterns and labour governance. It examines how decisions taken by stakeholders, especially global brands and retailers, during the pandemic to date have had far-reaching consequences for workers and the supply chain itself (ILO 2020a) and how their further actions will be critical in reshaping the industry's configuration after the crisis.

Against the backdrop of these trends and the fallout of the pandemic responses, this brief draws on lessons learned and presents several possible scenarios for the post COVID-19 future of the industry. It explores the likely impacts for workers, employers and policymakers, particularly in Asia. Amid the possibilities, a scenario that is built on social dialogue and guarantees protection for workers while stimulating a just transition with long-term enterprise growth and productivity emerges as the only viable and sustainable way to build a future for the industry that benefits all.

Structure of the brief

The research brief is organized in five sections. Section 1 explores the industry's evolving structure and efforts to become more resilient in an increasingly unpredictable world, focusing on business models and sourcing practices. Section 2 looks at what changes to garment production have taken place as a result of the COVID-19 pandemic responses and examines what they mean for workers. Section 3 looks at the emerging trends in labour governance in the industry. Section 4 presents three possible scenarios for the future of the garment industry in Asia and globally. The concluding section illustrates the way forward and presents policy recommendations.

[11] An estimated 75 per cent of garment workers worldwide were located in the Asia and Pacific region in 2019 (ILO 2020a).

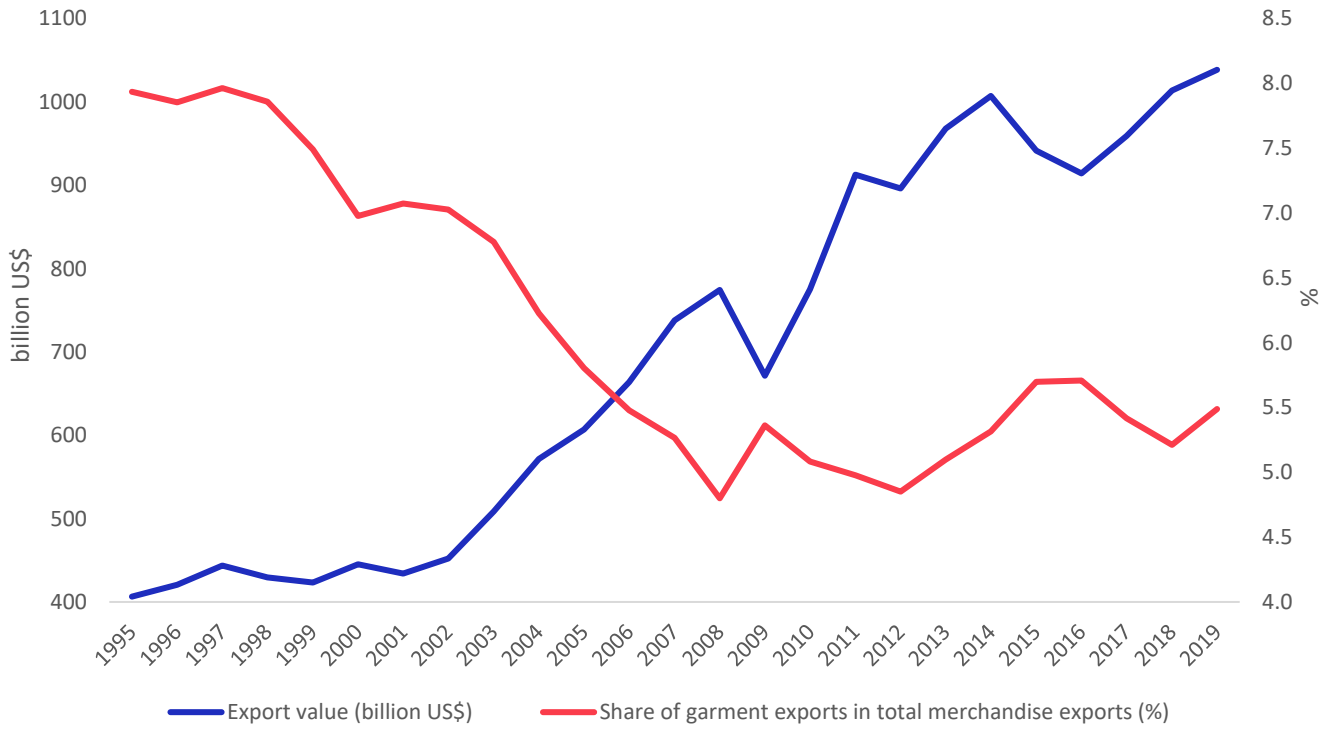
▶ Long-term trends: Where is the industry heading?

The garment industry saw strong growth in the pre-pandemic years

Past decades saw strong growth in the industry, when measured through the global export value of garments. Global garment exports increased in particular after 2001, the year in which China joined the World Trade Organization. It continued to increase thereafter, only interrupted by the 2008–09 financial crisis and a drop in 2015–16, both of which affected trade in garments and overall trade flows. Global garment exports increased from US$434 billion in 2001 to US$1,038 billion in 2019. In terms of share, however, garment exports declined between 1995 and 2008. Since 2008, global garment export growth had been broadly in line with the overall growth in merchandise exports, with garments accounting for a constant share of about 5–6 per cent of all global merchandise exports.

The COVID-19 crisis caused a sharp decline in global trade in garments, largely in the first half of 2020. Imports from some of the main global consumer markets for garments declined sharply, as consumer demand collapsed, leading to widespread factory closures and adverse impacts for millions of workers. Garment exports of some garment-producing countries plunged by as much as 70 per cent (ILO 2020a).

▶ **Figure 1. Global garment exports, 1995–2019**



Note: Garment exports considered in this chart include exports of textile fibres, yarn, fabrics, clothing and footwear (products of Standard international trade classification (SITC) categories 26, 65, 84 and 85). The share is in terms of export value.

Source: ILO calculations based on UNCTADstat.

Market concentration and consolidation have increased

Although the market increased its size in terms of value during the pre-pandemic years, market concentration in the sector also was rising. The top ten garment brands steadily gained in market share, from 8.8 per cent in 2011 to 11.4 per cent in 2020. Similarly, the top ten footwear brands increased their market share, from 17.9 per cent in 2011 to 29.1 per cent in 2020 (Judd and Jackson 2021). Only 20 companies made around 97 per cent of the economic profits in the garment industry; 12 of them were among the top 20 companies by economic profit for the past decade (McKinsey & Company and BOF 2020). As the pandemic continues to test corporate resilience and favour the largest and most capitalized companies, it is unlikely the recovery will see any change to these trends. Further consolidation may be more likely (ILO 2020d).

Brands have also been consolidating their global supplier bases (Judd and Jackson 2021). Evidence from major brands suggests that supplier networks have contracted quite significantly, with many suppliers concentrated in fewer countries. One example is Nike, which significantly decreased the number of footwear factories from which it is sourcing globally, from 163 in 2010 to 112 in 2019 (-31 per cent). The number of garment factories also reduced, from 631 in 2019 to 334 in 2020 (-47 per cent). Industry observers expect these trends to continue beyond the COVID-19 crisis (Judd and Jackson 2021).

Consolidation and concentration are limited to large, vertically integrated supplier groups. But they also include a redistribution of functions between buyers and suppliers, with the latter increasingly taking on elements of product design and development, inventory management, stock holding, logistics, factory selection and multi-factory production planning (Kumar 2020).

Many industry observers expect that small-batch production, led mostly by small and medium-sized enterprises, will grow in the post-pandemic period (Judd and Jackson 2021). In some instances, garment lead times and inventory in this market segment can be reduced through "made-in-cloud" technologies, characterized by automated resourcing, cost-planning and logistics processes (Businesswire 2020). In the short to medium term at least, it is unlikely that growth in this market segment will reach a point where it rivals production of the giant supplier groups (Judd and Jackson 2021).

Sourcing is increasingly moving out of China

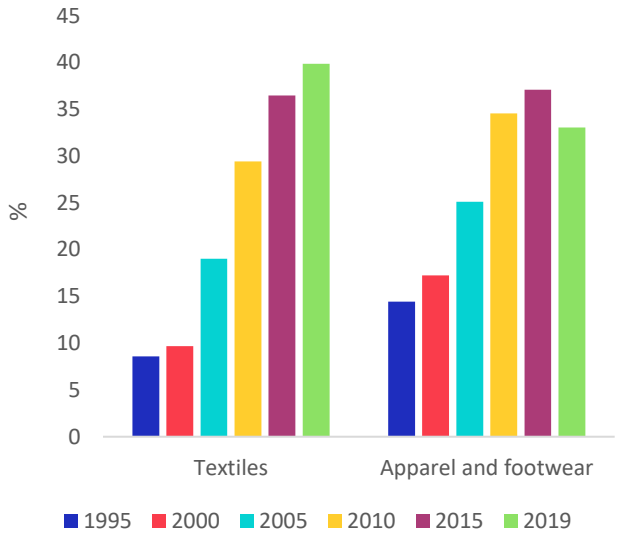
The geographical patterns of sourcing have been changing over time. China remains a main source of apparel and footwear, accounting in 2019 for 33 per cent of the world's exports. However, exports have been on a downward trend recently, declining from 37 per cent in 2015 (figure 2). This trend is in line with the view of many observers that the reliance on Chinese garment and footwear production is shrinking (Judd and Jackson 2021).

Bangladesh and Viet Nam have benefited most from the shift away from China (figure 3). The two countries' combined share of apparel and footwear exports to the world equalled 37 per cent of China's share in 2019, which is remarkable because their combined GDP in 2019 was less than 4 per cent of China's GDP. In contrast, the apparel and footwear exports of other countries, such as Sri Lanka or India, as a share of the world's exports in these products, have remained constant or even decreased. Although the diversification of production to countries other than China is a trend that is expected to continue beyond the COVID-19 pandemic and indeed may further accelerate, the crisis is prompting some firms to re-evaluate the worth of a broader supplier base to diversify supply chain risk. Few industry analysts believe this will extend in any significant way to other regions, like Africa (Abdulla 2021).[2]

Even though production of garment and footwear has been moving out of China, textiles from China will likely remain an important ingredient for the industry for years to come. China accounted for 40 per cent of global textile exports in 2019, continuing on an increasing trend that started around 20 years ago (figure 2).

[2] Prior to the pandemic, Myanmar had emerged as a new frontier destination for global garment sourcing, albeit still small in size and value relative to near neighbours like Bangladesh and Viet Nam. Following the February 2021 military coup, much uncertainty has emerged about its future as a manufacturing hub, even though some brands have recommenced sourcing from the country after earlier suspensions. All data pertaining to Myanmar in this brief was compiled *prior* to the coup.

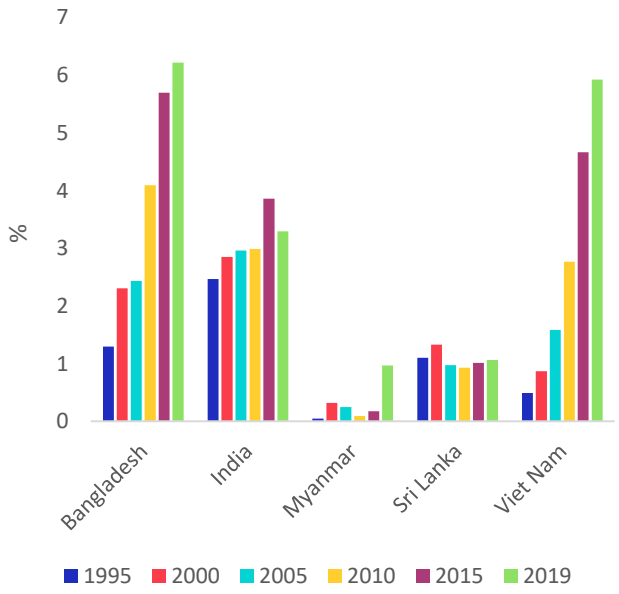
▶ **Figure 2. Chinese exports as a share of world exports, by product category (percentage)**



Note: Textile exports considered in this chart refer to products of SITC category 65. Apparel and footwear exports refer to products of SITC categories 84 and 85.

Source: ILO calculations based on UNCTADstat.

▶ **Figure 3. Apparel and footwear exports as a share of world exports, selected countries (percentage)**



Note: Apparel and footwear exports refer to products of SITC categories 84 and 85.

Source: ILO calculations based on UNCTADstat.

Supply flexibility, focusing on "speed and control", remains the predominant business model

"Fast fashion" was the predominant business model of the industry long before the COVID-19 pandemic, with brands and manufacturers under constant pressure to reduce the time to market, which is a crucial measure of industry agility and responsiveness to fashion trends (Berg et al. 2018). The time to market for some fashion brands was at about a month or even less before the pandemic (*The Economist* 2005; Berg et al. 2018).

A 2010 study modelled the quintessential fast fashion strategy for supply flexibility or postponement pioneered by Zara/Inditex. The model seeks to elevate revenue by cutting losses from store markdowns and stock shortages. The study found that a 5 per cent revenue increase led to *double-digit* increases in profit (between 22 and 28 per cent) and market capitalization (between 30 and 43 per cent) because supply flexibility helped reduce inventory costs (Hausman and Thorbeck 2010). Although the potential gains are significant, the success of this strategy depends on several conditions, including effective demand and risk forecasting, pre-commitments on materials, production and transportation capacity and delaying stock-keeping quantity decisions for as long as possible (Hausman and Thorbeck 2010).

Despite the Zara blueprint, this kind of disciplined, data-savvy planning is a rarity in the industry to date, with some exceptions. Industry experts highlight how the sector remains on the whole slow to change, wasteful and highly inefficient in terms of end-to-end processes, particularly when compared with industries with widely distributed manufacturing, such as the electronics and automotive industries (Judd and Jackson 2021). Instead of stemming the tremendous losses caused by markdowns, excessive inventories and poor forecasting, brands in the pre-pandemic period, according to industry experts, continued to focus on securing efficiencies in their production processes and prices by increasing pressure on workers and suppliers to maintain margins (Robinson et al. 2019, Vaughan-Whitehead and Caro 2017).

The pandemic-related workplace and travel restrictions have accelerated the digitalization of planning and production. This potentially may continue to facilitate a shortening of the time to market (Judd and Jackson 2021).

Near-shoring capacity closer to traditional markets has remained limited so far

Near-shoring is defined as the re-emergence of garment production closer to major markets in Europe and North America. How likely it is to occur, to what extent and how it might affect garment workers in Asia continue to be central questions for the industry.[3]

Evidence suggests that European Union buyers and the European Commission are looking to facilitate greater near-shoring through reductions in garment-related trade duties in countries like Bulgaria, Egypt, Morocco and Turkey, all of which already supply European brands (Arnett 2020). However, near-shoring prospects could be overstated because such a trend may ultimately be limited by manufacturing capacity constraints in many of these countries (Judd and Jackson 2021).

In the United States, growing trade friction with China, combined with the much-publicized supply disruptions during the pandemic, have revived talk of near-shoring of some United States-bound garment production to parts of Central America in the post-pandemic period. However, despite long-term trade agreements with Guatemala, Haiti, Honduras, Mexico and Nicaragua, there may be little incentive to relocate production, based on a recent comparison of "landed costs"[4] for garments made in Bangladesh, China and Mexico (Robinson et al. 2019).[5] Similar to the European Union's near-shoring, capacity is also an obstacle in Central America, in particular the limited fabric production infrastructure (fibre2fashion 2020). And while experts have noted that US buyers may look again to the region for new opportunities after the pandemic, factors linked to Asia, such as the availability of raw materials, will continue to loom large over these prospects (Judd and Jackson 2021).

Even after the pandemic, the combination of China's control over most inputs and continued low-wage labour supply in parts of Southern and South-Eastern Asia will remain critical in determining the industry's geography of sourcing. Despite capacity constraints near the US and EU markets, some industry observers still predict a rise in near-shoring after the pandemic, particularly for high-value clothing and shoes, for which production is highly automated. Near-shoring may also be the result of the shifting focus on circular business models as a sustainable alternative to the linear "take–make–dispose" production systems (McKinsey & Company 2018). Production of basic essentials with fewer speed imperatives, such as socks and underwear, will remain in "traditional" production centres like Asia (Judd and Jackson 2021).

Automation has been relatively slow

Technological changes, including automation, may have destructive and transformative impacts on occupations and therefore on skills requirements (ILO 2020e). The decision to replace garment workers with machines is dependent on wage levels, new technologies, available capital, workers' technical skills and, of course, an expectation of constant or growing consumer demand. Automation of garment production has tended to be slow in comparison with other manufacturing sectors, as demonstrated through the low sales of robots in the sector[6] (Kucera and Bárcia de Mattos 2020). This is, to a large extent, driven by the still relatively low wages in dominant garment-producing countries, such as Bangladesh, Cambodia, India, Indonesia and Viet Nam (ILO 2019a). One exception is China, whose garment industry invested heavily in automation technologies while simultaneously shifting to higher value-added goods following the end of the Multi-Fibre Arrangement in 2005 (Vandenbussche et al. 2013).

Automating production in the garment sector is also far from straightforward. The manipulation of fabrics for sewing requires dozens of complex motions to get and

[3] As traditional manufacturing hubs in Asia also become burgeoning *consumer markets* for apparel (in places where incomes and the middle class are growing), pressure to retain –or even to reshore – production in the region may emerge as a counterforce to the current reshoring trends (towards Europe and North America). In this research brief, we refer only to reshoring in the direction of the current major consumer markets in Europe and North America.

[4] "Landed cost" is the expense to have the product in a company's stock, including freight and transportation.

[5] Another part of the industry's calculus suggests a return to the familiar: a November 2020 Ernst & Young survey found that 37 per cent of business leaders were considering bringing manufacturing services back to Europe, down from 83 per cent in May. As Asia recovers from the pandemic, businesses have decided "not to cause further disruptions to their supply chain" (Alderman 2020).

[6] While robot sales in the electronics and automotive industries hovered around 100,000 units in 2016, they peaked at around 300 units for textiles, apparel and footwear industries (Kucera and Barcia de Mattos 2020).

keep the pieces in place. Only advanced sewbots can overcome this with the use of cameras, mapping technologies, artificial intelligence and algorithms as well as complex mechanics using vacuums, robotic arms and rollers (Gerber Technology 2019). Automation systems are expensive and require new workforce skills to be in place before adoption can be considered (Bárcia de Mattos et al. 2020).

Even though core processes, such as sewing, remain unautomated across the industry, there have been advances in automating auxiliary processes, such as cutting, fitting and support services. Post-pandemic pressures in the industry will likely increase the up-take of new sewing technologies. But the speed or scale at which this is likely to happen remains unclear (Judd and Jackson 2021).

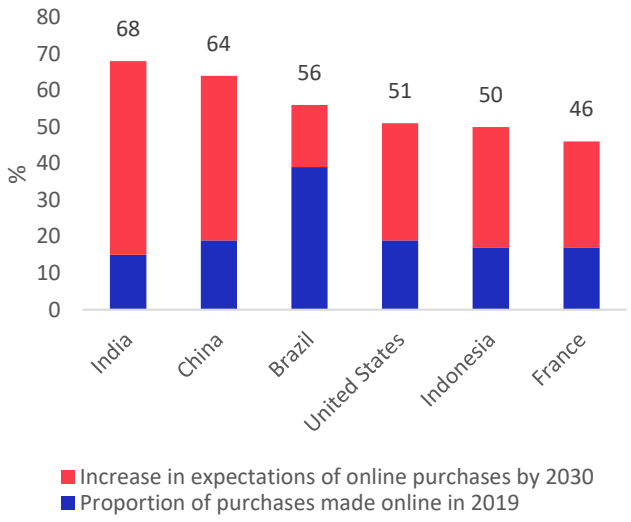
E-commerce has emerged as a feature of the pandemic

The way garments are consumed has been changing in recent years. The pandemic is likely to supercharge many pre-existing trends. Findings from a pre-pandemic survey of consumers by Deloitte in some of the world's largest consumer markets suggest much larger shares of consumption for online garments and footwear by 2030, in particular in major regional economies like China and India (figure 4). Data from major brands (garment and footwear) during the pandemic suggest that this trend will further accelerate in the recovery – a pattern that would also align with the general growth trend of e-commerce sales across the retail sector overall (UNCTAD 2020).

According to Judd and Jackson (2021), several garment retailers reported significant revenue losses in 2020 as a result of the pandemic. Yet, their losses in store sales were at least partially offset by significant increases in online sales. For example, Uniqlo/Fast Retailing Co. reported a considerable increase in e-commerce, with online sales topping at around US$2.8 billion (15 per cent of total sales). Another example is PVH, which had a 70 per cent year-on-year surge in online sales in 2020 Q3. Also, the retailer GAP recorded a 56 per cent increase in online sales by the end of October 2020, relative to 2019 (45 per cent of total sales).

Prior to the crisis, the in-person retail sector resembled a bubble, with a proliferation of products and retail outlets and high levels of inventory (Judd and Jackson 2021). The subsequent bursting of that bubble during the pandemic has compelled brands and retailers to accelerate the integration and digitalization of a host of design, planning and production elements in their businesses.

▶ **Figure 4. E-commerce in the garment sector, 2019 and 2030 (projection)**



Source: Deloitte 2020.

Customization and "circular fashion" remain important trends

Resale, subscription and the renting of clothes – a design, production and consumption that increases use and reuse of garments and uses safe and renewable materials – is a growing trend, and the pandemic appears to have accelerated the so-called "shift to thrift" among developed market consumers. Both the European and the American resale markets are on the increase, with major second-hand retailers emerging (Deloitte 2020; Judd and Jackson 2021). Younger generations are showing a growing preference for second-hand clothing (Delisio 2020). Nevertheless, there is still considerable uncertainty about the future of these alternative consumption models, particularly when their environmental credentials are more closely scrutinized.[7]

Longer-term changes in fashion habits are also speeding

[7] Judd and Jackson (2021) cited a recent assessment by a major brand showing that the likely climate impacts of air-freighting rented clothing to customers and back again outweighed the "circular" economy benefits.

up customization. Small-batch or on-demand models can increase efficiency and also margins, using algorithmic fitting for customers and 3D weaving. For more traditional retailers, these new models also reduce losses due to inventory mismanagement that results in markdowns and stockouts (Nishimura 2021).

More recently, the industry promoted the concept of "circular fashion", which embeds the idea to reuse and recycle all materials and to eliminate waste and pollution. According to this alternative concept, fashion is supposed to be made traceable, transparent and more sustainable for businesses, consumers and the environment.[8]

The dominant garment industry model as of now, however, remains linear. The pace of sustainability progress in the fashion industry has been slow. Even in pre-pandemic times, it was not moving fast enough to counterbalance the harmful impact of the fashion industry's growth (GFA, BCG and SGC 2019). In addition, the pre-pandemic projections of rapid income growth among Asia's 4.3 billion consumers and 4–5 per cent annual global growth in new garment sales are likely to far outstrip increases in garment reuse and resale (EIU 2013; GFA, BCG and SGC 2019; Hall 2017).

The science and the infrastructure for measurement and disclosure of progress on environmental commitments – to regenerative agriculture and use of synthetic fibres, for example – are increasingly well developed. But recent aggregate analyses of these efforts and their outcomes point to a decoupling between industry goals, practices and results, even as the industry's most advanced sustainability initiatives have been limited in their impact in the face of downward price pressures (Lollo and O'Rourke, 2020a).

Data reveal a persistent "intention–action gap" between consumer sustainability sentiment and their actual spending (White, Hardisty and Habib 2019). While consumer concern about labour rights and environmental costs in garment supply chains has been growing, researchers point to a general reluctance among consumers to pay (for better social and environmental standards) for garments that are produced with such costs internalized. Consumer concern might continue to grow. The pandemic is revealing many stories of worker suffering, much of which the mainstream media is covering.

As well as contributing to it, the industry is also vulnerable to the effects of climate change

A just transition in the garment industry is undermined by a disconnect between social and environmental issues. The likely impact of climate change on the garment industry has received little attention in the sustainability debate so far, overshadowed for the most part by debates around the sector's environmental and carbon footprint and the consequences of vast overproduction and underutilization (of clothing) (Judd and Jackson 2020). Climate change will contribute to a rise in sea levels and extreme weather events, which will impact suppliers and factories located in areas that are vulnerable to sea level rise, such as Dhaka, Ho Chi Minh City and Jakarta. For the time being, neither buyers nor suppliers appear to have any plans to mitigate possible job and income losses due to sea level rise and do not perceive this as an imminent threat (Judd and Jackson 2021).[9]

Buyers' relative lack of attention to sea level impacts underlines the nature of commercial relationships in the sector. Most buyers do not own their supplier factories. Thus, risks, such as catastrophic flooding, belong to their suppliers. Well-capitalized, transnational suppliers can be expected to amortize low-land facilities and consolidate production on higher ground if needed. Smaller-scale and often locally owned suppliers have fewer options. Bangladesh's industry, for example, appears particularly vulnerable. Workers, too, have few options, except those able and willing to migrate for work.

Extreme heat is also worsening in important Asian export hubs –areas that are typically already affected by pre-existing heat extremes and where garment factories are frequently non-air conditioned (Judd and Jackson 2021). Intense heat may have serious long-term health consequences linked to dehydration, heat stroke and even increased risk of poisoning from the evaporation of workplace chemicals (ILO 2019d). It also brings more prosaic risks for workers and suppliers: absence and loss

[8] The European Commission identified textiles as a priority product category for the circular economy, and countries, such as the Netherlands, have started to set concrete goals in this regard.
[9] Judd and Jackson (2021) offered further exploration of these trends with visual projections of sea level rise overlaid on apparel and footwear factory production areas in prominent locations in Asia, including Dhaka, Ho Chi Minh City and Guangzhou.

of income due to illness, lower productivity and longer hours (Somanathan et al. 2021; Sebastio 2018). Compared with sea level rise (which requires holistic economy-wide government efforts to manage), heat risks are generally easier for governments and the garment industry to isolate and manage (not least because temperatures can be controlled at the enterprise level with investments in building design, ventilation and cooling systems).[10]

New alliances may spur a rethink of the buyer–supplier relationship

The pandemic has triggered many debates in the industry over "reimagining" the largely transactional relationship between buyers and suppliers. The Business of Fashion and McKinsey & Company (2020) reported that 73 per cent of sourcing executives they surveyed were counting on "deeper partnerships" in the post-pandemic period. There remains much scepticism within the industry due to longstanding fragmentation and trust deficits between buyers, vendors and suppliers – deficits that were not helped by commercial decisions taken during the pandemic (Judd and Jackson 2021; Anner 2020).

"Partnership" suggests a formal and durable sharing of risk and cost along the supply chain, which would mark a break from the traditional distribution of power between buyers, suppliers and their workers. Although the industry's largest manufacturing groups are often able to secure better terms through wide-ranging commercial and risk-sharing partnerships, this dynamic is not found in much of the rest of the industry (Judd and Jackson 2021; Better Buying 2020). A 2017 International Labour Organization (ILO) survey of garment suppliers estimated that 52 per cent of them had accepted orders whose price did not allow them to cover their production costs (Vaughan-Whitehead and Caro 2017). At the onset of the pandemic in 2020, buyers cancelled – or failed to pay for – an estimated US$16.2 billion of orders (BOF and McKinsey & Company 2020; Dean 2020). In the period since, many suppliers have reported facing further pressure to extend payment periods, discount heavily and accept below-cost orders (Anner 2020). In 2020, McKinsey & Company found that only 17 per cent of buyers in Bangladesh reported a willingness to enter a concrete partnership to "co-invest in [their] suppliers to secure future capacity".

The COVID-19-related economic crisis has led to the creation of new types of alliances in the sector between trade unions and employer associations, with a focus on shared opposition to buyers' purchasing practices (recognizing their dual impact on suppliers' revenues and workers' wages and working conditions). This is especially true in Bangladesh, where employers and unions converged in opposition to cancelled orders during the pandemic (Judd and Jackson 2021). The global collapse in garment production in 2020 also helped push to prominence a network of producer associations known as the Sustainable Textile of the Asia Region (STAR Network), which in January 2021 launched a purchasing practices campaign.[11] The initiative on Manufacturers Payment and Delivery Terms seeks to set minimum expectations and best practices related to payment and delivery conditions for brands (IAF 2021).

While these sorts of alliances may face tensions that undermine their long-term durability, their very emergence marks a potential shift in the public relationship between brands and retailers and their suppliers in Asia and elsewhere.

▶ What will these changes mean for garment workers?

There is broad agreement among buyers, suppliers and unions that a redistribution of risks and costs in the post-pandemic garment industry is necessary, not least to address the vulnerability of garment workers – and indeed suppliers – to economic shocks (Judd and Jackson 2021). But as outlined in the next section, the realization of this vision is just one of a number of *possible* scenarios that may emerge in the industry's post-pandemic recovery.

[10] There remain significant challenges to managing heat risks among smaller and less professionalized manufacturing businesses in the garment sector, particularly where energy use is still dependent on traditional carbon-intensive sources.
[11] In 2021, this group included producing associations from Bangladesh, Cambodia, China, Myanmar, Pakistan and Viet Nam. See http://www.asiatex.org/en/about/184.html.

Supply- and demand-side shocks during the first wave of the COVID-19 pandemic in 2020 had a profound impact on garment workers (ILO 2020c). Unilateral order cancellation by buyers during this time generated significant media attention, while the observed national and international responses were widely acknowledged by the industry as useful but insufficient. These included expanded income support and social protection programmes (in producer countries), brand compensation for broken contracts and the early commitments on wages and long-term social protection under the ILO-facilitated Global Call to Action (Judd and Jackson 2021; ILO 2020).[12]

Post-pandemic industry reconfiguration will have uneven impacts on workers

Economic recoveries are frequently uneven and often benefit the most vulnerable workers last and least, thus exacerbating pre-crisis inequalities, as demonstrated by the aftermath of the 2008–09 financial crisis (ILO 2021; ILO 2010).

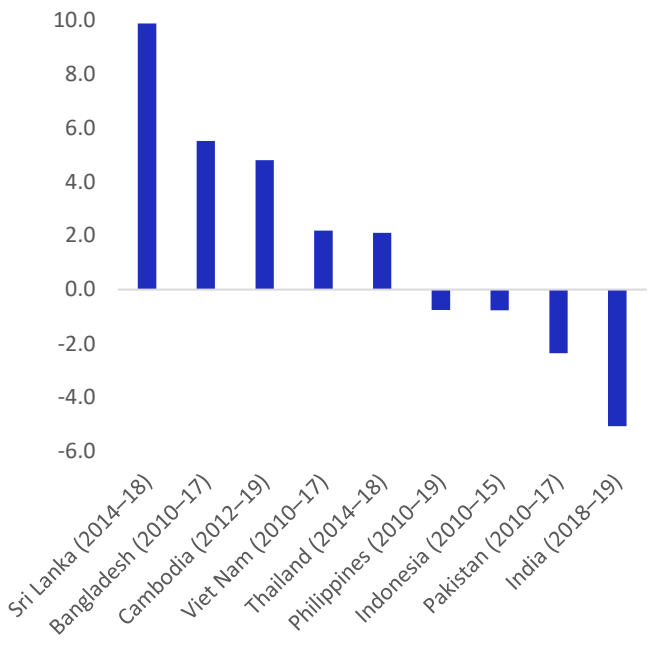
The pre-crisis trends towards increased concentration and consolidation in the garment industry will likely lead to an increased presence of large, well-capitalized global suppliers headquartered in Asia receiving ever-larger orders from ever-larger buyers. Where high compliance with labour standards is a feature of these strategic buyer–supplier partnerships, decent work is a possible or likely by-product of this consolidation. The extent to which this will transform working conditions and at what speed, however, remains unclear (Judd and Jackson, 2021).

The degree to which the industry will see improvements in working conditions, especially beyond the large supplier groups, will depend in large part on the presence of independent trade unions that are able to bargain effectively for improved pay and conditions of work. Another possible implication of this consolidation could be the reduction of the need for large numbers of workers at given production levels. This in turn implies that the pool of workers available for the rest of the garment market – in general, at lower value and (consequently) lower wages – will grow. An increase in the competitive pressures on these smaller, non-specialist suppliers and their workers will push against the realization of decent work and other social and environmental goals in the global garment industry (Judd and Jackson 2021).

Automation and new technologies still pose risks to some workers

The global garment export value had been increasing over time before the pandemic (see figure 1), including for exports originating in Asia. Many countries had also seen an increase in their real value added. At the same time, the industry had continued to see consistently increasing employment levels in many countries of the region (ILO 2020a). Some countries had relatively slower employment growth rates than growth in real value added, however, implying an increase in labour productivity (figure 5).

▶ **Figure 5. Compound annual growth rate of real gross value added per worker (percentage)**



Note: Calculations based on data from Labour Force Surveys, National Statistical Offices and the Asian Development Bank's Input–Output Database.
Source: El Achkar Hilal forthcoming.

Some of the productivity increases could be driven by the adoption of new technologies. It is difficult to assess the exact role that automation and other technological progress in the sector have had for employment so far due to the multiple factors at play. The phenomenon of

[12] For more information about the Global Call to Action, including its implementation in Cambodia, Myanmar and Viet Nam, see https://www.ilo.org/global/topics/coronavirus/sectoral/WCMS_742343/lang--en/index.htm.

higher productivity growth also could be driven by a reallocation effect observed in other post-recession economies, where resources shift towards more productive segments within the sector, thereby increasing the overall productivity of the sector (Foster, Grim and Haltiwanger 2014) or the start of a more dramatic hollowing-out effect of increasing "robot diffusion" (IMF 2018). Despite the slow uptake of automation in the near future, these trajectories may become challenging for future workers and policymakers in countries in which garment production has for decades been a reliable engine of employment growth.

Rapid growth in digitalization and e-commerce, regenerative agriculture and other elements of circular fashion arguably would have greater impacts on employees who are upstream and downstream from garment and footwear production. For example, staff in global brands may find their functions taken on by suppliers as digitalization shortens internal design and production processes, while retail workers may see their functions reshaped and reallocated to repair, resale, e-marketing and warehouse personnel (Judd and Jackson 2021).

Digitalization is also potentially impacting the way in which brands and retailers monitor compliance in their supply chains. While technology has the potential to support businesses in monitoring labour risks, a permanent shift to new online platforms paired with potentially less reliable compliance programmes could lead to a deterioration in oversight of working conditions and labour rights in the supply chain.

At the same time, growing digital literacy and smartphone penetration across emerging Asia is transforming the information landscape for garment workers, with new opportunities for advocacy and collective action to address deficits in rights and working conditions in the supply chain.

Women workers remain subject to discrimination

The pandemic is disproportionately impacting women workers and exacerbating inequalities regarding unpaid care work, wage gaps, discrimination and gender-based violence. Many women workers have found themselves bearing a heavier workload than men by having to take on household chores and dependant care (CARE 2020b; ILO 2020c). Garment Worker Diaries (2020), a labour rights organization, found that women who returned to work in Bangladesh in 2020 earned a median salary of 9,200 Bangladeshi taka (US$109), compared with 10,000 taka (US$118) for men. Trade unions reported discriminatory termination of pregnant women workers and failure to pay maternity benefits (Politzer 2020). And overall violence against women, particularly domestic violence, increased during the pandemic (UN Women 2020).

Equally concerning, the pandemic response has not been gender-responsive, threatening to exacerbate pre-COVID-19 inequalities and undermine prior (limited) progress made towards gender equality (ILO 2021). In general, social dialogue has largely been absent in the COVID-19 response, with many governments and employers' associations taking unilateral action without consultation with workers' representatives (Jackson, Burger and Judd 2021). Even where dialogue has occurred, labour rights organizations have found a lack of female representation and involvement. A June 2020 CARE International survey of 20 countries' COVID-19 policy responses found that a majority of national-level committees established to respond to the pandemic did not have equal female–male representation (CARE 2020a).

The inequities experienced by women workers and representation gaps in the COVID-19 policy response (in addition to pre-existing gaps in leadership and management in trade unions, factories and other institutions) are further compounded by a changing industry structure that may increase their vulnerability. In observing increasing consolidation, technological upgrading and other forms of restructuring, the ILO (2020c) posited that "[t]he sector may not provide the same number and level of opportunities as it did before".

Many countries still rely on the garment sector to generate paid formal jobs for millions of women. But decreasing demand for labour could leave these same workers with increasingly informal job arrangements, both within and outside the sector. This would shift the burden of uncertainty to workers and reverse progress made on decent work. This is concerning because women are more exposed to informal employment than men in almost 75 per cent of Latin American countries, 89 per cent of countries in Southern Asia and more than 90 per cent of sub-Saharan African countries (ILO 2020c). Latest available data for countries in South-Eastern Asia suggest a higher prevalence of informal employment among

women, compared with men, in most countries.[13]

Against this concerning backdrop, the ILO Violence and Harassment Convention, 2019 (No. 190) offers cause for optimism. Even if ratification in Asia goes slowly, the Convention has the potential to be a game-changer for gender equality in the sector. Where preventing and addressing gender-based violence and harassment becomes centre stage, there will be increased pressure to establish appropriate management systems, including grievance mechanisms, to address violence and harassment at work. Labour advocates have argued that as a result, women workers will be more able to build workplaces free of fear, where freedom of association and collective bargaining can thrive (Judd and Jackson 2021).

▶ Emerging labour governance trends in the garment industry

How will the crisis change the way that global garment supply chains are organized and governed to promote decent work and sustainability? Recognizing that effective public labour governance is often weak in garment-producing countries in Asia, both normatively and in terms of enforcement capacity, the labour governance models discussed here focus on trends emerging during the pandemic related to private regulation and multilateral regimes, such as trade policy and mandatory due diligence processes.

Private regulation may be rethought after the pandemic

Private regulation has been a cornerstone of labour governance in the global garment industry since the early 1990s. Brand-led corporate social responsibility, relying on private compliance monitoring and social auditing, has often stepped in to monitor labour rights violations in garment-producing locations with weak public governance regimes (Amengual et al. 2019; Locke 2013). Private monitoring of labour compliance has remained an important implementation modality in the context of international frameworks, such as the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, the United Nations Guiding Principles for Business and Human Rights and the OECD Guidelines for Multinational Enterprises (even while such tools also set out roles and responsibilities for governments and public regulation). The effectiveness of this model, though, has been increasingly called into question.

Judd and Jackson (2021) found little consensus among industry actors on the shape of a post-pandemic labour governance system. But they agreed on one point: The predominant voluntary audit-remediation regime is for the most part – and for various reasons – not working for most buyers, suppliers or workers.

Recent research on the aggregate global results of private regulation in the garment sector shows little or no improvement for workers (Kuruvilla 2021). The industry's record with self-regulation undermines its ostensible original logic: first, that private regulation achieves results superior to public regulation, and second, that it is not to be used in situations in which high rates of participation and compliance are required, where there is limited flexibility regarding actions and timings or where serious social or environmental risks are involved (McCarthy and Morling 2015). While not defending private regulation's wider record, brands have pointed to discrete successes, such as initiatives like the Social and Labour Convergence Project, which aims at harmonizing the audit regime in the sector.[14] Although consolidation of brands' codes of conduct into one harmonized audit tool may be beneficial, this still suggests limited commitment towards a more holistic approach to labour governance of global supply chains, built on joint remediation and capability building.

The Clean Clothes Campaign noted progress in 2020 with the adoption by brands of minimum, voluntary reporting standards and pointed hopefully towards more stringent public reporting standards required by the European

[13] Based on ILOSTAT database, accessed 2 July 2021.
[14] The Social and Labour Convergence Project is a multistakeholder initiative that created a Converged Assessment Framework, which is a common audit tool that allows manufacturers to use standardized measurements.

Union's Non-Financial Reporting Directive, in effect since 2018 (CCC 2020b). The industry's self-reporting on sensitive topics like workers' wages, nonetheless, tends to focus on social compliance and related efforts to mitigate adverse impacts on workers' lives rather than the effects of those efforts (PLWF 2019). Given the flaws in the current monitoring and reporting system (Kuruvilla 2021; Wicker 2020), questions on how such data will be collected, analysed and disclosed in the future remain critical to the discussion going forward.

A comprehensive analysis of the impact of private regulation is hampered by large gaps in data among the vast majority of buyers and suppliers who do not engage in any substantive voluntary regulation and are as such largely untouched by garment industry campaigns (Kuruvilla 2021). Collection of basic working conditions data is increasingly routinized and, on the whole, improving. There has been a trend towards convergence of voluntary codes of conduct and labour and environmental audit tools since 2015, for example, through the Higg Index, the Better Work Compliance Assessment Tool[15] and the Social and Labour Convergence Project's standards for labour practices.

Emerging technologies could in the future supplement the consolidated monitoring regime, such as blockchain-based traceability initiatives, forensic analysis of cotton fibres to determine their origins and improved inputs tracing (Friedman 2017) or phone-based worker surveys. Labour advocates argue that workers do not in general rely on apps and remote management tools to solve workplace problems. The advocates instead ask that workers be given direct, leading roles in the monitoring and reporting of rights and working conditions in garment workplaces (Judd and Jackson 2021).

There may be new opportunities to leverage the information collected during private factory monitoring. Analysis of labour compliance data from garment factories points to measures of labour compliance that have more predictive power than audit measures of working conditions (such as data on wages, hours and working conditions) (Kuruvilla 2021). Predictive modelling of factory-level compliance can reorient or largely replace unreliable audits with more easily verifiable hard data on factory characteristics, such as firm size, workforce make-up, worker turnover rates and geography.

A corollary to observations about unreliable and spotty factory-level data on labour practices is the need to strengthen them with hard measures of labour practices reliable enough to drive buyers' macro-level sourcing decisions.

Beyond better data and analyses, an effective supply chain governance regime depends in large part on strong or stronger public governance of labour standards in garment-producing countries. This includes an effective and credible labour inspectorate, consistent alignment of national and international labour standards and a robust system of enforcement, all of which require considerable strengthening in many garment-exporting countries. In particular, without a credible expectation that standards will be enforced, compliance programmes across the board, regardless of their form, intention or complexity, will remain ineffective, acting as Lollo and O'Rourke (2020a, 2020b) have remarked as "a scale without a diet".

Finally, as discussed in the section on sourcing strategies, a critical limitation to private regulation is the misalignment of brands' sourcing and sustainability strategies. As long as sustainability is not embedded in brands' core business decisions, including their sourcing strategies, their corporate social responsibility apparatus will encounter roadblocks.

Legislative efforts to regulate global supply chains are intensifying

The movement for mandatory standards accelerated following the 2013 Rana Plaza disaster in Bangladesh. Public supply chain governance has progressed from broad reporting requirements, as in California's Transparency in Supply Chains Act and the 2015 United Kingdom's Modern Slavery Act, to mandatory due diligence requirements, such as France's 2017 Loi de Vigilance and the targeted forced labour sanctions by the US Government against China in 2020.[16] More recently, the German parliament passed a mandatory due diligence

[15] The Higg Index, developed by the Sustainable Apparel Coalition, is a suite of tools for the standardized measurement of value chain sustainability. The Better Work programme is a partnership of the ILO and the International Finance Corporation to improve working conditions in the global garment industry. It monitors compliance with international labour standards and national laws using a compliance assessment tool available here.

[16] See a current list of government due diligence initiatives at Investor Alliance, 2020. See US sanctions in Glover, 2020.

law in global supply chains for German firms.

This shift towards mandatory human rights due diligence, meaningful public reporting requirements and the possibility of legal liability on the part of buyers for injuries to supply chain workers won support in April 2020 from a coalition of largely European and American institutional funds representing US$4.2 trillion in investments (Investor Alliance, 2020). A growing number of British and European firms, led by food and agriculture companies but including a smattering of garment buyers, have endorsed the principles of mandatory human rights due diligence (BHRRC 2021; Smit et al. 2020).

The 2020 pandemic prompted policymakers around the world to refocus their priorities almost exclusively on economic recovery. In garment-producing countries, labour policies as a response to the COVID-19 pandemic often focused on relief for employers and workers (ILO 2020a). The 2020 contraction in the industry and the redrawing of garment sourcing patterns described earlier in this brief means that these governments – without new counter-pressures – may lack both the incentives and the urgency to make sufficient efforts to tackle decent work deficits in the industry. Going further, a number of Asian garment-producing countries were alleged in 2020 to have used the economic crisis to tighten curbs on labour rights and postpone wage negotiations (AFWA 2020). But a European Union proposal for mandatory human rights due diligence for EU firms sourcing globally has gathered momentum. In March 2021, the European Parliament passed a resolution with recommendations to the European Commission on a future directive on corporate due diligence and corporate accountability. The European Commission has committed to publish a proposal for such a directive in the second quarter of 2021.

The estimated costs for large EU firms to comply with mandatory due diligence requirements throughout their supply chains are 0.005 per cent of annual revenues. The rate for small- and medium-sized enterprises is higher but still accounting for only about 0.07 per cent of annual revenues (Smit et al. 2020).

The potential impact of mandatory human rights due diligence legislation in the European Union could be limited if its enforcement accepts the current private audit format as adequate fulfilment of a company's duty of care, rather than mandating independent verification measures (Bengtsen 2020a, 2020b). Verification and reporting challenges will likely be more acute among smaller firms in the supply chain (Curley 2020).

The relatively new international framework agreements were gaining ground prior to the pandemic as an important form of cross-border social dialogue between brands and international union federations in the garment sector (ILO 2019d). Similarly, another partnership is the Action, Collaboration, Transformation (ACT) initiative launched in 2015, which brings together 20 global brands and retailers and the IndustriALL global union, with a focus on living wages through industry-level collective bargaining and linked to purchasing practices.

In 2020, leaders of workers' and labour rights organizations interviewed by Judd and Jackson (2021) backed sector-based bargaining and Bangladesh Accord-style binding agreements that oblige buyers to take on a greater share of decent work costs and risks along their supply chains (CCC 2020a). Variations on a severance fund proposal – covering both severance payment and social protection components – first advocated for by civil society groups and global unions has received the backing of some brands, manufacturers and producer governments (CCC 2020a; Judd and Kuruvilla forthcoming).[17] Buyer support for a *binding* agreement would mark the start of a different type of partnership in fashion: enforceable, transnational and direct to workers in a way that recognizes the ties between global buyers and the workers who make their products.

Labour provisions in trade agreements have become more prominent

Trade policy has had a critical role in the advancement of workers' rights and decent work over the past two decades. Recent changes in the United States and, to a lesser extent, European trade policies could result in a greater role for labour provisions in trade agreements.

In the United States, these include the 2016 forced labour revision to the Tariff Act, a return of (section 301) tariffs as

[17] The Penn State Center for Global Workers' Rights estimates wage losses by workers due to cancelled contracts of at least US$1.6 billion (Anner et al. 2020).

a major trade tool, new standards and enforcement mechanisms in the 2020 US–Mexico–Canada trade agreement, trade actions in 2020 against Chinese cotton and garments, and the diversification of the industry's supplier base to less powerful trade partners (Judd and Jackson 2021).[18]

In the European Union, trade and global labour policy interests converged in the 2020 revocation of Cambodia's Everything But Arms trade preferences for persistent human rights violations and the gentle leveraging of changes to Viet Nam's legal framework, including the 2019 ratification of the ILO Right to Organise and Collective Bargaining Convention, 1949 (No. 98) via a new free trade agreement (EU Commission 2020).

The trade policy vehicles for improving frameworks and enforcement of labour laws in garment-producing countries may change in both the European Union and the United States. For example, there may be a transition from unilateral tariff schemes, such as the Generalized System of Preferences, to wider free trade agreements because they provide a higher degree of flexibility due to their being quasi-permanent and without eligibility consideration. A post-pandemic US trade policy away from the template used in the past could allow each party to an agreement to define for itself the acceptable standards and in which labour compliance should figure in a determination of market access (Polaski et al. 2020). This has been accomplished in the garment and other sectors when credible threats of trade sanctions or well-calibrated offers of reward spurred the tightening by governments of legal frameworks and enforcement regimes and thus measurable improvements by industry in labour practices.[19]

As part of a superstructure supporting the agreements described here, unions and labour rights organizations have backed strong and enforceable labour provisions in trade agreements between buyers' and suppliers' home governments.

▶ Future scenarios for the garment industry

Plotting the pre-pandemic trajectory of the garment industry – its structure, sourcing patterns and labour governance – and teasing out possible changes in direction allowed Judd and Jackson (2021) to compose three possible scenarios for the post-pandemic future of the industry, in Asia and globally. This research brief outlines in some detail what each of these scenarios would entail (see the following table).

Given the diversity of firms, product types and regulations, these scenarios are necessarily broad. They are permutations of the most important and variable of the factors explored in the previous sections: consolidation, automation, e-commerce, consumer habits, sourcing patterns, supply flexibility, near-shoring and climate change impacts. Some factors are considered to be essentially fixed in any scenario. First, industry concentration will continue and e-commerce leaders will figure prominently in this future. Second, online sales will grow, albeit more slowly, and accelerate their disruption of traditional retail models. Third, climate impacts will change the geography and modes of garment production in Asia.

Each scenario resizes the relevant factors and outlines a potential configuration for the industry that could emerge in the post-pandemic recovery, together with perspectives on how these will impact both suppliers and workers in Asia. The first high-level scenario can be called ***repeat***: a repetition of the pre-pandemic model for industry structure, sourcing and governance, along with all its related weaknesses in relation to decent work and broader industry sustainability. The second scenario is ***regain***, in which changes to industry structure and sourcing habits are accelerated but (externally driven) governance changes are largely only merely accommodated. The final scenario, ***renegotiate***, imagines an industry in which changes to structure, sourcing and governance are both integrated and mutually reinforcing. It is the most ambitious and hopeful of the three scenarios. It integrates the most desirable and durable of the possible changes in industry structure, sourcing and governance and, with it, the most conducive set of conditions for decent work to flourish.

[18] See amendments to the US Tariff Act of 1930 in Reed, 2016. See examples of labour provisions in trade agreements in ILO 2019b.
[19] See, for example, the US–Cambodia garment agreement (Kolben 2004), Trans-Pacific Partnership negotiations in Viet Nam (Evans 2020) and EU–Thailand fishing "yellow card" process (ILO 2020b).

▶ **Table. Future scenarios of the garment industry**

	Repeat	Regain	Renegotiate
Main trends	• Default scenario in the absence of deliberate reform efforts. • Continuation of earlier (pre-COVID-19) long-term industry trends.	• Resembles an accelerated version of pre-COVID-19 trends, in which the industry bifurcates more dramatically than in the *repeat* scenario. • More innovative, integrated suppliers are able to upgrade technologically, increase productivity and uphold decent working conditions, while a large portion of suppliers have weak ties to the top tier of the supply chain and continue on a *repeat* track.	• Deliberate reforms bring discernible change in industry power relationships, including sourcing and governance dynamics. • Deeper and wider industry partnerships and collaboration addresses the collective challenges. • A just transition towards social and environmental sustainability built on social dialogue is actively embedded in industry operations.
Buyer–supplier relationship	• Brand and supplier concentration and supply chain consolidation continue. • Sourcing patterns continue to shift towards the low-wage, low-cost production centres in Asia and Africa.	• Stakeholders (consumers, investors, major suppliers, unions, campaigners and regulators) signal that a return to pre-pandemic norms is blocked. • Major brands and retailers implement structural reforms to boost process efficiency, as opposed to minor operational adjustments.	• New buyer–supplier contract terms address vulnerabilities in supply chain relations (as exposed by the COVID-19 responses) and take into account workers' and unions' demands regarding labour rights, wages and working conditions. • Organizing among garment producer associations takes root, so that deals available to the largest producers may be within reach for smaller suppliers.
Business model	• Slow pace of internal change, with the exception of online sales, which will continue to accelerate. • Low-cost fast fashion will continue to dominate; pressure for shorter cycles will land predominantly on suppliers and their workers, and the buyer–supplier relationship for most brands and retailers will still be organized around price rather than shared risk.	• Business model splits into two discernible tracks (growing dichotomy between "the best" brands and suppliers and "the rest"). • Fast fashion and familiar major brands continue to dominate the industry and shape its trajectory. • Potential for more proactive sustainability efforts spearheaded by industry leaders, but these remain largely ad hoc, initiative-driven or incremental rather than fundamental or structural. • Large segment of the industry continues to resemble the *repeat* business model.	• As a result of internal pressure and/or expanded and improved regulations, supply chain risks are rebalanced and more fairly redistributed among actors (brands and suppliers). • A "shared value" proposition emerges as a practical reality in the industry, wherein: - Longstanding worker demands are incorporated into a renegotiated contracting modality, which enjoys widespread industry adoption. - The centrality of "people and planet" to business prosperity is recognized by all industry actors. Brands and suppliers invest in a just transition towards social and environmental sustainability as a core business concern, leading to innovative circular business models.

Automation and near-shoring	• Near-shoring and large-scale automation will remain slow to develop or unrealized in the medium term.	• Near-shoring and automation by the biggest players (for example, the largest buyers in partnership with a consolidated group of global suppliers) mean that low-cost, low-tech production in developing countries will co-exist with a steady growth in robotics and automation in higher-income countries close or closer to major consumer markets.	• Automation is harnessed for both its competitive advantages and its social and environmental benefits. For example, it is deployed in tandem with worker upskilling and enhanced social protection (as with other active labour market policies) to mitigate possible workforce displacement effects and secure a just transition.
Worker outcomes	• Return to pre-pandemic production levels with a likely contraction on employment: Firms that operated on narrow margins in the pre-pandemic period may not recover, and larger, better-capitalized and more efficient suppliers may absorb their orders without taking on their full workforces. • Continued supplier consolidation benefits workers in factories that are part of robust (private or multistakeholder) regulation and compliance programmes – the ILO/IFC Better Work programme, for example – or effective collective bargaining regimes. • For all other workers, increased competition among suppliers for the remaining orders may drive down wages and working standards, and subcontracting of orders may expand leading to increased informality.	• The bifurcation of outcomes for garment workers in different types of factories in the supply chain are even more pronounced. • Accelerations in supply chain consolidation, automation and near-shoring point towards higher wages for higher-skill workers and fewer jobs for lower-skill workers at a given level of production. • Outcomes for workers in the rest of the industry looks like the future described in the *repeat* scenario. The majority of the garment production whether global, regional or domestic, in which neither private labour governance nor public regulation are effective.	• Industry reconfiguration delivers broad-based benefits to garment workers throughout the supply chain. • Workers in factories producing for the largest global brands and retailers benefit from the greater accountability and representation included in new contracting arrangements and new governance models. • Workers at large (outside those leading factories) benefit as a result of sector-wide agreements driven by trade policies (including labour provisions in trade agreements) and the resulting changes to labour laws and industry practices.
Labour governance	• Public governance in garment producing countries in Asia will continue to be underresourced and flawed. Transnational private regulation will remain the norm in global supply chains and the share of global garment workers engaged in constructive social dialogue, represented by effective unions or covered by genuine collective agreements, will remain relatively small.	• No significant reinvention of labour governance for networked global production. • The largest, reputation-sensitive suppliers to top brands increasingly support social dialogue efforts in their supplier base. • Signals from regulators and worker advocates over (changes to) sourcing and labour practices, although growing louder, will still be misaligned with the signals on financial performance.	• The emergence of three bargaining blocks (suppliers, buyers and workers and their organizations) leads to new solutions that distribute cost and risk more equitably along garment supply chains. • Public governance is more effective, including through capable labour inspectorates and enforcement of mandatory human rights due diligence regulation.

▶ Ways forward

Which of the three scenarios is the likeliest for the industry after the COVID-19 pandemic? The recovery pattern is still highly uncertain, and unpredictability about future configurations is still the norm. Also, different hybrid versions of these scenarios may materialize, with different time frames and potentially on a sequential, incremental basis. *Repeat* – being the pre-pandemic default – takes the least effort but may prove to be unacceptable to investors, regulators, worker advocates and the majority of suppliers. *Regain* is perhaps probable, driven by likely changes in process and production technology. *Renegotiation* takes the most effort and depends on alignment of the "planets" – investors, regulators, unions, campaigners and suppliers, which rarely occurs.

There are plenty of reminders that a return to the "old" normal, essentially, the *repeat* position, is neither a viable nor a desirable blueprint for the future of the industry. Prior to COVID-19, the sector was vulnerable to external shocks due to weaknesses in productivity, infrastructure and skills, as well as wasteful and unsustainable production practices. Routine risk disclosures, mandated by law in many countries, provide prescient insights into the level of unpreparedness among major brands for the confluence of risk factors that gathered in 2020.

As the industry emerges from the pandemic, it is likely that brands will expand and improve their risk analyses while also professionalizing their predictive planning so they can better anticipate and manage multiple *simultaneous* blows to their business. However, a more substantive shift of industry fundamentals will be required for it to become more resilient, fairer and more sustainable going forward. Critical to this will be the task of rebalancing risks and how they are shared across the supply chain (by buyers and suppliers).

While the *regain* scenario takes advantage of advances in technology and efficiency, it suggests that in the absence of specific policies to mitigate their negative effects, shocks and economic crises, including related to COVID-19, will continue to fuel widening inequalities in the sector (ILO 2021). Among employers, research has indicated variable recovery prospects between smaller local factories and major foreign-owned ones (often vertically integrated and with strong buyer relations), with the former most acutely affected by continued slack demand (post-pandemic). With just 20 per cent of firms supplying 80 per cent of products to major buyers, this dynamic is likely to continue in the post-pandemic recovery period (Judd and Jackson 2021).

To avoid the risk of exacerbating detrimental outcomes for the most vulnerable garment workers, industry actors should strive to *renegotiate* the business and governance models at the core of the global garment industry. Such efforts are in line with the ILO global policy framework to respond to the COVID-19 crisis, articulated through four pillars: stimulating the economy and employment; supporting enterprises, jobs and incomes; protecting workers in the workplace; and relying on social dialogue for solutions. They are equally in line with the Global Call to Action for a Human-Centred Recovery,[20] which was adopted at the International Labour Conference in June 2021 and commits countries to ensuring that their economic and social recovery from the crisis is "fully inclusive, sustainable and resilient". The combination of new tools, from data science to virtual design, together with a commitment to redress the industry's inefficiencies, could "release new value". This could potentially make it possible for buyers to ease production and price pressures on suppliers and advance decent work through increased wages and investments in social protection for workers.

A catalyst and source of leverage for workers and suppliers in the *renegotiate* scenario could be public regulation, in particular through effective enforcement of mandatory human rights and environmental due diligence legislation. When paired with strengthened social dialogue that addresses power asymmetries in the industry, for example through new coalitions among suppliers and trade unions, this scenario would be conducive to a more equitable and sustainable industry.

The *renegotiate* scenario also relies on efforts to better align production and sustainability imperatives in the

[20] See https://www.ilo.org/ilc/ILCSessions/109/news/WCMS_803980/lang--en/index.htm.

business model. This could involve, among other things, reforming the pay and incentive structures of brands' sourcing teams so they reward more holistic decision-making that supports a just transition towards longer-term sustainability. Similarly, non-salary compensation for sourcing and senior executives could be tied to a few simple labour-related key performance indicators.

To change the internal signals and those sent to suppliers about how brands prioritize labour standards, the design, sourcing and buying teams could also be required to incorporate key performance indicators on the labour impacts of their decisions, resulting, for example, from changes to product design or order specifications.

These business incentives and restructuring, paired with a holistic policy framework providing appropriate regulation, an enabling environment for social dialogue and financial incentives at the national level, could be the critical steps for sustaining a *renegotiate* scenario.

Recognizing the industry's continued importance to employment and economic development in Asia and other regions, a *renegotiate* scenario that is built on the twin foundations of stronger social dialogue and guaranteed worker protections, together with enhanced investments in physical and human capital to spur long-term enterprise growth and productivity is the only viable way to build a human-centred future for the industry – one that is both sustainable in the long run and delivers a fairer deal with broad-based benefits for all actors in the supply chain.

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