A photograph of several rectangular concrete blocks arranged on a dark gravel surface. The blocks are light gray with a rough, textured top surface and a smoother, slightly recessed bottom surface. The lighting creates shadows between the blocks, emphasizing their three-dimensional form.

BUILDING BLOCKS FOR GOVERNING THE GARMENT INDUSTRY

**WORKING PAPER 3
TRADE REALITIES:**

**USING TRADE DATA TO STRENGTHEN THE DESIGN OF
SUPPLY CHAIN GOVERNANCE**

**KATALYST
INITIATIVE**

ABOUT THE SERIES: BUILDING BLOCKS FOR GOVERNING THE GARMENT INDUSTRY

This series aims to assist policymakers, trade unions, NGOs, investors, funders and anyone else interested in designing the new forms of governance needed to improve protection of human rights and the environment in transnational supply chains. Using the global garment industry as a test case, we hope to help ‘catalyse’ new, multi-disciplinary strategies to make 21st century supply chains fairer and more sustainable.

Our work helps to replace anecdotes and guesswork about the power and financial dynamics in industries like garments with: 1) an evidence base, and 2) guidance on what the evidence means for policy development. In doing so, we aim to help policymakers and civil society to identify where to focus limited governance resources in order to achieve the maximum benefits for garment workers and the environment.

[Working Paper 1: Sizing Up the Garment Industry: Large Brands, Supply Chain Labour Market Share and Lessons for Governance Design](#)

Based on original research, we look at how many garment brands would need to change their behaviour to reach a ‘critical mass’ for widespread improvements in human rights and environmental protections. We then explore how governance and regulatory efforts aimed at brands could be designed to benefit the largest number of workers.

[Working Paper 2: Garment Industry Structure: Observations, Challenges and Recommendations for Human Rights Governance Designers](#)

A companion to ‘Sizing Up the Garment Industry’, we outline five governance challenges created by the industry’s complex structure. If new laws, regulations, collective bargaining systems and other governance tools can overcome these challenges, they will be far more effective in the years to come. We offer some recommendations to support these new governance initiatives.

[Working Paper 3: Trade Realities: Using Trade Data to Strengthen the Design of Supply Chain Governance](#)

We use trade data to explore how the effectiveness of new forms of supply chain governance - like mandatory due diligence laws or enforceable brand agreements - may be influenced by trade flows, now and in the future. We then identify several options for strengthening the design of governance efforts so they can compensate for trade flow effects.

[Working Paper 3 Annex: ‘Group of 30’ Garment Export Infographics](#)

In this companion to ‘Trade Realities’, we present country-by-country garment export trade data for the 30 major non-EU garment-exporting economies.

[Working Paper 3 Graphics Pack](#)

The *Trade Realities* graphics and analysis are offered under a Creative Commons license (see [Acknowledgements](#) for details). We invite civil society organisations to use the graphics in presentations or publications on a non-commercial basis. The visuals can be downloaded as .png files in this graphics pack.

TRADE REALITIES:

USING TRADE DATA
TO STRENGTHEN THE DESIGN
OF SUPPLY CHAIN GOVERNANCE

BUILDING BLOCKS FOR GOVERNING
THE GARMENT INDUSTRY
WORKING PAPER 3

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EXECUTIVE SUMMARY:

WORKING PAPER 3: TRADE REALITIES



THE GOAL: This paper aims to help strengthen the design of supply chain governance efforts currently under development, such as the EU Corporate Social Due Diligence Directive (CSDDD). It also explores some of the limits of current supply chain governance concepts, and proposes ways to supplement them as organisations start developing the next generation of governance solutions.

The argument we lay out – in line with Katalyst’s [theory of change](#) for this research – is that by understanding the realities of trade flows between exporting and importing countries, civil society and policymakers can better understand how to adjust current and future supply chain governance efforts to be more effective.

A SPOTLIGHT ON SCOPE AND REACH: Many political, social and economic factors will influence how effective supply chain governance will be in practice. Among these factors, it is vital to spotlight the scope and global reach and coverage of any given governance solution. Even if the design and implementation of a governance tool are successful, its scope and reach determine its impact for workers and the environment. This paper uses trade data from the [Atlas of Economic Complexity at Harvard University](#) as a proxy indicator for scope and impact, in hopes of moving policy discussions closer to answering key governance questions, including:

- **To what extent are workforces and environmental issues in major garment-exporting countries likely to be covered by one or more of the emerging supply chain governance efforts?**
- **Where are governance efforts more or less likely to have impact, based on trade volumes?**
- **What can trade flows tell us about potential gaps and overlaps in the governance efforts of importing economies? What policy implications do these gaps and overlaps have for governance design?**
- **Where might alignment in trade policy and supply chain governance policy need extra attention?**

Scope and reach are also central to addressing industry fragmentation - the way a single factory or country can export goods to many different brands and import markets. Fragmentation has long been used as an excuse for inaction on issues like living wages. But an understanding of trade realities can show pathways to creating the critical masses of brands and factories needed for supply chain governance efforts to successfully address living wages and many other rights and environmental issues.

SUPPLY-CHAIN BASED GOVERNANCE AND TRADE-BASED GOVERNANCE:

The main focus of this paper is on using trade data to assess the potential scope, coverage and impact of supply chain governance efforts – like the

EU CSDDD legislation. However, in the context of discussing trade data, many are accustomed to thinking about the rights and environmental governance impact of bi- or multilateral trade agreements. There are important considerations to take into account about both forms of governance, and how ensure they align.

GOVERNANCE FORMS COMPARISON

	Supply Chain-Based Governance	Trade-Based Governance
Target for Change:	Companies, especially lead firms in supply chains	Governments
Power Structure:	Transnational Supply Chains	National Boundaries
Relevance of other trade partners:	Critical risk factor for effective governance	Out of scope?
Relevance of production for domestic markets	Critical risk factor for effective governance	Out of scope?

In particular, we see value in considering: the targets of these efforts (governments vs. companies); the power structures they seek to address; and the relevance of other trading partners and production for domestic markets. Better understanding of these factors can help civil society and policymakers use both governance forms in complementary and effective ways.

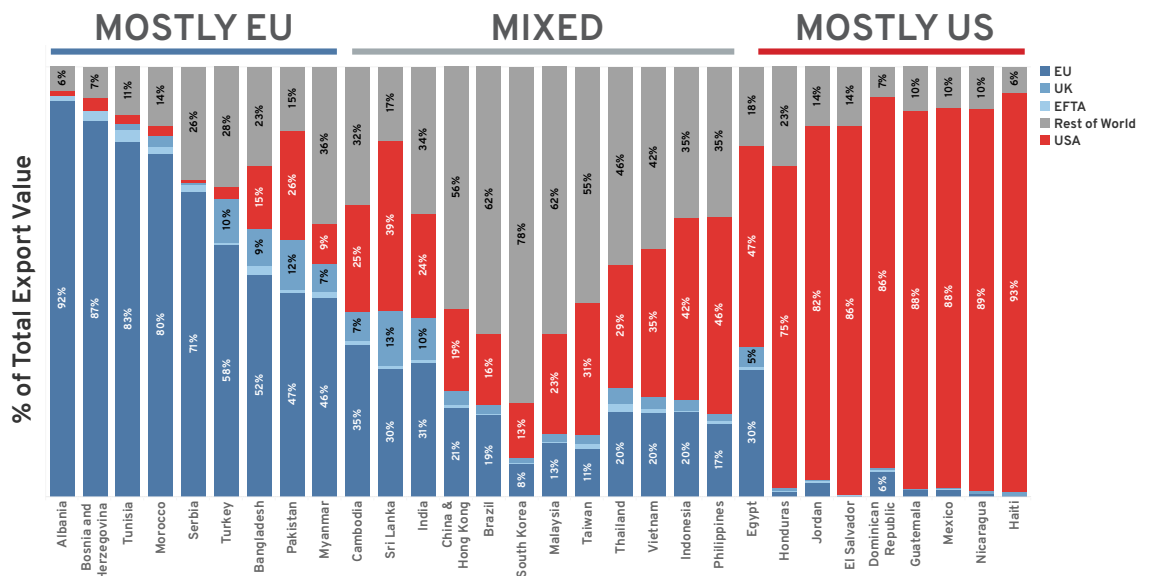
THE FINDINGS: We offer a holistic overview of global garment trade flows.

Garment Exports are dominated by two groups of countries: the EU/EFTA/UK cluster with around 30%; and a ‘Group of 30’ countries at around 65%. We suspect that intra-EU trade may inflate EU statistics, meaning the Group of 30 is even more important.

Garment Imports are dominated by the EU/EFTA/UK cluster and the US, which together represent 55% of all imports. Japan is around 7%, China 4%, with percentages rapidly shrinking from there.

The interplay between importers and exporters is where scope and scale questions about supply chain governance efforts like CSDDD, the European Citizen’s Initiative on Living Wages, or enforceable brand agreements come into play. Our research indicates that the ‘Group of 30’ major exporting countries predominantly trade with either the EU; or the US; or a highly mixed set of trade partners. This distribution has enormous implications for effective governance.

WHO DO MAJOR GARMENT EXPORTERS TRADE WITH?



We want to be very clear: nothing in this paper should be construed as an call for delay or inaction. Our argument is quite the opposite: the momentum building behind efforts like the CSDDD, the Good Clothes Fair Pay Citizens' Initiative and other efforts in other industries needs to accelerate, and we need to start planning now to expand and strengthen these efforts in the future.

POLICY IMPLICATIONS: Eight governance considerations emerge from the data. Some are fairly new, others have been raised before, but can benefit from additional evidence. All can help to strengthen current and future supply chain governance efforts.

1. The EU and US remain central to governing garment supply chains; so does coordination between their civil society networks. Different political and economic climates might make a *uniform* approach difficult, but *coordinated* policies could have dramatic impact. Ensuring and supporting coordination between EU and US civil society actors is a critical factor.

2. Policies need to compensate for different impacts of supply chain governance in different exporting countries. In countries where the EU is a major trade partner, efforts like the CSDDD - if given teeth - could provide widespread benefits to workers and the environment. But what is likely to happen in countries where the EU is a minor trade partner? Policymakers need to forecast and compensate for unintended consequences in how brands and factories are likely to react in different trading contexts.

3. Understanding production for domestic markets is important for transnational supply chain governance. Because the lines between domestic and export production sectors commonly blur, domestic market size and prevailing conditions in facilities producing for domestic markets will influence the implementation of transnational supply chain governance, especially if the risks of unauthorised subcontracting are high.

4. Understanding how production is distributed can help design more effective governance. A better understanding of how production is distributed across a country's suppliers would enable fine-tuning of governance efforts: identifying which geographic clusters, product types, or factory networks tend to export more to a given country or trading bloc.

5. The governance efforts of smaller importing countries can still be important. The governance efforts of smaller importers can have outsized influence in specific countries, production clusters, or product types.

6. Political infrastructure is needed to enable garment exporting countries, workers, and communities to participate in designing supply chain governance emanating from the EU, US and other importing countries.

7. Policy coherence is needed across various forms of governance. Trade-based and supply chain-based governance efforts need better coordination going forwards. Competition law and other importing-country domestic policies can impact the effectiveness of supply chain governance.

8. Understanding today's trade flows helps us futureproof governance efforts. For example, it's obvious that China is a massive garment exporter today; what's not obvious is what would happen if China exits garment production in the future, as the EU and the US did in the 1990s. Where will all that production go? Will supply chain governance mechanisms be able to cope? Examining today's realities can help us prepare for future possibilities.

INTRODUCTION

GARMENTS AS A TEST CASE FOR GLOBAL GOVERNANCE



WHY UNDERSTANDING INDUSTRY STRUCTURE MATTERS FOR GOOD GOVERNANCE IN ANY INDUSTRY

More than 20 years of private regulation efforts have shown that common human rights and environmental violations in transnational supply chains cannot be prevented through voluntary means alone.¹ Katalyst Initiative's core belief is that supply chains need to be governed² to ensure behavioural change among the many actors in supply chains who contribute to the negative outcomes facing workers and the environment.

With political will emerging to regulate supply chains, a critical next step towards successfully governing complex global industries is for policymakers and civil society to understand underlying power structures far better than we currently do.³ Many of the root causes of common violations – like low wages, excessive overtime and pollution – often lie far from the factory floor or the local community where they occur. Effective governance requires knowing where to intervene to achieve desired changes, even if the intervention points may not be immediately obvious or intuitive.

We define 'industry structure' to include the ways businesses relate to each other; how power and wealth are distributed; the ways companies compete or cooperate; and the legal and physical distance between a group of workers and the actual power centres in supply chains. Some industries are dominated by a few companies, but others are fragmented across thousands of businesses. In some industries raw material producers are powerful. In others retailers dominate. Production may span many countries or just a few. The ways these characteristics vary and interact have consequences for the design of successful governance for different industries.

The *Building Blocks* papers use garments as a test case for strategies to govern modern globalised industries. The questions we ask about garments can be applied to *any* transnational industry; we hope they will help policymakers and civil society figure out where to focus limited resources for maximum benefit in the garment industry and beyond.

1 We recommend Sarosh Kuruvilla's 2021 book as the clearest articulation of how private regulation has failed to deliver improvements.

2 We define *governance* to include: 1. (transnational) public regulation (e.g. supply chain laws or trade agreements); 2. (transnational) social dialogue and collective bargaining; 3. new and hybrid governance forms (such as enforceable brand agreements or sustainable investor efforts); with 4. voluntary private regulation playing a role in some cases.

3 For an excellent primer on why this is critical in designing governance – and what can go wrong if we skip it – we recommend David Peter Stroh's [Systems Thinking for Social Change](#).

A QUICK RECAP: GARMENT INDUSTRY STRUCTURE⁴

Each industry has characteristics that governance efforts need to consider. In our previous paper, [Garment Industry Structure](#), we argued that two key factors in particular need to be accounted for in designing garment industry governance strategies – especially efforts focused on garment brands, the lead firms in supply chains:

1. The shared supplier base: Most garment brands do not own or control their suppliers; and most of the world’s hundreds of thousands of factories and farms supply multiple garment brands. This ‘shared supplier’ arrangement tends to dilute the influence of any one brand over environmental and labour conditions at any given supplier.

2: The highly fragmented nature of the industry: There are a huge number of brands – our current estimate is tens of thousands – even the largest of which accounts for only a few percent of global production. This further dilutes the influence of individual brands over the overall industry.

These challenges are real, but they have also long been used as excuses for inaction. **Katalyst’s aim is to replace anecdotes about complexity – which brands have long hidden behind – with an evidence base. Knowing that an industry is complicated is of little help in remedying its problems. Knowing how an industry is complicated, however, opens doorways to effective governance and large-scale improvements.**

Working Papers 1 & 2 considered the governance implications of the garment industry’s shared supplier base and fragmented structure by looking at the relationships between brands and suppliers. This paper considers similar questions, but looks at relationships between importing and exporting countries.

All three papers support one of our main arguments: that because of the industry’s complex structure, policymakers and civil society need to focus less on regulating individual brands or suppliers and more on regulating groups of companies. We are not the first to argue that the scale, structure and complexity of an industry like garments lends itself to sectoral rather than enterprise-level governance. But in order to decide *which* companies should be regulated as groups and *how* they should be regulated, we need a much better evidence base to work from. This paper aims to contribute to that evidence base.

OUTLINE OF THIS PAPER

In Part I we briefly provide some background and context. We summarize emerging innovations in supply chain governance; explore how trade data is useful for designing supply chain governance; and consider the relationship between supply chain governance and governance based in trade policy.

In Part II we analyse global garment trade relations, and visualize country-by-country trade flows in garment industry. This enables us to identify most significant importers and exporters of garments, as well as patterns across the trade relationships that are relevant for governance design.

In Part III we identify and briefly describe a number of these policy implications for governance design that emerge from the analysis.

⁴ See Appendix 1 for how we define ‘the garment industry’ for the purpose of this paper.

PART I:

SUPPLY CHAIN GOVERNANCE: BACKGROUND, CONTEXT AND TRADE DATA USES



A SHIFT TOWARD TRANSNATIONAL SUPPLY CHAIN GOVERNANCE

The early 2020s have seen the emergence of proposals for legislation, treaty, transnational collective bargaining, investor initiatives, enforceable brand agreements, and other efforts to govern human rights and environmental conditions in global supply chains. We refer to them collectively here as **supply chain governance efforts**. What makes recent efforts unusual is that they are:

- Largely backed by actors in importing economies like the EU or US
- Aimed at regulating the behaviour of lead firms in supply chains (e.g. clothing brands) under their jurisdiction or influence, rather than suppliers
- Designed to improve conditions at (independently-owned) suppliers, including those operating in foreign trade partner countries

The proposed [EU Corporate Sustainability Due Diligence Directive](#) (CSDDD) has perhaps received the most attention but there are a host of other efforts in various stages of development⁵. These also include:

- [EU Corporate Sustainability Reporting Directive \(CSRD\)](#)
- [EU Representative actions for the protection of the collective interests of consumers](#)
- [US Alien Tort Statute Clarification Act](#)
- [Enforceable Brand Agreements](#)
- [The International Accord](#)
- [Good Clothes Fair Pay – European Citizens’ Initiative on Living Wages](#)

Laws are also under development or in place in:

- [Germany](#)
- [The Netherlands](#)
- [France](#)
- [Switzerland](#)
- [Norway](#)
- [South Korea](#)
- [Japan](#)
- [United Kingdom](#)
- [Australia](#)

⁵ To date, both the [European Coalition for Corporate Justice](#) and the [Danish Institute on Human Rights](#) have published and periodically updated useful comparisons of the various initiative under way. The [Business & Human Rights Resource Center](#) offers plain-language summaries and updates on the various national and transnational initiatives under development.

These efforts understandably touch on a host of legal and political questions (see [page 17](#)): as efforts to bring regulation back into alignment with the economic realities of a globalised economy, many long-standing assumptions need to be challenged. How these supply chain governance efforts should be shaped, and what they should demand of lead firms, are an ongoing debate that we hope this series can help inform.

Many political, social and economic factors will influence how effective these new forms of governance will be. How well they address these factors will determine how fit-for-purpose each form of governance is. But these considerations are being explored by many other organisations, and are not the main focus of this research.

Instead, we focus on the ways the scope and global coverage of *any* form of supply chain governance will also influence its ability to benefit workers and the environment.

ASSESSING POTENTIAL SCOPE AND COVERAGE, AND THE ROLE OF TRADE DATA AS A PROXY MEASURE

Assessing the potential scope and coverage of supply chain governance efforts is difficult. There is very little reliable industrywide data on 1. the direct links between lead firms in the garment industry and the global garment workforce, or 2. links to their environmental impacts.

To overcome these data limitations, we turned to trade data as a proxy measure. Trade data allows us to explore four key questions about governance scope and coverage and related policy implications. These questions were the starting point for this paper.

- 1. To what extent are workforces and environmental issues in major garment-exporting countries likely to be covered by one or more of the emerging supply chain governance efforts?**
- 2. Where are governance efforts more or less likely to have impact, based on trade volumes?**
- 3. What can trade flows tell us about potential gaps and overlaps in the governance efforts of importing economies? What policy implications do these gaps and overlaps have for governance design?**
- 4. Where might alignment in trade policy and supply chain governance policy need extra attention?**

As we describe in the later parts of this paper, in exploring these questions a wide range of policy implications for supply chain governance efforts begin to emerge.

HOW TRADE DATA CAN HELP IMPROVE SUPPLY CHAIN GOVERNANCE

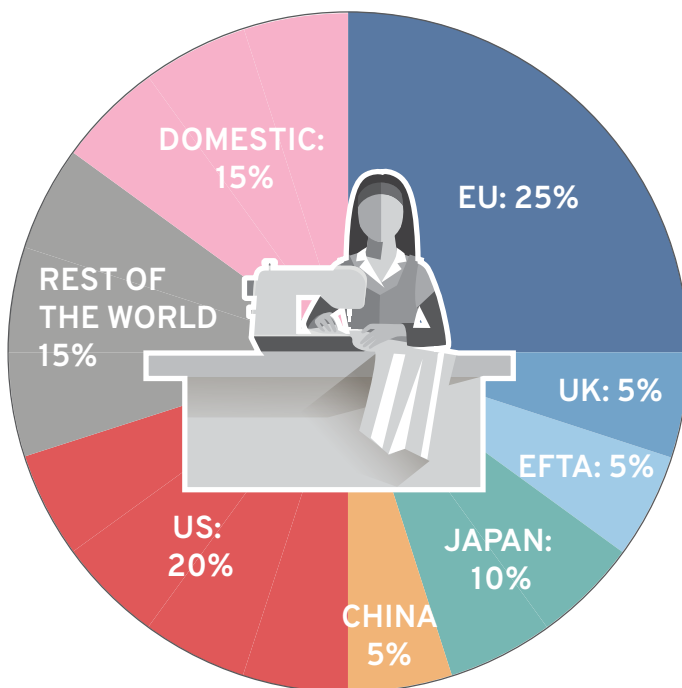
As we noted in the introduction, the garment industry and other similarly structured industries are highly fragmented in two ways which make governance especially challenging:

1. A very large number of brands, operating in many different countries, who are the lead firms in supply chains;
2. The fact that these brands share suppliers, so that each supplier produces goods for many different brands.

In this paper, we explore how these fragmented power dynamics play out at a national level, documenting:

1. Which countries import garments – a position roughly analogous to being a lead firm in a supply chain; and
2. Which countries export garments, and how those exports are distributed across importing countries – a dynamic roughly analogous to an industry’s shared supplier base.

FIGURE 1: ‘COUNTRY X’ ILLUSTRATION OF A GARMENT WORKER’S ANNUAL TIME ALLOCATION BY EXPORT DESTINATION



Why are we talking about ‘Country X’?

For the sake of illustrating some general principles, we have created a fictional but realistic ‘Country X’ for this section.

This perspective may seem very ‘top-down’ or Global North-centric, but given that the objective of this paper is to examine governance efforts focused on regulating the behaviour of lead supply chains based in garment-importing countries, it is a necessary framing.

However, we also believe it is important to clearly link this analysis to the people who supply chain governance efforts are intended to help. So we begin our discussion of global trade flows and their implications for governance with an individual garment worker.⁶

Figure 1 illustrates what trade flows mean for a garment worker’s yearly production. Most garment workers at most factories make products for a range of different customers – i.e. garment brands – that are then exported to countries around the world, or sometimes sold locally.

It is helpful to think in terms of the *time* each worker spends on products destined for customers in different countries. This idea will be familiar to anyone who has to do timewriting for

different projects or clients, and is the way labour costs are calculated and

⁶ For the purposes of illustration, we have limited our focus to human rights and garment workers. However, we believe key concepts outlined here have relevance for environmental issues and communities as well.

negotiated for most garment production.⁷

The limitations of available trade data mean we can only focus in this paper on the trade in finished garments. It is not possible to use trade data to, for example, trace cotton across the various countries it might pass through on the way from farm to retail shop. However, the principle of shared time still applies to fabric, yarn, cotton, polyester, etc., even if we do not yet have the data to measure it. By and large, people working in these stages of supply chains also produce goods for export to many different countries.

Supply chain governance efforts largely rest on the idea that a supplier's customers – the lead firms in supply chains – have some degree of responsibility for labour and environmental conditions at their suppliers, even if they do not own or control those suppliers. This is one of the core tenets of the UN Guiding Principles on Business and Human Rights, and is built on a large and well-established body work on supply chain power dynamics.⁸

On the human rights side, these governance efforts are attempting to reconnect *responsibility* for respecting the rights of workers – which almost universally still rests with the direct employment relationship – and the *resources* needed to ensure respect for their rights, which have overwhelmingly migrated to global brands and retailers.⁹ On the environmental front, we see a similar dynamic: the wealthy top end of the supply chain benefits the most from environmental degradation, while local communities have to absorb the negative externalities.

Living wages and excessive overtime are two examples of rights violations that are widely understood to require the active involvement of lead firms in supply chains in resolving. Garment brands, as a group, simply do not pay enough to suppliers to enable them to pay living wages. And competitive pressures – between brands and between countries – undercut the ability of most suppliers to demand higher prices.¹⁰

Similarly, a well-documented root cause of excessive overtime lies in the purchasing practices of brands. Poor forecasting, late changes, unrealistic production calendars, and badly-planned production peaks on the brand side all put suppliers in the position of having to demand working hours in violation of ILO standards or risk losing customers.¹¹

Supply chain governance efforts such as the EU's Corporate Sustainability Due Diligence Directive (CSDDD) the Good Clothes Fair Pay European Citizens Initiative on living wages; or enforceable brand agreements are all designed, to a greater or lesser degree, to change the root-cause behaviours of brands that cause or exacerbate human rights and environmental violations at suppliers.

7 For more on this concept, please see Klaus Hohenegger & Doug Miller's [Labour Minute Costing](#). Piece-rate work uses a different calculation system, but is also considered to be far more exploitative (see. e.g. Chan and Siu 2010) and something many want eliminated.

8 e.g. Anner, Bair & Blasi (2013); Santos et al. (2016); Dallas, Ponte & Sturgeon (2019); etc.

9 Shelley Marshall (2019) discusses these issues and highlights emerging alternatives to the weaknesses of traditional employment contracting in global supply chains; see Chapter 9.

10 See e.g. Vanpeperstraete (2021a); The Industry We Want's online [wage gap dashboard](#).

11 See e.g. Locke (2013); Dash & Nalam (2012), Vaughn-Whitehead & Caro (2017); Merk (2016)

FIGURE 2: ‘COUNTRY X’ POTENTIAL LIMITS OF SUPPLY CHAIN GOVERNANCE COVERAGE

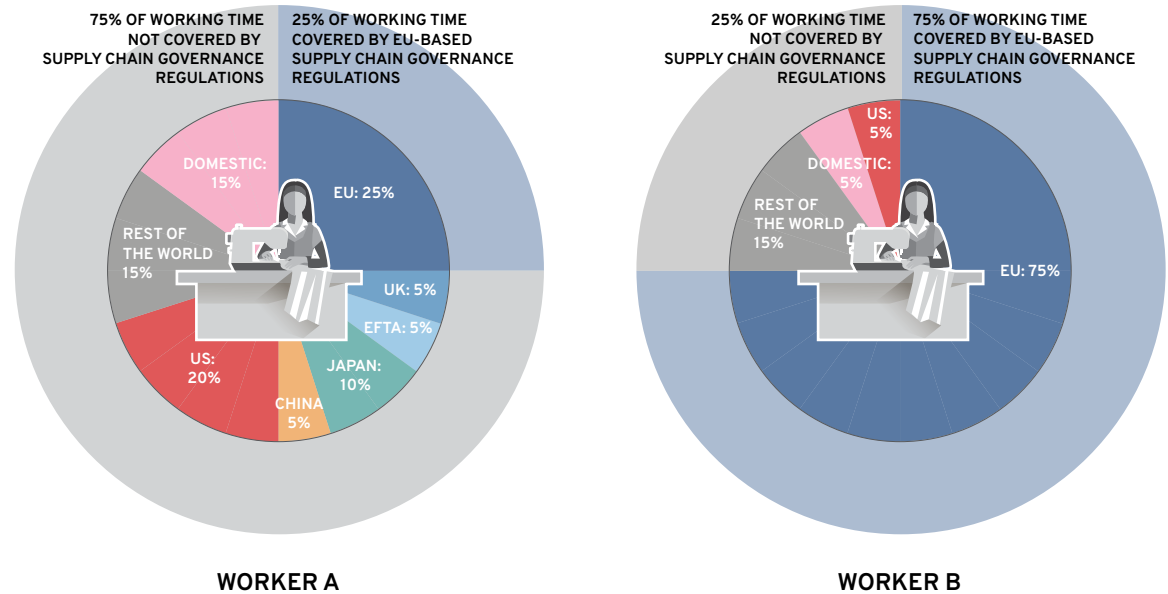


Figure 2 illustrates the challenge facing any supply chain governance effort: its impact for any given worker will depend on the structure of the supply chains she works for. Let’s assume the EU passes a law requiring brands to eliminate behaviours – like poor production planning and late product changes – that contribute to excessive overtime.

In the case of **Worker A**, the 25% of the time she works making goods for export to the EU would be covered by these requirements – but the other 75% would not. Even if all the brands covered by EU law managed to eliminate the root causes of excessive overtime, the other 75% of this worker’s hours for the year would not be covered by such protections – if other importing countries do not pass similar regulations for their lead firms.

It remains highly likely then, that Worker A would still end up facing excessive overtime demands for exports to the rest of the world. It’s possible that the overall demand for overtime may be reduced somewhat; but it’s also possible that the other 75% of customers will simply take advantage of the extra overtime capacity to shorten their lead times. A similar principle applies to many other issues: living wages, health & safety, freedom to join a trade union, etc. For environmental issues the dynamics may be slightly different – e.g. if the 25% of exports bound for the EU require a more expensive non-toxic dyestuff, that may help wastewater conditions overall; but the other 75% of exports may keep using the cheaper, toxic dyestuff, so the problem does not go away.

Worker B, on the other hand, employed by a different factory with a largely EU customer base, may benefit much more from the EU legislation (again, assuming it is effective) because most of her time is covered by it.

The underlying challenge we face here is that **you cannot protect part of a worker**; one way or another, in order to protect workers, and the environment a critical mass needs to be reached to address the negative impact of brand behaviour.

FIGURE 3: ‘COUNTRY X’ EXAMPLE OF FACTORY-LEVEL FRAGMENTATION OF EXPORT DESTINATIONS



Figure 3 illustrates how these same dynamics apply at a factory level: part of the factory’s time is covered by the supply chain regulation passed by the EU; the remainder of the time is not.

SHOULD WE BE TRYING TO IMPLEMENT SUPPLY CHAIN-BASED GOVERNANCE, GIVEN THESE CHALLENGES?

Yes. We want to be very clear: nothing in this paper should be construed as an argument for delay or inaction. Our argument is quite the opposite: the momentum building behind efforts like the CSDDD, the Good Clothes Fair Pay Citizens’ Initiative and other efforts in other industries needs to accelerate, and we need to start planning now to expand and strengthen these efforts in the future. The importance of rich economies starting to govern the behaviour of their global companies cannot be understated.

We are well aware that at this point in the discussion, many business interests will be tempted to seize on these issues to argue that supply chain governance is ineffective; or should be delayed until there is a global agreement, or will come up with some other excuse for more inaction.

Our point is that no system as complex as a global industry will be fixed with a single piece of legislation or a single initiative. Improvements will require a range of governance efforts; with *coordination* being a key concept. Different governance forms will have different impacts in different countries; the better we understand them, the better we can coordinate them. Progress will necessarily take place in phases, and efforts like the CSDDD need to be seen as the *beginning* of a process of regulating global supply chains, not the endpoint.

This paper, with its assessment of the challenges to governance design, is designed to strengthen the ideas currently being developed, and to support the creation of the next generations of governance that need to follow.

FIGURE 4: ‘COUNTRY X’ EXAMPLE OF FRAGMENTATION OF EXPORT PRODUCTION ACROSS THE NATIONAL SUPPLIER BASE

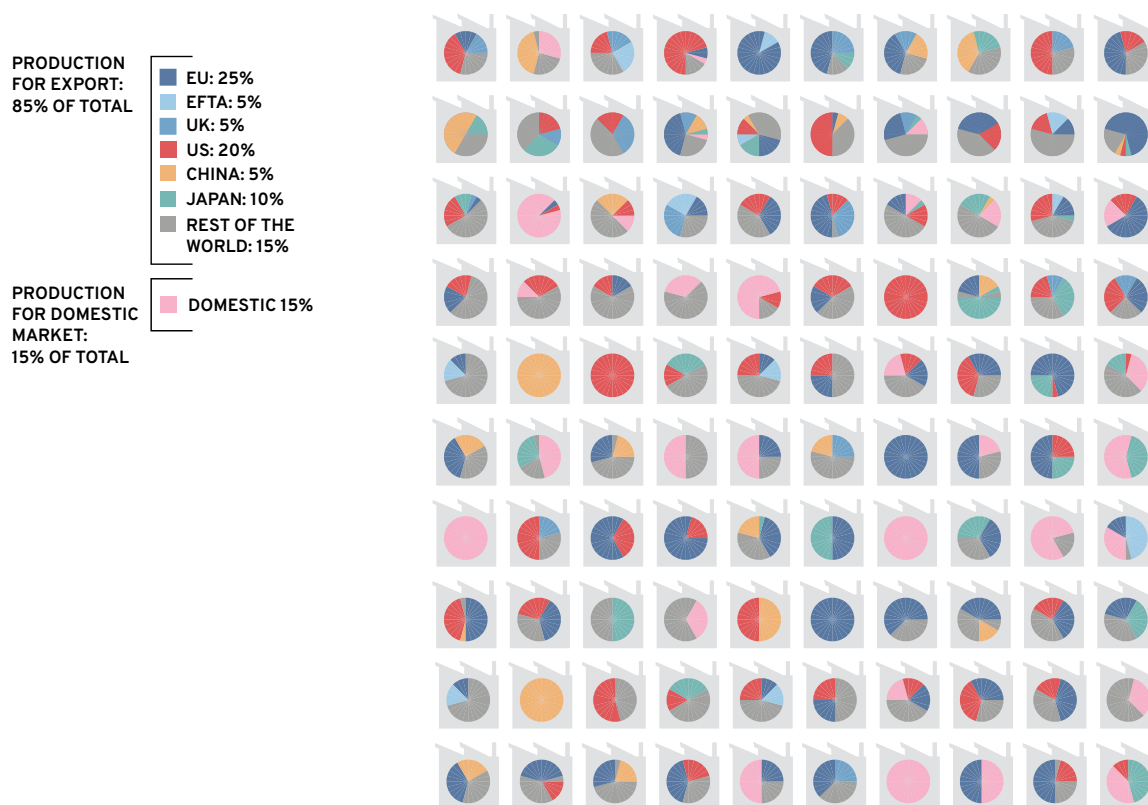


Figure 4 extends our model up the national level, and illustrates the key point that each factory will export garments to a mix of different countries. What immediately becomes clear is that when we say, for example, that the EU purchases 20% of a country’s output, it does not mean that 20% of factories or workers export their production to the EU. As the dark blue areas in Figure 4 show, the EU imports goods from many factories, but mostly in small amounts. This means that the impact of an EU-based regulations maybe more widespread, perhaps applying to half of Country X’s factories; but it is also diluted by sharing all of those factories with export production to countries that do not have the same supply chain regulations.

One of the reasons that we created a fictional ‘Country X’ for this section is that the data shown in Figure 4 – which would be extremely valuable to understand – simply does not yet exist in any accessible format.¹² But our fictional ‘Country X’ examples illustrate an important question: whether looking at individual workers or national industries: ***if you cannot protect part of a worker, how can supply chain governance be effective?***¹³

Part of the answer, as we will see in the coming sections, is by understanding much more about the specifics of groups of supply chains. Many systems are complex; they are only ungovernable if there is no evidence base to document the complexity. The Bangladesh Accord, for example, remains an important example of how a detailed understanding of supply chain structures and a focus on collective action creates governance options.¹⁴

¹² The important efforts of initiatives like the [Open Supply Hub](#) and the [Transparency Pledge](#) have helped to lay the groundwork for better data, and provide models for what mandatory reporting regulations could look like, but more mandated reporting is needed.

¹³ Again, the parallels with environmental violations may not be exact, and need further development, but do exist: we cannot protect part of a lake from pollution, for example.

¹⁴ See e.g. Reinecke & Donaghey (2017); Bair, Anner & Blasi (2020)

IS SUPPLY CHAIN GOVERNANCE JUST NEOCOLONIALISM OR PROTECTIONISM IN DISGUISE?

Regulations emerging from one country but designed to change conditions in another country rapidly raise a host of complex questions. The power relations between many garment-importing and exporting countries, and their histories often involve major wealth and power imbalances.

A growing body of thought and analysis has made it clear that while many export-country governments and employers bear responsibility for problems in the industry, the behaviour of global brands is at least as much of a contributing factor, as they demand unreasonable prices and production timelines, which suppliers meet by cutting corners on human rights and environmental protections.¹⁵ While the last 20 years of regulatory efforts in the garment industry have focused on voluntary code of conduct + audit schemes, there is now a growing willingness, particularly in Europe, to regulate lead firms in supply chains via legislation.

We have heard some argue that supply chain governance efforts are little more than neo-colonial power grabs. And indeed, if industry has too much influence over the design of these efforts, the risk is they will codify the ability of lead firms to offload risk and expenses onto foreign suppliers. They will continue to hide behind weak ESG reporting, while pressuring suppliers to keep prices artificially low by compromising on rights and environmental protections.

However, it is clear that most garment-exporting countries, their workers, and their communities have hardly been equal partners in the last 20 years of globalisation or its regulation.¹⁶ Well-designed supply chain governance efforts have the potential to force brands to act in ways that enable suppliers and export-country governments to enforce the law while retaining viable industries. They could end the race to the bottom if properly designed and implemented.

Others have argued that the real goal of supply chain governance is to ‘reshore’ production back to the EU and US. In an industry like garments at least, we struggle to imagine how the finances would work.

While proper analysis is needed, we suspect that for many brands, the low production costs afforded by the status quo matter far more to their business model than the risk of possible supply chain disruption.

Talk of reshoring may be good domestic PR for brands, but absent a radical change to many brands’ business models, or the emergence of disruptive new technologies, we would continue to have doubts about how widespread it is likely to be.

We do not see any of the current governance proposals as fixing the industry’s problems; they are, rather, first steps in that direction. And there remains a risk that these efforts, if poorly designed and implemented, could reinforce the negative aspects of global supply chains.

However, given the current state of affairs, and the relatively small degree of progress that voluntary efforts have provided over the past few decades, we would argue that the current crop of supply chain governance initiatives present an important opportunity, which needs to be carefully guided by pro-good-governance actors in both importing and exporting countries.

15 See e.g. Anner, Bair & Blasi (2013); Dallas, Ponte & Sturgeon (2019)

16 See e.g. Langford & Fransen (2022)

REFLECTIONS ON SUPPLY CHAIN GOVERNANCE AND TRADE-BASED GOVERNANCE

Katalyst's work – and much thinking on supply chain regulation – emerges from a governance perspective informed by global value chain theory, transaction cost economics, systems theory, and corporate law concerns. We use the term 'supply chain governance' to broadly refer to efforts that target lead firms, seeking to ensure their supply chain decisions align with desired human rights and environmental sustainability goals.

While supply chain governance is the main focus of this paper, our work with trade data led us to explore the realm of human rights and environmental governance that grows out of *trade policy*. And, in the context of discussing trade data, many are accustomed to thinking about the rights and environmental governance impact of bi- or multilateral trade agreements. However, in our experience, the two communities of practice – around supply chain governance and trade policy – do not interact as often as they could. We wanted to capture a few observations and reflections that emerged from our explorations, and hope they maybe be useful in coordinating efforts between the two approaches to governance.

Trade-based governance: A potential complement to supply chain regulation

For the purposes of this discussion, we consider two forms of what we broadly term 'trade-based governance,' focused on human rights and environmental protection.

One form involves specific, product-related standards. The proposed EU Forced Labour policy or US Withhold Release Orders on products like cotton from Xinjiang are examples of such an approach.¹⁷ Under both regimes, the basic idea is to prohibit the import of products made using forced labour.

Another form of governance, generally embedded as 'non-trade provisions' in trade agreements, is a requirement that the exporting country will agree to change laws or policy in order to gain market access.¹⁸ For example, the Mexican labour law reforms included in the renegotiation of NAFTA into USMCA; or expectations by the EU that trade partners abide broadly by the human rights clause in trade agreements.¹⁹

A full exploration of trade-based governance – how effective it may be in practice, or e.g. the impact of WTO rules – is beyond the scope of this paper,²⁰ as is a detailed comparison of trade-based and supply chain-based governance forms. However, we do outline four issues that may be helpful in future governance planning.

17 See Vanpeperstraete (2021a)

18 Polaski (2022) provides a very helpful brief history of trade requirements.

19 See Scherrer (2020) on USMCA and Zamfir (2019) on EU human rights clauses.

20 Many, such as Herr, et al. (2020), Ferrari et al. (2021) and Rodrik (2021), and have questioned the efficacy of these measures, and/or whether free trade agreements as currently designed are compatible with environmental and rights protection. We are sympathetic to these questions, but do not address them here.



FOUR ISSUES TO CONSIDER IN COORDINATING TRADE-BASED AND SUPPLY CHAIN GOVERNANCE EFFORTS

1. Who is the change target? Governments vs. companies

One key difference between these governance strategies are in the core actors being targeted for behavioural change. Trade agreements, of course, are negotiations between governments; supply chain governance (whether based in law, collective bargaining or voluntary action) focuses on companies, particularly lead firms in supply chains.²¹ To our knowledge, it is rare for lead firms to be the focus of labour or environmental provisions of trade agreements.

2. What are the power structures? National boundaries vs. transnational supply chains

A second and related difference has to do with the power structures that the two forms of governance operate in.

Trade-based governance understandably prioritizes the role of states in ensuring human rights and environmental protections. However, as a few observers have begun to point out,²² the logic of trade deals and trade-based governance that focus primarily on states may not, on its own, be able to address a key 21st-century power dynamic: the impact of global industries' business models and purchasing practices.

The idea of the 'Race to the Bottom,' where countries compete to have the lowest production costs to attract supply chain links is well-documented. Especially in countries where sections of the economy exist solely to service the needs of foreign supply chains, the impact foreign brands have on government enforcement of labour and environmental standards included in trade deals cannot be ignored.²³ This is, of course, one of the main innovations in the UN Guiding Principles: an acknowledgement that the power of individual states – while essential to protecting rights – is no longer adequate in an age of transnational supply chains. Regulatory tools need to be developed that can govern transnational supply chains as a distinct power structure, and that is the gap that supply chain governance efforts are emerging to fill.

²¹ In some industries like extractives, state-industry interactions are explicitly part of supply chain governance; e.g. the OECD guidelines on conflict minerals discuss these issues. For many other industries, like garments, state ownership of factories is uncommon.

²² See Barbu et al. (2018)

²³ e.g. Bhattacharjee & Roy (2012); Barbu et al.(2018)

While we cannot explore this idea in great depth in this paper, there are clearly major questions still to address – and potential benefits to be gained – in further exploring the interface between states and supply chains as power structures. Such work would form the basis for understanding how trade-based and supply-chain based governance strategies can be aligned to create a comprehensive governance framework that reflects the realities of the underlying power structures.

3: The relevance of other trade partners

When the US or the EU negotiates environmental or human rights trade deal provisions with a trade partner, does that partner's trade relations with other countries figure into the design of those provisions?

To illustrate the idea: let's return to the example of the reforms to Mexican labour law negotiated by the US as part of USMCA. Those reforms may be beneficial to workers across the Mexican economy – not just in industries exporting to the US. But presumably these 'spillover' effects benefiting Mexican workers exporting to say, Belgium or Brazil, were not a primary concern of US negotiators.

In any event, when it comes to supply chain governance, especially in industries with shared supplier bases like garments, the role of other countries is absolutely critical to the success or failure of the governance effort, as we saw in Figures 1-4.

The behaviours and lead firm regulations of other importing countries matter because they share the same supplier base with e.g. the EU. We will explore the policy implications of this idea more in Part III.

4: The relevance of production for domestic markets

A final consideration lies in how production for domestic markets is treated within trade-based governance. We assume that in many trade agreements, production for domestic markets is largely out-of-scope.

However, just as with production for other trade partners, production for domestic markets can have a significant impact on conditions in industries with shared supplier bases. Domestic lead firms may not be held to the same standards as international lead firms, in terms of purchasing practices or price. And while in some countries there is theoretically a distinction between domestic and export factories, that is not always the case. Widespread unauthorised subcontracting means that divisions between domestic and export industries should often be suspect.

We summarize these points in the following chart:

FIGURE 5: COMPARISON OF SUPPLY CHAIN GOVERNANCE AND TRADE-BASED GOVERNANCE FEATURES

	Supply Chain-Based Governance	Trade-Based Governance
Target for Change:	Companies, especially lead firms in supply chains	Governments
Power Structure:	Transnational Supply Chains	National Boundaries
Relevance of other trade partners:	Critical risk factor for effective governance	Out of scope?
Relevance of production for domestic markets:	Critical risk factor for effective governance	Out of scope?

PART II: VISUALISING THE TRADE OF A GLOBAL INDUSTRY



Building on the context offered in Part I, in Part II we explore trade data with an eye to what it tells us about the potential impact of various supply chain regulations efforts already underway – or still in need of development.

A main goal of this analysis is to provide an overview of the most important players in global garment trade in terms of importing and exporting countries. While it is fairly common to see data on individual countries, our goal is to describe the industry as whole; in doing so we aim to provide context to help policymakers and civil society consider what needs to happen to achieve change at scale.

A broad view of the industry also reflects the points outlined in Part I: when attempting to design governance in complex and shared supply chains, policymakers need to consider not only the parts of the industry they do have influence over; but also the parts outside of their jurisdiction, and what influence external actors may have on efforts to protect rights and the environment.

ABOUT THE DATA

The trade data in this report is drawn from the [Atlas of Economic Complexity](#), developed by the [Harvard Growth Lab](#) at Harvard University. At time of writing the 2019 data was the last year available from the Atlas, and we would argue is a more typical year than pandemic-impacted 2020.

The raw data is based on the UN Comtrade database. Since trade data is not always reported consistently or accurately, the Atlas of Economic Complexity team has taken steps to address some of the common issues and to adjust estimates where data is weak or suspect.

Nonetheless, trade data should be treated with caution; it provides a sense of scale in trade between two countries, but even when cleaned, as the Atlas data is, there is a margin of error in how accurately it represents reality, due to errors or gaps in the underlying data reported by governments. The graphics we present here should be interpreted as approximations.

Contributing author Lukas Linsi and his colleague Daniel Mügge have written a paper [discussing the limits of trade data](#) in greater detail, and is valuable reading for anyone interested in trade data as a policy tool.

The implications of poor-quality trade data for supply chain human rights and environmental governance – and what should be done about it – is something we hope to explore in future publications.

WHAT DO WE MEAN BY ‘GARMENTS’?

For the purposes of this paper, we have included five groups of products that make up most of what is traditionally referred to as the ‘Garment Industry.’

1. Knit clothing 2. Non-knit clothing 3. Footwear 4. Headwear 5. Accessories

Knit/non-knit refer to the production process used in a garment’s fabric. Accessories include leather goods and bags. We follow the [Harmonized System](#) (HS) which is the basis for international customs, and can be used to identify nearly any type of product

For more on the specific HS codes included in this research, please see Appendix 1.

Finished Garments vs. Raw Materials

We focus in this paper solely on the trade in finished garments. While many forms of supply chain governance assert lead firm responsibility for earlier supply chain stages – fabric manufacturing, cotton farming, etc., – there is no way to use current data to trace materials from source to ultimate retail sale.

However, the principles we attempt to illustrate in this paper – of the impact of trade flows on governance, and the problems of shared supply chains – hold true across the many stages of production in garments and other supply chains with many production phases.

The EU vs. EU Member States

In reports about industry-specific trade – be it garments or others – EU member states are often reported on an individual basis.

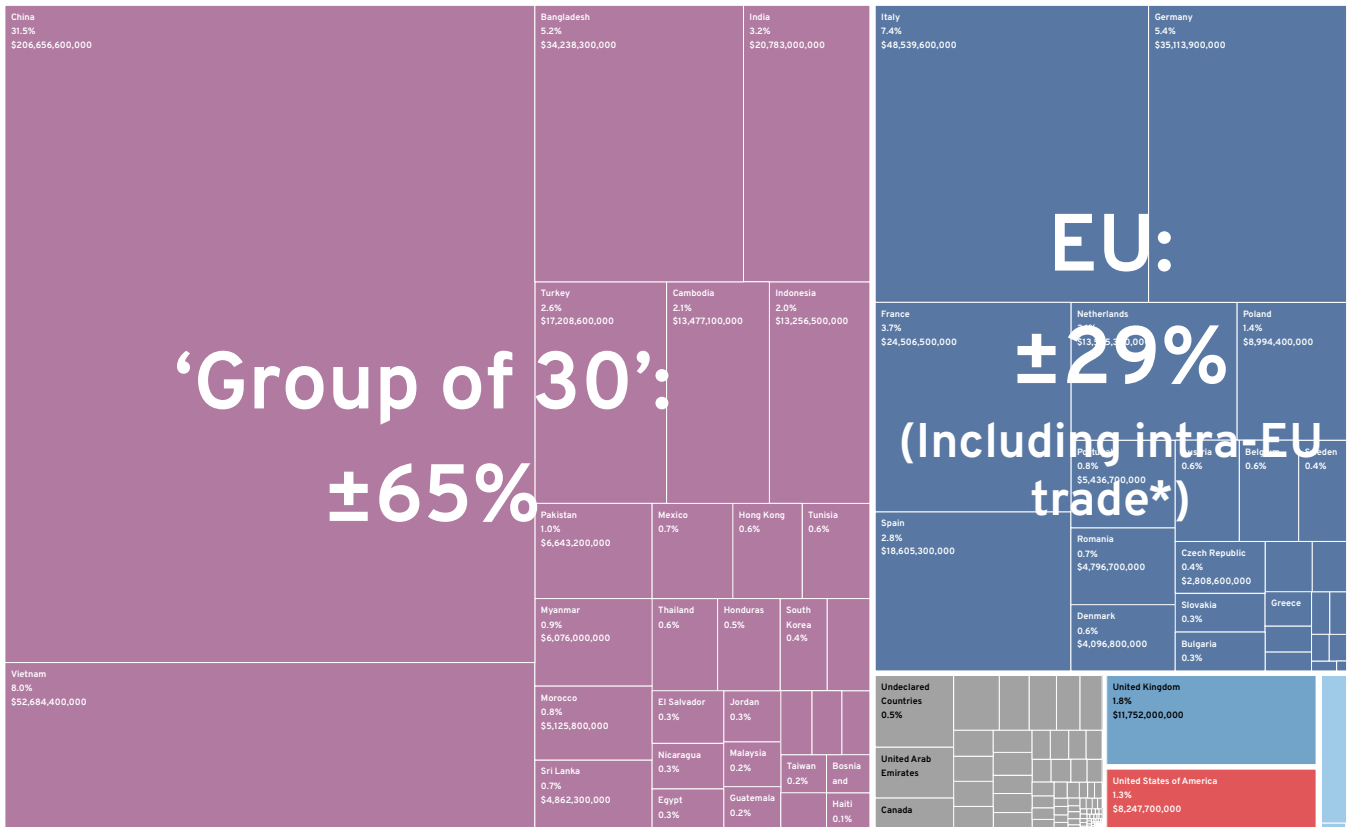
Throughout this report, however, we report on the EU as a single entity. This is very much in keeping with a main recommendation of our previous paper: in a highly fragmented industry like garments, *strategies to govern brands need to be aligned with the structure of the garment workforce.*

What do we mean by this? EU garment brands operate inside a single market; walk down any high street in a European city and you will see garment brands from all over Europe on sale. Webshops follow the same principle. In short, garment workers do not produce goods for individual EU countries. They produce goods for the EU as a market. Governance efforts should reflect this reality.

Furthermore, as we saw in the previous section, garment workers manufacture goods for export to many different countries. Individual EU member states, even the largest of them, simply are not big enough on their own to have a significant impact on enough garment workers’ conditions to create sustainable change. Belgian and Danish garment brands, for example, are sharing factories with brands from Australia and Russia and the US and dozens of other countries.

The efforts of individual countries like the Netherlands and Germany – as we noted in the introduction – are important examples of what can be done. But for significant and sustained impact, the EU needs to act as a bloc.

**FIGURE 6: GLOBAL GARMENT EXPORTS 2019
ESTIMATED TOTAL \$655,000,000,000 (\$655 BILLION)**



WHO EXPORTS GARMENTS?

Garment exporting countries shipped around \$650,000,000,000 (\$650 Billion) worth of garments²⁴ in 2019 and can be categorized in four groups:

1. The ‘Group of 30’ countries: This name is our effort to describe an extremely diverse group of around 30 countries spread over Asia, Africa and the Americas who together dominate global garment exports.²⁵

Setting aside the EU/EFTA/UK cluster and the US, the Group of 30 are responsible for more than 90% of the remaining global garment exports – \$425,000,000,000 worth in 2019. See Figure 7 for a map of the Group of 30 countries.

2. The EU/EFTA/UK Cluster: The EU remains a major garment producer, however as we discuss more on page 25, the 29% global share is likely inflated by trade between EU member states – meaning the Group of 30 is likely more important than these figures show.

Given the close economic ties between the garment industries in the EU, EFTA (Switzerland, Norway, Iceland and Lichtenstein) and the United Kingdom – despite Brexit – we have generally grouped these countries together across the paper.

²⁴ This number generally represents the ‘Freight-on-Board’ or export value of garments. This can, very roughly speaking, be thought of as the wholesale price that the world’s brands pay for garments.

²⁵ We assume Hong Kong export figures are primarily for garments manufactured in China; however certain visualization formats do not permit us to combine the data.

3. The United States: The US still maintains a small amount of domestic production, but only exports around 1% of the global total.

4. The Rest of the World: All other garment exporters; this includes around \$3.5 billion in trade where some data is missing; and some economies like the UAE, which appears to be a major garment re-exporter (rather than producer).²⁶

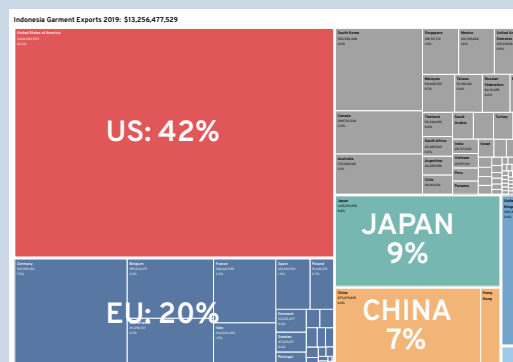
Focusing on the ‘Group of 30’

Given the focus this paper has on the design of supply chain governance, particularly emerging from major importers like the EU and the US, we will primarily discuss the interaction between major importers and the ‘Group of 30’ countries in the remainder of this paper.

The application of, for example, EU due diligence laws to production within EU member states is potentially important to many workers; however it does not pose the same governance challenges as attempting to understand the potential impact of EU due diligence requirements across the Group of 30 countries.

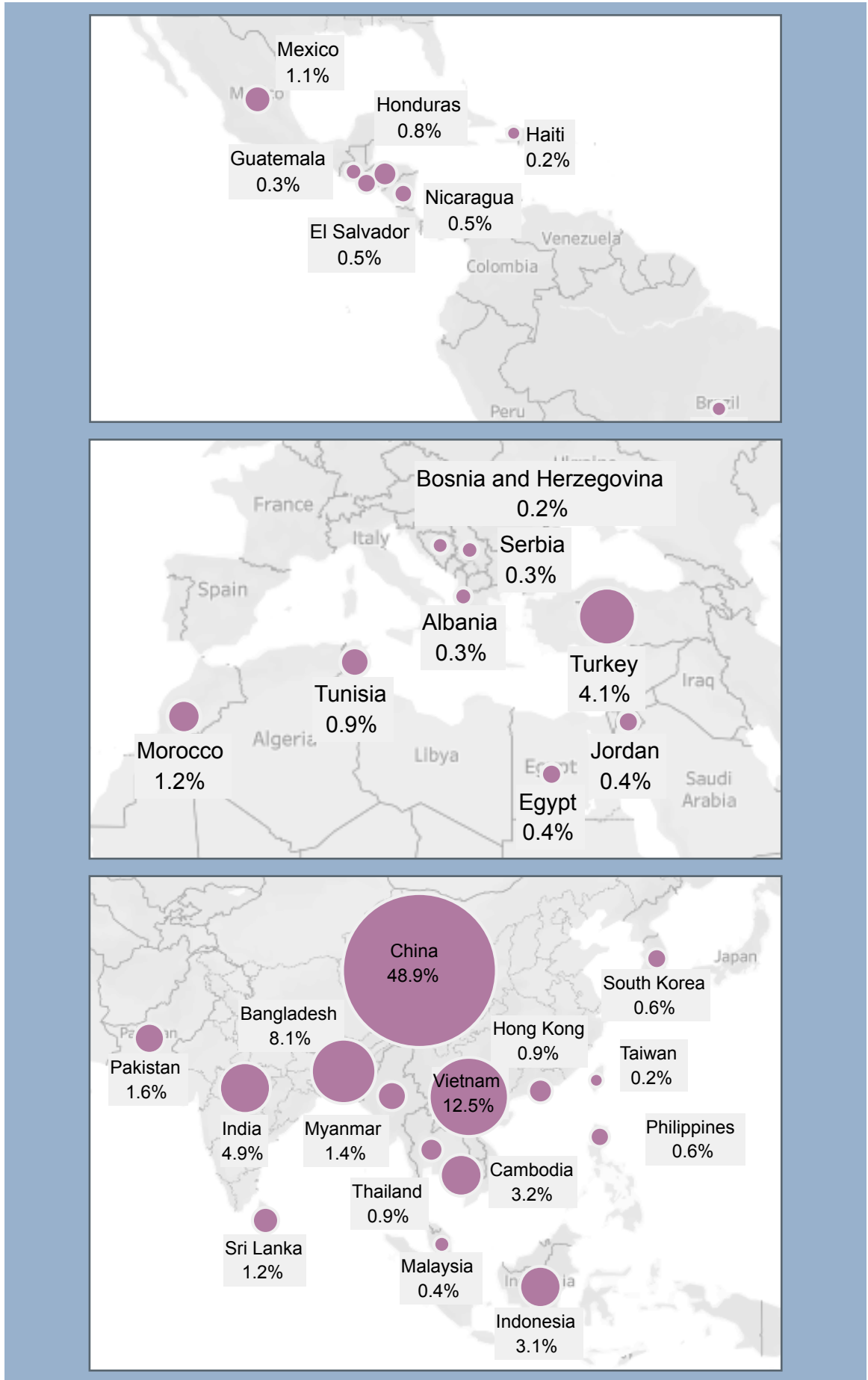
WORKING PAPER 3 ANNEX: COUNTRY BY COUNTRY TRADE INFOGRAPHICS

We have also developed an annex to this paper, which provides country-by-country garment trade infographics for the ‘Group of 30’ countries. This Annex can be downloaded from the Katalyst Initiative website [here](#).



²⁶ See UAE Ministry of Economy ‘Non-Oil Foreign Trade’ report, 2020

FIGURE 7: THE 'GROUP OF 30' GARMENT EXPORTERS
GLOBAL MARKET SHARE (EXCLUDING EU/EFTA/UK AND US EXPORTS)
2019 EXPORT VALUE: \$425,000,000,000 (\$425 BILLION)





DOES THE EU REALLY PRODUCE A THIRD OF THE WORLD'S GARMENTS?

We believe that the 'Group of 30' countries may represent an even larger share of garment exports – and the EU less of the total – than is shown in Figure 6, for two main reasons:

1. EU trade figures include intra-EU trade. While the EU still has significant domestic production, several experts we spoke to warned that intra-EU trade tends to distort the values of EU trade statistics. A shirt could be imported from Vietnam to a brand's warehouse in Belgium, and counted once. If it then is shipped to a store in France, it could be counted again in EU export figures.

We also suspect that UK, EFTA and some other countries' trade figures may suffer from similar inflation of value due to re-exports.

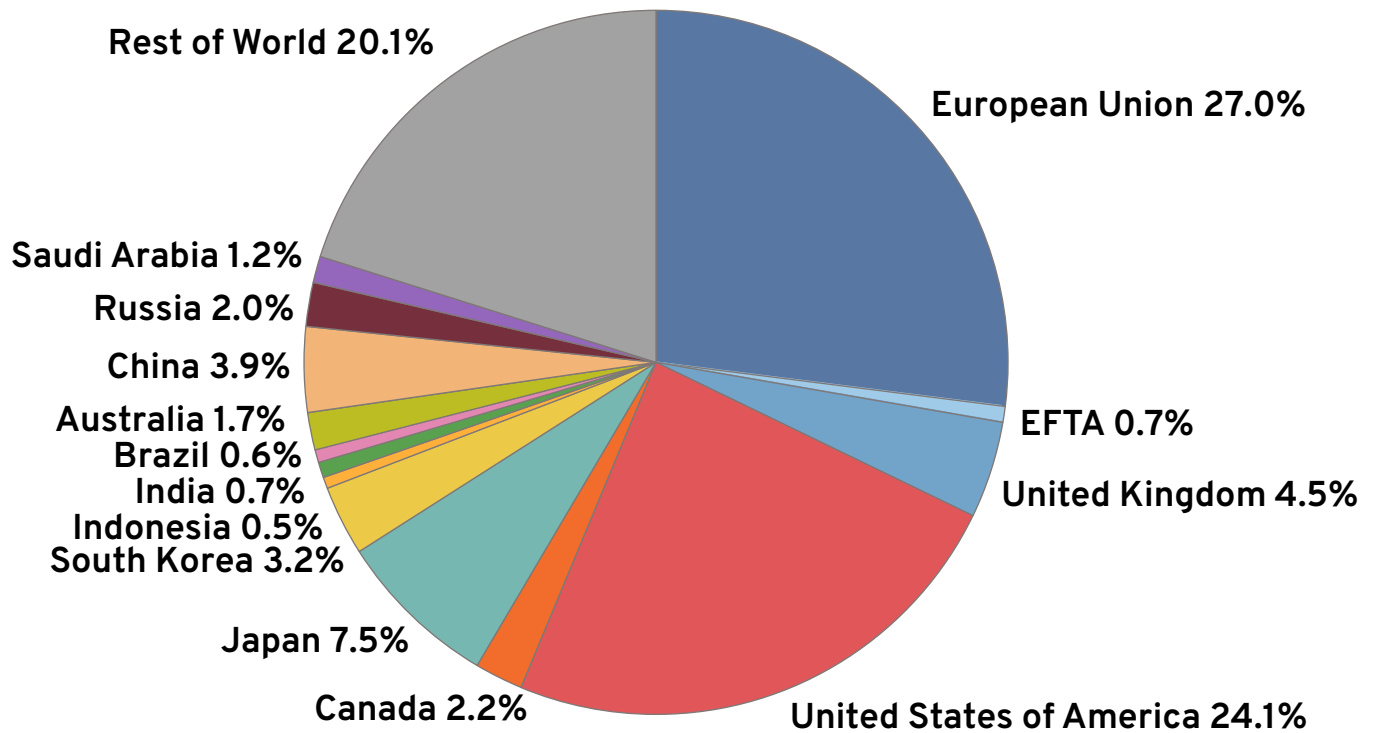
2. Price differences. As noted on the previous page, one assumption underlying this analysis is that most garments shipped from the Group of 30 are shipped at factory cost, also known as 'Freight on Board'.

However, intra-EU trade may include a garments valued at EU wholesale prices,¹ or even full retail price, both of which would be higher. As a result, intra-EU trade figures would be inflated, relative to factory prices. Furthermore, higher factory costs, especially for luxury goods produced in Europe, may further distort the picture, especially when considering production volumes – and ultimately the share of the global garment labour force – rather than simply focusing on export values, as we do in this analysis.

We hope to revisit both of these issues in a future revision to this paper, and be able to provide greater clarity on the relative size of the EU and Group of 30 in global exports.

¹ E.g. A factory may export a shirt for \$10 to a Croatian wholesaler. That wholesaler may sell that shirt for \$15 to a Dutch retailer (who then sells it to an end customer for \$30).

**FIGURE 8: MAJOR IMPORTERS OF GARMENTS FROM THE ‘GROUP OF 30’
2019 EXPORT VALUE: \$425,000,000,000 (\$425 BILLION)**



WHO IMPORTS GARMENTS ?

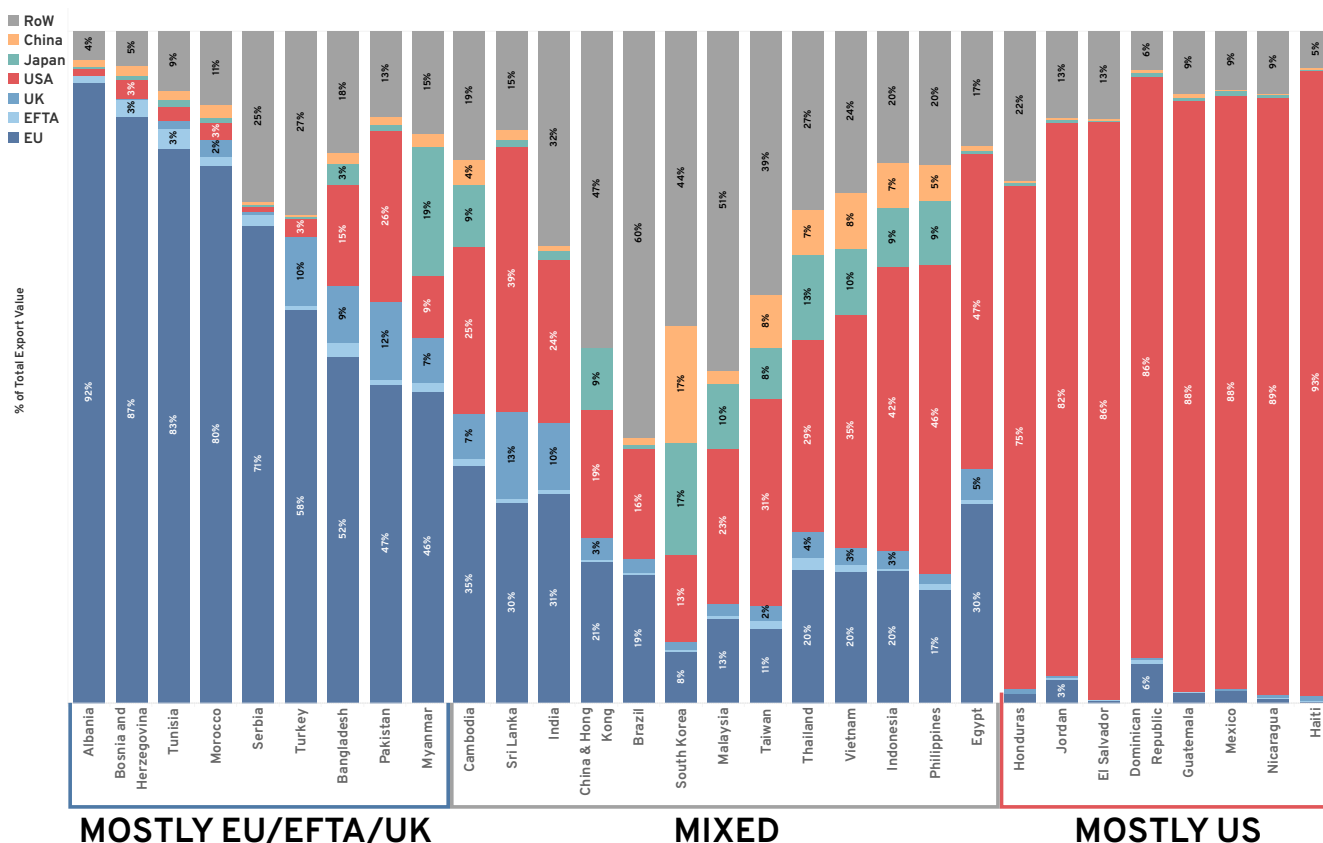
Figure 8 illustrates the distribution of garment *imports* from the Group of 30. The EU/UK/EFTA cluster and the US remain the largest garment importers, accounting for around 55% of total imports.

That the EU and US are large importers is no surprise. However, looking at the full picture and at how trade is distributed is illuminating, and addresses a number of assumptions that we sometimes hear in policy discussions.

The relatively small amount of garments that India and especially China import are noteworthy, implying that for the moment anyway that both countries rely on domestic manufacturing for most of their production.

It should be noted however, that both countries, and particularly China, import large amounts of raw materials used in the production of garments for export. These raw materials would still be covered under many forms of governance - for example human rights due diligence-based systems - even though we cannot illustrate them using trade data.

FIGURE 9: ‘GROUP OF 30’ COUNTRIES: DESTINATIONS FOR GARMENT EXPORTS



WHO ARE THE MOST IMPORTANT TRADING PARTNERS FOR EACH EXPORTING COUNTRY?

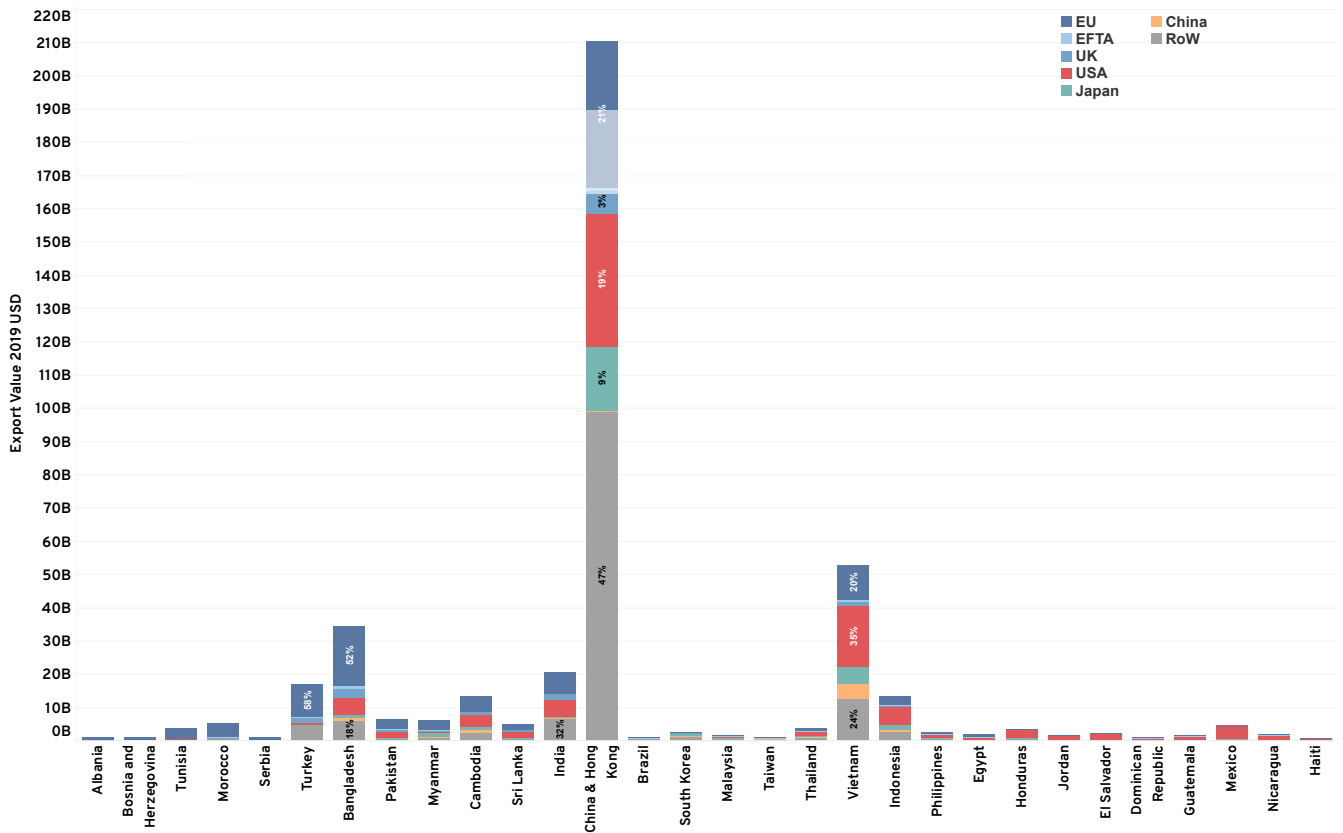
Figure 9 shows, for each Group of 30 country, how their garment exports are distributed across trade partners.

This chart tells us that there are three major groups of exporting countries: At the left side are countries whose exports are primarily destined for the **European Union**; at the right are countries exporting primarily to the **United States**.

In the middle are countries like China, Vietnam and Thailand whose exports are diversified, and include significant amounts of exports to non-EU or US destinations.

That some countries are heavily reliant on the EU or the US as trade partners is not a great surprise; however a significant number of countries – and as we see in Figure 10, a significant amount of global production – takes place in countries where neither the EU nor the US are the dominant trade partner. We explore the policy implications of this distribution more in Part III.

FIGURE 10: WHERE THE ‘GROUP OF 30’ COUNTRIES EXPORT GARMENTS TO: TOTAL EXPORT VALUE



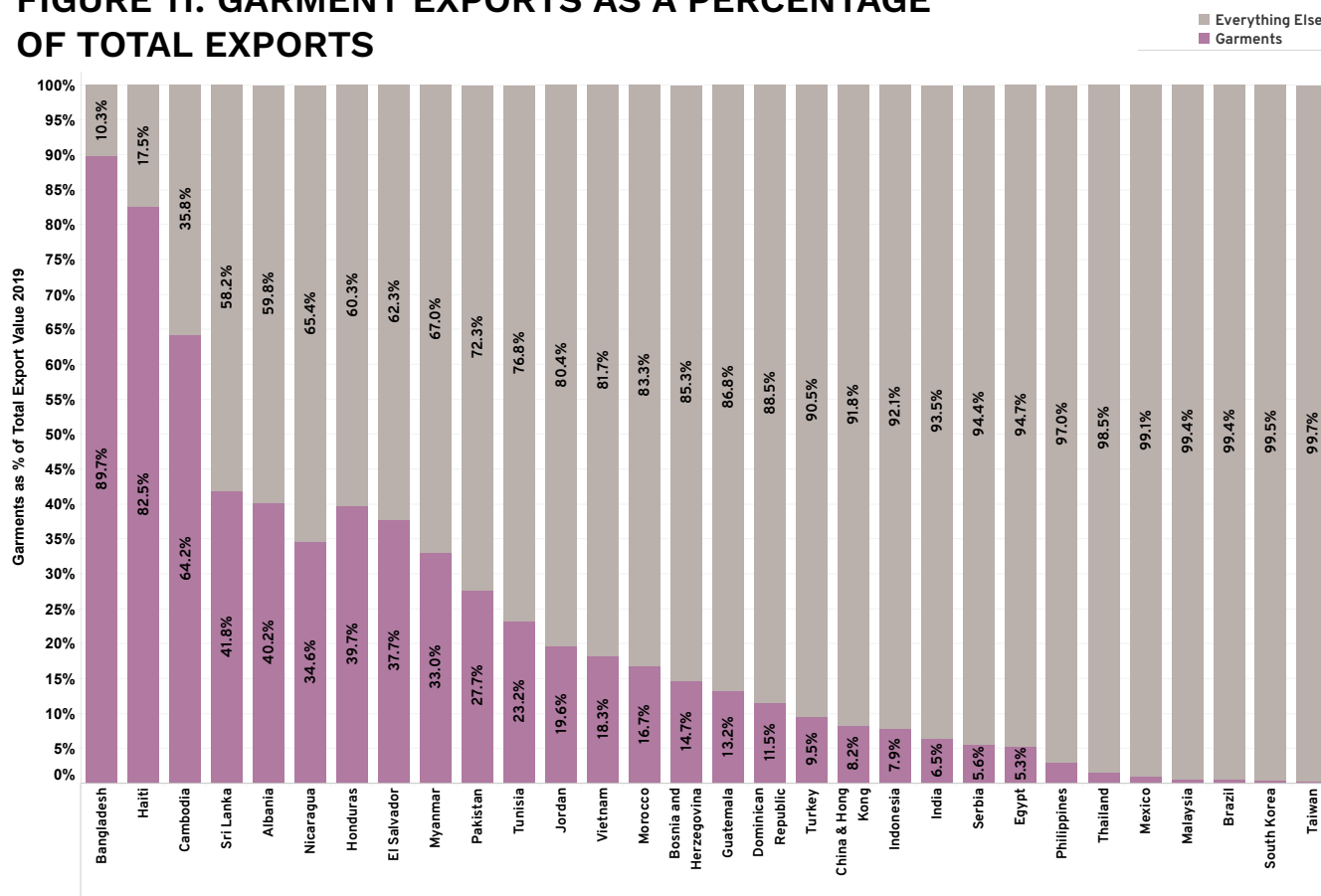
HOW MUCH DOES EACH COUNTRY EXPORT, AND TO WHERE?

Figure 10 is a companion to Figure 9, and illustrates the relative dollar value of each country’s exports, and the amount imported by major importers.

That China is still the world’s largest garment exporter will surprise no one.

And while the EU may import a relatively small part of China’s total garment output, in absolute dollar amounts, the value of garments the EU imports from China still represents more that the total national production of many other countries combined. This creates a number of policy questions that the EU will need to address in attempting to govern the supply chains of brands importing goods from China to the EU.

FIGURE 11: GARMENT EXPORTS AS A PERCENTAGE OF TOTAL EXPORTS



ADDITIONAL TYPES OF TRADE DATA TO INCLUDE IN CONSIDERATIONS OF GOVERNANCE DESIGN.

Many factors influence how effective supply chain governance efforts may be. Here, we consider two trade-related questions worth considering as part of the broader governance policy discussion:

1. How Significant are Garments for Each Country’s Export Economy?

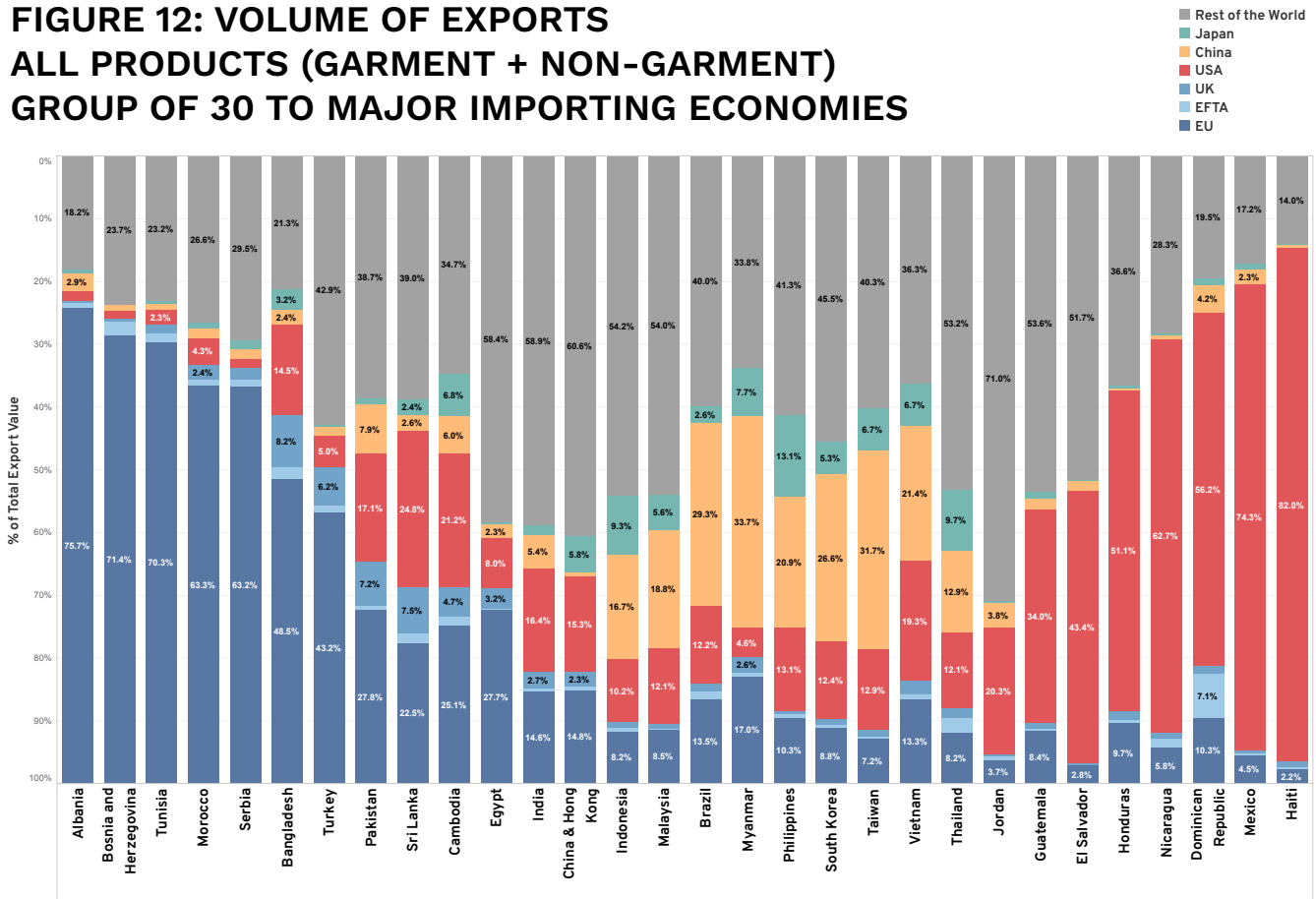
When it comes to garment-sector-specific supply chain governance, such as the European Citizens Initiative on Living Wages it can be helpful to understand how important garments are to a country’s overall export economy, as one factor in understanding their likely impact in different countries.

Figure 11 illustrates how much of each country’s export economy is made up of garments,²⁷ ranging from Bangladesh on the left, where garments make up 90% of export earnings; compared to Taiwan, where garments are less than 1% of exports.

It is important to remember that Figure 11 only represents exports of finished garments (not raw materials or components), so the garment industry may be much more important overall to some countries than the graphic indicates. And in other cases, like Taiwan, local production may be minimal, but Taiwanese companies own factories all over the world; so supply chain regulations will certainly impact countries like Taiwan, albeit indirectly.

²⁷ The figures in this paper only consider trade in goods. Trade in services was outside the scope of the project, although there can also be human rights and environmental impacts from service industries..

FIGURE 12: VOLUME OF EXPORTS ALL PRODUCTS (GARMENT + NON-GARMENT) GROUP OF 30 TO MAJOR IMPORTING ECONOMIES



2. What Role May Trade Relations Beyond the Garment Industry Play?

While there are many sound economic and governance reasons to consider governing the garment industry as a sector, it also exists within larger trading relationships, which will affect any sector-specific efforts.

Figure 12 looks at the question of how important *overall* trade relations are between the Group of 30 countries and the major garment importers. It is very similar to Figure 9, except it shows how much the EU, US and other major importer buy of *all* the Group of 30's exports – clothing, food, electronics, etc.

In comparing Figure 9 and Figure 12, we can see that the countries at the edges (e.g. Albania or Haiti) sell most of both garments *and* all other goods to the EU or the US. In countries like this, heavily dependent on both a small number of industries and trade partners, industry-specific supply chain governance efforts may have widespread impact. Meanwhile more diversified economies in the middle are far less dependent, overall, on the EU and the US as trade partners.

Many supply chain governance efforts, such as the CSDDD are cross-industry. This means that countries that, for example, export more overall to the EU will encounter the directive's impacts more often, across multiple industries.

PART III: POLICY IMPLICATIONS AND REFLECTIONS



The data presented in Part II generates a wide variety of policy and strategy implications, several of which we have noted in passing.

In Part III, we expand on these implications and offer additional considerations for policy-makers and civil society strategists. We also return to the importance of scope and coverage, as discussed in the early parts of this paper. Building on Part II's data, the impact of scope and coverage on effective governance can be seen as a recurrent theme across many of the ideas in the following pages.

Some of the policy implications outlined in Part III are relatively new. Others have been proposed before, but our data and analysis offer additional support that we hope will be of use in developing them further.

Each of the eight policy implications we note here would also require an individual paper – or book – to explore fully, and Katalyst would appreciate hearing from individuals and organisations already working along similar lines.

We hope that by signposting these eight issues, we can help policymakers and civil society actors to strengthen their governance design efforts.

We also provide a brief overview of our Theory of Change for using data to drive better governance design in the context of a complex industry like garments.

A SHORT THEORY OF CHANGE: DATA AND SUPPLY CHAIN GOVERNANCE

Here, very briefly, is an overview of how we at Katalyst propose that the kind of data presented in this report can be useful for designing governance.

1. In order to design effective human rights and environmental governance, we need a shared understanding of the industry's underlying structure – based on comprehensive data, rather than anecdote and guesswork.

Understanding the underlying structure of a complex system – and not just the negative effects it has – is a fundamental step in achieving change. The garment industry is not a monolith; it is composed of dozens of sub-industries that compete and cooperate with varying degrees of dysfunction. In order to regulate such a complex system, we need to understand power and financial relations, from the sowing of cotton seeds in Uzbekistan to share buybacks planned in London and New York. Those two points, and all the supply chain stages in-between, are interconnected. Many industry stakeholders understand the industry's structure in a general, anecdotal way; the *actual* industry structure is far too poorly documented to be useful in governance design.

In addition to being evidence-based, our understanding of the industry needs to be shared. Effective coordination between different policymakers, governments, trade unions, NGOs and other civil society actors is often missing, due to lack of resources, lack of data, and the sheer size of the industry. A shared understanding of the industry's structure and power relations will facilitate that coordination.

2. Once we understand the overall structure, we need to segment the industry into smaller subsections with common characteristics that make governance feasible.

In an industry spread over tens of thousands of brands, hundreds of thousands of factories and farms, and dozens of countries, no single regulatory approach will work.

But the more we understand about the industry's overall structure, the easier it is to identify subsections that can be regulated – e.g. by product type, sourcing cluster, import and export trends, workforce similarities, and national boundaries.

3. Complex systems have multiple power centres; our governance solutions need to take that fragmentation into account.

There is a running debate among garment industry stakeholders about who should be held accountable for human rights and environmental violations in the industry.

Factory and farm owners, exporting country governments and garment brands are the most commonly cited, though importing country governments also need to be on the list. Many stakeholders tend to hold one or the other primarily responsible, sometimes to the exclusion of the others.

We would argue, however that all of these groups of actors form power centres that will need to change behaviour. And all have incentives to shift risks onto someone else. These dynamics needs careful management in any supply chain governance to achieve desired goals and avoid unintended consequences. Defining and apportioning responsibility in a coherent manner amongst these power centres is another essential piece of changing complex systems. We need to better understand how these power centres relate to each other if we hope to effectively change their behaviours.

1

THE EU AND US REMAIN CENTRAL TO GOVERNING GARMENT SUPPLY CHAINS; SO DOES COORDINATION BETWEEN THEIR CIVIL SOCIETY NETWORKS

The EU and the US import more than half of the world's garment exports; and in many countries, either the EU/EFTA/UK cluster or the US are the major trade partner by a large margin. China may be a major importer of raw materials – and a large producer of garments domestically – but the EU and the US still dominate global trade in finished garments.

The clear message here is that if the EU and the US developed coordinated supply chain governance strategies, it would go a long way towards improving conditions globally. This may seem to be an obvious point, but it bears repeating.

We also want to highlight the importance of a coordinated approach between civil society networks in the EU the US. (We address the role of civil society from garment-producing countries in the pages ahead). We already see some divergence between EU and US civil society. For example, EU organisations are investing a great deal of time and effort to help shape the CSDDD and CSRD into regulation with teeth and impact. Many US civil society actors, however, advocate lawsuit-based strategies such as creating joint and several liability for brands sharing a supplier.²⁸ These are not mutually exclusive concepts, and we would argue neither mandatory due diligence nor joint & several liability are 'magic bullets' for fixing supply chains. Much more work will need to be done after the passage of any current legislative proposals. We would also not necessarily argue for a single approach to be applied in both the EU and the US, given the political and economic differences – but coherence will be important.

Remembering that garments for export to the EU and the US often are produced in the same countries, and can easily be produced in the same factories by the same workers, it's clear that the more civil society networks in the EU and the US can find a coherent governance strategy, the better the outcome will be for workers and the environment. And given that a significant proportion of garment brands operate in both jurisdictions, a coherent approach would also increase pressure – and make it easier – for many brands to comply with new regulations.

Discussions on a binding treaty on transnational business & human rights²⁹ have been underway for several years, and may well provide a coordinated approach globally, for all industries, but again the EU and the US will have central roles to play.

²⁸ See, e.g. the California Garment Worker Protection Act and the proposed FABRIC act.

²⁹ The BHRRC provides an [regularly updated overview](#); the treaty is currently in its third draft.

2

**THE IMPACT OF SUPPLY CHAIN
GOVERNANCE EFFORTS WILL VARY
ACROSS EXPORTING COUNTRIES
GOVERNANCE STRATEGY NEEDS TO
ACCOUNT FOR THESE DIFFERENCES**

As we explored in Part I, the fact that most workers, factories and countries manufacture goods for export to many different countries can have a huge impact on the effectiveness of supply chain regulation emanating from the EU, US and other importing countries.

If, for example, the EU requires garment brands to conduct due diligence in their supply chains, the impact for workers and the environment³⁰ is likely to vary from country to country. To be clear, trade volumes are only one of many factors that will impact the effectiveness of supply chain governance efforts. But they are a fundamental factor.

Consider the two countries at right: Albania and Indonesia. From a volume perspective alone, it seems far more likely that EU regulations will benefit Albanian workers than Indonesian workers. For countries like Indonesia, however, it will be more difficult to predict the impact of a law like CSDDD.

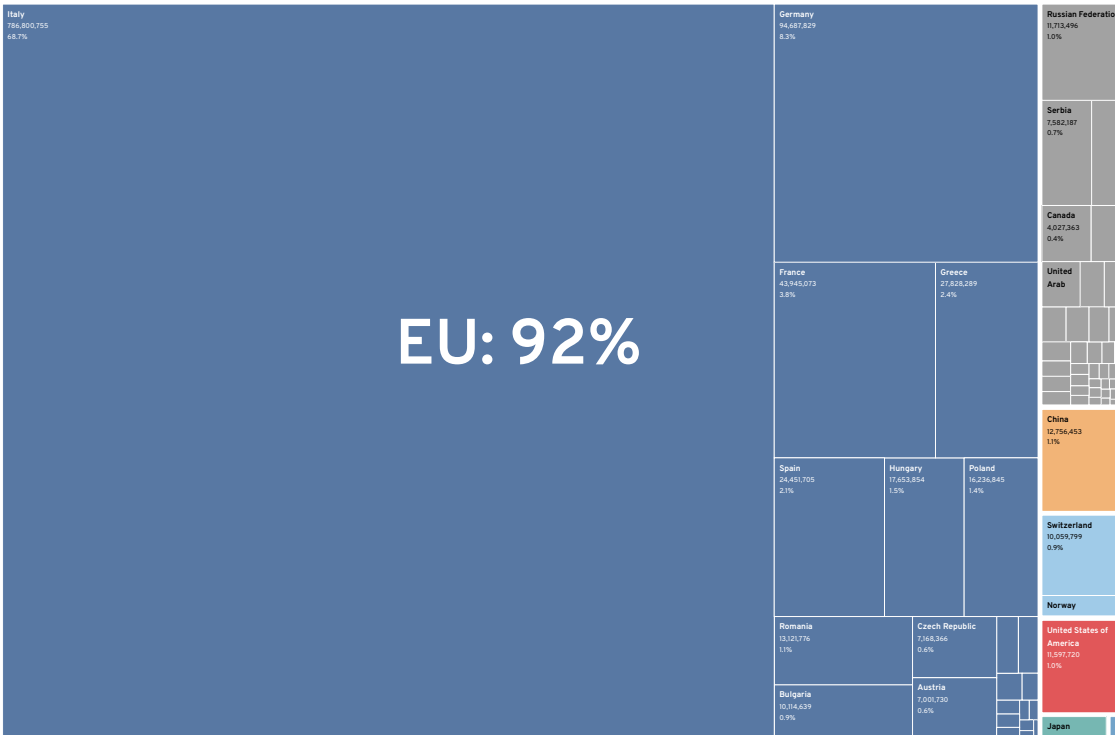
Optimists will argue that the CSDDD, for example, can ‘raise the bar’ for any factories where it applies to a portion of production. We would take a more cautious stance, given many other outcomes are also possible. Brands may shift production to consolidate in factories that are predominantly sourcing to the EU. But it is equally possible that they may spread production more widely across Indonesian locations in order to lessen the chances of regulatory scrutiny. Similarly, unauthorised subcontracting might expand -- with ‘front’ factories complying with CSDDD requirements while production actually takes place elsewhere.

Our point here is that in the coming years, attention must be paid to the likely responses of businesses to new regulation, and how those responses will differ from country to country, depending on the context. Policymakers and civil society will need to be thinking several steps ahead to anticipate unintended consequences.

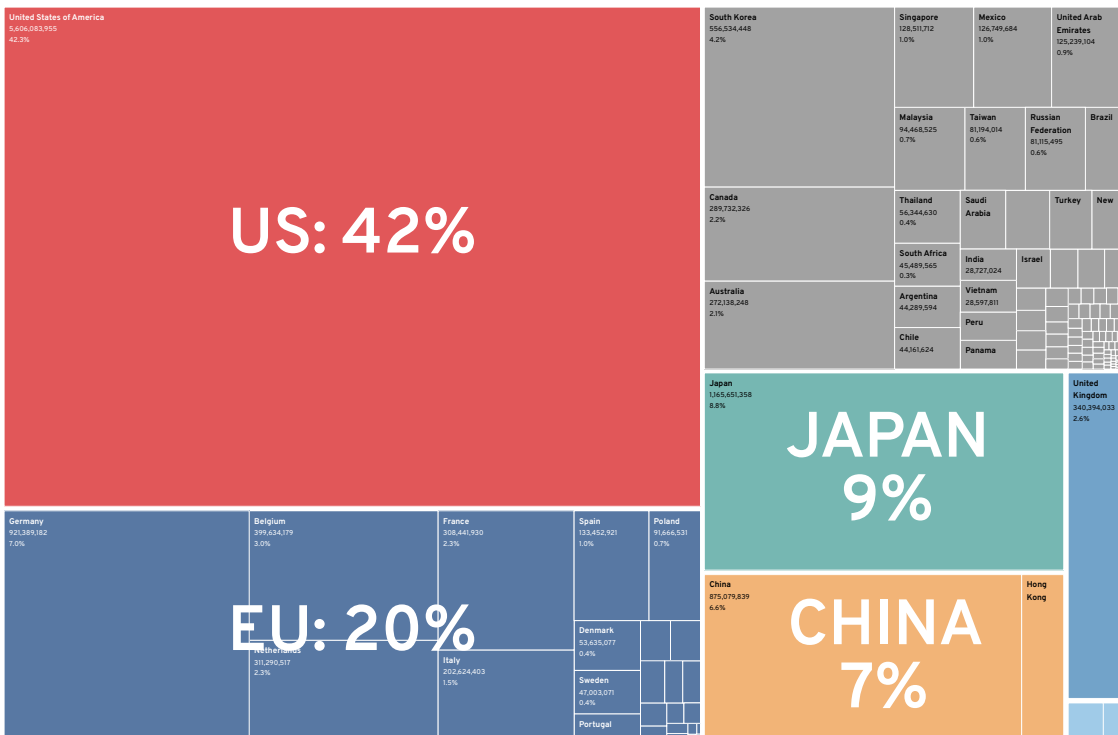
³⁰ Again, for the sake of argument, we are assuming that strong HRDD requirements will be imposed on EU brands that result in improved environmental and human rights outcomes.

FIGURE 12: COMPARISON DIFFERENT EXPORT DISTRIBUTIONS: ALBANIA VS. INDONESIA

ALBANIA GARMENT EXPORTS 2019: \$1,140,000,000



INDONESIA GARMENT EXPORTS 2019: \$13,260,000,000



3

UNDERSTANDING PRODUCTION FOR DOMESTIC MARKETS IS IMPORTANT FOR TRANSNATIONAL SUPPLY CHAIN GOVERNANCE

In discussing how effective supply chain governance efforts might be, it is critical to understand how much of a country's production is destined for domestic markets.

For example, India's domestic garment market is estimated to be two or three times as large as its export-oriented industry; whereas for other countries, the domestic market is a fraction of the export market.³¹

The labour and environmental conditions and regulations in domestic-oriented factories may be very different than those in export-oriented factories (though which type offers better conditions can vary from place to place, making generalizations difficult; and workers' definitions of 'better' may vary depending on their individual priorities and needs.)³²

Certainly there are cases when domestic factories offer fewer labour and environmental protections, and are therefore cheaper, and a tempting resource for unauthorised subcontracting. In those situations, the existence of export licensing schemes and similar structures some countries use to separate export and domestic production should be viewed with scepticism. Large amounts of domestic production may also – for better or worse – skew industry behavioural norms towards domestic standards, rather than those required by supply chain governance systems.

A mapping of domestic garment production, and a full exploration of relative risks and benefits of transnational vs. domestic production for workers and the environment was beyond the scope of this paper. But such a project is important in understanding how domestic production is likely to interact with supply chain governance in many countries.

31 See Nayyar et. al. (2020), We have struggled to find consistent, well-documented figures for domestic garment production across the Group of 30 countries; we hope to follow up on this issue in a future research paper.

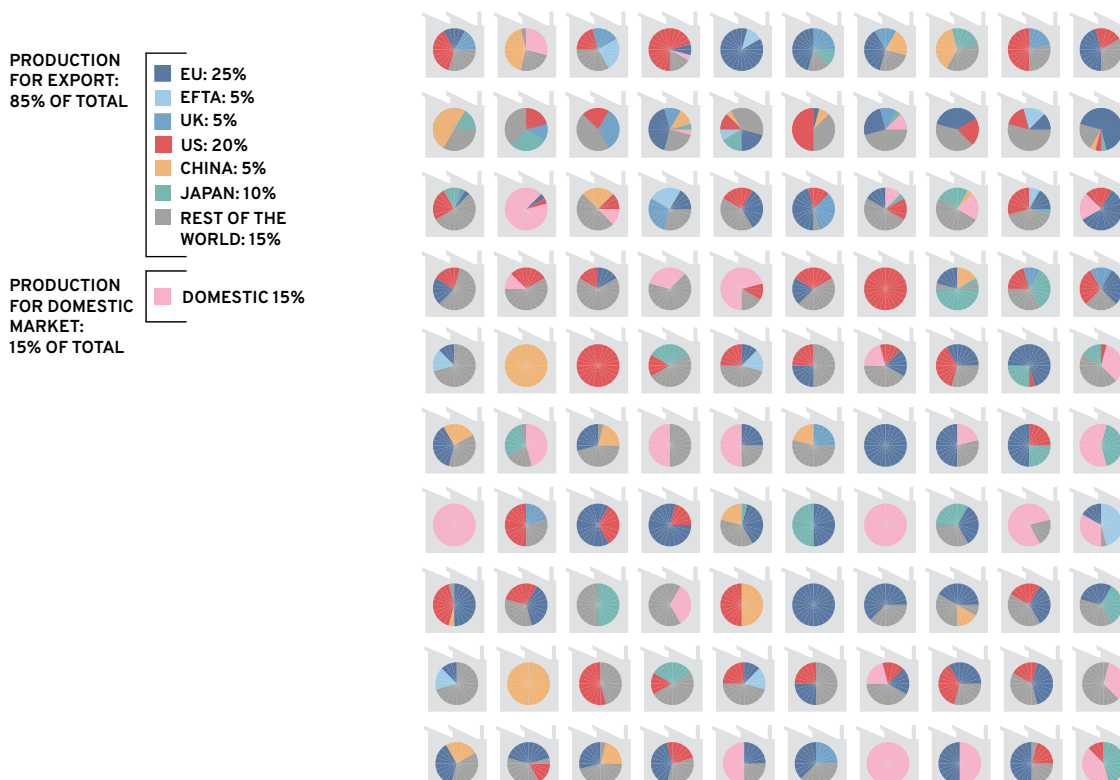
32 See e.g. Li & Kuruvilla (2022)'s discussion of worker preferences and livelihood logic.

4 UNDERSTANDING HOW PRODUCTION IS DISTRIBUTED CAN HELP DESIGN MORE EFFECTIVE GOVERNANCE.

One type of evidence that holds great promise for more effective regulation is understanding how export production is distributed across groups of factories.

Currently, this is poorly understood, due to a lack of accessible data. As we previously showed in our fictional ‘Country X’ example in Figure 4, production may be distributed in small amounts across a large number of factories, diluting the potential impact of supply chain governance efforts.

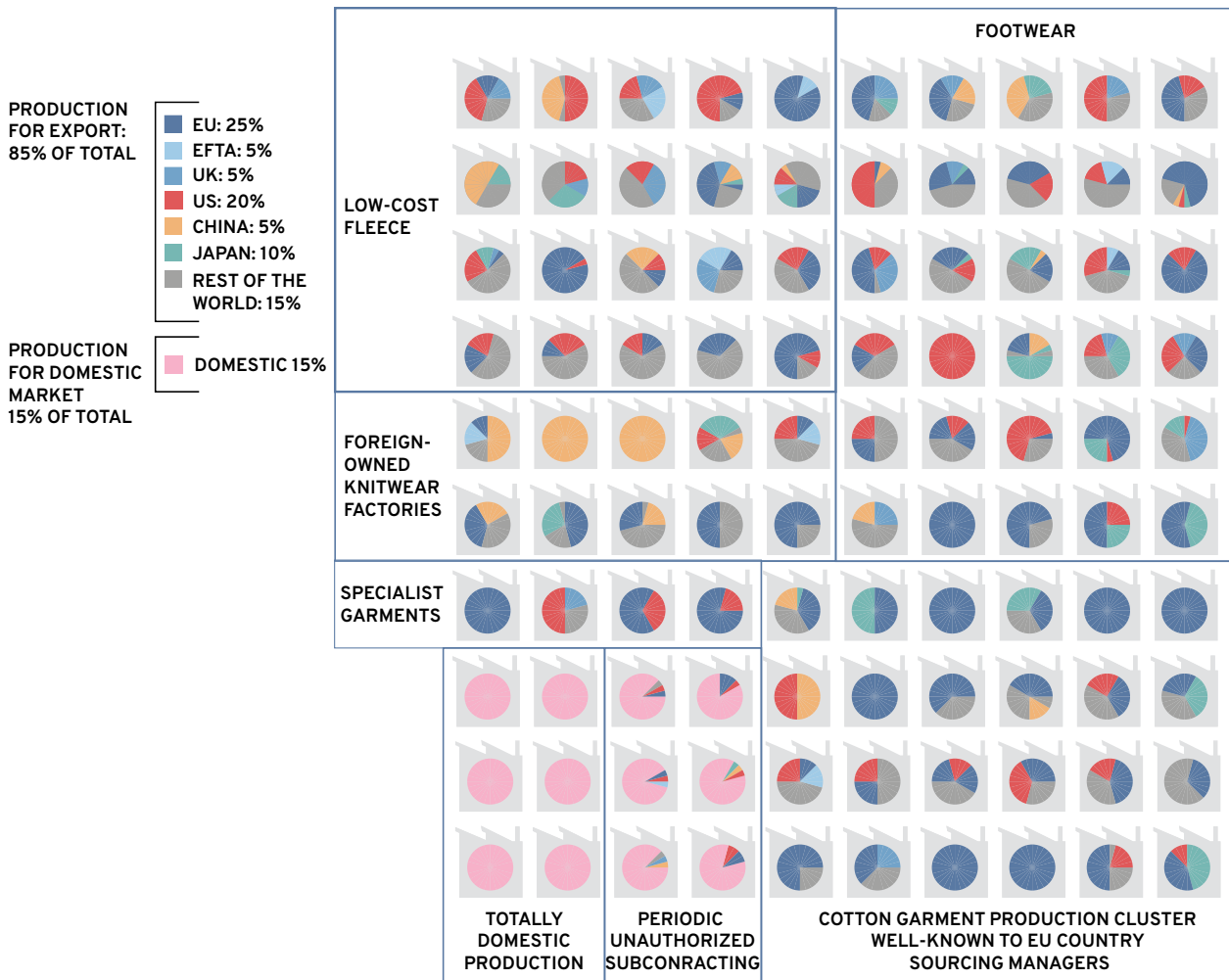
FIGURE 4: ‘COUNTRY X’ EXAMPLE OF FRAGMENTATION OF EXPORT PRODUCTION ACROSS THE NATIONAL SUPPLIER BASE



One way to overcome this issue, however, is to understand *how* production is distributed within a exporting country – or even across multiple countries – and target supply chain regulations to address segments of the industry.

Figure 13 on the following page – another fictional example, due to lack of available data – illustrates how this could work, identifying product-based or geographical ‘segments’ of a country’s production.

FIGURE 13: ‘COUNTRY X’ ILLUSTRATION OF HOW PRODUCTION COULD BE SEGMENTED TO ALLOW MORE EFFECTIVE SUPPLY CHAIN GOVERNANCE DESIGN



With access to better data, trade unions, regulators and supportive NGOs in both exporting and importing countries would be in a far better position to establish human rights or environmental due diligence expectations and requirements for industry subsectors.

The footwear industry, for example, has a different market structure and can have different risks than cotton garment production; regulatory requirements, enforceable brand agreements or transnational collective bargaining agreements could be developed to focus on these differences. Geographical clusters also provide opportunities to increase the effectiveness of supply chain governance efforts within groups of factories.

In Policy Implication 7, we discuss options for better information and reporting, which would enable this kind of governance approach to be implemented.

5 THE GOVERNANCE EFFORTS OF SMALLER IMPORTING COUNTRIES CAN STILL BE IMPORTANT

One takeaway of Policy Implication 4 is that the importance of countries besides the EU and the US should not be forgotten.

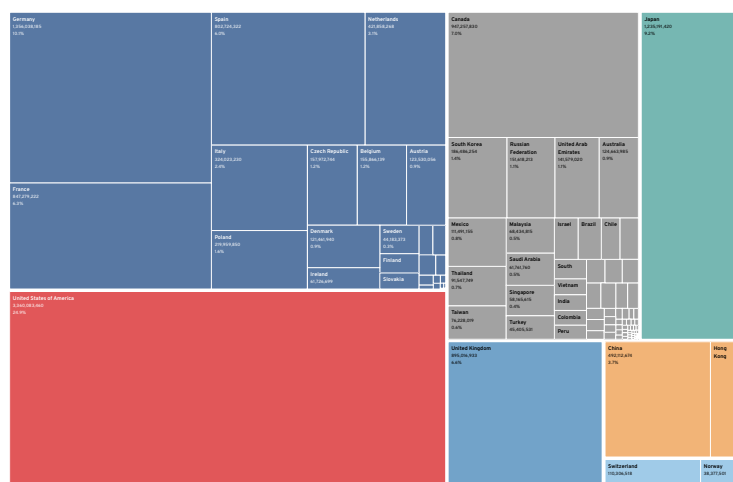
In countries with a diversified set of export partners (e.g. Cambodia, at right), the potential influence of countries like Japan, Australia and Canada grows. In some cases, these countries, in combination with others, may provide enough volume to reach a tipping point for the whole national industry.

In other cases, as seen in Figure 13, certain countries may be purchasing large amounts of specific products, or production from specific industrial clusters, so that their supply chain regulation can have a major impact on certain industry segments. There may also be a relatively small network of sourcing managers or agents in an importing country who tend to use the same group of factories, simply because they're familiar.³³

Finally, importing countries outside of the US and EU are home to sizable international garment brands, who operate in many markets. So the influence of home-country regulation on a brand's global behaviour may 'spill over' into production that is destined for global markets.

For these reasons, supply chain governance efforts beyond the EU and the US should still be supported, and coordination with EU and US efforts should be encouraged.

CAMBODIA GARMENT EXPORTS 2019: \$13,480,000,000



33 There is a body of literature on what we might call the 'sociology of sourcing staff' which can help to inform this question, for both smaller importers as well as EU states and the US, and for many different industries. See e.g. Martin & Moodysson (2013).

6

POLITICAL INFRASTRUCTURE IS NEEDED TO ENABLE GARMENT EXPORTING COUNTRIES, WORKERS, AND COMMUNITIES TO HELP DESIGN SUPPLY CHAIN GOVERNANCE

As noted on page 12, if the goal of transnational supply chain governance is human rights and environmental protection, it is vital that workers and environmental advocates in exporting countries have a leading role in the design of governance solutions.

This is partly a matter of principle – linked to the concepts of power, respect and fairness. It is partly an issue of good governance: rightsholders should be central to the design of any regulatory efforts. And it is partly a method for preventing unintended consequences.

Even though efforts like the CSDDD aim to support the implementation of existing laws and treaties in exporting countries, the way brands and suppliers may react could lead to unintended or unforeseen consequences. Rightsholders are best-placed to flag such consequences when they occur.

In most industries, the global governance infrastructure simply does not yet exist to enable what should be negotiated collective bargaining agreements on supply chain governance between importing and exporting country governments; lead firms; suppliers; and workers and trade unions in garment supply chains.

And *infrastructure* is a critical concept here. Up to now, much of the burden of providing ‘consultation’ to, for example, the EU on supply chain governance proposals, has largely fallen on the same small group of overworked individuals and organisations. Without a formal negotiating role, and adequate resources, workers and communities will struggle to really influence governance design.

A number of proposals have been developed over the years to create a proper infrastructure for developing transnational governance efforts. These, and additional ideas, particularly around the design of transnational legal forms of supply chain governance like the CSDDD, need serious attention going forwards.³⁴

34 To name just a few: e.g. Shelley Marshall (Ch. 9) who envisions a refreshed role for the ILO; Jeroen Merk’s (2016) work on Triangular Bargaining; Marissa Brookes’ (2019) work on transnational labour alliances; the [WSR Network](#), the [Asia Floor Wage Alliance](#), and the proposed UN treaty on business & human rights..

7

POLICY COHERENCE IS NEEDED ACROSS VARIOUS FORMS OF GOVERNANCE

Calls for policy coherence in business & human rights are not new. Point 8 in the UN Guiding Principles directly addressed the need for it. However, we want to highlight three specific areas where attention to coherence from policymakers and civil society could strengthen governance efforts.

A. Trade-based and supply chain-based governance.

In Part I of this paper, we began to explore how trade-based and supply chain-based governance efforts compare. Clearly, it is important that the two regulatory frameworks are not operating at cross-purposes.

One potential point of tension between the two approaches seems to be the centrality of lead firms and supply chains in ensuring respect for rights and the environment; and the extent to which trade agreements do or do not address supply chain dynamics. Barbu et al. sum up the problem: “value chain dynamics severely constrain the ability of supplier firms to comply with the substantive labour standards in the FTA.”³⁵

Policy coherence in this area would seem to require greater agreement on whose behaviour needs to change and how: lead firms, suppliers, exporting governments and/or importing governments. We would welcome hearing from anyone doing work on these questions as they relate to trade and supply chain governance forms.

B. Reporting requirements and governance efforts

The importance of coherence between reporting requirements and governance efforts also cannot be understated. As we have noted at several points, data that can enable far more effective governance is not being reported, despite lead firms producing torrents of ‘transparency’ and CSR reporting information that is largely useless for good governance.³⁶

The EU’s efforts to align the CSDDD and CSRD are an important step in the right direction; and there is an opportunity coming in 2023 to further shape the CSRD so meaningful data is gathered. And a proposed revision to the EU Customs Code offers an opportunity to require disclosure of the kind of buyer-supplier information that would enable, for example, segmentation of the industry for governance purposes, as illustrated in Figure 13. A recent civil society letter to EU leadership outlines the benefits for governance purposes.³⁷

³⁵ Barbu et al. (2018), p. 274

³⁶ See e.g. the Alliance for Corporate Transparency (2020); Fashion Checker (2020).

³⁷ Available [here](#).

C. Supply chain governance and competition/anti-trust law

The position of the EU and the US as the world's major garment importers can create situations where their domestic laws cause knock-on effects that reverberate through their enormous trade influence.

Competition/anti-trust law is one example where domestic concerns, amplified by trade influence, can undercut supply chain governance efforts.

In an industry like garments, with a shared supplier base and thousands of lead firms, it is difficult to envision widespread improvements without a significant level of inter-brand cooperation. This has been a widely accepted idea in the living wage debate for years now.³⁸

The degree to which 'pre-competitive' cooperation should be allowed has remained a sticking point for a long time however. Despite the existence of legal opinions that lay out cooperation strategies which would avoid competition law concerns³⁹ many companies have remained reluctant to engage in cooperative activities. And the decision by the EU to investigate the Rewiring Fashion group⁴⁰ seems likely to have a further chilling effect.

While the specifics of the Rewiring Fashion case are not entirely clear, the larger point remains: as new governance ideas like mandatory due diligence emerge to fix global supply chains, they will likely require cooperation to be effective in a shared supplier base.⁴¹ The potential for competition law's focus on consumer 'welfare' to derail effective supply chain regulation needs to be addressed.⁴²

There have been a growing number of calls to reform antitrust thinking in light of growing concerns about climate change, sustainability and human rights. The possibility that the efficacy of major legislative initiatives in these areas could be undermined by outmoded competition law priorities should add extra urgency to a review of what competition law should do, and the issuance of clear new guidelines that support sustainability.

Concerns about industry concentration are growing,⁴³ so it may strike some as odd that we are discussing the need for *more* cross-brand cooperation. However our argument here echoes our earlier point that we need a far better grasp of the industry's varied contexts so that the right solutions are deployed in the right place. Where concentration is the problem, we may need one solution; where fragmentation endangers rights, another competition law policy option may be needed.

38 See e.g. Miller (2009); and Hohenegger & Miller (2016).

39 See e.g. Frazer, Gardner & Zwierzyńska's 2015 legal opinion for Arnold & Porter.

40 See www.rewiringfashion.org; Paton, Livni & Gross (2022) article for an overview.

41 While we see the need for cooperation, we also agree that collection action – e.g. via membership in an MSI – should not be used as a 'safe harbour' to protect companies from liability. See SOMO's 2022 'A Piece, not a Proxy' for more.

42 See Mark Glick's 2022 INET paper for an accessible summary of the problems with contemporary anti-trust and competition law thinking, and how it could change.

43 See e.g. Kumar (2020); Callaci & Vaheesan (2022)

8

**UNDERSTANDING TODAY'S TRADE
FLOWS HELPS US FUTUREPROOF
GOVERNANCE EFFORTS**

We would argue that whatever governance frameworks are created in the coming years will be with us for decades to come. They can be strengthened and adjusted over time, but the foundations need to be solid, and they need to be designed with the future in mind. As we at Katalyst sometimes say: *The year 2000 did a pretty poor job of preparing for 2020. Let's not make that mistake again.*

Looking at today's trade flows gives us a starting point for identifying future possible scenarios, which will be influenced by population changes, climate change, and many other dynamics.⁴⁴

We illustrate the idea with one example that emerges from an unsurprising but striking data point: China currently produces half of the world's garment exports. Today, this reality tends to prompt questions about Xinjiang cotton in supply chains, the impact of China's Covid policies on supply chain and workers, and the extent to which CSDDD requirements can be met in the short term.

Looking further ahead, however, a different set of questions emerges. What happens, for example, if China does what the EU and the US did, and decides to get out of garment manufacturing? Or if global brands decide Chinese garment production has become too expensive? Where will all that production go? And will supply chain governance initiatives based in the EU and the US be ready? Can they be designed to prevent the mistakes of the past, when in so many countries' garment industries were set up without adequate regulation or protections for workers and the environment?

Potential Chinese garment manufacturing decline is just one of many questions about the future that today's trade data can help us to formulate. We need to start preparing now for the industry we will have in 15 or 30 years' time. Understanding how today's industry is put together gives us a starting point for projecting how it may evolve in the future, and how to anticipate and prevent its worst abuses from being repeated.

⁴⁴ Megatrends like climate change will have very different impacts on different countries and industries, but for an accessible overview, see Bluth (2021).

APPENDIX 1: HOW 'GARMENTS' ARE DEFINED FOR THIS PAPER

Using the [Harmonized System \(HS\)](#) codes, we have identified the following list of product types as 'Garments' for the purposes of this paper. The HS is used to classify products for international trade and customs purposes. (We use a shorthand version of the normally quite detailed production descriptions, which was developed by the Atlas of Economic Complexity).

A number of other products – particularly home textiles – can be made in garment factories, however we have omitted them from this analysis, as more work is needed to understand the relevant product categories.

It is also important to note that the figures in this report represent garments only. Raw materials, cotton, polyester, yarn, fabrics, etc. have their own HS codes. If a bale of cotton is shipped from, e.g. Uzbekistan to Bangladesh, it would be counted under the relevant HS code.

There is, unfortunately, no easy way to use trade data to trace back components of a finished garment; e.g. we can find out how much cotton Bangladesh imports from various countries, but where that cotton ends up in finished garments is not captured by trade data.

PRODUCT CATEGORIES AND HS CODES USED IN THIS PAPER

Apparel, Knit

Men's overcoats, knit	6101
Women's overcoats, knit	6102
Men's suits, knit	6103
Women's suits, knit	6104
Men's shirts, knit	6105
Women's shirts, knit	6106
Men's undergarments, knit	6107
Women's undergarments, knit	6108
T-shirts, knit	6109
Sweaters, pullovers, sweatshirts etc., knit	6110
Babies' garments, knit	6111
Activewear, knit	6112
Garments knit with impregnated fibers	6113
Other garments, knit	6114
Socks, stockings, etc., knit	6115
Gloves, knit	6116
Other clothing accessories, knit	6117

Apparel, not knit

Men's overcoats, not knit	6201
Womens overcoats, not knit	6202
Men's suits and pants	6203
Women's suits and pants	6204
Men's shirts	6205
Women's shirts	6206
Men's undergarments	6207
Women's undergarments	6208
Babies' garments	6209
Garments made of textile felts and nonwoven fabric	6210
Activewear	6211
Brassieres	6212
Handkerchiefs	6213
Shawls, scarves, etc.	6214
Ties, bow ties and cravats	6215
Gloves	6216
Other clothing accessories	6217

Headgear

Hat forms	6501
Hat shapes	6502
Felt hats	6503
Hats	6504
Hats, knit	6505
Other headgear	6506
Headbands	6507

Footwear

Waterproof footwear	6401
Other footwear of rubber or plastics	6402
Leather footwear	6403
Textile footwear	6404
Other footwear	6405
Parts of footwear (missing)	6406

Accessories

Trunks or cases	4202
Leather apparel	4203

Headgear

Hat forms	6501
Hat shapes	6502
Felt hats	6503
Hats	6504
Hats, knit	6505
Other headgear	6506
Headbands	6507

Footwear

Waterproof footwear	6401
Other footwear of rubber or plastics	6402
Leather footwear	6403
Textile footwear	6404
Other footwear	6405
Parts of footwear (missing)	6406

Accessories

Trunks or cases	4202
Leather apparel	4203

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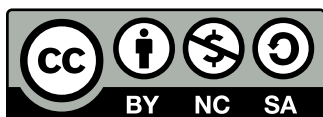


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About Katalyst Initiative

Katalyst Initiative was founded by veterans of the business & human rights civil society network. The aim is to help civil society – trade unions, NGOs, academics and activists – and government policymakers to develop new forms of human rights governance in supply chains, using the garment industry as a model. Katalyst also sees close links between the root causes of human rights violations and environmental and climate risks, and aims to support closer ties between the human rights and environmental communities. Please feel free to contact us at:

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