

From Haute Couture to Fast-Fashion: Evaluating Social Transparency in Global Apparel Supply Chains

by
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Submitted to the Institute for Data, Systems, and Society
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Abstract

After Rana Plaza collapsed on April 24, 2013, in Dhaka, Bangladesh, and killed more than 1,100 workers, the apparel industry fell under widely publicized scrutiny for its negligent social practices. With consumers and non-governmental organizations aware of these issues and creating public pressure on the industry, many companies are increasingly trying to institute transparency within their supply chains to become socially sustainable. However, transparency so far has not been clearly defined, which makes the process of evaluating transparency difficult and often unpractical.

The main goal of this thesis is to establish a framework and methodology that can be used by consumers, brands, and regulatory bodies to define and evaluate social transparency in global supply chains. Building on previous research in this field, we first construct a framework that distinguishes external and internal transparency, after which we identify five factors that drive supply chain transparency. Adaptive survey is then designed and used to evaluate both external and internal transparency, while investigating the role of each factor in shaping supply chain transparency. Due to time constraints and data availability, this thesis focuses primarily on external transparency and two factors: legal and political complexity and supply chain communication.

Our quantitative analysis shows that the degree of external transparency increases with the size of brands, which is influenced by legal acts that focus on supply chain transparency. Additionally, our qualitative analysis shows that information asymmetry and lack of standardized auditing system have a detrimental effect on external and, ultimately, internal transparency. We therefore argue that socially responsible national legal regimes and diffusion of technological innovations are necessary to increase the degree of social transparency in global supply chains.

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On May 11th, 2011, I opened my inbox and found out that I was accepted from MIT's waitlist and admitted to the Class of 2015. At a time when I thought that I was going to pursue my undergraduate studies back home without any significant changes to my daily routine, my life did a complete one-eighty. From the classic all-nighters and the notorious psets to being eaten alive by ants every spring in my dorm room and running on the highway to catch my flight in the not-so-mesmerizing Boston blizzard, MIT provided me with experiences I never thought I would have.

In that sense, this thesis is more than just a product of a two-year research project in graduate school. It represents six years of continuous learning and soul searching. But, none of this would have been possible, or nearly as fun, without the people that made these years special.

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Chapter 1

Introduction

Following the collapse of Rana Plaza on April 24, 2013, in Dhaka, Bangladesh, which killed more than 1,100 workers, the fashion industry has fallen under publicized scrutiny for not ensuring safe and healthy conditions for its workers (“Bursting at the seams,” 2013; Burke, 2015). Reports of physical and verbal abuse, child labor, unsanitary working conditions, unpaid wages, and restriction of basic human rights across global media outlets revealed the demanding and life-threatening situations that workers in the fashion industry face on a daily basis (Burke, 2015; Butler, 2016).

Motivated by increasing pressure from concerned stakeholders, fashion companies responded by establishing the “Accord on Fire and Building Safety in Bangladesh”¹ and the “Alliance for Bangladesh Worker Safety”² to aid inspections and structural improvements of factories in Bangladesh (Burke, 2015). The initiatives, however, have been met with criticism. In particular, the Alliance for Bangladesh Worker Safety garnered negative publicity because it is not legally binding, which means that its signatory companies are not obliged to contribute funding for building and infrastructure repairs. While the Accord on Fire and Building Safety in Bangladesh is regarded as more promising and legally stringent, its power is limited by weak Bangladeshi laws, which are inadequately designed to combat violations of basic human rights within the industry (Rubya, 2014). On top of that, as of 2016, many of the planned corrective action plans (abbreviated as “CAP”) are behind schedule according to The Accord’s official website (Inspection Reports).

¹ An agreement spearheaded by mostly European companies.

² An alliance consisting of North American companies.

An even more concerning fact is that Bangladesh is not the only country where apparel workers are facing unfair and unsafe conditions. Supply chain operations in the apparel industry occur internationally across different countries, including but not limited to China, India, Brazil, Mexico, Cambodia, and Vietnam, where these issues continue to compromise workers' health and safety (Agbonkhese, 2010; Posthuma and Bignami, 2014). Therefore, even though the collapse of Rana Plaza in Bangladesh served as an important impetus for rectifying the previously mentioned issues, the industry is far from being socially sustainable.

To address the root cause of these problems, many non-profit organizations and multi-stakeholder initiatives, such as Fair Wear Foundation and Clean Clothes Campaign, have called for transparency in apparel supply chains. However, ambiguous definitions of supply chain transparency from both business experts and academics, in addition to lack of clear methodology that could be used to measure it, give rise to two questions: what is social supply chain transparency and how can we evaluate it? Without a clear definition and standardized framework of evaluating social transparency in global apparel supply chains, there is no reliable method of assessing industry's efforts to become more socially transparent.

These questions serve as the foundation for this thesis, which is to develop a standardized framework of defining and evaluating social supply chain transparency, apply it to a specific case study in the apparel industry, and use it to understand how different factors – technology, business, and policy-making – can be employed to increase the degree of social transparency in global apparel supply chains.

Chapter 2

Background and Motivation

2. 1. Current issues within global supply chains

2. 1. 1. The basics of supply chain management

As described by Ganeshan and Harrison, “A supply chain is a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers” (Ganeshan and Harrison, 1995). Therefore, a company that distributes products to consumers relies heavily on numerous players across its supply chain to extract raw materials, process them, and deliver them on time according to consumers’ demand.

While this process might sounds simple for those companies whose supply chains are local and inextensive, many of today’s companies depend on global and extensive supply chains. This means that numerous suppliers are located in different countries, far removed from one another, and yet need to continuously cooperate and communicate to avoid delays and mistakes in production and distribution. For instance, an adapted graphic from Sourcemap³ (Figure 2-1), a supply chain mapping software platform, clearly illustrates how convoluted and challenging global supply chains can be.

³ <http://www.sourcemap.com>, Accessed Feb. 28, 2017.



Figure 2-1: An example of a complex global supply chain, whose suppliers are located in different areas of the world. Adapted from Sourcemap (<http://www.sourcemap.com/>).

Because of the immense complexity of supply chains, it is important to break it down for constructive discussion. There are three important dimensions within supply chains: horizontal structure, vertical structure, and the horizontal position of the focal company within the end points of the supply chains (Lambert and Cooper, 2000). Horizontal structure represents the number of tiers (or production stages) across the supply chain. A supply chain can be considered long if it has numerous tiers, or short if it has only few tiers. Vertical structure represents the number of suppliers (or consumers) within each tier. If a supply chain has a narrow vertical structure, it means there are few suppliers (or consumers) within each tier, and it has a wide vertical structure, it means there are numerous suppliers (or consumers within each tier). Finally, the horizontal position of the focal company refers to the position of the company itself within the supply chain. A company can be positioned in the upstream (close to sourcing) or downstream (close to consumers) part of the supply chain.

These dimensions can be seen in the adapted graphic representation of a seven-phase life cycle of an apparel product (Figure 2-2; Agbonkhese, 2010). For example, textile mills represent one tier, or one horizontal structure, within this hypothetical supply chain, and there could be few or numerous mills (vertical structure) within this tier

that supply fabric for the next tier, the garment factories. For the majority of apparel brands, the company itself is usually positioned in the downstream portion of the supply chain, where it sells finished products to its consumers.

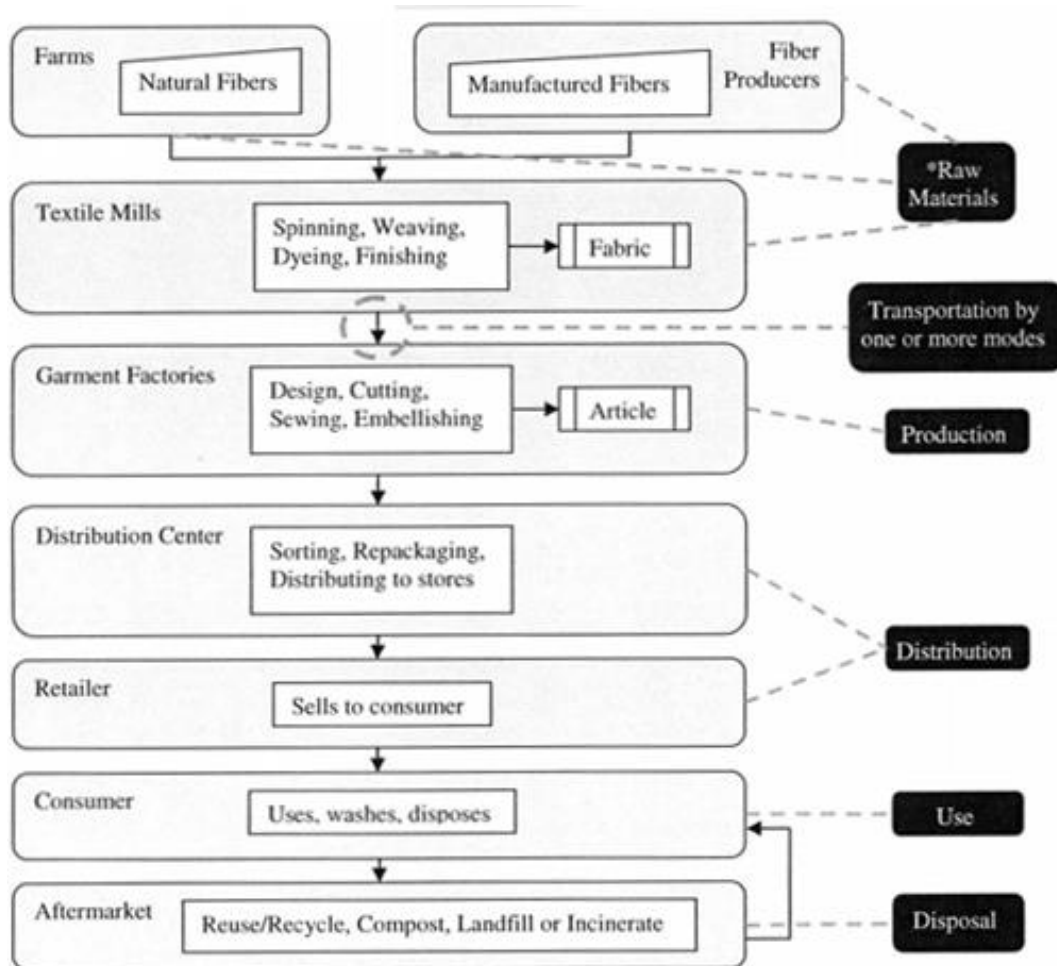


Figure 2-2: Seven-phase life cycle of an apparel product. Graphic adapted from Agbonkhese (2010).

By looking at the figure, one can see why transparency in communication between the supply chain players is important. The brand receives finished products before it sells them to the consumers, but despite having designed the product and outsourced its production, it might be unaware of the details behind the production, from raw-

material sourcing to sorting and distribution. In an ideal situation, the brand would be aware of the specifics in each tier, such as whether there are few or numerous suppliers and if subcontracting is used at any point within the supply chain. Of course, this becomes increasingly difficult in global supply chains with extensive networks of tiers and suppliers, which is why unambiguous communication between the different players is essential. The need for supply chain transparency, however, goes beyond the simple necessity for unhindered communication.

2. 1. 2. Unsustainable supply chains

To understand why supply chain transparency is essential, it is also important to identify the rising issues that are rendering today's supply chains unsustainable. Recent technological advances have enabled dynamic and flexible demand-response systems in supply chains that have allowed producers to quickly deliver products and adjust production according to changing demand. This can be seen most easily in cases like that of "fast fashion," in which brands like H&M and Zara use quick-response production to capture the latest trends in fashion and capture more value from the consumers (Caro and Martínez-de-Albéniz, 2015; O'Rourke, 2014). At the same time, such efficient and cost-effective supply chains have become unsustainable as producers are unaware of the environmental and social impacts of their ever-increasing production networks (O'Rourke, 2014; Lee, 2004). This can be easily understood by looking at Figure 2-3, adapted from O'Rourke, which shows the different production stages in the apparel industry along with corresponding environmental and social issues in each stage.

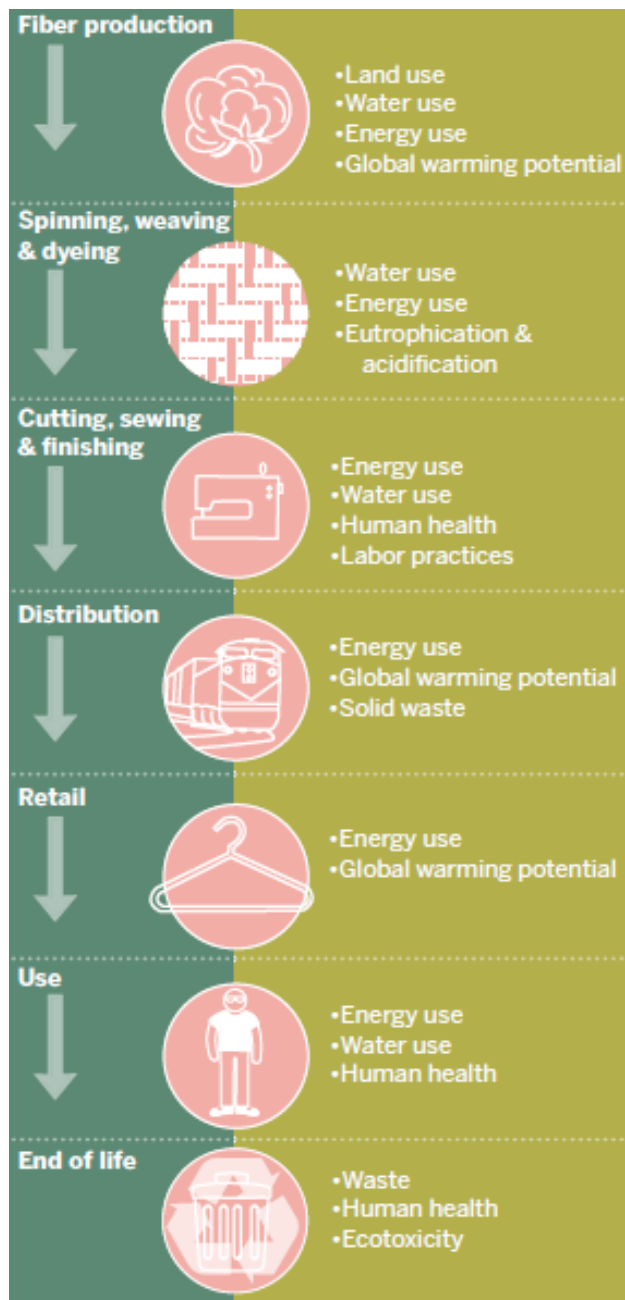


Figure 2-3: Production stages in the apparel industry with associated environmental and social issues. Graphic adapted from O'Rourke (2014).

For instance, in the stage of cutting, sewing, and finishing, one can see that the production stage gives rise to issues such as energy use and labor practices. For an apparel company with global supply chains, in which the networks of suppliers are

becoming increasingly more complex, it becomes apparent that a company might be unaware of the issues that occur at more “upstream” stages of production, such as whether the suppliers use slave labor or environmentally-damaging processes. Inditex, the parent company of Zara, for example, has 1,725 suppliers and 6,298 factories located in more than 50 countries. Naturally, recognizing the full scope of environmental and social issues for such an extensive network of suppliers becomes very difficult. Different initiatives have been taken undertaken to acquire information about unsustainable practices and address these issues, but these efforts have been mostly centered around assessments such as LCA, which can give information only about environmental impacts (Kirchain et al., 2015; O’Rourke, 2014).

However, social practices are harder to measure and assess. While environmental aspects, such as those of transportation and distribution, can be measured through metrics such as emissions, fuel usage, and quantity of packaging material, social impacts, such as those seen through workplace conditions, can only be measured through aspects like monitoring, supplier audits, or codes of conduct (Agbonkhese, 2010), which are often loosely defined. In other words, social impacts can only be assessed through knowledge and information about the different aspects of supply chain production, which is why supply chain transparency is undoubtedly important. With the appropriate knowledge about its social impact and practices, a firm can understand which issues to address and consequently increase its social transparency, ultimately improving conditions for its workers and preserving sustainability within its supply chains.

2. 2. Literature Review

2. 2. 1. *Defining supply chain transparency*

Despite the overwhelming evidence that supply chain transparency is becoming increasingly more important, there is little clear definition of what supply chain transparency is and how it can be evaluated.

By looking at the literature, one can see that there are numerous, varying definitions of transparency, which introduces a significant degree of confusion when discussing this topic. For instance, Bhaduri and Ha-Brookshire define transparency as “visibility and accessibility of information especially concerning business practices” (Bhaduri and Ha-Brookshire, 2011). Bastian and Zentes interpret transparency as “the degree to which a supply chain player has access to relevant information about products, processes, and flows of capital without loss, noise, delay and distortion” (Bastian and Zentes, 2013). Similarly, Aung and Chang articulate that “transparency of a supply chain network is important as all the stakeholders of the network have a shared understanding of access to product and process related information they requested without loss, noise, delay, and distortion” (Aung and Chang, 2014).

This ambiguous definition perpetuates throughout other scholars’ work. Pant et al., for example, define transparency similarly as “the extent to which all its stakeholders have a shared understanding of and access to the product related information without loss, noise, delay and distortion” (Pant et al., 2015). Some scholars even reference transparency without attempting to define it. Doorey claims that “transparency can provoke institutional learning and behavioral changes of the sort desired by the state” and that “information disclosure is a common regulatory tool designed to influence business behavior” (Doorey, 2011). Egels-Zandén et al. are the only scholars who, according to our literature review, have offered a more in-depth definition of supply chain transparency by stating that it comprises “corporate disclosure of (i) the names

of the suppliers involved in producing the firm's products (i.e. traceability), (ii) information about sustainability conditions at these suppliers, and (iii) the buying firms' purchasing practices" (Egels-Zandén et al., 2015).

Because supply chain transparency is also a topic of interest for organizations outside academia, such as NGOs, nonprofits, or even brands themselves, there are additional definitions of supply chain transparency that illuminate the confusion behind the concept. Fashion Revolution, a UK-based nonprofit, described transparency as "openness, communication, and accountability" in their 2015 report ("It's time for a fashion revolution," 2015). Fair Wear Foundation⁴, a European multi-stakeholder initiative, implies on their website that transparency means disclosing information "about [...] suppliers, sourcing practices, and pricing."

Comparing all the previously mentioned definitions, it is apparent that supply chain transparency is most closely related to disclosure of information. It is, however, unclear which pieces of information should be disclosed, to what degree, to which stakeholders, and under which conditions. Furthermore, it is also unclear what "without loss, noise, delay, and distortion" means when discussing transparent communication between the supply chain players. Given the ambiguity around the definition of supply chain transparency, it should come as no surprise that the process of evaluating supply chain transparency is even more uncertain.

2. 2. 2. Evaluating supply chain transparency

Many organizations have designed metrics to measure transparency within supply chains, which often evaluate either sustainability or partial aspects of supply chain transparency. Fashion Revolution, along with Ethical Consumer, have designed the Fashion Transparency Index, which evaluates five key areas: policy and

⁴ <https://www.fairwear.org/news/more-fwf-brands-choose-transparency/>, Accessed Jan. 17, 2017.

commitment, tracking and traceability, audits and remediation, engagement and collaboration, and governance (“Fashion Transparency Index,” 2015). The index is useful for comparing apparel and footwear brands against one another and illustrating which brands have taken action toward a higher degree of transparency and sustainability. In their 2015 report, Levi Strauss & Co. has achieved the highest score of 77%, while Chanel scored the lowest with a score of 10%. However, Fashion Revolution did not provide a clear review of their methodology, so it is unclear which aspects of the five key areas were assessed to derive the transparency scores. They also do not distinguish between information that is displayed publicly and information that is known internally to supply chain players, thus effectively lowering the scores for some brands due to lack of internal knowledge.

Project JUST⁵, an online platform that evaluates fashion brands for their ethics and sustainability, provides an in-depth review of various business aspects on their website, such as labor conditions, environment, community, innovation, and transparency as well. The platform is particularly useful for obtaining qualitative assessments of the brands’ environmental and social practices as it provides an easy-to-understand breakdown of information with corresponding links to source information. The information, however, is not presented in a standardized way, so academics who seek to comparatively evaluate the data might find it hard to deduce whether some pieces of information have not been assessed or whether they are simply missing.

Rankabrand⁶, another online platform that provides assessments of brands’ sustainable practices, has designed a standardized questionnaire that examines climate change and carbon emissions, environmental policies, as well as labor conditions. Although most of its questions are targeting sustainability-related issues,

⁵ Project JUST provided us with the opportunity to validate our data collection for assessment in Chapters 4 and 5 (see Notes); <https://projectjust.com/>

⁶ http://manual.rankabrand.com/wiki/Main_Page, Accessed Jan. 17, 2017.

Rankabrand provides several questions that directly address supply chain transparency, such as whether the brands publish names of their suppliers and supplier Codes of Conduct. The questionnaire is useful for comparative analysis of brands due to its standardized format, but it only evaluates those aspects of information disclosed to the public, while ignoring information that might be internally known to supply chain players. Therefore, many aspects of supply chain transparency remain unaddressed in the questionnaire.

The Sustainable Apparel Coalition (SAC)⁷, a nonprofit organization, has developed the Higg Index, possibly the most known metric used to evaluate environmental and social sustainability within apparel and footwear supply chains, which can be downloaded from SAC's website. In addition to evaluating environmental aspects, the Higg Index provides a thorough and standardized evaluation of social and labor practices. For instance, it calculates the brand's score by assessing its performance over its internal social and labor practice management, its management system for partners in value chain, and external engagement, community impact, transparency, along with public disclosure. While the assessment is undoubtedly thorough, most of the questions are directed at management performance, and evaluation of transparency is exclusively based on public disclosure, without any attention to evaluation of supply chain players' internal knowledge. Therefore, despite the impressive thoroughness of its evaluation process, the Higg Index also fails to encompass supply chain transparency in its entirety.

Our literature review revealed that very few attempts have been made within academia to design a framework and methodology of evaluating supply chain transparency, which is likely a result of inadequate definitions of supply chain transparency in the scholarly community. As mentioned earlier, Egels-Zandén et al. have designed a robust framework of defining supply chain transparency, but their

⁷ <http://apparelcoalition.org/the-higg-index/>, Accessed Jan. 17, 2017.

study did not reveal the questions or the methodology used to apply this framework to the case of Nudie Jeans, a Swedish brand that served as the authors' case study (Egels-Zandén et al., 2015). Moreover, while their framework provides a concrete understanding of supply chain transparency, it does not address underlying factors that increase or decrease the degree of supply chain transparency.

Bastian and Zentes (2013) have provided a vague definition of supply chain transparency in their study, but have conducted a quantitative analysis that showed which factors had the most significant influence on supply chain transparency, including supply chain disintermediation, legal complexity of countries involved in the supply chain, product formalization, integration of third-party monitoring, and communication between players in the supply chain (Bastian and Zentes, 2013). Their study, however, did not provide a framework or methodology for evaluating supply chain transparency, once again leaving the concept of supply chain transparency open to interpretation.

In sum, our literature review (Table 1-1) shows that the lack of unambiguous and encompassing definition of supply chain transparency as well as standardized methodology to evaluate supply chain transparency serves as an important and motivating factor for providing a new and robust method of addressing these issues. With the appropriate knowledge about its social impact and practices, a firm can understand which issues to address and consequently increase its social transparency, ultimately improving conditions for its workers and preserving sustainability within its supply chains.

Organization / Authors	Advantages	Disadvantages
Fashion Revolution	Developed Fashion Transparency Index to measure supply chain transparency	Unclear definition of supply chain transparency and unclear methodology
Project JUST	Extensive qualitative assessment of brands' social and environmental practices, including transparency	Data is not presented in a standardized format, might be hard to perform academic comparative analysis
Rankabrand	Published standardized and simple methodology to measure sustainability	Only some aspects of supply chain transparency are measured by rankabrand
Sustainable Apparel Coalition	Developed the Higg Index for measuring sustainability, including transparency	Only some aspects of supply chain transparency are measured by the Higg Index
Egels-Zandén et al. (2015)	Established framework for defining supply chain transparency	Did not publish the methodology used for evaluating supply chain transparency and did not identify factors influencing supply chain transparency
Bastian and Zantes (2013)	Identified factors influencing supply chain transparency	Lack clear definition of supply chain transparency

Table 2-1: A summary of advantages and disadvantages from leading academics and non-academic organizations addressing supply chain transparency.

2. 3. Motivation

2. 3. 1. Goals of the thesis

The goal of this thesis is to bridge the gaps between current efforts from academic researchers and non-academic organizations, such as Sustainable Apparel Coalition and Fashion Revolution, in providing a straightforward definition of supply chain transparency and methodology for its evaluation. Our extensive research and literature review revealed two conspicuous issues in this field: (1) ambiguous

definitions of supply chain transparency are coupled with (often non-standardized) methodologies of evaluation, which renders the process of evaluation dubious, and (2) more precise definitions of supply chain transparency are coupled with unclear methodologies of evaluation, which, paradoxically, makes the process of evaluation nontransparent.

In addition to providing a framework of defining and methodology of evaluating supply chain transparency in this thesis, we aim to understand which factors affect the degree of supply chain transparency, and how different aspects – business, technology, and policy – should be co-optimized to improve supply chain transparency. Our argument is that a company cannot achieve higher transparency on its own and that collaborative efforts from the company's stakeholders, innovation- and technology-oriented firms, as well as regulatory and legal bodies are necessary to lead the industry toward improved social sustainability.

2. 3. 2. Structure of the thesis

Chapter 3 of this thesis introduces the framework and methodology used to define and evaluate supply chain transparency. Each component of the framework and methodology is explained succinctly, while the entire methodology has been attached in the appendix at the end of the thesis. Chapter 4 introduces the results from the analysis of brands' external transparency using our framework and methodology, while Chapter 5 provides an in-depth analysis and review of underlying factors that affect supply chain transparency, including a review of regulatory policies and legal acts focused on these issues. Chapter 6 provides a detailed analysis of internal transparency, and, finally, in Chapter 7, we offer a review of these analyses and propose solutions that can be implemented to increase the degree of supply chain transparency in global supply chains. We conclude the thesis with Chapter 8, paving the way for future research in this field. In addition to our methodology, raw data from the analyses have been included in the appendices for reference.

Chapter 3

Framework and Methodology

3.1. Framework

To articulate the multiple ideas and concepts interacting in this space, a framework can provide clarity to these issues. The framework for evaluating social transparency in global apparel supply chains (Figure 3-1) was developed by combining a recently proposed definition of supply chain transparency in a case study of Swedish brand Nudie Jeans by Egels-Zanden et al. (2015) with five antecedents of supply chain transparency identified by Bastian and Zentes (2013), which were adjusted and renamed as “underlying influences” for the purposes of this framework.

Egel-Zanden et al. (2015) define supply chain transparency as a three-dimensional structure, consisting of traceability (the ability to identify the names of the brands’ suppliers), sustainability conditions at the brands’ suppliers, and the brands’ purchasing practices. As the proposed framework in this thesis evaluates social issues prevalent in supply chains, the definition of supply chain transparency from the aforementioned case study was adjusted so that the second dimension of transparency – sustainability conditions – refers only to social aspects, without addressing environmental factors. Furthermore, the case study distinguishes between external and internal transparency, which is also incorporated in the proposed framework (Figure 3-1). While the case study was innovative for providing an encompassing definition of supply chain transparency, it did not address factors that influence transparency or provide a clear methodology used to analyze supply chain transparency.

Therefore, to counterbalance this absence and provide a complete understanding of transparency in supply chains, the five antecedents of supply chain transparency described in the study conducted by Bastian and Zentes (2013) have been incorporated in the framework of evaluating social transparency, adjusted to adopt a wider range of applicability, and renamed as “underlying influences.” They are described as factors that influence transparency, including supply chain disintermediation, legal and political complexity of countries involved in the supply chain, product formalization, integration of third-party monitoring, and communication between players in the supply chain.

While Bastian and Zentes (2013) have described these five factors in the context of agricultural supply chains, additional literature shows that they are equally important in apparel supply chains. Supply chain disintermediation is defined as the distance – physical, social, or cultural – between supply chains players. It is important in transparency because it can lead to increased information asymmetry between them (Sarkis et al., 2011). Legal and political complexity has been shown to have significant impact on working conditions as private and public regulations, in addition to country laws, can dictate how transparent the employers have to be about their social practices (Locke et al., 2007; Posthuma et al., 2014; Rubya, 2014).

Formalization of products in the apparel industry can be easily understood through the use of social labels, which have been shown to improve standards in the supply chain and increase consumers’ willingness-to-pay as they increase the amount of information about labor conditions shown to the consumers (Hustvedt et al., 2010; Zadek et al., 1998). Third-party monitoring is essential for transparency because many firms use internal auditing, which can lead to biased and limited understanding of their supply chains (Locke et al., 2007). Finally, supply chain communication is essential for transparency because closer relationships between the brands and their suppliers can facilitate information sharing and lead to better working conditions (Locke et al., 2007; Locke et al., 2010; Sarkis et al., 2011).

The study by Bastian et al. (2013) describes legal and political complexity and disintermediation as factors with the strongest influence on supply chain transparency, with the other three factors being less influential but nonetheless equally important. The authors, however, do not complement these factors with a definition of supply chain transparency that is as clear and encompassing as the one proposed in the case study of Nudie Jeans, which is why the factors have been included in the framework to complement a robust definition of supply chain transparency.

By looking at the proposed framework that merges and adjusts the ideas from these two studies (Figure 3-1), one can see that supply chain transparency consists of external and internal transparency, while both of these subtypes consist of traceability, social sustainability conditions, and purchasing practices as their three-dimensional structures. To complement this break down of supply chain transparency, which can be understood as the basis of the framework, the five underlying influences are drawn above the basis to represent factors that influence both the external and internal supply chain transparency.

Finally, this framework is further articulated through a standardized methodology of evaluating social transparency in global supply chains. This process is highly important because one has not yet been developed by other academic studies, as far as thorough research of published case studies on supply chain transparency. The methodology and its relationship to the proposed framework are explained in the next section.

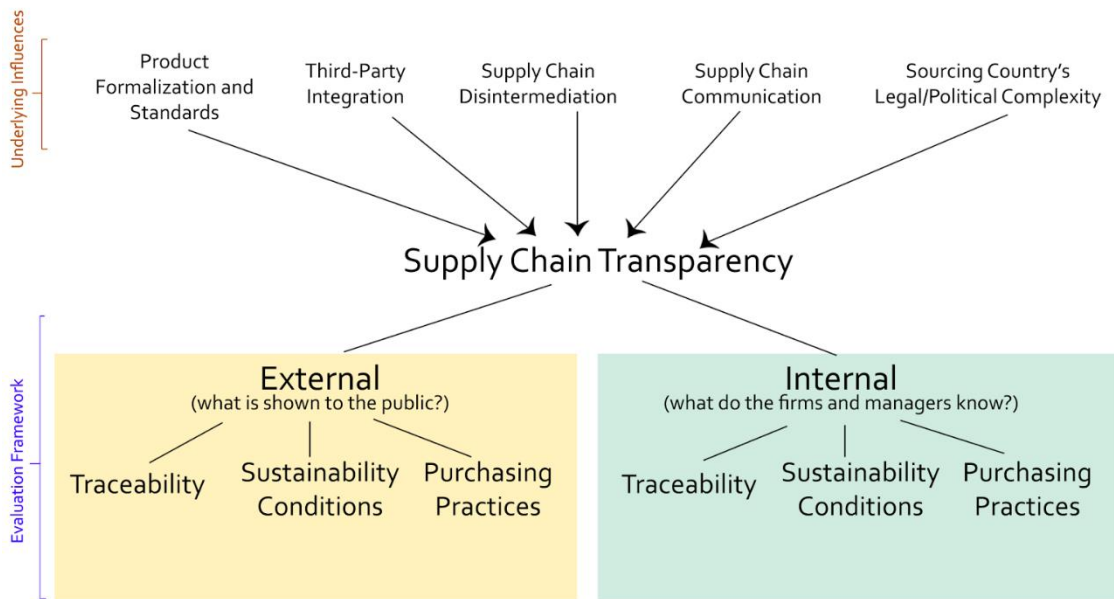


Figure 3-1: Proposed framework of evaluating social transparency in global supply chains, with the basis (division into internal and external transparency) and underlying influences.

3.2. Methodology

3. 2. 1. Adaptive Survey

Drawing from the framework, a set of in-depth questions in a form of a survey was prepared to evaluate social transparency in supply chains. After extensive analysis of previous academic research in this area, we did not find any standardized methodologies that have been developed to evaluate supply chain transparency. As far as we were able to find, authors never published the questions used for interviewing companies. Therefore, we felt it was appropriate to design our own three-part survey (Appendix A) using Qualtrics Software that evaluates traceability, sustainability conditions, and purchasing practices both quantitatively and qualitatively, while providing insight on the influence of the five underlying factors, as well as the difference between external and internal transparency. The survey was designed to be adaptive, which means that not all respondents will answer the same

set of questions as they might give different answers to previous questions. The diagrams of logic flows in the survey can be found in Appendix B.

The questions have been formulated by paying careful attention to questions provided by non-academic organizations and platforms, such as those in rankabrand's questionnaire⁸ and the Higg Index by Sustainable Apparel Coalition⁹, as well as relevant technical, business, and legal discussions on supply chain transparency. As these questions are also applicable to other industries, we propose this survey as a standardized methodology of evaluating social supply chain transparency.

3. 2. 1. 1. Structure

The survey (Appendix A) consists of three parts, which separately address traceability, sustainability conditions, and purchasing practices in global supply chains. Each section contains questions that refer to external and internal transparency, and these questions are evaluated separately (to provide independent evaluations of external and internal transparency) even though they are presented dependently.

The survey has been constructed as adaptive using logic flows in the Qualtrics software, which means that most respondents are not expected to answer all questions. For instance, if a brand responds that it has a Supplier Code of Conduct and that such document can be accessed by general public, it will not have to answer specifics on its Supplier Code of Conduct (as this information can be easily retrieved online), while a brand that has such document, but has not disclosed it to general public, will be subjected to additional questions in order to access specific details on the document.

⁸ http://manual.rankabrand.com/wiki/Main_Page

⁹ <http://apparelcoalition.org/the-higg-index/>

3. 2. 1. 2. External Transparency

In the case study of Nudie Jeans, external transparency has been defined as “degree to which the firm is transparent to external stakeholders” (Egels-Zandén et al., 2015). For the purposes of our framework, we have used this definition to determine whether brands disclose information about traceability, sustainability conditions, and purchasing practices to general public (for most brands, whether this information is available on brands’ websites). Therefore, each section contains questions that ask the respondents if specific information is publicly available online, and if it is, the respondents are not required to provide any further information. On the other hand, if the information cannot be readily accessed by general public, the respondent is required to provide additional information.

3. 2. 1. 3. Internal Transparency

Internal transparency was defined by Egels-Zanden (2015) as the “degree to which the firm can be transparent to itself.” In the case of our proposed framework, we used this definition to assess the brands’ internal knowledge of their supply chain networks that is unlikely to be revealed to the public. Many of these questions ask for quantitative estimation in forms of percentage, and since no similar standardized methodologies have been developed for evaluating transparency in forms of percentage, we used IPCC’s (Intergovernmental Panel on Climate Change) report on treatment of uncertainties to derive our own interpretation of transparency levels (Mastrandrea et al., 2010). We selected IPCC’s report as the basis for our questions of estimation as it was the only publication to our knowledge that provided unambiguous classification of uncertainty according to likelihood of outcome. Therefore, 90 to 100 percentage range, which is classified as “very likely” by IPCC, corresponds to high transparency as the respondents are highly certain of specific knowledge. On the other hand, 0 to 49 percentage represents low transparency as respondents are more likely to *not* be certain of specific knowledge. Finally, 50 to 89

percentage range, represents medium transparency, as respondents are either equally certain and uncertain of specific knowledge (lower end of the range) or more likely to be certain of such knowledge (higher end of the range).

3. 2. 1. 4. Traceability

We have extended the definition of traceability presented in the case study by Egels-Zanden et al. (2015) to include questions about the tiers in the supply chain. In their review of issues of supply chain management, Lambert and Cooper describe horizontal structures of supply chain that refer to tiers, which are also described as “production stages” by Meixell and Gargeya (Lambert and Cooper, 2000; Meixell and Gargeya, 2005). Therefore, the questions in this part of the survey are designed to probe in detail about brands’ knowledge of suppliers in each tier of the supply chain.

3. 2. 1. 5. Sustainability Conditions

In our proposed framework, sustainability conditions are primarily assessed through use of Supplier Code of Conduct (or similar document) and use of audits for inspection of rules proposed within such document. Evaluations of Supplier Code of Conduct are based on following ILO’s (International Labor Organization) conventions: C001, C029, C087, C098, C100, C105, C111, C131, C135, C138, C154, C155, C158, C182, and C187 (full titles of conventions are included in the references). Furthermore, all the assessment components within the Supplier Code of Conduct and auditing portion are corroborated by Clean Clothes Campaign’s “Living Wage Versus Minimum Wage,” Global Reporting Initiative’s “G4 Sustainability Reporting Guidelines”, “Sustainability Reporting Guidelines & Apparel and Footwear Sector Supplement: Pilot Version” and “Sustainability Topics for Sectors: What do stakeholders want to know?” (included in the references).

3. 2. 1. 6. Purchasing Practices

Purchasing practices are assessed through four components: sourcing countries, use of social labels, full-cost breakdown of products, and use of documents that establish the foundations for purchasing practices. If the brand does not publish any information about their suppliers, they are required to provide information on their sourcing countries as this information is an essential component of purchasing practices (Barrientos, 2013). Social labels – labels which provide information on working conditions of those who made the product – are not yet a widely implemented tool of purchasing practices, but have been included in this framework as they can provide market leverage to improve standards in the supply chain (Zadek et al., 1998). Full-cost breakdown of products gives a highly-transparent insight on the production process of each item, which can indirectly show how brands purchase separate components from their suppliers and what their markup is (Egels-Zandén et al., 2015). Finally, we argue that it is also important to understand which standards brands use to establish, maintain, and terminate relationships with their suppliers, which is why we included questions on documents that contain such information as part of purchasing practices.

3. 2. 2. Content Analysis

In addition to evaluating external and internal transparency using the adaptive survey, we also performed extensive content analysis by researching brands' sustainability reports, reports and manifestos of various NGOs and nonprofits, as well as media articles. The goal of this type of analysis was to complement the findings of survey-based analysis and search for pieces of information that might provide insight on the effect of five underlying influences in our framework.

3. 2. 3. Interviews

We also conducted interviews with professionals and technological innovators in the field of sustainability to present a well-rounded understanding of the issues in this space. Because our framework and methodology are mostly based on previous academic research, we felt it was necessary to inspect the findings of our research with a non-academic perspective.

3. 2. 4. Analysis of Underlying Influences

The purpose of deploying the adaptive survey to analyze external and internal transparency, as well as performing content analysis and conducting interviews, was to gain insight on the role of the five underlying influences.

Content analysis, interviews, and survey questions focused on internal transparency can highlight important information about all five underlying influences, while the analysis of external transparency is highly valuable for its insight on two of these factors: supply chain communication as well as legal and political complexity. This is because publicly displayed information can easily reveal how brands communicate with their suppliers and whether they comply with laws and regulations.

In this thesis, we performed both qualitative and quantitative analysis of political and legal complexity as this factor was recognized as very influential by Bastian and Zentes (2013) and is still largely unexplored in academic literature. Regulatory and legal analysis is included in Chapter 5, together with a qualitative analysis of supply chain communication, to complement the findings of external transparency assessment in Chapter 4. These analyses are particularly important as they show which proposals for increasing the degree of social supply chain transparency are feasible and warrant attentive consideration from different groups of stakeholders.

Chapter 4

Analysis of External Transparency

4.1. Assessment of external transparency

As we have explored in the first three chapters of this thesis, external transparency represents the degree to which the brands are disclosing information to the general public. To understand which factors affect external transparency, we collected and analyzed data of sixty apparel brands and compared them using a five-point scale. The five-point scale is a scoring system we designed for this study, using a scoring norm developed by the Dutch online platform rankabrand, which assigns one point to a brand if it satisfies a particular criterion. Since our literature review suggests that no standardized methodology of evaluating supply chain transparency has been yet published, we concluded that it was appropriate to base our scoring system on rankabrand's standardized methodology¹⁰ of evaluating environmental and social sustainability. Although rankabrand's questionnaire does not specifically address supply chain transparency, its simple scoring metric allowed us to develop a more intricate methodology that encompasses transparency while still allowing for straightforward evaluation.

We decided to assign low transparency to scores one and zero because it is easy for a brand to satisfy some criteria even if they disclose only some pieces of information to the public. Likewise, we assigned high transparency to scores four and five because it is difficult for a brand to satisfy all five criteria. Medium transparency was, therefore, assigned to scores two and three. Table 4-1 shows qualitative interpretations of transparency according to scores.

¹⁰ http://manual.rankabrand.com/wiki/Main_Page

Score	Interpretation
0	Low Transparency
1	Low Transparency
2	Medium Transparency
3	Medium Transparency
4	High Transparency
5	High Transparency

Table 4-1: Qualitative interpretation of external transparency scores.

The five criteria used in our assessment of external transparency are:

1. The brand has identified some or all suppliers on its website.
2. The brand has published its Supplier Code of Conduct or similar document on its website.
3. The brand has published some or all suppliers' audits on its website.
4. The brand has published full-cost breakdown of some or all of its products on its website.
5. The brand has published a statement or a document on its website that identifies a) criteria the brand uses to establish business with its suppliers, b) actions the brand undertakes for suppliers' compliance or non-compliance, and c) whether the brand is actively trying to consolidate its supply chain.

After careful analysis of our framework and methodology based on extensive literature and industry practices, we concluded that these five criteria realistically encompass external transparency and do not impose unreasonable expectations. For instance, social labels can be viewed as means of external transparency as they

showcase important information about the brands’ social practices to its consumers, but they have not been included in the assessment as they are not widely implemented by all brands (Zadek et al., 1998). Furthermore, they might not be accessible to everyone as the customers would still have to purchase the product to obtain information instead of simply visiting the website.

The assessment (Table 4-2) is lenient because it does not penalize brands if partial information is published on the website. If a brand publishes the names of only some suppliers or records of few audits, it will still be rewarded with full points. Likewise, if a brand only identifies the criteria it uses to establish business with its suppliers but not the actions it undertakes for compliance or non-compliance, it will still get a full point.

However, the assessment is also strict because the five criteria are scored equally even though they are not equally easy to achieve. A brand can easily identify information about its purchasing practices on its website, but it is a significantly more arduous (and probably riskier) process to publish a Supplier code of conduct or full-cost breakdown of products online. We have decided not to weigh the criteria differently as it would introduce biased scores due to previously-mentioned lenience for partial information. For example, if full-cost breakdown was weighed more, a brand could achieve a high score even if it published a full-cost breakdown for only few of its products.

	Suppliers published?	Code of Conduct published?	Audits published?	Full-cost breakdown published?	Statement on purchasing practices published?
Full point	Some or all	Partial or full	Some or all	For some or all products	Partial or complete
No points	None	None	None	None	None

Table 4-2: Scoring methodology for external transparency assessment.

4.1.1. External transparency versus the Brands' Orientation

4.1.1.1. Analysis

Our **first hypothesis** was that **the degree of external transparency will change with the brands' orientation**. More precisely, we assumed that trend-oriented brands, which are focused on delivering the latest trends in fashion, will have lower transparency scores due to their global presence and extensive supply chains. On the other hand, we assumed that sustainability-oriented brands, which are focused on delivering fashion in a sustainable way, will have higher scores due to their niche presence and less extensive supply chains. Finally, we assumed that medium scores would correspond with brands that do not have a clear preference for either of these orientations, and we classified these brands as neutral for our analysis.

We used selective sampling¹¹ to sort twenty brands into each of the categories – trend-oriented, neutral, and sustainability-oriented – and analyzed a total of sixty brands. To accurately sort the brands in each category, we used the taglines on the brands' websites (Appendix C) to identify key words. For example, the tagline of Zara's website, which reads "Latest trends in clothing for women, men & kids at ZARA online," puts Zara into trend-oriented brands. Similarly, in the case of Eileen Fisher, whose tagline reads "Shop women's casual clothing that effortlessly combines timeless, elegant lines with eco-friendly fabrics from EILEEN FISHER," the brand clearly fits in the sustainability-oriented category. It is important to note that we do not view these three categories of business orientation as mutually exclusive. For instance, it is possible that a brand might be both trend- and sustainability-oriented, which is why we used the website taglines to accurately identify how the brands themselves identify their business orientation.

¹¹ A non-probability sampling technique that focuses on choosing units based on the judgment of the researcher.

In some cases, however, where the tagline is ambiguous or misleading, such as Urban Outfitter's "Always open, always awesome. Clothing, accessories and apartment items for men and women," we used subjective evaluation of the brand's mission to sort it into the appropriate category. It is worth noting that subjective evaluation was used for several brands during the sorting process as some brands published taglines that were contradictory to their core business model. For example, H&M refers to sustainability in their tagline, but we sorted it in the trend-oriented category as the brand is primarily focused on delivering latest trends in fashion.

4.1.1.2. Results

Our analysis (Figure 4-1) of sixty brands for the first hypothesis showed surprising results. While sustainability-oriented group has the highest percentage of high-transparency brands, and trend-oriented group has the lowest percentage, the percentage of low-transparency brands was also significantly higher in the sustainability-oriented group. Furthermore, the trend-oriented group had the highest average score with the smallest standard deviation, while the sustainability-oriented group had the lowest average with the highest standard deviation.

However, it is also important to look separately at the external transparency criteria. We observed a few interesting trends (Figure 4-2) across the five requirements. All trend-oriented brands publish a statement regarding their purchasing practices, almost all neutral brands publish such a statement, while less than half of sustainability-oriented brands have information about purchasing practices on their website. For instance, H&M, a trend-oriented brand, publishes information about its relationships with suppliers in their "Conscious Actions Sustainability Report 2015,"¹² while sustainability-oriented brands like Good Society and Reformation do not publish any information of this type on their website.

¹²http://sustainability.hm.com/content/dam/hm/about/documents/en/CSR/2015%20Sustainability%20report/HM_SustainabilityReport_2015_final_FullReport_en.pdf, Accessed Mar. 4, 2017.

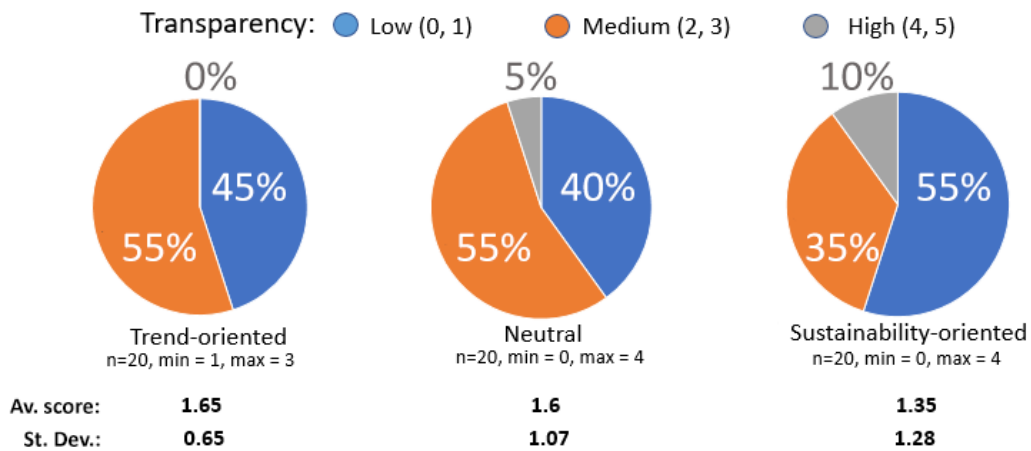


Figure 4-1: Analysis of overall external transparency scores versus the brands’ business orientation. *n* denotes sample size, *min* denotes minimum score in the category, while *max* denotes maximum score in the category.

Very few trend-oriented and neutral brands publish the name of their suppliers, while half of sustainability-oriented brands publish names of at least some suppliers on their website. None of the trend-oriented brands publish audits or full-cost breakdown of their products, a small portion of neutral brands publishes audits, and a small portion of sustainability-oriented brands publishes audits and full-cost breakdown of products. Specifically, Everlane and Honest by are the only two brands that publish a full-cost breakdown, which can be accessed by viewing each product on their website^{13,14}. Patagonia and Nudie Jeans are one of the few brands that publish audit reports publicly, which can be found either on their website¹⁵ or the websites of their auditors¹⁶.

We didn’t observe a consistent trend for disclosure of supplier Code of Conduct, although there is a larger percentage of trend-oriented and neutral brands that publish

¹³ <http://www.honestby.com/>, Accessed Mar. 4, 2017
¹⁴ <https://www.everlane.com/>, Accessed Mar. 4, 2017
¹⁵ https://cdn.nudiejeans.com/media/transparency/Armstrong_2.pdf, Accessed Mar. 4, 2017
¹⁶ <http://www.fairlabor.org/affiliate/patagonia>, Accessed Mar. 4, 2017

such document compared to sustainability-oriented ones. PVH, the parent corporation of neutral brands Tommy Hilfiger and Calvin Klein, publishes its Code of Conduct in the form of a public statement called “A Shared Commitment,”¹⁷ while sustainability-oriented brands like 16Seven and Good Society do not publish such document.

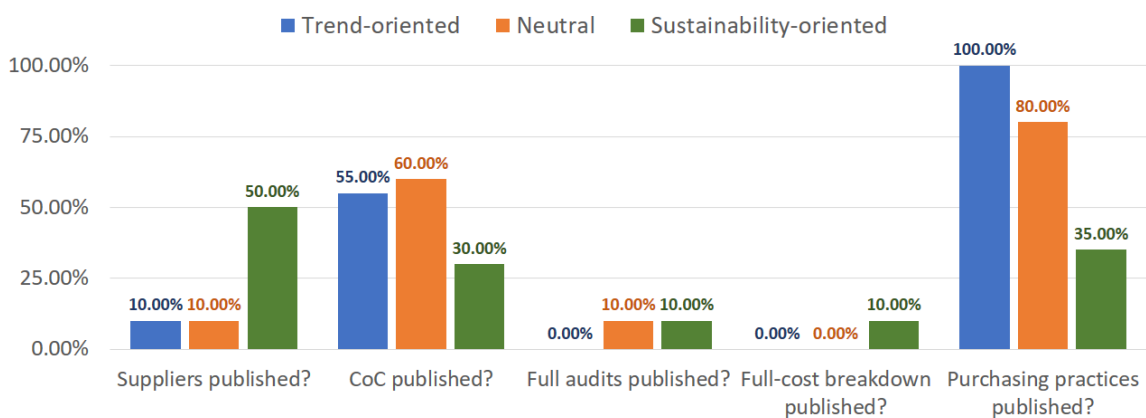


Figure 4-2: Analysis of five external transparency criteria versus the brands’ business orientation.

While our results suggest that business orientation is not a significant influence on overall external transparency, it seems that sustainability-oriented brands are more proactive about publishing their suppliers, audits, and full-cost breakdown of their products, while trend-oriented and neutral brands are actively publishing their code of conduct for their suppliers and statements regarding their purchasing practices. Interestingly, according to our data spreadsheet (Appendix D), many of the sustainability-oriented brands have less than 1,000 employees and are thus smaller in size, while many of the trend-oriented brands have more than 10,000 employees and are thus large in size. We therefore hypothesized that the brand’s size might be a more significant driving factor of overall external transparency, which is why analyzed the external transparency score against size for the next hypothesis.

¹⁷ <https://www.pvh.com/responsibility/policy/shared-commitment>, Accessed Mar. 3, 2017

4.1.2. External transparency versus the Brands' Size

4.1.2.1. Analysis

For the second hypothesis, the same brands were sorted by their size, measured in number of employees. Although it is common practice to measure the size of brands by their annual revenues (for instance, as specified by California Transparency in Supply Chains Act), the data on the number of employees was more recent and reliable compared to information on the brands' annual revenues, which is why measured the size of brands by the number of their employees.

For some brands, most of which are sustainability-oriented, we could not find any information on the number of their employees. These brands are denoted by “0 employees” in the data spreadsheet (Appendix D). However, after careful review of their business model and performance in media articles, we made a reasonable assumption that they have less than 1,000 employees. Scotch&Soda was the only non-sustainability-oriented brand for which we could not find reliable information, so we approximated the number of employees based on the brand's LinkedIn Profile. The brands were then sorted into three categories (0 - 1000 employees for small brands, 1000 - 10,000 employees for medium brands, and over 10,000 employees for large brands) to split them into groups of relatively equal size. Because we selectively sampled brands based on their business orientation for the first hypothesis, the three size-based groups for the second hypothesis are not of equal size (Figure 4-3).

In this case, our **second hypothesis** was that **we would observe higher transparency scores with increasing size of the company** due to factors such as responsibility to stakeholders, the pressure of general public on global brands, and legal or regulatory influences.

4.1.2.2. Results

Our analysis (Figure 4-3) suggests that overall external transparency is dependent on the brands' size. While the three categories had the same number of high-transparency brands, the percentage of low-transparency brands was lower in the category of large brands compared to that in the category of medium and small brands. Conversely, the percentage of medium-transparency brands increased steadily across these three groups. The average external transparency score increased across the three groups, while standard deviation decreased for medium-size brands and remained the same for large-size brands.

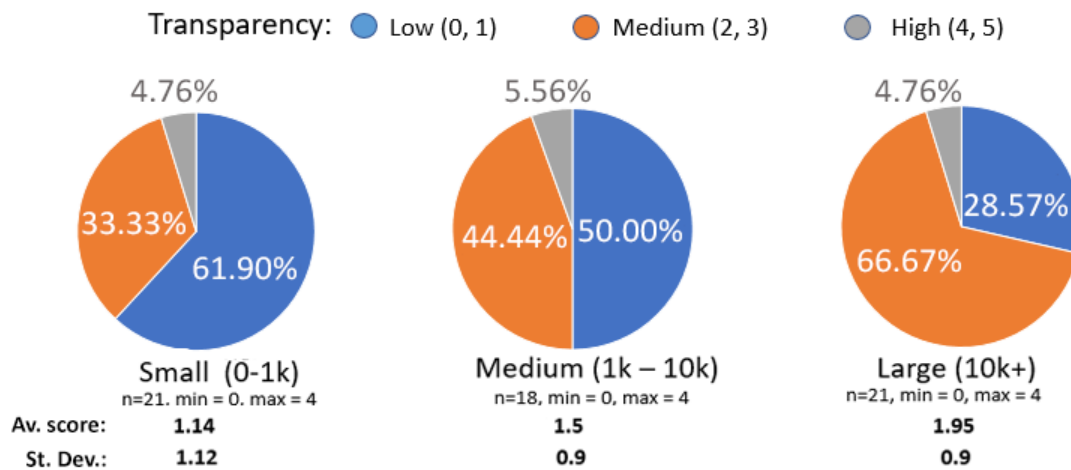


Figure 4-3: Analysis of overall external transparency versus brands' size. *n* denotes sample size, *min* denotes minimum score in the group, and *max* denotes maximum score in the group.

Furthermore, by looking at how these three groups differ across the five external transparency criteria (Figure 4-4), we observed a few interesting trends. While there seems to be no significant trend for disclosure of suppliers, audits, and full-cost breakdown of products, it seems that disclosure of Supplier Code of Conduct and statement regarding purchasing practices is correlated with the brands' size. This confirmed our hypothesis, but we were still uncertain why the brands' size seemed to have influence on these two criteria of external transparency.

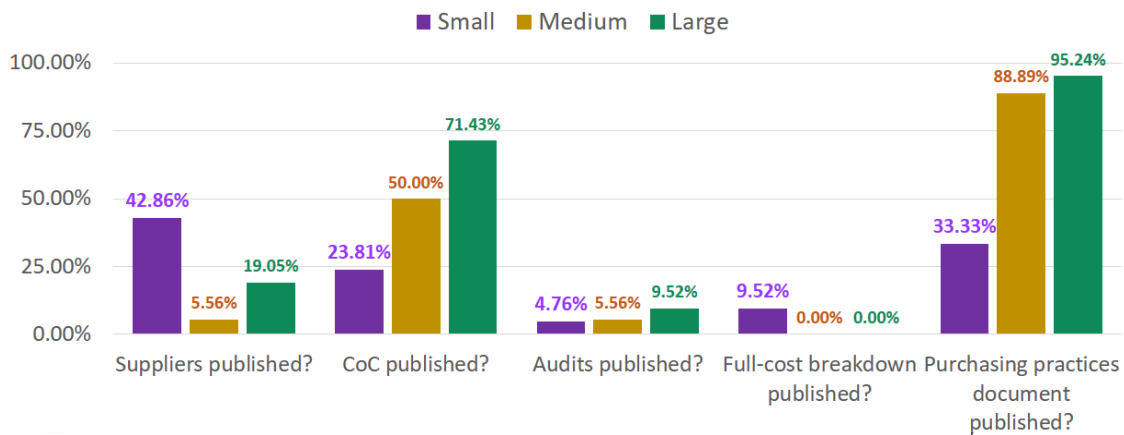


Figure 4-4: Analysis of five external transparency criteria versus the brands' size.

Our content analysis of media journals and sustainability reports suggested that external pressure, stemming from either the general public or the brands' stakeholders, might be a significant factor, but we also hypothesized that regulatory or legal influences may be involved. We decided to test this hypothesis as no previous academic research, to our knowledge, attempted to answer this question. Before we present this analysis in Chapter 5, we also show the analysis of our third hypothesis: that external transparency is correlated with the brands' nationality.

4.1.3. External transparency versus the Brands' Nationality

4.1.3.1. Analysis

We inspected our **third hypothesis**, which is that **the brands' nationality was correlated with external transparency scores**. Our data spreadsheet (Appendix D) shows that we collected three major regional groups of apparel brands: US-based, UK-based, and EU-based. At the time of performing this analysis, UK-based and EU-based brands were clustered together as EU-based brands. Kowtow, Uniqlo, and Shift to Nature were excluded from this analysis because they did not belong to either

US- or EU-based brands. Our expectation was that we would observe observable differences in external transparency scores, although we did not assume which nationality would display higher scores.

4.1.3.2. Results

Our analysis (Figure 4-5) suggests that nationality does not have an observable influence on external transparency scores, but US-based brands nonetheless displayed more proactive disclosure of information (Figure 4-6) in addition to having a greater number of high-transparency brands. While the difference in scores might stem from disparity in sample size (24 US-based brands compared to 33 EU-based brands), we also thought that one of the possible driving factors – regulatory or legal influences – mentioned in the second hypothesis might be related to the brands' nationality, which would suggest that the US has a more influential regulatory and legal structure.

4. 2. Summary of results

Overall, the assessment showed that external transparency scores are most closely correlated to the size of the brands, as measured by the number of employees. Large brands, with over 10,000 employees, on average displayed higher transparency scores compared to small and medium brands because many of them publish a Supplier Code of Conduct and a statement regarding their purchasing practices. The majority of smaller brands do not publish these documents, which lowered their external transparency score.

Our results corroborated the need to understand why some brands publish these documents and how disclosure of information motivates brands to become more transparent. Based on our content analysis, we hypothesized that regulatory and legal complexity is the reason why we observed significantly higher transparency scores

for large brands and somewhat higher scores for US-based brands. Therefore, we decided to analyze the regulatory and legal influence on external transparency in the next chapter to understand whether regulating bodies can provide incentive for brands to be more transparent.

Additionally, although the brands gained full points for publishing partial information, the assessment showed that brands of same transparency level still differed significantly in the way they disclosed information publicly. For this reason, we decided to perform an analysis of another underlying influence, supply chain communication, to understand how transparency is affected by modes of communication between supply chain players. We present these findings in the next chapter after showing the results of regulatory and legal analysis.

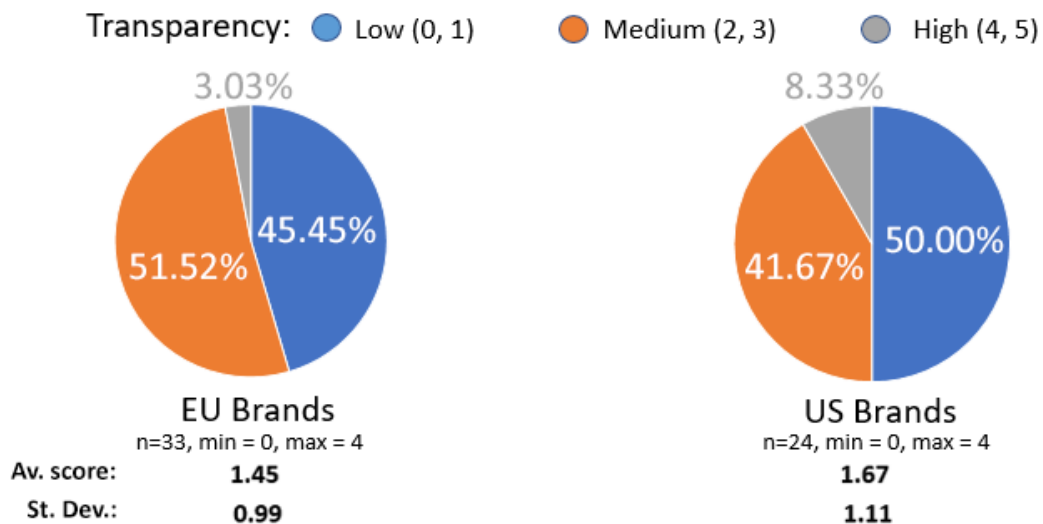


Figure 4-5: Analysis of overall external transparency versus the brand’s nationality. *N* denotes sample size, *min* denotes minimum score in the category, and *max* denotes maximum score in the category.

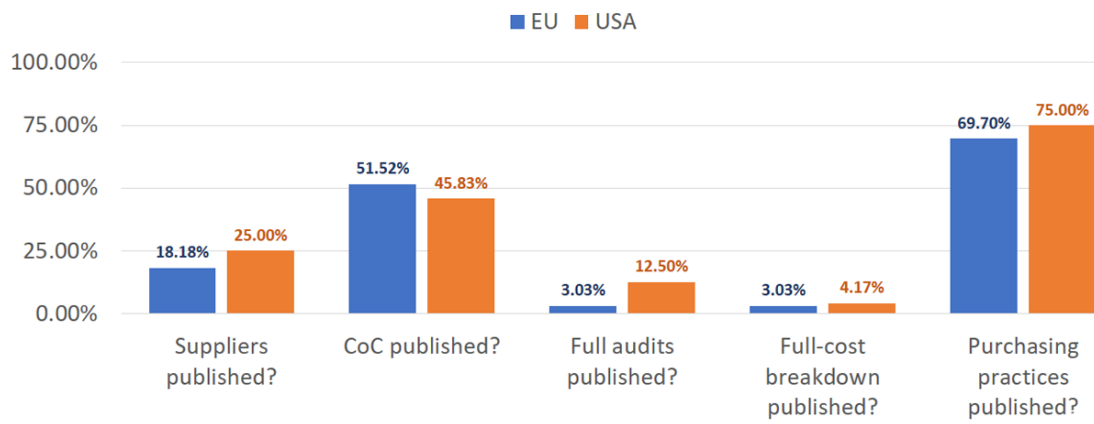


Figure 4-6: Analysis of five external transparency criteria versus the brands' nationality.

Chapter 5

Analysis of Underlying Influences on External Transparency

5. 1. Political and Legal Complexity and Supply Chain Communication

In this chapter, we explore the significance of two underlying influences on supply chain transparency: political and legal complexity and supply chain communication. Because the assessment in Chapter 4 showed that it was important to analyze their impact on external transparency, we implemented the analysis in this chapter to understand how regulatory efforts and channels of communications can be improved to increase the degree of transparency in supply chains.

We achieve this by first providing an in-depth review of regulatory and legal efforts that have been enacted to address issues of social exploitation in global supply chains. Afterward, we present the results of our quantitative analysis focused on understanding the relationship between external supply chain transparency, brand size, as well as regulatory and legal complexity, which was motivated by our findings in the previous chapter. Our findings are finally triangulated by a qualitative analysis of supply chain communication, which altogether sets the stage for exploration of internal transparency in Chapter 6 before delving into overall discussion and suggestions in Chapter 7.

5. 2. Relationship between supply chain transparency and political and legal complexity

5. 2. 1. Corporations and their power on regulatory and legal landscapes

In our analysis of apparel brands and their social supply chain transparency, we have focused mostly on their corporate actions without elaborating how such actions shape governing regimes of the countries in which the brands operate. However, it is important to understand that corporations can have a strong influence on political and legal landscapes and that, in turn, regulatory and legal bodies can affect how corporations operate.

Corporations can contribute to regulatory regimes by choosing to comply with existing rules, supplying rules where none exist, shaping the rule scheme via political or economic pressure, or simply evading the rule scheme and conducting business elsewhere (Danielsen, 2005). Undoubtedly, they have a non-trivial amount of power, which means that their decisions can have strong social consequences. At the same time, corporate actions are often detached from public participation and scrutiny, leaving most of social burden on regulatory and legal bodies (Danielsen, 2005). Without effective involvement of regulatory bodies in governing how businesses operate, corporations can exert monopolizing power in shaping the global socio-political landscape.

As transnational corporations, many apparel brands conduct operations in countries around the world, bolstering national economies and providing jobs, but often violating many economic and social rights, as was discussed in earlier chapters. Even if consumers, non-governmental organizations, and nonprofits exert pressure on brands to be more transparent for the purpose of being socially sustainable, the reality is that apparel brands will not have a strong incentive to institute high levels of social

supply chain transparency unless regulatory and legal bodies affect their decision-making process.

So far, regulatory and legal bodies have tried to address this issue through extraterritorial jurisdiction and specific, national policies in the form of legal acts or accords. It is important to understand the underpinnings of these means of influence as they can provide insight on the continuing shortcomings of global governance¹⁸.

5. 2. 2. *Extraterritorial jurisdiction*

In practice, extraterritorial jurisdiction is the government's ability to exercise its authority beyond the geographic boundaries of the country to which it belongs. In the last few decades, during which transnational corporations have outgrown national corporate law regimes of their respective states, extraterritorial jurisdiction has become an essential tool to hold transnational corporations accountable for their actions in foreign countries (Kirshner, 2012). This is because single states with national jurisdictions do not have the capacity to inspect interconnected and international corporate groups, and, likewise, there are no international courts with jurisdiction to oversee the compliance of transnational corporations with international operations (Droubi, 2016; Kirshner, 2012).

It is, therefore, easy to see why extraterritorial jurisdiction is essential for social supply chain transparency. If regulatory and legal bodies of a particular state do not have the means to hold corporations accountable for violations of human rights — from slave labor to denial of minimum living wage — across their supply chains in foreign countries, the corporations will not have an incentive to comply with international norms. In writing, workers who are exposed to these violations can petition against such practices at national courts, but in practice, many of these

¹⁸ “[...] process of cooperative leadership that brings together national governments, multilateral public agencies, and civil society to achieve commonly accepted goals.” Boughton, J. and Bradford, C. I. Jr. <http://www.imf.org/external/pubs/ft/fandd/2007/12/boughton.htm>, Accessed Mar. 23, 2017

workers are employed in developing countries where national laws are not stringent enough (Rubya, 2014). Without extraterritorial jurisdiction, transnational corporations can commit serious violations of international human rights and are not accountable for such actions.

Despite the obvious need for extraterritorial jurisdiction as a legal tool for inspecting international compliance, developed countries have not been successful at instituting and formalizing this type of rule. As our study showed, most of the world's leading apparel brands are based either in the United States or the European Union, so it is important to understand how their legal systems differ in decisionmaking related to this issue.

For a long period of time, the United States used extraterritorial jurisdiction as means of protecting foreign plaintiffs who have been subjected to violations of international human rights (Bédard et al., 2013, Kirshner, 2015). The Alien Tort Statute (ATS), enacted in 1789, provided the US with the ability to “have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States.” For the first two centuries since enactment, the statute only applied to “violation of safe conducts, infringement of the rights of ambassadors, and piracy” on the high seas, but in 1980, upon the recommendation of the US Court of Appeals for the Second Circuit, the ATS conferred jurisdiction on the US courts to accept claims by foreign citizens against defendants charged with violations of modern-day “customary international law,” such as “war crimes” and “crimes against humanity” (Bédard et al., 2013). This meant that foreign nationals could file claims against US entities if they had been exploited or subjected to violations of international human rights.

More specifically, for victims of international corporate human rights abuses, this meant that the US courts offered them access to justice in its courts (Kirshner, 2015). With transnational corporations overcoming individual states and their legal systems, ATS provided the US with enough power to inspect its corporate conduct abroad

while allowing noncitizens, who have been exploited by US corporations, unhindered access to its legal system.

However, in 2013, the US Supreme Court overturned the provisions of the statute in *Kiobel v. Royal Dutch Petroleum*, holding that ATS is subject to the “presumption against extraterritoriality.” The Court made a claim that:

“[...] even where the claims touch and concern the territory of the United States, they must do so with sufficient force to displace the presumption against extraterritorial application. [...] Corporations are often present in many countries, and it would reach too far to say that mere corporate presence suffices. If Congress were to determine otherwise, a statute more specific than the ATS would be required” (Bédard et al., 2013).

Therefore, after three decades of being an exemplary leader in human rights, the US reverted to a yielding form of global governance, which does not hold transnational corporations accountable for violations of international human rights.

The European Union is moving toward enforcing corporate standards, but its efforts are hindered by a complicated legal infrastructure. Namely, EU Member States provide for corporate criminal liability, but typically for cases in which the crime has taken place within the territory of national jurisdiction (Kirshner, 2015). There are exceptions to the territoriality requirements, but for cases of transnational violations of human rights, the EU’s provision of corporate criminal liability does not offer foreign nationals with access to courts and justice within the EU.

Similarly, there are no civil mechanisms for holding transnational companies accountable for violations abroad. Particularly, the provision of extraterritorial jurisdiction in civil liability only holds for extraterritorial violations within the

boundaries of the EU. This situation is further exacerbated by the fact that many EU Member States provide human rights-related legislations extraterritorially, but these laws are not applicable to corporations (Kirshner, 2015). This means that, despite all efforts, the EU's legal infrastructure provides little to no control over transnational corporations' actions abroad.

Although extraterritorial jurisdiction seems to be the most effective tool for inspecting violations of human rights by transnational corporations, it is not the only legal instrument for addressing this issue (Table 5-1). As we show in the next section, accords and legal acts are also used for influencing actions of international companies.

5. 2. 3. *Accords and legal acts*

Accords and legal acts do not impose global liability like extraterritorial jurisdiction because they typically apply only to nation states in which they have been established or legislated. However, because they usually address a narrower subset of issues, they might be better suited for pre-emptive protection of international human rights via specific legislations. There are three prominent regulations that apply to the apparel industry and supply chain transparency: The Accord on Fire and Building Safety in Bangladesh, The California Transparency in Supply Chains Act, and The Modern Slavery Act 2015 (Table 5-1).

The Accord on Fire and Building Safety in Bangladesh¹⁹ was brought to existence following the collapse of the Rana Plaza in Dhaka, Bangladesh. The Accord is a legally binding agreement between brands and trade unions that focuses on cultivating safe workplaces in Bangladesh for garment workers. For instance, the Accord's official website publishes Corrective Action Plans (CAPs)²⁰ for factories

¹⁹<http://bangladeshaccord.org/signatories/>, Accessed Mar. 23, 2017

²⁰<http://accord.fairfactories.org/ffcweb/Web/ManageSuppliers/InspectionReportsEnglish.aspx>, Accessed Mar. 23, 2017.

Extraterritorial jurisdiction		
General Information		
<ol style="list-style-type: none"> 1. Allows victims of international human rights violations to have access to foreign courts. 2. It does not necessarily offer pre-emptive protection of international human rights from malpractices of transnational corporations. 		
Regional Differences		
<ol style="list-style-type: none"> 1. The US Alien Tort Statute (ATS) was an exemplary case, but Supreme Court overturned the provisions of the Statute in 2013. 2. The EU has potential to mend the gaps left by overturned ATS, but its heterogenous legal system serves as hindrance. 		
Accords and legal acts		
The Accord on Fire and Building Safety in Bangladesh	The California Transparency in Supply Chains Act	The Modern Slavery Act 2015
<ol style="list-style-type: none"> 1. Legally-binding agreement 2. Voluntary participation 3. Focused on safety, not transparency 4. Applies to signatories of the Accord 	<ol style="list-style-type: none"> 1. Legal act 2. Brands conducting business in California must comply 3. Focused on transparency 4. Applies to brands with annual revenues of over \$100M 	<ol style="list-style-type: none"> 1. Legal act 2. Brands conducting business in the UK must comply. 3. Not exclusively focused on transparency 4. Not clear what type of brands it applies to

Table 5-1: Summary of main points related to extraterritorial jurisdiction, as well as accords and legal acts, and their relation to supply chain transparency.

employed by global brands so that the general public can easily see whether the factories are implementing structurally safe buildings free from fire and electrical mishaps.

While the Accord is a step forward toward instituting a greater degree of supply chain transparency, its exclusive focus on physical safety and Bangladesh-based factories neglects many aspects of social transparency provided by our framework. On top of that, the company's decision to become part of the agreement is voluntary (Rubya, 2014). As can be seen from the Accord's website, many of the Corrective Actions Plans are also behind schedule.

It is also worth mentioning The Alliance for Bangladesh Worker Safety, which is another regulatory effort to prevent accidents like the collapse of Rana Plaza. However, The Alliance is not an accord, but rather an association of "companies, retailers, and brands" focused on improving the working conditions of garment industry workers²¹. Unlike the Accord, which is an official agreement between companies and trade unions (in addition to having NGOs as witnesses to the agreement and a representative from the ILO as independent chair), the Alliance is a self-formed group of companies, and is therefore excluded from our legal analysis.

The California Transparency in Supply Chains Act of 2010 requires that:

“[...] every retail seller and manufacturer doing business in [California] and having annual worldwide gross receipts that exceed one hundred million dollars (\$100,000,000) shall disclose, as set forth in subdivision (c), its efforts to eradicate slavery and human trafficking from its direct supply

²¹ <http://www.bangladeshworkersafety.org/en/who-we-are/faq>, Accessed Mar. 23, 2017.

chain for tangible goods offered for sale.”²²

The Act furthermore specifies that firms should disclose on their website whether they engage in verification of product supply chains, conduct audits of suppliers to evaluate compliance, require direct suppliers to certify that materials incorporated into their products comply with laws regarding slavery and human trafficking, maintain internal accountability standards and procedures for non-compliance, and provide company employees and management with training on human trafficking and slavery.

Unlike the California Transparency in Supply Chains Act, the Modern Slavery Act (a UK-legislated act) is not focused solely on supply chain transparency. In its original form, the act did not address transnational exploitation, thus initially negating the importance of global supply chain transparency (Pollitt, 2014).

It does, however, require that brands publish a slavery and human trafficking statement that:

“*may* include information about [...] (b) its policies in relation to slavery and human trafficking, (c) its due diligence processes in relation to slavery and human trafficking in its business and supply chains, (d) the parts of its business and supply chains where there is a risk of slavery and human trafficking taking place, and the steps it has taken to assess and manage that risk, (e) its effectiveness in ensuring that slavery and human trafficking is not taking place in its business or supply chains, measured against such performance indicators as it

²² http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_0651-0700/sb_657_bill_20100930_chaptered.pdf, Accessed Mar. 23, 2017.

considers appropriate; (f), the training about slavery and human trafficking available to its staff.”²³

As we mentioned earlier, we were interested in understanding how these agreements and acts affect external social supply chain transparency. However, even though the Accord is a legally-binding agreement, it is not legislation, and is therefore not as legally binding as the California Transparency in Supply Chains Act and the Modern Slavery Act 2015. For this reason, we focused our analysis exclusively on the two acts to understand the influence of legal complexity on supply chain transparency.

5. 2. 4. Analysis

The definition of transparency in the California Transparency in Supply Chains Act is not as encompassing as that provided by our framework, and focuses exclusively on slavery and human trafficking. However, the requirements provided in the act still closely resemble the criteria for purchasing practices and moderately resemble the criteria for requirements of Supplier Code of Conduct in the external transparency assessment. We therefore inspected which US-based brands indicated their compliance with the Act and whether they published a statement regarding purchasing practices or a Supplier Code of Conduct. Even though some non-US brands — namely, Uniqlo, Hermes, Hugo Boss, Gucci, Zara, and Burberry — also indicated compliance with the Act, we decided to focus solely on US-based brands as the Act does not clearly specify whether these requirements apply to brands based outside the US.

The Modern Slavery Act is more ambiguous and its language does not institute the same stringency as that of the California Transparency in Supply Chains Act. However, its requirements to some extent still resemble the criteria for purchasing practices statement or document and the criteria for requirements of Supplier Code

²³ <http://www.legislation.gov.uk/ukpga/2015/30/contents/enacted>, Accessed Mar. 23, 2017.

of Conduct in the external transparency assessment. Therefore, we applied the same analysis to UK brands to inspect whether they comply with the Act and satisfy these two criteria of external transparency.

We visited the brands' websites and inspected whether they publicly indicated compliance with the California Transparency in Supply Chains Act or the Modern Slavery Act. We then observed whether the brands gained points for publishing a statement or document regarding their purchasing practices or their Supplier Code of Conduct to identify the relationship between these legal acts and external transparency. The brands were divided into four groups: (1) those that publicly comply with the corresponding act and publish a statement or document regarding purchasing practices or their Supplier Code of Conduct, (2) those that publicly comply with corresponding act and do *not* publish a statement or document regarding purchasing practices or their Supplier Code of Conduct, (3) those that do not publicly comply with the corresponding act and *still* publish a statement or document regarding purchasing practices or their Supplier Code of Conduct, and (4) those that do not publicly comply with the corresponding act and do not publish a statement or document regarding purchasing practices or their Supplier Code of Conduct.

5. 2. 5. Results

For the California Transparency in Supply Chains Act, we hypothesized that, for brands that publicly indicate compliance with the Act, we would observe a high percentage of compliance with criteria for purchasing practices and, to a lesser extent, compliance with criteria for Supplier Code of Conduct. As can be seen in Figure 5-1, 62.50% of US-based brands publicly indicated compliance with the Act and published a statement or document regarding their purchasing practices, while 41.67% of them indicated compliance with the Act and published a Supplier Code of Conduct. On the other hand, 25% of US-brands did not publicly indicate compliance with the Act and did not publish a statement or document regarding their purchasing

practices, while 33% of them did not indicate compliance with the Act and did not publish a Supplier Code of Conduct.

A minority of US-based brands did not publicly indicate compliance with the Act and yet have still published a statement or a document regarding their purchasing practices, and an even smaller percentage did not indicate compliance with the Act but have published a Supplier Code of Conduct. There were no US-based brands that publicly indicated compliance with the Act but did not publish a statement or document regarding their purchasing practices, but 20.83% of US-based brands publicly indicated compliance with the Act but did not publish their Supplier Code of Conduct.

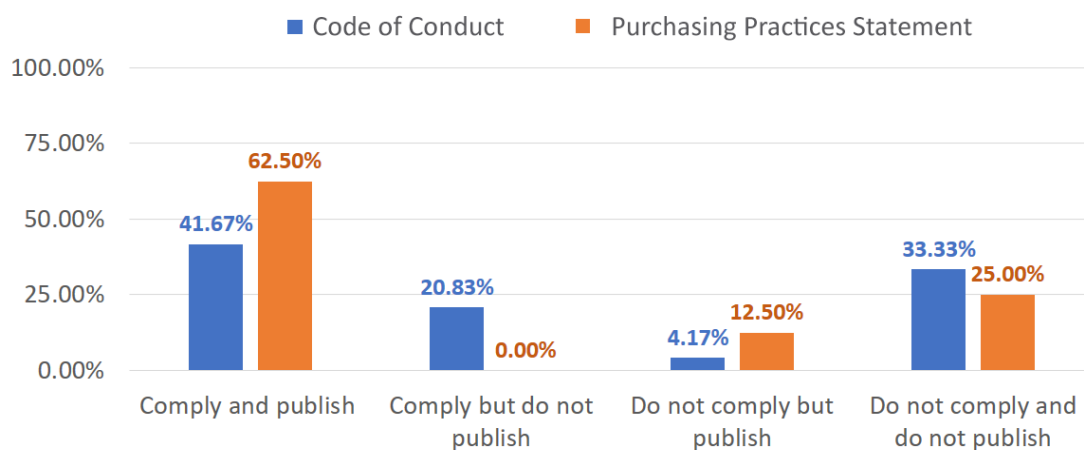


Figure 5-1: Analysis of the effect of the California Transparency in Supply Chains Act on US-based brands (n=24). Each category shows whether the brand publicly indicates compliance with the Act and whether it publishes a statement or document regarding purchasing practices or a Supplier Code of Conduct.

Of the US-based brands that publicly indicated compliance with the Act, a smaller percentage published their Supplier Code of Conduct and a larger percentage published a document or statement regarding purchasing practices. These findings were consistent with our observation that the provisions of the Act closely resemble the criteria for purchasing practices statement or document provided by our

framework and moderately resemble the criteria for Supplier Code of Conduct. However, because the Act specifies that only brands with annual revenues of over \$100,000,000 are required to comply with its requirements, it was important that we complement our analysis with data on the brands' revenues.

Figure 5-2 shows that all the US-based brands that complied with the Act and published a statement or document regarding purchasing practices or their Supplier Code of Conduct are generating more than \$100,000,000 annual revenues. Those brands that do not comply with the Act and do not publish a statement or document regarding their purchasing practices are all generating less than \$100,000,000 annual revenues, while only 12.5% of those that do not comply with the Act and do not publish their Supplier Code of Conduct are generating more. All brands that publicly indicate compliance with the Act but do not publish a Supplier Code of Conduct are generating more than \$100,000,000 annual revenues, which means that all of these brands have at least published a statement or a document regarding purchasing practices.

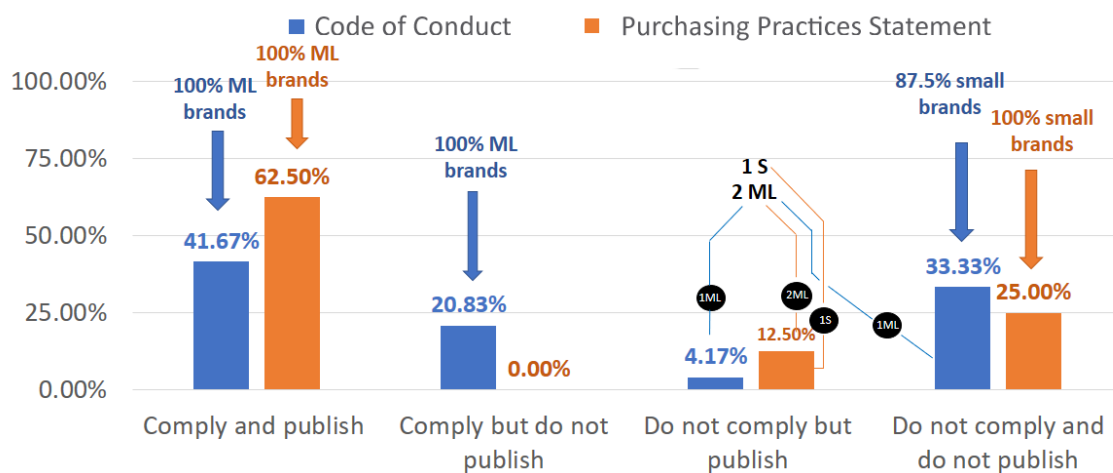


Figure 5-2: Analysis of the effect of California Transparency in Supply Chains Act on US-based brands (n=24), with distribution of small and medium & large brands in each category. According to the Act, small brands are those that generate less than \$100M in revenues each year. “1S” means one brand of small size, “1ML” means one brand of medium or large size, and “2ML” means two brands of medium or large size.

It is worth noting, as mentioned before, that there was a small percentage of brands that did not publicly indicate compliance with the Act but still published either or both of these documents. We expected to observe a few brands in this category as it is possible for brands to comply with the requirements of the Act without publicly indicating that they are following its provisions.

Our analysis, therefore, suggests that the Act has a significant influence on social external supply chain transparency. All the brands that publicly indicated compliance with the Act and have published either or both of the documents are generating more than \$100,000,000, which is a threshold requirement specified in the Act, while those that did not publicly indicate with the Act and have not published one or neither of the documents are generating less than this threshold. This means that the majority of US-brands that do not publish these documents are not legally required to do so.

On the other hand, due to the ambiguous language of the Modern Slavery Act and its non-exclusive focus on supply chain transparency, we did not expect to see the same degree of influence on external social supply chain transparency of the UK-based brands. Figure 5-3 shows that only a quarter of UK-based brands that publicly indicated compliance with the Act published a statement or document regarding their purchasing practices or their Supplier Code of Conduct. On the other hand, more than half of UK-based brands did not publicly indicate compliance with the Act but have still published a statement or document regarding their purchasing practices or their Supplier Code of Conduct. Similarly, 41.67% of UK-based brands did not publicly indicate compliance with the Act but have still published their Supplier Code of Conduct.

While it is possible that some of these brands comply internally with the Act without acknowledging it publicly, it was difficult to assess whether this was the case. Furthermore, because the Modern Slavery Act does not indicate clearly which brands are supposed to comply with its requirement (which is a distinct feature of the

California Transparency in Supply Chains Act), we could not determine which of these UK-based brands are legally obliged to satisfy the provisions of the Act.

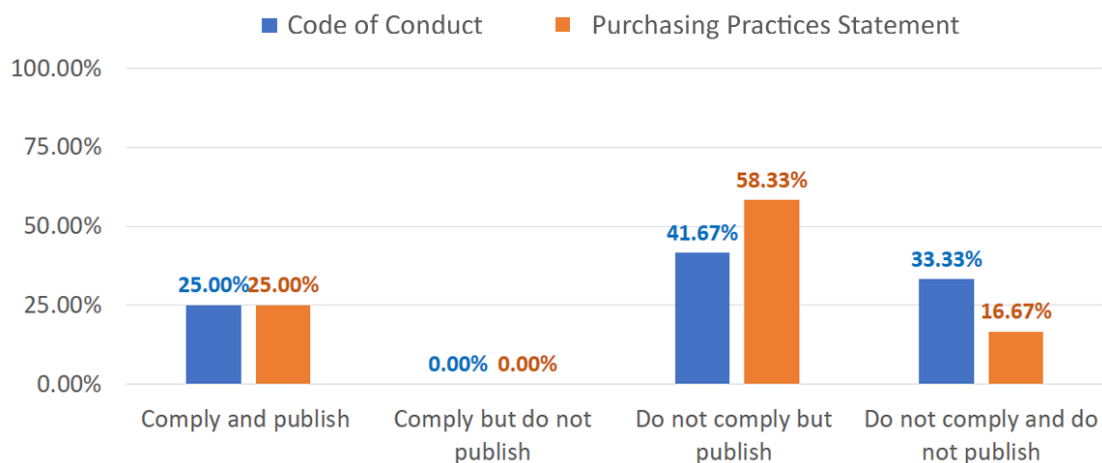


Figure 5-3: Analysis of the effect of the Modern Slavery Act on UK-based brands (n=12). Each category shows whether the brand publicly indicates compliance with the Act and whether it publishes a statement or document regarding purchasing practices or a Supplier Code of Conduct.

5.2.6. Interpretation of legal analysis

The results indicate that the California Transparency in Supply Chains Act has a positive and more significant influence on external transparency criteria. We believe this is a consequence of the ambiguity and more lenient requirements presented in the Modern Slavery Act, which are not focused as strongly on supply chain transparency as those in the California Transparency in Supply Chains Act. Additionally, it is important to emphasize again that the majority of US-based brands that did not publicly indicate compliance with the Act are small-sized brands that are not legally obliged to comply with its requirements.

In Chapter 7, we discuss the implications of the international legal system, as well as national legal acts, and offer suggestions on how to restructure their provisions to increase the degree of social transparency in global supply chains. Before this

discussion, to complement our findings on the underlying influences of supply chain transparency, we turn to qualitative analysis of another factor — supply chain communication.

5.3. Relationship between transparency and communication in supply chains

Analysis of external transparency was useful in discovering how supply chain players are sharing information with one another. Specifically, we noticed that brands of same-level transparency differed significantly in how they disclosed and shared the contents of their audits, which created disparity in supply chain communication.

Supply chain communication is an important factor that can have a significant influence on supply chain transparency (Bastian and Zentes, 2013; Sarkis et al., 2011). For the purpose of our study, we interpreted supply chain communication as means of information sharing between various supply chain players, from suppliers and factory workers to supply chain managers and brand's executive officers. In addition to interpersonal relationships and communication between these players, this also includes platforms and tools of communication, such as audit reports and technology-based applications.

While quantitative analysis of the effect of supply chain communication on social supply chain transparency was outside the scope of this thesis due to time constraints and lack of trustworthy data, qualitative analysis revealed some disadvantages of the ways supply chain players share information about the compliance of suppliers, an important component of supply chain transparency.

5.3.1. Information asymmetry between supply chain players

According to our content analysis and literature review, non-transparent communication and disparity in information sharing between supply chain players is a common issue. For instance, one of the brands selected for our data analysis, the Stockholm-based high-end fashion house Acne Studios, reported in 2012 that they observed excessive working hours, incorrect payment, as well as health and safety issues at their Chinese suppliers²⁴. Specifically, they found that two suppliers used double bookkeeping to conceal information on wages and working hours and that some of the factories did not show interest to comply with Acne's Code of Labor practices.

Auditing is the primary way of monitoring compliance with codes of conduct in the apparel industry and addressing issues like these, and in recent years is mostly focused on compliance with private, voluntary codes of conduct (Locke et al., 2007). As Locke et al. (2007) describe in their analysis of Nike's monitoring programs, these monitoring efforts were initially focused on compliance with national regulations and laws, but they became increasingly centered on the interaction between private codes of conduct and the brands' reputation, which has been severely criticized by those who believe in the power of government and union interactions. They succinctly summarize the pressing issue in this paragraph:

“Given that brands and their suppliers may have an interest in hiding labor violations rather than reporting them, how trustworthy are these internal audits? Wouldn't the incentives for moral hazard be too great for these interested parties? If these audits are, instead, contracted to “third party” organizations, be

²⁴ <http://www3.fairwear.org/ul/cms/fck-uploaded/documents/socialreports/2012/AcneStudiossocialreport2012.pdf>, Accessed Mar. 27, 2017.

they NGOs or private auditing companies, how competent are the NGOs in assessing certain technical issues and how forthcoming will the private monitoring firms be if they hope to please their clients?”

To address these problems, multi-stakeholder initiatives (MSIs) – like the Fair Wear Foundation (FWF) – have been established, which serve to certify external auditors in the monitoring process (Locke et al., 2007). However, the main issue of these initiatives is that they are directly associated with specific apparel brands and thus cannot always be perceived as unbiased auditing bodies. For example, Acne Studios, the Swedish high-end fashion house mentioned earlier, is a member company of the Fair Wear Foundation, which effectively creates some degree of uncertainty in Fair Wear Foundation’s auditing process²⁵.

Moreover, there is a multitude of multi-stakeholder initiatives focused on improving the sustainability in apparel supply chains, and as a result, these initiatives will likely have an incentive to compete against each other and conceal information when compared by external evaluators. Particularly, in his 2015 comparative analysis of the Fair Wear Foundation and Business Social Compliance Initiative, a Brussels-based business initiative focused on the apparel industry, Meier reported that Business Social Compliance Initiative refused to provide their audit reports when they discovered that the Fair Wear Foundation’s audits were used for comparison (Meier, 2015). Therefore, despite all these efforts, some critics argue that auditing must be performed independently of brands and factories in order for monitoring to be completely effective (Locke et al., 2007).

Our content analysis (Table 5-2), therefore, revealed that information asymmetry is the first pitfall in today’s communication between supply chain players through auditing. The first level of information asymmetry exists between suppliers and

²⁵ <http://www.fairwear.org/36/brands/>, Accessed Mar. 27, 2017.

brands where the suppliers have an incentive to conceal information from the brands in order to avoid termination of business due to non-compliance with codes of conduct.

The second level of information asymmetry exists between the brands on one side and external auditors certified by multi-stakeholder initiatives (MSIs) on the other side. In this case, the brands might have an incentive to provide incomplete information in order to remain members of the multi-stakeholder initiatives, which bolsters their credibility in the sustainability realm.

Finally, the third level of information asymmetry exists between the multi-stakeholder initiatives and external evaluators as the multi-stakeholder initiatives might have an incentive to provide incomplete information in order to remain competitive compared to other MSIs. As a result, communication between supply chain players becomes obscured, leading to lower degree of supply chain transparency. However, it is important to note that information asymmetry is not the only auditing-related issue that negatively affects supply chain transparency.

Information asymmetry in supply chain communication
First-level
suppliers & brands incentive to conceal info
Second-level
brands & auditors certified by MSIs incentive to provide incomplete info
Third-level
auditors & MSIs incentive to provide incomplete info

Table 5-2: Levels of information asymmetry in supply chain communication

5.3.2. *Lack of standardized auditing system*

The second pitfall of supply chain communication through auditing stems from the lack of universal auditing system and hence the uneven quality of audits. As different codes of conduct focus on different aspects – from freedom of association and excessive work hours to health and safety – the focal areas of different audits vary as well, which renders the comparison of social sustainability across different brands difficult and oftentimes impossible. According to Locke et al. (2007), another concern is that the lack of standardization in the monitoring system leads to mixed quality of the audits, which can be seen as a result of inexperienced auditors (who often happen to be recent college graduates) and inexistent quality standards.

This observation was confirmed by our comparative analysis of several auditing reports. First, our analysis showed that few brands publicly shared their audits. We then compared available audits reports and detected significant differences in the content and quality of the reports. For instance, by looking at auditing reports of Levi's²⁶, Patagonia²⁷, and Nudie Jeans²⁸, it becomes apparent that is unclear whether brands have complete understanding of the social conditions at their suppliers' sites (Appendix H). For instance, Nudie Jeans' audit reports are significantly more succinct and less revealing about the details of their findings on their suppliers. Levi's and Patagonia's audits are more detailed and extensive, but their formats and content are notably different, resulting in disparate type of information being presented to the brands.

The disparity in the content and format of their audits clearly indicates that communication across their supply chains is not equally effective, which would

²⁶ <http://levistrauss.com/wp-content/uploads/2015/04/Bangladesh-Building-Integrity-and-Fire-Safety-2015-Status-42115.pdf>, Accessed Apr. 5, 2017.

²⁷ <http://www.fairlabor.org/affiliate/patagonia>, Accessed Apr. 5, 2017 (Tracking Charts)

²⁸ https://cdn.nudiejeans.com/media/transparency/Armstrong_2.pdf, Accessed Apr. 5, 2017

likely lead to difference in the degree of their internal transparency²⁹. On top of that, this disparity, which is a result of no standardized auditing system, exacerbates the issue of information asymmetry, creating a negative-feedback-loop effect in non-transparent supply chain communication.

5.3.3. Interpretation of qualitative analysis of supply chain communication

Our qualitative analysis shows that reducing information asymmetry and instituting a standardized auditing system is essential for increasing external transparency. In Chapter 7, after proposing suggestions for restructuring the provisions of transparency-related legal acts, we discuss the feasibility of these options and argue that diffusion of technological innovation in the realm of social sustainability is necessary for mitigating issues of non-transparent supply chain communication.

5. 4. Summary of Results

This chapter showed that political and legal complexity and supply chain communication can greatly affect external supply chain transparency.

Regulatory and legal regimes have an influence on supply chain transparency through extraterritorial jurisdiction and national policies in the form of accords and legal acts. Extraterritorial jurisdiction is a powerful tool for enforcing global liability on transnational corporations, but the US and the EU — where the majority of leading apparel brands are located — do not exercise this power effectively. Legal acts seem to be more effective at instituting specific policies, but they either provide an incomplete definition of transparency (the California Transparency in Supply Chains Act) or do not fully emphasize it (the Modern Slavery Act 2015).

²⁹ It is worth noting that we gave a full point to all these brands in the category of social sustainability conditions as part of external transparency assessment, because they nonetheless published their audits publicly.

We did not perform a quantitative analysis of the influence of supply chain communication on external transparency, but our qualitative content analysis revealed that information asymmetry and lack of standardized auditing system negatively affect communication between supply chain players and, therefore, external transparency as well.

The goal of this analysis was to understand the role of these two factors and how they can be effectively used to increase the degree of external supply chain transparency. We propose these solutions in Chapter 7, but we first explore internal transparency in the next chapter to provide a detailed differentiation between brands that are externally and internally transparent.

Chapter 6

Analysis of Internal Transparency

6. 1. Overview of Internal Transparency

So far, we've explored external transparency and factors that incentivize brands to disclose information to the public. It is equally important to focus on internal transparency, which is the "degree to which the firm can be transparent to itself" (Egels-Zanden et al., 2015). This is because internal transparency represents the company's ability to obtain and digest information about its practices across the entire supply chain. Likewise, analysis of internal transparency is indispensable because:

1. It gives insight on the importance of all five underlying factors: political and legal complexity, supply chain communication, third-party integration, supply chain disintermediation, and product formalization.
2. It can reveal whether brands lack external transparency due to lack of knowledge about their supply chains or unwillingness to disclose information. A solid understanding of internal transparency can therefore help disambiguate between brands that are actively trying to institute transparency across their supply chains and those that purposefully conceal knowledge for avoiding liability.
3. It is possible that brands can be internally transparent even if they are not externally transparent. Our assessment in previous chapters showed that some brands are more externally transparent than others, but this does not imply

that they are more internally transparent than others. For example, a brand might publish some of its audits, which makes it externally transparent, but it is possible that the same brand does not audit the majority of its suppliers, which makes it internally non-transparent.

Our goal was to distribute the survey to the same brands used for external transparency assessment, and collect the data on their internal transparency. This would provide us with a complete understanding of their practices, which would allow us to propose solutions for co-optimizing all five underlying influences and increasing the degree of supply chain transparency. In this chapter, we show why this approach was difficult to implement and how it reflects the collective unwillingness of the apparel industry, or most likely any industry, to participate in the discussion of supply chain transparency.

Before we turn to this discussion, it is useful to differentiate levels of internal transparency for a more informed conversation about future steps in Chapter 7. We therefore explore three levels of internal transparency provided by our adaptive survey: zero internal transparency, complete internal transparency, and – the most likely one – medium internal transparency.

6. 2. Levels of Internal Transparency

6.2.1. Zero Internal Transparency

Zero-internal transparency is a highly unlikely scenario because it implies that a brand does not have any knowledge of its supply chain practices. In practice, brands have at least some understanding of their supply chain practices, as is evident from our external transparency assessment. It is, however, still important to show the criteria for zero-internal transparency because they set a reference point for

evaluating brands of medium and complete internal transparency. Furthermore, by instituting an absolute range of internal transparency levels – from zero to complete – we are ensuring that brands with low internal transparency can be easily compared to those with higher internal transparency.

Table 6-1 shows the criteria for brands of zero internal transparency based on our adaptive survey (Appendices A and B). A brand with no internal transparency cannot identify any suppliers or tiers (beyond the first tier), and therefore does not have enough knowledge for effective traceability. By having no Supplier Code of Conduct and not conducting audits, such brand also does not offer socially sustainable working conditions. Finally, with no insight on the full-cost breakdown of its products, use of social labels, or specifications for entering and maintaining relationships with its suppliers, a brand with no internal transparency cannot implement responsible purchasing practices.

Zero Internal Transparency
Traceability
(1) Unable to identify any suppliers (2) Unable to identify any tiers
Social Sustainability Conditions
(1) No Supplier Code of Conduct (2) Audits are not performed
Purchasing Practices
(1) No knowledge on full-cost breakdown of products (2) No social labels used (3) No document or statement specifying purchasing practices

Table 6-1: Conditions for brands with zero internal transparency

Based on our research of brands' social practices, it is very unlikely that a brand would score negatively on all three aspects of internal transparency. For instance, it is possible that a brand does not use any social labels or does not audit some of its suppliers, but most brands can identify at least some suppliers and have internal regulations specifying the nature of their relationships with suppliers.

Our framework therefore implies that all brands are likely to be internally transparent to at least some degree. This notion is important because it explains several seemingly contradictory scenarios:

1. Zero internal transparency is a highly unlikely scenario, while zero external transparency is more likely. A brand usually has some internal insight on its practices, but it might not disclose its insights to the public.
2. As a result, for almost all cases, zero external transparency does *not* equate zero internal transparency.

Now that we have specified conditions for zero internal transparency, it is important to take a look at conditions for another unlikely scenario – complete internal transparency.

6.2.2. Complete Internal Transparency

A brand with complete internal transparency (Table 6-2) has insight on all aspects of our transparency framework. Such brand is able to identify all suppliers across its supply chain, every tier within its supply chains, and specific suppliers within each tier. It offers a full Supplier Code of Conduct, as specified in Questions 3.8, 3.9., 3.10, 3.11, 3.12, and 3.13 (Appendix A), which applies to all suppliers in the supply chain. By implementing third-party auditing bodies and performing regular audits, it has insight on all possible cases of non-compliance and reports all such cases. Such brand also has internal regulations that clearly specify how relationships with

suppliers are initiated and terminated and whether the brand is actively trying to shorten or lengthen its supply chain. Finally, it can offer full-cost breakdown for all its products, which are identified by social labels.

Satisfying all these requirements is clearly a difficult task. Particularly, for brands with extensive global supply chains, it can be hard to stratify suppliers according to tiers and have a complete understanding of their position within the supply chain. Likewise, it can be difficult to offer a full-cost breakdown for all products if they are manufactured and distributed across several countries or if their turnover rate is high. For a simple product like a T-shirt, a full-cost breakdown would have to display information on the cost of labor, hardware costs, materials costs, and costs of transports. This is undoubtedly difficult for global brands with large supply chains. On the other hand, smaller brands might be able to identify all of their suppliers or offer full-cost breakdown for all products, but they might not have the means to implement a full Supplier Code of Conduct or regular audits.

Therefore, as a result of these difficulties, complete internal transparency is another unlikely scenario. Knowing its specifics, however, offers guidance to brands for improving their social practices and striving toward higher degrees of supply chain transparency. Moreover, like the case of zero internal transparency, it explains that following scenarios are possible:

1. A brand with complete internal transparency can have zero external transparency. Although it might have insight on all aspects – including traceability, social sustainability conditions, and purchasing practices – of transparency, it might not disclose its insights to the public for strategic or precautionary reasons.
2. As a result, complete external transparency does *not* equate complete internal transparency. A brand can disclose information on all five aspects of external transparency, but this does not mean that such information is complete.

Complete Internal Transparency
Traceability
<ul style="list-style-type: none"> (1) Can identify all suppliers (2) Can identify all tiers (3) Can identify specific suppliers within each tier
Social Sustainability Conditions
<ul style="list-style-type: none"> (1) Implements a full Supplier Code of Conduct that applies to all suppliers (2) Performs regular audits to inspect the compliance of suppliers for each aspect of the Supplier Code of Conduct (3) Implements third-party auditing (4) Reports all cases of non-compliance
Purchasing Practices
<ul style="list-style-type: none"> (1) Can offer full-cost breakdown for all products (2) Uses social labels for all products (3) Has a statement or document specifying how relationships with suppliers are established and terminated, <u>and</u> whether the brand is actively trying to disintermediate its supply chains

Table 6-2: Conditions for brands with complete internal transparency

With an understanding of these opposing, unlikely scenarios, it makes sense to explore a more likely case – medium internal transparency.

6.2.3. *Medium Internal Transparency*

There are many conditions under which a brand can have medium level transparency, because this level encompasses a wider range of criteria. An example of such brand is shown in Table 6-3.

Medium Internal Transparency
Traceability
<ul style="list-style-type: none"> (1) Can identify some suppliers (2) Can identify some tiers (3) Can generally separate suppliers according to tiers
Social Sustainability Conditions
<ul style="list-style-type: none"> (1) Implements at least a partial Supplier Code of Conduct that applies to some or all suppliers (2) Performs audits to inspect the compliance of suppliers for some or all aspects of the Supplier Code of Conduct (3) Implements auditing, although not necessarily third-party (4) Reports at least some cases of non-compliance
Purchasing Practices
<ul style="list-style-type: none"> (1) Can offer full-cost breakdown for at least some products (2) Uses social labels for at least some products (3) Has a statement or document specifying how relationships with suppliers are established and terminated, <u>or</u> whether the brand is actively trying to disintermediate its supply chains

Table 6-3: Conditions for brands with medium internal transparency

A brand with medium internal transparency can identify at least some suppliers and tiers, which generally allows them to separate suppliers according to tiers. Such brand also has a Supplier Code of Conduct, which may or may not satisfy all the criteria as proposed in Questions 3.8, 3.9, 3.10, 3.11, 3.12, and 3.13 (Appendices A and B). Auditing is performed to inspect at least some aspects of the Supplier Code of Conduct, although it is not necessarily performed by a third-party body. Some cases of non-compliance are generally reported and visible to management, while some remain unnoticed. Such brand can offer full-cost breakdown for some of its products, of which some are identified by social labels. Finally, a brand with medium level transparency has internal regulations that dictate relationships with its suppliers,

although those regulations do not necessarily specify all conditions provided by our framework.

In general, based on our extensive research, we hypothesized that most brands would fall in this category, with some leaning toward lower internal transparency (between zero and medium) and some toward higher internal transparency (between medium and complete). It is important to note that we did not develop a scoring system, like we did for the case of external transparency, due to nuanced differences between some conditions displayed by brands of medium level transparency. For instance, it would be unfair to penalize brands for their ability to identify only 70% of their suppliers instead of 80%, so we used IPCC's report on treatment of uncertainties (explained in Chapter 3) to allow for more flexible comparison between brands and compensate for lack of data that would inform some of these variations.

After specifying the conditions for medium level transparency, we developed a set of possible findings from the survey that would complement the results of external transparency assessment. We present these possibilities in the next section.

6. 3. Expected Insights from Assessment of Internal Transparency

We expected that assessment of internal transparency would provide us with important insight on each component of our transparency framework, including traceability, social sustainability conditions, and purchasing practices. Likewise, these findings would be equally important to understand the role of the five underlying influences: legal and political complexity, supply chain communication, supply chain disintermediation, third-party integration, and product formalization.

Table 6-4 shows expected insights according to the three components of our transparency framework. In general, these insights would replace or complement the results of external transparency assessment. For example, if the brand scored

negatively on the traceability component (i.e. does not publish names of suppliers to the public), assessment of internal transparency would allow us to understand how many suppliers the brand can identify. On the other hand, if the brand scored positively (i.e. publishes the names of at least some suppliers), the assessment would reveal whether the brand can identify more suppliers than it discloses to the public.

For all three components, the internal transparency assessment occasionally asks the same questions regardless of whether the brand scored positively or negatively on the external transparency assessment. If the brand, for instance, publishes its audits, the assessment still asks for the most recent year of audits. Because it is possible that brands conduct audits without publishing the most recent ones, questions like this one ensure that we do not miss any important details about the brands' social practices.

Overall, the goal of the assessment was to understand the specifics of the brand's social practices when the brand does not disclose information to the public. In case the brand publishes at least some information, the assessment would provide us with means of comparing the brand's internal knowledge to information it releases externally to the public. This, in turn, would reveal whether there is a general correlation between the degrees of external and internal transparency.

We also expected to gain detailed insight into the role of five underlying influences by conducting the internal transparency assessment (Table 6-5). By asking specific questions about targeted aspects of supply chain management, such as inclusion of third-party auditing bodies or product formalization, we would be able to find a correlation between the quality of the brands' social practices and the degree of their internal transparency.

Expected Insights
Traceability
<i>If scored negatively on external transparency</i>
<ul style="list-style-type: none"> (1) Approximately how many suppliers can the brand identify? (2) Approximately how many tiers can the brand identify? (3) To what degree can the brand separate suppliers according to tiers?
<i>If scored positively on external transparency</i>
<ul style="list-style-type: none"> (1) Can the brand identify more suppliers than it discloses to the public? (2) Can the brand identify more tiers than it discloses to the public? (3) Does the brand correctly display separation of suppliers according to tiers to the public?
Social Sustainability Conditions
<i>If scored negatively on external transparency</i>
<ul style="list-style-type: none"> (1) Does the brand have a Supplier Code of Conduct and does it apply to all suppliers? (2) Does the brand conduct regular audits to inspect compliance with aspects of the Supplier Code of Conduct? What is the most recent year of auditing? How many suppliers have been audited? (3) Are third-parties involved in auditing? (4) Are cases of non-compliance reported and to what extent?
<i>If scored positively on external transparency</i>
<ul style="list-style-type: none"> (1) What is the most recent year of auditing? How many suppliers have been audited? (2) Are cases of non-compliance reported and to what extent?
Purchasing Practices
<i>If scored negatively on external transparency</i>
<ul style="list-style-type: none"> (1) Can the brand offer a full-cost breakdown for products in last year of sale and to what extent? (2) Does the brand use social labels for its products? What percentage of products in the last year of sales were identified by social labels? (3) Does the brand have a document statement or document specifying purchasing practices? If so, which aspects are addressed?
<i>If scored positively on external transparency</i>
<ul style="list-style-type: none"> (1) For what percentage of products in last year of sale can the brand offer full-cost breakdown? (2) Does the brand use social labels for its products? What percentage of products in the last year of sales were identified by social labels?

Table 6-4: Expected insights according to transparency framework components

For instance, we hypothesized that brands with shorter supply chains (supply chain disintermediation) would have higher internal transparency as it would be easier for them to have a better understanding of the social practices within their supply chains.

This would allow us to finalize our results and have a complete understanding of supply chain transparency, which would strengthen the quality of our proposed solutions for increasing the overall degree of transparency in the apparel industry. Unfortunately, as we show in the next section, collecting data on internal transparency proved to be more difficult than we expected.

Expected Insights
Product Formalization
(1) Does the brand use social labels for its products? (2) If so, is the degree of transparency higher compared to those brands that do not?
Third-Party Integration
(1) Does the brand conduct audits using third parties? (2) If so, is the rate of available audits higher compared to those brands that do not? (3) If so, is the degree of transparency higher compared to those brands that do not?
Supply Chain Disintermediation
(1) Is the brand actively trying to shorten (or lengthen) its supply chain? (2) If so, is the degree of transparency higher (or lower) compared to those brands that are trying to lengthen (or shorten) their supply chain?
Supply Chain Communication
(1) Does the brand have insight on its cases of non-compliance? (2) If so, is the degree of transparency higher compared to those brands that do not have insight?
Legal and Political Complexity
(1) Which country is the brand based in? Which countries does it source from? (2) How legally-binding are the sustainability- and transparency-oriented regulations and laws in these countries? (3) If legally-binding, is the degree of transparency higher compared to those brands that operate in countries with flexible regulations and laws?

Table 6-5: Expected insights according to the five underlying influences

6. 4. Assessment of Internal Transparency

We distributed the adaptive survey to twenty companies for which we found internal contacts through personal references or internet research. While we were successful at initiating conversations with some brands, no one was willing to even partially complete the survey. We never received any explanation as to why the respondents were hesitant to answer, but we hypothesized that they were discouraged by the sensitivity of some questions. Specifically, questions like Q3.29, Q4.20, and Q4.22 (Appendix A), which directly address the brands' knowledge of non-compliance issues, might have been perceived as high-risk questions due to their potential to create negative publicity for brands.

Another potential scenario is that respondents simply did not have the answers to some of the questions. To circumvent this possibility, we provided the respondents with the option to provide estimates for some questions, but it is possible that this flexibility was not enough to incentivize brands to participate in the survey.

Unfortunately, this reflects the collective unwillingness of the apparel industry to be more transparent about their practices. We were aware that participation in this survey would be a significant time commitment for brands, but given the brands' commitment to transparency and sustainable practices (as displayed on their websites and in sustainability reports), we were disappointed to see that there was a discrepancy between their intentions and actions. Therefore, despite some of the promising efforts discussed in earlier chapters, the apparel industry still has a long way to go before claiming to be transparent.

6. 5. Summary of Results

Although we were unable to collect data on internal transparency, this chapter showed that, in almost all cases, brands are internally transparent to at least some degree. Because it is highly unlikely that a brand has no knowledge of its practices, it is very difficult to have zero internal transparency. Complete internal transparency is also an unlikely scenario, but it serves as a reference for those brands that are actively trying to institute transparency across all three components of our transparency framework.

We hoped that assessment of internal transparency would provide insight on brands with various degrees of medium internal transparency, but the lack of response from brands prevented us from finalizing our results. This, however, did not hinder our efforts to design solutions based on our findings from external transparency assessment. We therefore encapsulate all previous results in the next chapter and provide potential solutions for increasing the degree of social supply chain transparency and propose next steps for future research in this domain. Specifically, we believe that researchers should freely redesign and deploy this survey to evaluate both environmental and social supply chain transparency, in addition to using it for transparency research in other industries as well.

Chapter 7

Discussion and Suggestions

7.1. Overview of findings

In this thesis, we showed that supply chain transparency has not yet been clearly defined, which has consequentially hampered many of the efforts to develop a standardized evaluation methodology. Building on previous research, we therefore designed a framework that clearly defines supply chain transparency and identifies five factors, named underlying influences, that can be co-optimized to increase the degree of transparency. We also developed an in-depth, adaptive survey that can be used to evaluate both external and internal transparency in addition to inspecting the role of the five underlying influences.

Although we were unable to collect data on internal transparency due to data unavailability, our assessment of external transparency revealed interesting results and allowed us to explore the role of two underlying influences: legal and political complexity and supply chain communication.

First, trend-oriented brands on average displayed higher external transparency, while sustainability-oriented ones on average had lower transparency, which motivated us to explore the correlation between brands' size and external transparency. As we expected, larger brands displayed higher external transparency, which could have been a result of consumer pressure, stakeholder pressure, or legal influences. After observing that US-based brands on average showed higher external transparency compared to the EU-based ones, we hypothesized that different legal regimes caused the disparity in transparency scores.

Our legal analysis quantitatively proved that, for US-based brands, there is a strong correlation between external transparency score and public compliance with the California Transparency in Supply Chains Act. While such correlation was not observed for UK-based brands, we were not surprised by this because the Modern Slavery Act does not focus exclusively on transparency and uses lenient and vague language.

Furthermore, our qualitative analysis of supply chain communication revealed that information asymmetry and lack of standardized auditing system have a detrimental effect on overall supply chain transparency. This was evident from significantly different audits published on the brands' websites.

With these insights, we developed a set of solutions that can be readily used by global industries and policymakers to increase the degree of supply chain transparency. We present these proposals in the next subsections, focusing first on regulatory and legal complexity and then on supply chain communication.

7.2. Suggestions for improving regulatory and legal influence

7.2.1. Improvements on international level

Our findings in Chapter 5 revealed that there is no international legal regime that can impose legal liability on transnational corporations for violating international human rights. We showed that such liability is an essential component of increasing transparency because it provides a legal incentive for transnational corporations to be aware of their social practices.

Naturally, a logical solution to this issue would be to establish a legal body, such as an international tribunal, that would oversee activities of transnational corporations. However, we argue that such ideas are unlikely to succeed due to the bureaucratic

complexity of the international legal system. Specifically, while some researchers have advocated for international supply chain liability, it is well-known that international legal bodies are often preoccupied by the constant threat of fragmentation and loss of business to competing tribunals, which weakens their effectiveness (Baars et al., 2016; Benvenisti and Downs, 2009). Judges in international tribunals furthermore do not have the same level of independency as those in national courts because they cannot base their decisions solely on national sources of authority, such as domestic constitutions. Their decisions are tied to a variety of international authoritative sources, which can make the decision-making process unnecessarily prolonged and consequently ineffective.

Therefore, our suggestions are primarily focused on national legal regimes, which can be improved through stronger extraterritorial jurisdiction and more nuanced legal acts. As we show in the next subsection, imposing liability on transnational corporations via coordinated national regimes can be an effective way of increasing the degree of supply chain transparency in global supply chains.

7.2.2. Improvements on national levels

7.2.2.1. Extraterritorial jurisdiction

In our legal review, we noted that the Alien Tort Statute (ATS) used to be a rare example of an effective national legislation that promoted responsible social practices in foreign countries by US-based transnational corporations. However, because the US Supreme Court recently overturned the Statute, large transnational corporations no longer have national incentive to ensure socially responsible practices abroad.

We think it is paramount that the Supreme Court revisits this decision and re-establishes the US as the leader of socially responsible corporate practices. With an

active Alien Tort Statute, US-based transnational corporations would be forced to institute social transparency across their supply chains. This would be particularly effective in the case of apparel industry as many of the leading global apparel brands are based in the US.

Since many leading apparel brands are also based in the EU, we also support the proposals by other legal scholars for the EU Member States to allow foreign liability claims against transnational companies in their own courts. As Kirshner has identified in her article, Article 6 of the Convention on Human Rights could serve as the basis for legislating extraterritorial jurisdiction. Particularly, the Article specifies that “In the determination of his civil rights and obligations or of any criminal charge against him, everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law” (Kirshner, 2015). We argue that synchronized efforts of the EU Member States to deploy extraterritorial jurisdiction would increase the degree of social transparency across global supply chains, which would make the industry socially sustainable.

Because our legal analysis quantitatively proved the correlation between external transparency and public compliance with national regulations, we also propose solutions on revising some of the leading acts and accords focused on corporate social issues.

7.2.2.2. Accords and legal acts

As we noted in Chapter 5, it is unclear whether the Accord on Fire and Building Safety in Bangladesh and the Alliance for Bangladesh Worker Safety have a notable impact on improving corporate social responsibility. Many of the corrective plans proposed by their provisions are behind schedule, which shows that there is no legally binding power that could incentivize more effective implementation of factory safety. Furthermore, because The Alliance is only an association of mostly North

American brands, many global companies with operations in Bangladesh are not even required to financially support structural improvements in their factories. We therefore think it makes more sense to rely on the Accord for increasing social transparency in global supply chains.

However, unless The Accord is restructured to become a transparency-oriented, legally-binding document, we doubt that its provisions will be effective at improving corporate social responsibility. We are skeptical of its practicality because it focuses solely on structural safety of the factories in Bangladesh, which is only one component of the bigger social systems issues in global supply chains.

We believe that it should instead focus on transparency by requiring public disclosure of suppliers' names, codes of conduct, audits, and purchasing practices. This would motivate global companies to become more transparent about their practices, eventually leading to social improvements in their supply chains, including structural safety. Publishing a full-cost breakdown would ensure the highest degree of supply chain transparency. At the same time, we are aware that, for many global companies, this is a difficult task and could hurt their competitive advantage. Hence, we don't think that it is necessary for this component of transparency to be motivated by The Accord.

These revisions, however, would take time to implement and might be feasible only in the long run. A better short-run solution would be to focus on the California Supply Chain Transparency Act and the Modern Slavery Act. This is because we quantitatively showed that provisions of these Acts are already closely related to specifications of purchasing practices and somewhat related to specifications of Supplier Code of Conduct in our framework. Although the definition of transparency in these Acts is not as encompassing and thorough as the one provided in our framework, we believe that they should serve as a focal point for instituting higher degrees of transparency across global supply chains.

For instance, if the definition of transparency in these Acts was simply expanded to require disclosure about other criteria of external transparency, we believe global companies would be pressured to acquire deeper understanding of the working conditions within their supply chains, which would in turn increase the degree of their internal transparency. Again, disclosing full-cost breakdown might be unfeasible for brands of global size, but we believe that other criteria, such as the names of suppliers and codes of conduct, should be addressed by legal acts.

It is also important that these legal acts are unambiguous. The Modern Slavery Act is probably not as effective as the California Transparency in Supply Chains Act because it does not focus solely on supply chain transparency and because it uses modal verbs in expression such as “may include information about,” which does not institute a strong requirement. Therefore, effective legal acts should clearly indicate which aspects of external supply chain transparency need to be addressed on the brands’ websites.

Moreover, the Modern Slavery Act could be improved by specifying which brands need to comply with the Act. The California Transparency in Supply Chains Act clearly identifies that only those brands with annual revenues of over \$100M are required to comply. Having a stronger focus on supply chain transparency in the provision of the Modern Slavery Act is also paramount, as the Act currently only partially addresses transparency.

If these changes are implemented in the near future, we believe that the apparel industry would quickly observe higher social transparency in global supply chains. Once these Acts are revised, policy-makers and legal bodies would then be able to focus on long-term positive changes by reinstating extraterritorial jurisdiction and strengthening the provisions of the Accord, scaling the implementations beyond regional and national levels.

7.2.3. Summary of suggestions

As Table 7-1 shows in summary, improvements on international level are not feasible. Focusing on changes on the national level is more practical, especially if the two Acts are first revised for short-term positive changes. Afterward, long-term improvements can be implemented through extraterritorial jurisdiction and a revamped Accord.

Level of change	How?	Feasible?	Timeline?
International	Creating new legislating bodies	No	Long-term
National	Using extraterritorial jurisdiction	Somewhat	Long-term
	Revising provisions of the Accord	Yes	Long-term
	Revising provisions of the Acts	Yes	Short-term

Table 7-1: Suggested improvements for regulatory and legal regimes

7.3. Suggestions for diffusing technological innovations in supply chains

In addition to proposed improvements of regulatory and legal regimes, we argue that diffusion of technological innovations is necessary to improve communication in global supply chains. Diffusion of technological innovation is defined as “widespread adoption of an innovation beyond those who developed it,” while innovation is defined as “first commercially successful application of a new technical idea” (Ashford and Hall, 2011). We want to highlight this conceptual difference elaborated by Ashford and Hall because it brings forward an important issue in global supply chains.

The authors imply that industrial advancement is not dependent on new technological innovations, but rather on diffusion of existing ones. We agree with the authors and

believe that supply chain communication — and therefore transparency as well — does not require new innovations across supply chains. Existing innovations need to be applied to supply chains instead, which would serve as a more effective way of improving communication and increasing transparency.

One way to do this is to digitize the auditing process. As we showed in Chapter 5, information asymmetry and lack of standardized auditing system have a detrimental effect on supply chain transparency, which is a result of outdated inspection processes. For example, many audits have different formats because they are still conducted manually by handwriting and according to company-specific criteria. Using a standardized digital platform to report the monitoring process would ensure that audits have a consistent format throughout time and are comparable across different suppliers.

For this to happen, innovators in the field of sustainability need to focus specifically on delivering such tools for global supply chains. Inspectorio, for example, is a supplier compliance verification platform that aims to achieve this by developing a mobile platform that can be used to make the inspection process more digital and efficient. We believe this is a great way to standardize the auditing system and reduce information asymmetry across supply chains.

Specifically, by using a mobile platform that can comparatively assess performance of suppliers, companies would be able to instantaneously access audit reports and easily analyze them to identify potential compliance issues or gaps in communication. This would consequentially increase transparency in supply chains.

Introducing digitization in supply chain management could also promote diffusion of other innovations and aid companies in increasing their transparency. PVH, for example, recently introduced digital showroom for Tommy Hilfiger (one of its brands), enabling the brand to reduce sourcing materials and production time by

previewing samples digitally for its buyers (Saunter, 2015). This is another excellent way of reducing information asymmetry between supply chain players and increasing transparency.

Compared to improvements of regulatory and legal regimes, we think that diffusion of technological innovations is an easier and more feasible solution. Technological innovations are not dependent on bureaucratic processes and can be deployed by individuals who do not need to be part of regulatory and legal bodies. Moreover, diffusion of innovations is likely to occur faster, which would be an effective way of increasing supply chain transparency for the near future before implementing all our proposed changes on a larger scale. We believe that these changes would be most effective for redesigning quality control as the auditing process would undoubtedly become streamlined.

That said, all the proposed changes would only initialize the process of restructuring current supply chain management practices. It is therefore essential that academics continue this research in the future and work closely with supply chain professionals on finalizing this process.

7.4. Suggestions for future research

Our suggestions for improvement of regulatory and legal regimes and for diffusing technological innovations are only the first steps toward increasing social transparency in global supply chains. As we showed in this thesis, the influence of supply chain disintermediation, third-party integration, and product formalization also needs to be explored in greater detail through analysis of internal transparency.

We hope that interested researchers will be able to use our methodology in the future to investigate internal transparency of companies explored in this thesis. This would

provide valuable insight into sustainable supply chain practices and complement the suggestions proposed in this chapter. Most importantly, it would lay a foundation for a new format of corporate social responsibility, one that is influenced by consumers, brands, and regulatory bodies.

Finally, we would like to note that the framework and methodology in this thesis could also be used to initiate a project on evaluating environmental supply chain transparency. We argued that it was more important to focus our efforts on social transparency due to pressing issues in the apparel industry, but environmental problems undoubtedly warrant attentive evaluation as well.

Our hope is that other academics will use our methodology to fully explore both social and environmental transparency. By doing this, they would undoubtedly provide relevant stakeholders with a well-rounded strategy for instituting better supply chain management practices and aiding global sustainable development.

Chapter 8

Conclusion

After the collapse of the Rana Plaza in 2013, social issues in supply chains became a prominent topic in the media and the apparel industry. Nonprofits and non-governmental organizations made it apparent that transparency needed to be improved, but despite all the efforts from academics and industry professionals, not much progress has been made in the last few years. This is because transparency has never been clearly defined, and as a result, no standardized methodology has been developed for evaluation of transparency across companies' supply chains.

By building on previous research, this thesis bridged these gaps by introducing a framework that identifies all components of supply chain transparency and explains five factors that have a significant influence on the degree of transparency. A standardized methodology was also introduced in form of an in-depth, adaptive survey that aims to evaluate both external and internal transparency in addition to inspecting the relationship between the five factors and transparency scores.

We were unable to obtain necessary information on internal transparency due to lack of data availability, but our analysis showed that the degree of external transparency was clearly correlated with the size of companies. This, in turn, led us to discover that legal acts have a significant influence on promoting companies' disclosure of information, which consequently increases the score of external transparency. We also complemented this quantitative analysis with a qualitative analysis of communication in supply chains, which revealed that transparency is detrimentally affected by information asymmetry and lack of standardized auditing systems.

With these findings, we suggested that regulatory and legal regimes need to be improved through restructuring of legal acts and accords before national bodies can reinstitute extraterritorial jurisdiction in the US and the EU. Another effective solution is to diffuse technological innovations across supply chains, most likely through digitization, which would reduce information asymmetry and introduce platforms for effective and robust monitoring of supplier compliance.

We believe that our analysis in this thesis was detailed and extensive, but it is certainly not the end goal of this project. Specifically, it would be useful to conduct in-depth interviews with companies and obtain data that would complete the findings from our survey. Finally, by extending this project to other industries, we would be able to construct an insightful cross-comparison between different types of companies and their supply chain practices.

Therefore, we hope that other researchers will be able to continue this work and finalize our results, thus promoting globally transparent supply chains and ultimately paving the way to a socially responsible future.

Appendices

Appendix A: Social Transparency in the Apparel Industry Survey

Note: Each question is denoted by a numerical notation that was assigned by the Qualtrics software. Some questions in form of instructions have been omitted from this appendix for clarity. For the three parts of survey referring to traceability, sustainability, and purchasing practices, logic flow diagrams have been included in Appendix B to show the order in which the questions are presented depending on the respondent's' answers. In the introductory and final part of the survey, questions and information are presented in a sequential order.



Intro

Q1.2 What is your full name?

Q1.3 Which brand do you represent?

Q1.4 What is the official title of your position within the brand that you represent?

Q1.5 Please provide an e-mail address that we can use to contact you in case we have follow-up questions:



Part 1: Questions related to Traceability

Q2.1 The first part of this survey will consist of questions that will ask about your brand's supplier traceability, the first metric of supply chain transparency according to our framework. Please answer these questions honestly and accurately. For questions that require estimation, please estimate to your best ability; we understand that you might not be able to answer these questions with absolute precision.

Q2.2 Can your brand identify all suppliers across its entire supply chain (i.e. all the way up to raw material-sourcing)?

1. Yes
2. No

Q2.3 Can your brand identify at least some suppliers across its entire supply chain (i.e. all the way up to raw material-sourcing)?

1. Yes
2. No

Q2.4 Thank you for completing the first part of the survey!

Q2.5 In this case, please estimate what percentage of total suppliers your brand can identify across its entire supply chain (i.e. all the way up to raw material-sourcing).

Note: For example, if you believe that your brand can identify approximately 50% of its suppliers, you should select "50% to 89%" as your answer. Similarly, if you believe that your brand can identify approximately 30% of its suppliers, you should select "0% - 49%" as your answer.

1. 0% to 49%
2. 50% to 89%
3. 90% to 100%

Q2.6 Are the suppliers identified on the brand's official website?

Note: Suppliers' names need not be consolidated in a single list. As long as all the identifiable suppliers are listed on the official website, please answer Yes.

1. Yes
2. No

Q2.7 Can the names of the suppliers be found elsewhere?

1. Yes
2. No

Q2.8 Where can the names of identifiable suppliers be found?

Q2.9 Are the names of identifiable suppliers available to general public? (General public encompasses any individual interested in obtaining information about your brand's suppliers.)

1. Yes
2. No

Q2.10 Can your brand identify all tiers across its entire supply chain (i.e. all the way up to raw material-sourcing)?

(Note: 1. For the purposes of this survey, tiers represent horizontal structures or echelons in the supply chain that consist (either completely or partially) of your brand's suppliers. For example, one tier in your supply chain might be the level of raw material-sourcing, i.e. all suppliers who provide raw materials such as cotton or synthetic material to your brand.

2. Please note that downstream echelons of supply chains that consist of only consumers are not classified as tiers for the purposes of this survey because suppliers no longer play a direct role in these echelons of supply chain.

3. "Identifying a tier" does not mean that your brand needs to know all the suppliers in this tier. As long as your brand is aware that a specific tier, which consists of a particular type of suppliers, exists in the supply chain, your brand is able to identify this tier.)

1. Yes
2. No

Q2.11 How many tiers does your brand's supply chain have?

Q2.12 Thank you for completing the first part of the survey!

Q2.13 Can your brand identify at least some tiers across its entire supply chain (i.e. all the way up to raw material-sourcing)?

1. Yes
2. No

Q2.14 Thank you for completing the first part of the survey!

Q2.15 How many tiers can your brand identify within its supply chain (please use numbers instead of words)?

Q2.16 Please estimate, to your best ability, what percentage of total number of tiers your brand can identify across its entire supply chain (i.e. all the way up to raw material-sourcing)?

Note: For example, if your brand can only identify 2 tiers with certainty, but you think that your brand's supply chain has 4 tiers, your estimate is that your brand can identify 50% of its total number of tiers, so you should select option "50% to 90%. Similarly, if you believe that your brand can identify approximately 30% of its tiers, you should select "0% - 49%" as your answer. "

1. 0% to 49%
2. 50% to 89%
3. 90% to 100%

Q2.17 From the identifiable tiers, for how many tiers can your brand identify 90% to 100% suppliers?

(Note: For example, if your brand can identify three tiers, and you know that your brand can identify all suppliers for one of the tiers, and you believe that your brand can identify approximately 30% of suppliers for each of the other two tiers, you should put "1" as your answer. Answer "1" in this case would mean that your brand can identify 90% to 100% suppliers for one tier. If, on the other hand, you believe that out of these three tiers, your brand cannot identify all suppliers for any of the tiers, but it can identify, for example, 30% suppliers for one tier, and 70% for other two tiers, you should put "0" as your answer to this question. Answer "0" in this case would mean that your brand cannot identify 90% to 100% suppliers for any of the tiers.)

Q2.18 From the identifiable tiers, for how many tiers can your brand identify 50% to 89% suppliers?

Q2.19 From the identifiable tiers, for how many tiers can your brand identify 0% to 49% suppliers?

Q2.20 Thank you for completing the first part of the survey!

◇

Part 2: Questions related to Social Sustainability Conditions

Q3.1 The second part of this survey will consist of questions that will ask about your brand's sustainability practices, the second metric of supply chain transparency according to our framework. Please answer these questions honestly and accurately. For questions that require estimation, please estimate to your best ability; we understand that you might not be able to answer these questions with absolute precision.

Q3.2 Does your brand have a Supplier Code of Conduct?

Note: If your brand has another set of rules that has the same purpose as a Supplier Code of Conduct but is recognized under a different name, please answer Yes.

1. Yes
2. No

Q3.3 Thank you for completing the second part of the survey!

Q3.4 Is this Supplier Code of Conduct (or equivalent set of rules) published on the brand's official website?

1. Yes
2. No

Q3.5 Can the Supplier Code of Conduct (or equivalent set of rules) be found elsewhere?

1. Yes
2. No

Q3.6 Where can the Supplier Code of Conduct (or equivalent set of rules) be found?

Q3.7 Is the Supplier Code of Conduct (or equivalent set of rules) available to general public? (General public encompasses any individual interested in obtaining information about your brand's supplier Code of Conduct.)

1. Yes
2. No

Q3.8 Which of the following does your brand's Supplier Code of Conduct (or equivalent set of rules) enforce?

1. No forced/compulsory/slave labor
2. No child labor
3. No discrimination of any kind
4. Safe workplace
5. Hygienic workplace

Q3.9 Does your brand's Supplier Code of Conduct (or equivalent set of rules) specify that its workers should be allowed to form and join trade unions?

1. Yes
2. No

Q3.10 Does your brand's Supplier Code of Conduct (or equivalent set of rules) specify that its workers should be able to bargain collectively?

1. Yes
2. No

Q3.11 Does your brand's Supplier Code of Conduct (or equivalent set of rules) specify that its workers should have a formally registered employment relationship?

1. Yes
2. No

Q3.12 Does your brand's Supplier Code of Conduct (or equivalent set of rules) specify that its workers should have a maximum working week of 48 hours?

1. Yes
2. No

Q3.13 Does your brand's Supplier Code of Conduct (or equivalent set of rules) specify that its workers should have a sufficient living wage?

Note: Please note that living wage is not the same as minimum wage. Living wage refers to a wage that is high enough to maintain a normal standard of living, which might not be achieved with a minimum wage.

1. Yes
2. No

Q3.14 Does your brand's Supplier Code of Conduct (or equivalent set of rules) apply to all suppliers across the entire supply chain (i.e. all the way up to raw material-sourcing)?

1. Yes
2. No

Q3.15 In this case, please estimate the number of suppliers across the entire supply chain (i.e. all the way up to raw material-sourcing) to which your brand's Supplier Code of Conduct (or equivalent set of rules) applies:

Note: We understand that you might not have a precise number when answering this question, so we ask you to estimate to your best ability.

1. 0% -49%
2. 50% - 89%
3. 90% - 100%

Q3.16 Does your brand perform audits to ensure its suppliers enforce the Supplier Code of Conduct (or equivalent set of rules)?

1. Yes
2. No

Q3.17 Thank you for completing the second part of the survey!

Q3.18 What kind of auditing does your brand perform to ensure its suppliers enforce the Supplier Code of Conduct (or equivalent set of rules)? Please check all options that apply.

Note: According to ASQ (American Society for Quality), these are the official definitions of three different types of auditing:

A first-party audit is performed within an organization to measure its strengths and weaknesses against its own procedures or methods and/or against external standards adopted by (voluntary) or imposed on (mandatory) the organization.

A second-party audit is an external audit performed on a supplier by a customer or by a contracted organization on behalf of a customer.

A third-party audit is performed by an audit organization independent of the customer-supplier relationship and is free of any conflict of interest.

1. First-party auditing
2. Second-party auditing
3. Third-party auditing

Q3.19 Since you indicated that a third-party organization performs audits of your brand's suppliers, please tell us the name(s) of the third-party auditor(s). If there are multiple third-party auditors, separate their names by a comma.

Q3.20 Are your brand's audit reports published on the brand's official website?

1. Yes
2. No

Q3.21 Can your brand's audit reports be found elsewhere?

1. Yes
2. No

Q3.22 Where can your brand's audit reports be found?

Q3.23 Are your brand's audit reports accessible to the general public? (General public encompasses any individual interested in obtaining information about your brand's audit reports.)

1. Yes
2. No

Q3.24 In the most recent completed year of your brand's auditing process, which of the following were inspected by audit reports:

Note: 1. "Inspected" in this case refers to inspection of aspects of the Supplier Code of Conduct, regardless of whether compliance or non-compliance was established. For instance, if your brand's audit reports inspected safety conditions in suppliers' factories, you would choose "Safety" as one of your answers. Current year (2016) is not considered as completed year for the purposes of this question.

1. Forced/compulsory/slave labor
2. Child labor
3. Discrimination of any kind
4. Safety
5. Hygiene
6. Workers' rights to form and join trade unions
7. Workers' rights to bargain collectively
8. Workers' rights to have a formally registered employment relationship
9. Workers' rights to have a working week of maximum 48 hours
10. Workers' rights to have a sufficient living wage
11. I don't have enough information to answer this question correctly.

Q3.25 In the most recent completed year of your brand's auditing process, for which of the following was non-compliance established in your suppliers' factories:

Note: "non-compliance" in this case refers to any deviation from your Suppliers' Code of Conduct (or equivalent set of rules). Current year (2016) is not considered as completed year for the purposes of this question.

1. Forced/compulsory/slave labor
2. Child labor
3. Discrimination of any kind
4. Safety
5. Hygiene
6. Workers' rights to form and join trade unions
7. Workers' rights to bargain collectively
8. Workers' rights to have a formally registered employment relationship
9. Workers' rights to have a working week of maximum 48 hours
10. Workers' rights to have a sufficient living wage
11. I don't have enough information to answer this question correctly.

Q3.26 What is the most recent completed year of your brand's audit reports?

Note: For instance, if the last time your brand's suppliers have been audited was in year 2015, please type in "2015". Current year (2016) is not considered as completed year for the purposes of this question.

Q3.27 How many of your brand's suppliers have been audited in the most recent completed year of the auditing process? If you do not have information on the precise number of total audits, type "N/A" as the answer. Current year (2016) is not considered as completed year for the purposes of this question.

Q3.28 Please estimate, to your best ability, what percentage of suppliers across your brand's entire supply chain (i.e. all the way up to raw material-sourcing) have been audited in the most recent completed year of your brand's auditing process.

Note: For instance, if you believe that approximately 30% of suppliers have been audited, you would choose 0% - 49% as your answer. We understand that you might not have a precise number of total audits or all suppliers across the brand's supply chain, but we ask you to estimate to your best ability. Current year (2016) is not considered as completed year for the purposes of this question.

1. 0% - 49%
2. 50% - 89%
3. 90% - 100%

Q3.29 In the most recent completed year of your brand's auditing process, did your brand report all instances of non-compliance? Current year (2016) is not considered as completed year for the purposes of this question.

1. Yes
2. No

Q3.30 Thank you for completing the second part of the survey!

Q3.31 In this case, please estimate, to your best ability, the percentage of cases of non-compliance that were reported by your brand during the most recent completed year of your brand's auditing process? Note: Current year (2016) is not considered as completed year for the purposes of this question.

1. 0% - 49%
2. 50% - 89%
3. 90% - 100%

Q3.32 Thank you for completing the second part of the survey!



Part 3: Questions Related to Purchasing Practices

Q4.1 The third and final part of this survey will consist of questions that will ask about your brand's purchasing practices, the third metric of supply chain transparency according to our framework. Please answer these questions honestly and accurately. For questions that require estimation, please estimate to your best ability; we understand that you might not be able to answer these questions with absolute precision.

Q4.2 Since your brand does not have a publicly available list of suppliers, please list all countries, to your best knowledge, from which your brand is sourcing materials. Even if your brand sources the materials in the country in which it sells its final products, please list the name of the country. If your brand is sourcing from the US, please specify the state of sourcing materials.

Q4.3 Can your brand offer a full cost breakdown for all of its products?

Note: By "full cost breakdown," we are referring to your brand's ability to give a precise cost breakdown for each component of the product. For instance, if one of your brand's product is a basic cotton shirt, a full cost breakdown in this case means that your brand can list the cost of all components such as: the cost of each button, the cost of the amount of cotton used for manufacturing the shirt, the cost of the size label, etc.

1. Yes
2. No

Q4.4 Can your brand offer a full cost breakdown for at least some of its products?

1. Yes
2. No

Q4.5 Please estimate the percentage of products for which your brand can offer a full cost breakdown. Note: For the purposes of this question, please focus on year 2015, the most recent year of completed sales.

1. 0% - 49%
2. 50% - 89%
3. 90% - 100%

Q4.6 Is the full cost breakdown of your brand's products published on the brand's official website?

1. Yes

2. No

Q4.7 Can the full cost breakdown of your brand's products be found elsewhere?

1. Yes
2. No

Q4.8 Where can the full cost breakdown of your brand's products be found?

Q4.9 Is the full cost breakdown of your brand's product accessible to general public? (General public encompasses any individual interested in obtaining information about your brand's full cost breakdown.)

1. Yes
2. No

Q4.10 Are any of your brand's products certified with social labels or certifications, such as Fair Trade Certified?

Note: Please note that we are not asking about environmental labels or certifications in this case. We are interested in those labels or certifications that ensure your brand's compliance with social rights and fair working conditions. If your products are certified with labels or certifications that certify both environmental and social compliance, please answer Yes.

1. Yes
2. No

Q4.11 Has your brand ever actively tried to have its products certified with social labels or certifications?

1. Yes
2. No

Q4.12 Please describe briefly why, despite the brand's efforts, its products are not accompanied by social labels or certifications.

Q4.13 Please list, to your best knowledge, social labels or certifications that have been used to certify your brand's products.

Note: For the purposes of this question, please focus on year 2015, the most recent year of completed sales.

Q4.14 Please estimate the number of your brand's products that have been certified with social labels or certifications.

Note: For the purposes of this question, please focus on year 2015, the most recent year of completed sales.

1. 0% - 49%
2. 50% - 89%
3. 90% - 100%

Q4.15 Does your brand have a document or statement that addresses (select all that apply): the brand's criteria for choosing new suppliers?

1. whether the brand is trying to consolidate its supply chain and use fewer suppliers?

2. how the brand treats current suppliers if findings of compliance or non-compliance are found?
3. My brand does not have a document or statement that addresses these issues.

Q4.16 Is this document or statement available on the brand's official website?

1. Yes
2. No

Q4.17 Can this document or statement be found elsewhere?

1. Yes
2. No

Q4.18 Where can this document or statement be found?

Q4.19 Is this document or statement available to general public? (General public encompasses any individual interested in obtaining information about your brand's document or statement that addresses these aspects.)

1. Yes
2. No

Q4.20 When choosing new suppliers to work with, which of the following does your brand take into consideration?

1. Knowledge of the supplier's previous record of compliance or non-compliance (for example, with labor practices or , codes of conduct).
2. National laws and regulations in supplier's country that might affect workers' rights and conditions.
3. My brand does not take these factors into consideration when choosing new suppliers.

Q4.21 Is your brand actively trying to consolidate its supply chain and use fewer suppliers?

1. Yes
2. No

Q4.22 Which of the following actions does your brand follow when confronted with findings of suppliers' compliance or non-compliance:

1. My brand will discontinue working with those suppliers that continuously violate codes of conduct.
2. My brand will award or work more closely with those suppliers that continuously comply with codes of conduct.
3. My brand does not follow any of these actions when confronted with findings of suppliers' compliance or non-compliance.

Q4.23 Thank you for completing the third and final part of the survey!



Outro

Q5.1 If you feel that any of the questions were too restricting or that you would like to elaborate in further detail on some of your answers, please use this space to write your responses.

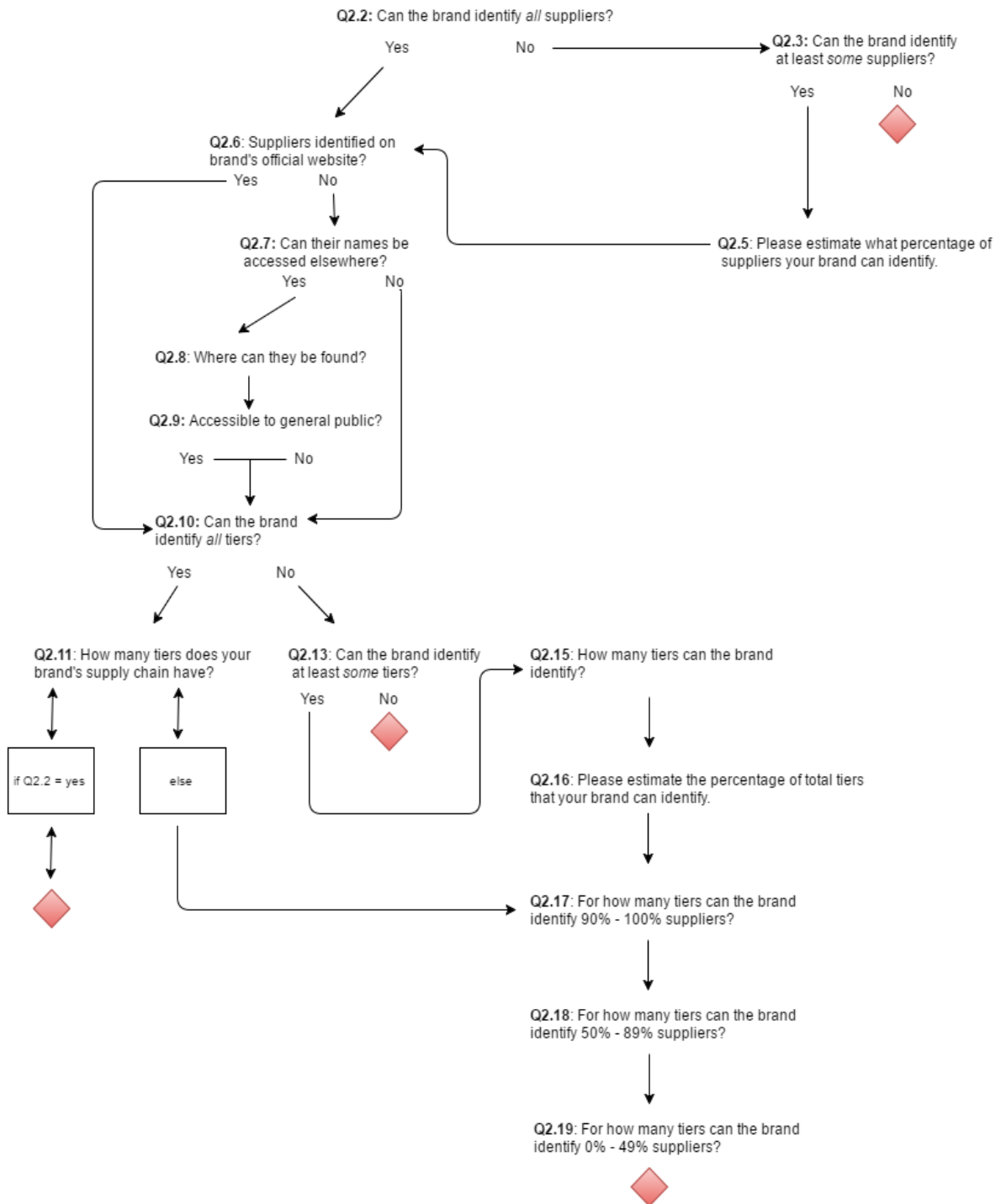
Note: Please remember that we have designed the questions to be as clear as possible, so use this space only if you feel that your answers need to be more nuanced.

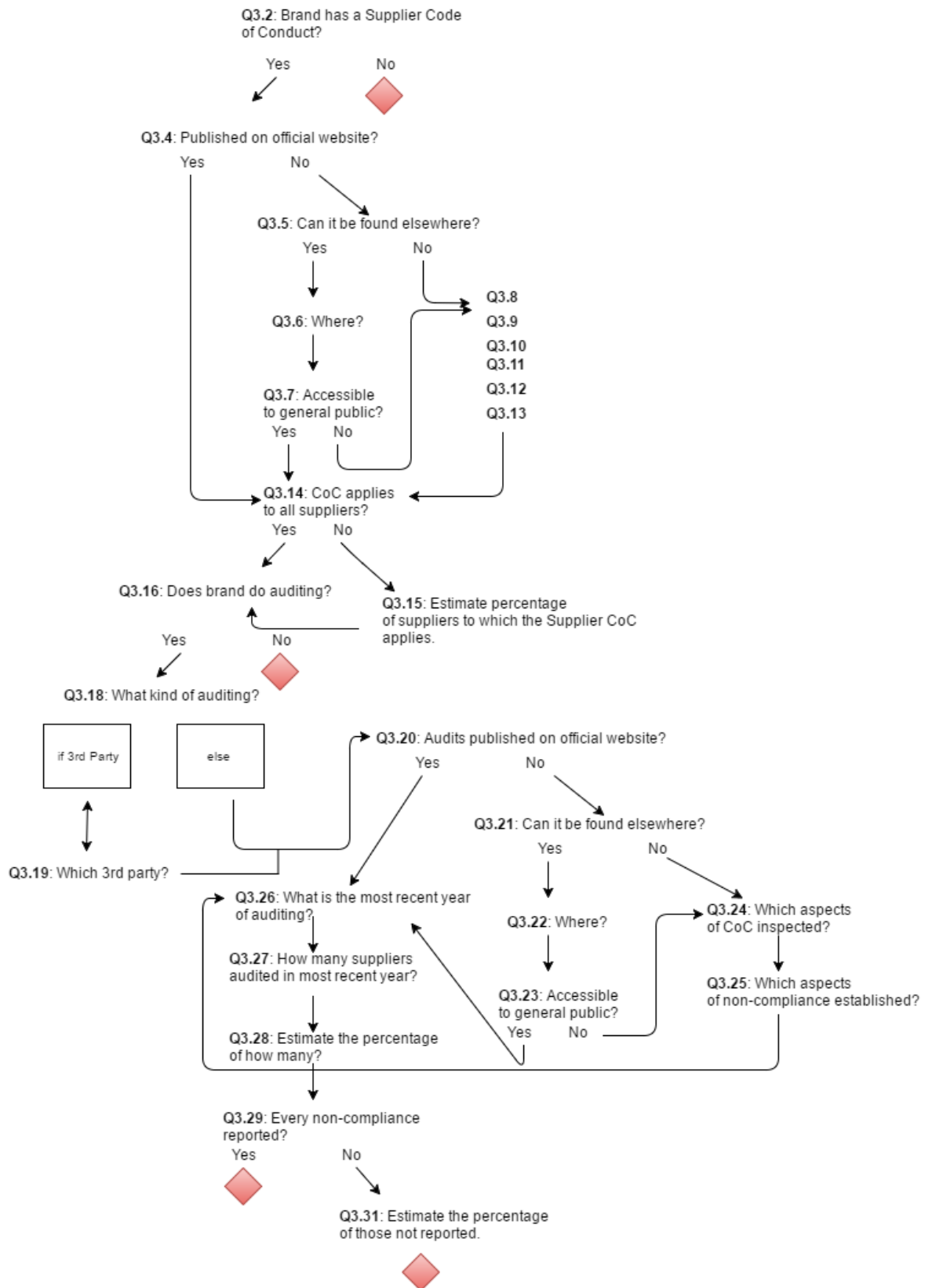
Q5.2 Thank you for completing MIT Responsible Supply Chain Lab's "Social Transparency in Apparel Industry Survey!" Your responses are highly valuable to us. If we have any further questions, we'll be in touch.

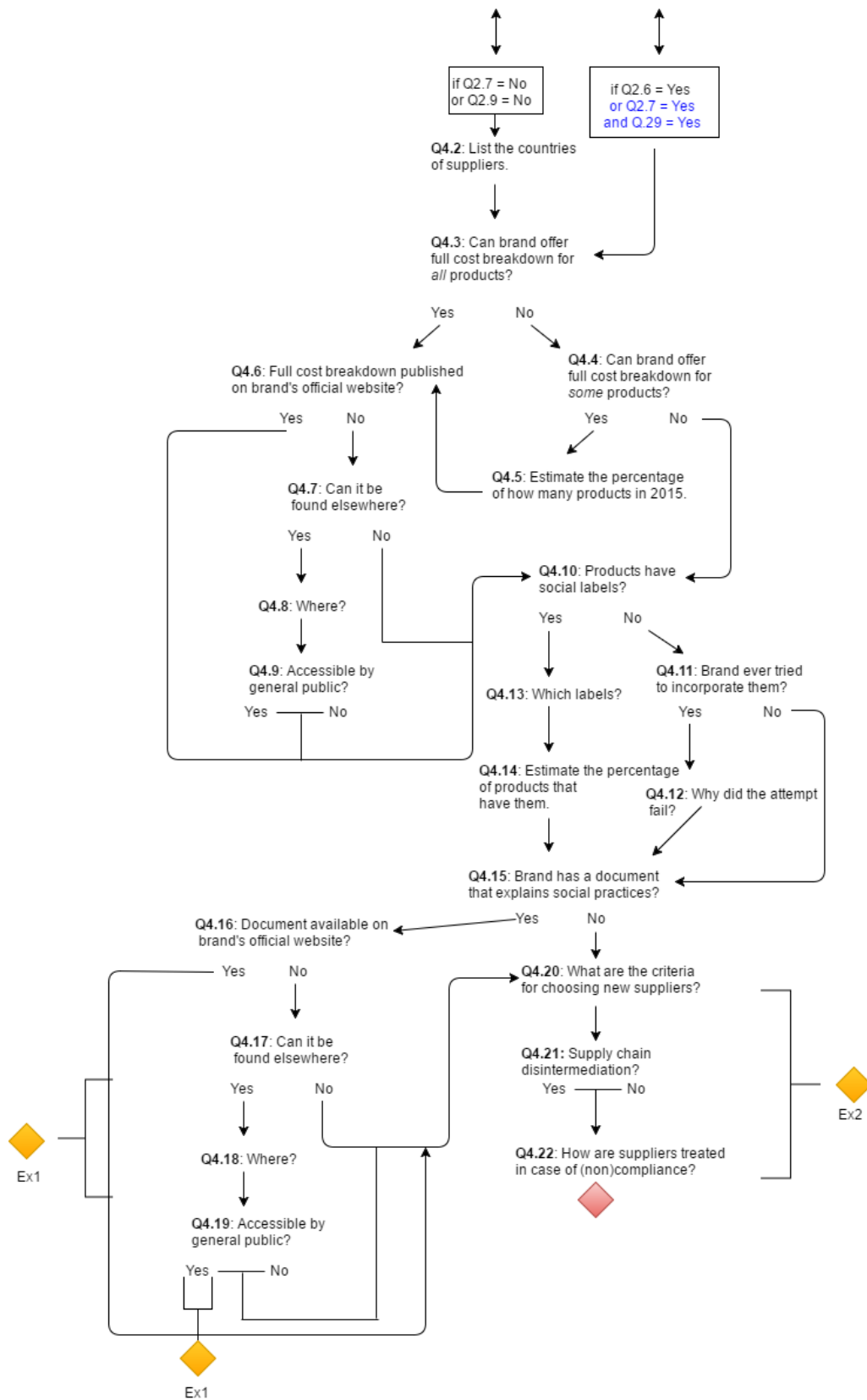
Appendix B: Survey logic flows

The following three pages display logic flows used in the survey to adapt questions to respondents' answers.

Red diamonds indicate end of survey at different points. Yellow diamonds in the section of purchasing practices indicate the possibility of ending the survey earlier depending on which options the respondents select in question Q4.15 and whether they answer Yes or No in question Q4.16.







Appendix C: Brands' website taglines

This appendix shows the taglines of each brand that we collected to selectively sample the brands into one of three categories: trend-oriented, neutral, or sustainability-oriented. Blue color denotes that subjective evaluation was used to sort the brand into the appropriate category due to misleading or ambivalent description.



Trend-oriented brands

H&M

“H&M your shopping destination for fashion online. We offer fashion and quality at the best price in a more sustainable way.” Accessed 21 Oct. 2016

Zara

“Latest trends in clothing for women, men & kids at ZARA online” Accessed 21 Oct. 2016

Topshop

“Discover the latest in women's fashion and new season trends at Topshop. Shop must-have dresses, coats, shoes and more.” Accessed 20 Oct. 2016

Forever21

“Forever 21 is the authority on fashion & the go-to retailer for the latest trends, must-have styles & the hottest deals.” Accessed 20 Oct. 2016

Gap

“FREE shipping on orders over \$50. Find the latest styles and fashions for men, women, kids, toddlers and babies. Shop Gap for clothes for the whole family.” Accessed 20 Oct. 2016.

Uniqlo

“Shop UNIQLO.com for the latest essentials for women, men, kids & babies.” Accessed 20 Oct. 2016

River Island

“Find the latest women's, men's and kids' clothing trends at River Island. Shop online at your favourite high street store” 20 Oct. 2016

Mango

“Discover the latest trends in Mango fashion, footwear and accessories. Shop the best outfits for this season at our online store.” Accessed 19 Oct. 2016

Primark

“Major retail group operating stores in the UK and Ireland, where it trades under the Penneys name. Company profile and career opportunities.” Accessed 20 Oct. 2016

United Colors of Benetton

“Check out the site now for the United Colors of Benetton Fall 2016 Collection for women, men and kids. Shop apparel and accessories at the official online shop.” Accessed 19 Oct. 2016

ASOS

“Free Delivery on orders over \$40! Discover the latest in men's fashion and women's clothing online & shop from over 40000 styles with ASOS.” Accessed 25 Oct. 2016

New Look

“Explore the latest fashion and all the freshest styles in women's clothing, footwear and accessories online this season at New Look” Accessed 25 Oct. 2016

Urban Outfitters

“Always open, always awesome. Clothing, accessories and apartment items for men and women.” Accessed 25 Oct. 2016

American Apparel

“Effortless basics and iconic fashion favorites for women, men and kids. Shop t-shirts, hoodies, denim and more.” Accessed 25 Oct. 2016

Rue21

“rue21 rocks girls and guys hottest fashion trends for less so you can step out in style” Accessed 25 Oct. 2016

NewYorker

“Die neuesten Looks, Trends und die Highlight-Outfits der Saison findest du in den Kollektionen unserer New Yorker-Marken Amisu, Smog, Fishbone und” Accessed 25 Oct. 2016

French Connection

“The latest women's clothing, men's fashion and homeware online” Accessed 25 Oct. 2016

Guess

“Shop the latest trends, going out fashion, dresses, blouses, trousers, skirts and petite clothing at Miss Selfridge.” Accessed 20 Oct. 2016

Scotch & Soda

“Discover the latest trends in fashion, clothing and accessories. Shop the best outfits for this season at our Official Scotch & Soda webstore. Worldwide Shipping.” Accessed 18 Oct. 2016

Charlotte Russe

“Fashion that's trendy, not spendy! Shop the glam at Charlotte Russe, and snag major savings on the hottest clothes, shoes, denim, accessories and more.” Accessed 26 Oct. 2016



Neutral brands

Abercrombie & Fitch

“Men, women, and children's clothing and accessories.” Accessed 14 Oct. 2016

Calvin Klein/PVH

“PVH owns, designs, sources and markets a selection of world-renowned brands in the dress shirts, sportswear, neckwear, footwear, and accessories categories.” Accessed 14 Oct. 2016

Gucci

“Shop the Gucci® official site. Discover the latest collection by Alessandro Michele. Shoes, handbags & ready-to-wear made in Italy.” Accessed 18 Oct. 2016

Chanel

“Enter the world of CHANEL and discover the latest in Fashion & Accessories, Eyewear, Fragrance & Beauty, Fine Jewelry & Watches.” Accessed 18 Oct. 2016.

Hugo Boss

“Shop the official HUGO BOSS Online Store for classic HUGO BOSS suits, luxury watches, women's dresses and designer shoes for men and women” Accessed 18 Oct. 2016

Levi's

“The official Levi's® website has the best selection of Levi's jeans, jackets, and clothing for men, women, & kids. Shop the entire collection today!” Accessed 19 Oct. 2016

J Crew

“Shop JCrew.com for the Highest Quality Women's and Men's Clothing and see the entire selection of Children's Clothing, Cashmere Sweaters, Women's” Accessed 19 Oct. 2016

Ralph Lauren

“Ralph Lauren offers luxury men's and women's clothing, children's and baby clothes, home & bedding collections.” Accessed 19 Oct. 2016.

Max Mara

“Explore Max Mara FW 2016: Buy Now at Max Mara Official Shop” Accessed 26 Oct. 2016

North Face

“For more than 40 years, The North Face has made activewear and outdoor sports gear that exceeds your expectations.” Accessed 26 Oct. 2016

Lanvin

“Enter the world of one of the first Fashion House in Paris and discover Lanvin collections and shows by Bouchra Jarrar, accessories, windows and exclusive” Accessed 26 Oct. 2016

Ministry of Supply

“Born from Human-Centered Design, Ministry Apparel creates performance clothing for work and life so you can move freely, keep cool, and stay sharp - no stress” Accessed 27 Oct. 2016

All Saints

“Shop the men's and women's ready to wear collection. New monthly Lookbooks, music, and film.” Accessed 27 Oct. 2016

L.L. Bean

“Shop L.L.Bean for Free Shipping on clothing, shoes, outdoor gear and more, all backed by our 100% satisfaction guarantee.” Accessed 27 Oct. 2016

Hermès

“Discover Hermès universe, news and special events, find a Hermès boutique, all the addresses and contact details, buy online on the official Hermès website, stay in contact subscribing the Hermès newsletter or following Hermès on social networks” Accessed 27 Oct. 2016

Dior Homme

“DIOR official website. Discover Christian Dior fashion, fragrances and accessories for Women and Men.” Accessed 27 Oct. 2016

Marni

“Marni Online Store. Fall Winter 2016/17. Worldwide delivery.” Accessed 27 Oct. 2016

Brooks Brothers

“Brooks Brothers is the original authority on American style, offering stylish modern clothing and fresh takes on heritage designs for men, women, and kids.” Accessed 27 Oct. 2016

Acne Studios

“Shop and view the latest Womenswear, Menswear, Shoes and Accessories Collection from the official Acne website.” Accessed 27 Oct. 2016



Sustainability-oriented brands

Everlane

“We make the most beautiful essentials, at the best factories, without traditional markups.” Accessed 13 Oct. 2016.

Reformation

“We make killer clothes that don't kill the environment.” Accessed 13 Oct. 2016.

Honest by

“HONEST BY IS THE WORLD'S FIRST 100% TRANSPARENT COMPANY” Accessed 13 Oct. 2016

Zady

“ZADY is a lifestyle destination for conscious consumers”. Accessed 13 Oct. 2016.

Organic by John Patrick

“Ethical and organic clothing made in New York.” Accessed 13 Oct. 2016.

Patagonia

“Patagonia is a designer of outdoor clothing and gear for the silent sports: climbing, surfing, skiing and snowboarding, fly fishing, and trail running.” Accessed 13 Oct. 2016

People Tree

“People Tree, the fair trade fashion pioneer and online garment retailer” Accessed 17 Oct. 2016.

Eileen Fisher

“Free standard shipping on all Continental US orders. Wardrobe essentials. Shop women's casual clothing that effortlessly combines timeless, elegant lines with eco-friendly fabrics from EILEEN FISHER” Accessed 17 Oct. 2016.

Kowtow

“kowtow - 100% certified fair trade organic cotton clothing” Accessed 17 Oct. 2016

Krochet Kids

“Krochet Kids intl. a non-profit social capitalism brand that empowers people by creating, selling apparel knit & crochet hats for babies men and women.” Accessed 27 Oct. 2016

Shift to Nature

“A luxury online store for organic cotton, bamboo, sustainable eco fashion, fair-trade yoga clothes, kids and baby organic cotton clothes and bed linen.” Accessed 27 Oct. 2016

Mayamiko

“Women’s contemporary clothing, accessories and homeware designed fusing modern and traditional textiles from Africa, Asia and Italy. Fair Trade and Sustainable” Accessed 27 Oct. 2016

Aiby Craft

“Sustainability, Craftmanship, Exclusivity. When the craft becomes eco-luxury converge reasons to love!” Accessed 28 Oct. 2016

Sveekery

“The design, manufacturing and decision making process is always follow social, environmental and animal friendly standards to make a positive contribution and a change in the fashion industry.” Accessed 28 Oct. 2016

Good Society

“Build the most valuable product, cause no unnecessary harm and use business to inspire and effect solutions for a better life for all.” Accessed 28 Oct. 2016

Henrica Langh

“Dress and fashion as art and ready-to-wear clothing for the conscious consumer who values quality and individual style. Unique statement pieces made ethically with respect for the environment and artistic fashion collections created through a combination of fashion design and artistic expression. “ Accessed 28 Oct. 2016

16Seven

“Premium Menswear and Womenswear. Ethical fashion Made in England .” Accessed 28 Oct. 2016

Alternative Apparel

“Fashion basics for a sustainable future.” Accessed 28 Oct. 2016

Braintree

“New thoughtfully-designed collection for Autumn Winter 2016. Discover women's and men's organic clothing, bamboo clothing and hemp clothing at Braintree.” Accessed 28. Oct 2016

Appendix D: Brands' Information

The following table displays information on all sixty brands used for assessment of external transparency.

Business orientation was determined using information provided in Appendix C. Publicly available data (based on sources in Appendix E) on number of employees and annual revenues has been gathered from brands' websites, news and media outlets, as well as LinkedIn Profiles. Therefore, there is a degree of uncertainty in this data as these numbers are not gathered from the same sources. Additionally, please note that some numbers are approximations from the range of the number of employees on LinkedIn profiles.

0 indicates lack of reliable data on number of employees or annual revenues. It is important to note that, for legal analysis in Chapter 5, Scotch & Soda and Brooks Brothers were approximated to be medium or large brands according to the California Transparency in Supply Chains Act using the assumption that they are likely generating more than \$100M in annual revenues based on qualitative analysis of their business model and historical performance.

With the exception of Scotch & Soda, all brands with 0 for their number of employees have been approximated to be small in size, with less than 1,000 employees, based on qualitative analysis of their business model and historical performance.

Name of the brand	Nationality	Business Orientation	Number of Employees	Annual Revenues
16Seven	UK	Sustainability-oriented	0	\$0
Abercrombie & Fitch	USA	Neutral	28,500	\$3,519,000,000
Acne Studios	Sweden	Neutral	500	\$138,031,250
Aiby Craft	Spain	Sustainability-oriented	10	\$0
All Saints	UK	Neutral	3,200	\$330,000,000
Alternative Apparel	USA	Sustainability-oriented	180	\$100,000,000
American Apparel	USA	Trend-oriented	7,500	\$609,000,000
ASOS	UK	Trend-oriented	1,900	\$1,209,620,000
Braintree	UK	Sustainability-oriented	50	\$0
Brooks Brothers	USA	Neutral	1,500	\$0
Burberry	UK	Neutral	9,698	\$3,900,000,000
Calvin Klein (thru PVH)	USA	Neutral	34,200	\$8,020,000,000
Chanel	France	Neutral	10,000	\$5,200,000,000
Charlotte Russe	USA	Trend-oriented	10,000	\$856,000,000

Dior	France	Neutral	122,736	\$41,600,000,000
Eileen Fisher	USA	Sustainability-oriented	1,100	\$429,000,000
Everlane	USA	Sustainability-oriented	100	\$50,000,000
Forever 21	USA	Trend-oriented	30,000	\$4,400,000,000
French Connection	UK	Trend-oriented	1,999	\$203,608,000
Gap	USA	Trend-oriented	141,000	\$15,797,000,000
Good Society	Germany	Sustainability-oriented	0	\$0
Gucci	Italy	Neutral	10,000	\$4,300,000,000
Guess	USA	Trend-oriented	13,500	\$2,200,000,000
H&M	Sweden	Trend-oriented	104,637	\$21,730,000,000
Henrica Langh	Europe	Sustainability-oriented	0	\$0
Hermes	France	Neutral	12,244	\$5,370,000,000
Honest By	Belgium	Sustainability-oriented	0	\$0
Hugo Boss	Germany	Neutral	13,764	\$3,089,900,000
J Crew	USA	Neutral	15,300	\$2,510,000,000
Kowtow	New Zealand	Sustainability-oriented	0	\$0
Krochet Kids	USA	Sustainability-oriented	150	\$1,567,769
L.L.Bean	USA	Neutral	5000	\$1,610,000,000
Lanvin	France	Neutral	330	\$184,100,000
Levi's	USA	Neutral	12,500	\$4,490,000,000
Mango	Spain	Trend-oriented	14,400	\$2,211,000,000
Marni (thru OTB)	Italy	Neutral	10,000	\$1,590,000,000
MaxMara	Italy	Neutral	5,000	\$1,430,000,000
Mayamiko	UK	Sustainability-oriented	10	\$0
Ministry of Supply	USA	Neutral	50	\$0
New Look	UK	Trend-oriented	18,530	\$1,878,156,000
NewYorker	Germany	Trend-oriented	16,000	\$0
The North Face (thru VFC)	USA	Neutral	64,000	\$12,400,000,000
Nudie Jeans	Sweden	Sustainability-oriented	50	\$44,000,000
Organic by John Patrick	USA	Sustainability-oriented	0	\$0
Patagonia	USA	Sustainability-oriented	2000	\$570,000,000
PeopleTree	UK/Japan	Sustainability-oriented	50	\$3,125,000
Primark	Ireland	Trend-oriented	58,000	\$6,250,000,000
Ralph Lauren	USA	Neutral	26,000	\$7,400,000,000
Reformation	USA	Sustainability-oriented	200	\$25,000,000
River Island	UK	Trend-oriented	10,000	\$1,166,508,000
rue21	USA	Trend-oriented	10,000	\$1,100,000,000
Scotch & Soda	Netherlands	Trend-oriented	0	\$0

Shift to Nature	Australia	Sustainability-oriented	0	\$0
Sveekery	Germany	Sustainability-oriented	0	\$0
Topshop (thru Arcadia Group)	UK	Trend-oriented	45,000	\$2,587,500,000
Uniqlo (thru Fast Retailing)	Japan	Trend-oriented	41,646	\$14,440,000,000
United Colors of Benetton	Italy	Trend-oriented	9,500	\$2,310,000,000
Urban Outfitters	USA	Trend-oriented	24,000	\$3,400,000,000
Zady	USA	Sustainability-oriented	50	\$0
Zara (thru Inditex)	Spain	Trend-oriented	152,854	\$23,050,000,000

Appendix E: Sources of Information

This table displays the sources of publicly-available information used to gather data on the number of employees and brands' annual revenues. Please note that the majority of these sources are not primary sources and, as such, should be treated with a degree of uncertainty. "N/A" denotes lack of publicly available data.

Name of the brand	Source (Number of Employees)	Source (Annual Revenues)
16Seven	N/A	N/A
Abercrombie & Fitch	Fortune, 2016	Fortune, 2016
Acne Studios	LinkedIn, 2016 (approx.)	Business Off Fashion, Acne Studio Finds Its Groove (Oct 4, 2015), (approx.)
Aiby Craft	LinkedIn, 2016 (approx.),	N/A
All Saints	LinkedIn, 2016 (approx.)	Bloomberg, Apr 22, 2016.
Alternative Apparel	LinkedIn, 2016; Interview with Greg Alterman for Shop-Eat-Surf(2013)	Shop-Eat-Surf (2013)
American Apparel	LinkedIn, 2016 (approx.), Interview with Paula Schneider for Fast Company (2016)	San Francisco Chronicle article (Oct 5, 2015)
ASOS	Likedin, 2016 (approx.), ASOS Report (2014)	ASOS Report (2014); converted from pounds
Braintree	Linkedin, 2016 (approx.),	N/A
Brooks Brothers	LinkedIn, 2016 (approx.), Forbes, 2016	N/A
Burberry	Forbes (May 2015), LinkedIn, 2016	Forbes, 2016
Calvin Klein (thru PVH)	Forbes (May 2016), LinkedIn, 2016	Forbes, 2016
Chanel	LinkedIn, 2016 (approx.), Business Of Fashion	Forbes, 2016
Charlotte Russe	LinkedIn, 2016 (approx.)	Reuters article, Oct 23, 2013, by Moody's Investor Services (approx.)
Dior	Forbes, 2016	Forbes, 2016
Eileen Fisher	Official Eileen Fisher website	Forbes article, May 28, 2015.
Everlane	LinkedIn, 2016 (approx.), Upstart Business Journal article, Mar 7, 2015	Business Off Fashion article (Mar 21, 2016); approx.
Forever 21	Forbes, 2016	Forbes, 2016
French Connection	FCUK CSR Report 2016	FCUK Official Website and Report, 2016

Gap	GAP Official Annual Report	Nasdaq, GAP Official Report
Good Society	N/A	N/A
Gucci	LinkedIn, 2016; Business of Fashion	Forbes, 2016
Guess	Guess Annual Report, 2016	Gucci Official Annual Report, 2016
H&M	Forbes, 2016	Forbes, 2016
Henrica Langh	N/A	N/A
Hermes	Forbes, 2016	Forbes, 2016
Honest By	N/A	N/A
Hugo Boss	Hugo Boss Official Report, 2015	Hugo Boss, Annual Report (for 2015)
J Crew	Forbes, 2016	Forbes, 2016
Kowtow	N/A	N/A
Krochet Kids	LinkedIn, 2016 (approx.), Official website	Official Website, 2013 Financial Income Statement
L.L.Bean	L.L.Bean 2015 Company Fact Sheet	L.L.Bean Company Fact Sheet 2015
Lanvin	WWD article, October 29, 2015; LinkedIn, 2016 (approx.)	WWD article
Levi's	Forbes, 2016	Forbes, 2016
Mango	LinkedIn, 2016	Reuters article, Jul 10, 2014; Fibre2Fashion article, Apr 22, 2015 (approx.)
Marni (thru OTB)	LinkedIn, 2016	Moda24 article, April 18, 2014.
MaxMara	LinkedIn, 2016	Fashion Network article, May 1, 2016; cpp-luxury.com, July 18, 2014
Mayamiko	LinkedIn, 2016	N/A
Ministry of Supply	LinkedIn, 2016	N/A
New Look	Annual Report, 2016,	Official Website, March 2016 Report
NewYorker	Fashion United article; March 20, 2015	Fashion United article; March 20, 2015
North Face (thru VFC)	VFC Annual Report, 2015	VFC Annual Report 2015
Nudie Jeans	LinkedIn, 2016; Egels-Zanden et al.	Egels-Zanden et al.
Organic by John Patrick	N/A	N/A
Patagonia	Forbes article (Fisher); June 9, 2016	Groundswell article, July 31, 2014
PeopleTree	LinkedIn, 2016	People Tree Fashion Creative Director Job

		Description, Accessed 2016
Primark	Business & Finance article, 6 Oct, 2014	Guardian article, 4 No
Ralph Lauren	Forbes, 2016	Ralph Lauren, Official Website, Fiscal Results 2016
Reformation	Crunchbase + LinkedIn, 2016 (approx.)	Project JUST Profile
River Island	Changeboard Article; 23 Feb, 2016.	Drapers Online article, 18 September 2015
rue21	Forbes, 2012; LinkedIn, 2016 (approx.)	Moody's report, 16 Jul 2015
Scotch & Soda	N/A	N/A
Shift to Nature	N/A	N/A
Sveekery	N/A	N/A
Topshop (thru Arcadia Group)	Official website, History/About Us	Financial Report Official, 2014-2015 year
Uniqlo (thru Fast Retailing)	Forbes, 2016 profile	Forbes, 2016
United Colors of Benetton	Financial Report from 2011; LinkedIn, 2016 (approx.)	UCB Official Website
Urban Outfitters	US Security and Exchange Commission List	URBN Official Website, Report for Investors, Q4 Sales article
Zady	LinkedIn, 2016	N/A
Zara (thru Inditex)	Forbes, 2016	Forbes, 2016

Appendix F: External Transparency Criteria Spreadsheet

The following table displays all sixty brands used for assessment of external transparency. The five criteria are as follows:

- A:** Does the brand publicly identify some or all suppliers on its website?
B: Does the brand publish a Supplier Code of Conduct (or similar document) on its website?
C: Does the brand publish some or all of audits on its website?
D: Does the brand publish full-cost breakdown of some or all of its products on its website?
E: Does the brand publish a statement or document regarding its purchasing practices on its website?

Name of the brand	A	B	C	D	E	Score
16Seven	Yes	No	No	No	No	1
Abercrombie & Fitch	No	Yes	No	No	Yes	2
Acne Studios	No	Yes	No	No	Yes	2
Aiby Craft	No	No	No	No	Yes	1
All Saints	No	No	No	No	Yes	1
Alternative Apparel	No	No	No	No	No	0
American Apparel	No	No	No	No	Yes	1
ASOS	No	Yes	No	No	Yes	2
Braintree	No	Yes	No	No	Yes	2
Brooks Brothers	No	Yes	No	No	Yes	2
Burberry	No	Yes	No	No	Yes	2
Calvin Klein (thru PVH)	No	Yes	Yes	No	Yes	3
Chanel	No	No	No	No	Yes	1
Charlotte Russe	No	No	No	No	Yes	1
Dior	No	No	No	No	No	0
Eileen Fisher	No	Yes	No	No	Yes	2
Everlane	Yes	No	No	Yes	No	2
Forever 21	No	No	No	No	Yes	1
French Connection	No	No	No	No	Yes	1
Gap	Yes	Yes	No	No	Yes	3
Good Society	No	No	No	No	No	0

Gucci	No	Yes	No	No	Yes	2
Guess	No	No	No	No	Yes	1
H&M	Yes	Yes	No	No	Yes	3
Henrica Langh	No	No	No	No	No	0
Hermes	No	No	No	No	Yes	1
Honest By	Yes	No	No	Yes	No	2
Hugo Boss	No	Yes	No	No	Yes	2
J Crew	No	Yes	No	No	Yes	2
Kowtow	No	No	No	No	No	0
Krochet Kids	Yes	No	No	No	No	1
L.L.Bean	No	Yes	No	No	Yes	2
Lanvin	No	No	No	No	No	0
Levi's	Yes	Yes	Yes	No	Yes	4
Mango	No	Yes	No	No	Yes	2
Marni (thru OTB)	No	No	No	No	No	0
MaxMara	No	No	No	No	No	0
Mayamiko	Yes	Yes	No	No	No	2
Ministry of Supply	No	No	No	No	Yes	1
New Look	No	Yes	No	No	Yes	2
NewYorker	No	No	No	No	Yes	1
The North Face (thru VFC)	Yes	Yes	No	No	Yes	3
Nudie Jeans	Yes	Yes	Yes	No	Yes	4
Organic by John Patrick	No	No	No	No	No	0
Patagonia	Yes	Yes	Yes	No	Yes	4
PeopleTree	Yes	Yes	No	No	Yes	3
Primark	No	Yes	No	No	Yes	2
Ralph Lauren	No	Yes	No	No	Yes	2
Reformation	No	No	No	No	No	0
River Island	No	No	No	No	Yes	1
rue21	No	No	No	No	Yes	1
Scotch & Soda	No	Yes	No	No	Yes	2
Shift to Nature	Yes	No	No	No	Yes	2
Sveekery	No	No	No	No	No	0
Topshop (thru Arcadia Group)	No	Yes	No	No	Yes	2
Uniqlo (thru Fast Retailing)	No	Yes	No	No	Yes	2
United Colors of Benetton	No	Yes	No	No	Yes	2

Urban Outfitters	No	No	No	No	Yes	1
Zady	Yes	No	No	No	No	1
Zara (thru Inditex)	No	Yes	No	No	Yes	2

Appendix G: Brands According to External Transparency Score

This table was included for convenience of viewing brands from highest to lowest score, with qualitative interpretation of their external transparency. Low-transparency scores are 0 and 1, medium-transparency scores are 2 and 3, and high-transparency scores are 4 or 5.

Name of the company	Score	Transparency
Levi's	4	High
Nudie Jeans	4	High
Patagonia	4	High
Calvin Klein (thru PVH)	3	Medium
Gap	3	Medium
H&M	3	Medium
The North Face (thru VFC)	3	Medium
PeopleTree	3	Medium
Abercrombie & Fitch	2	Medium
Acne Studios	2	Medium
ASOS	2	Medium
Braintree	2	Medium
Brooks Brothers	2	Medium
Burberry	2	Medium
Eileen Fisher	2	Medium
Everlane	2	Medium
Gucci	2	Medium
Honest By	2	Medium
Hugo Boss	2	Medium
J Crew	2	Medium
L.L.Bean	2	Medium
Mango	2	Medium
Mayamiko	2	Medium
New Look	2	Medium
Primark	2	Medium
Ralph Lauren	2	Medium
Scotch & Soda	2	Medium
Shift to Nature	2	Medium
Topshop	2	Medium
Uniqlo	2	Medium

United Colors of Benetton	2	Medium
Zara	2	Medium
16Seven	1	Low
Aiby Craft	1	Low
All Saints	1	Low
American Apparel	1	Low
Chanel	1	Low
Charlotte Russe	1	Low
Forever 21	1	Low
French Connection	1	Low
Guess	1	Low
Hermes	1	Low
Krochet Kids	1	Low
Ministry of Supply	1	Low
NewYorker	1	Low
River Island	1	Low
rue21	1	Low
Urban Outfitters	1	Low
Zady	1	Low
Alternative Apparel	0	Low
Dior	0	Low
Good Society	0	Low
Henrica Langh	0	Low
Kowtow	0	Low
Lanvin	0	Low
Marni	0	Low
MaxMara	0	Low
Organic by John Patrick	0	Low
Reformation	0	Low
Sveekery	0	Low

Appendix H: Example of Audit Reports

(1) An audit report from Levi's.

BUILDING INTEGRITY | DEA SUMMARY REPORT

SUPPLIER NAME	Cosmopolitan Industries Pvt Ltd
UNITS AUDITED	One building with 6 (Six) Floors
SUPPLIER ADDRESS	Khejur Bagan, Boro Ashulia, Savar, Dhaka, Bangladesh
AUDIT DATE	January 2015
AUDIT PERFORMED BY	Consultancy, Research and testing Services, Department of Civil Engineering, Dhaka University of Engineering and Technology (DUET)
AUDIT TEAM	4 Members

BUILDING OVERVIEW

Item	Description
Building Usage Type	Garment Manufacturing
Structure System	RC Beaming column frame (Intermediate moment resisting)
Floor System	RC beaming slab.
No of Stories / Floor area	6 story with Mezzanine floor and a partial truss roofing in the top floor / approx. 61300 sqft/floor.
Floor Load:	Ground Floor: Sample & CAD section, Washing, Wrinkle Free, Laboratory, Chemical Store; Mezzanine: Finishing Unit – 1: Finishing, Packing, Alter & Repair, Sub-store, Quarantine, Spot cleaning, Mending, Office & Buyer Inspection Room; 1st Floor: Sewing section line 1-12 (Unit 1) and office; 2nd floor: Sewing section line 1-13 (Unit 2) and office; 3rd floor: Fusing Section, Quarantine, Finishing unit–2, Packing, Spot cleaning, Kill Garments, Mending & Cutting Section; 4th floor: Embroidery, Cutting unit–2, Canteen/dining area, Chiller Room, Machine Store, Leftover Store, Printing & Prayer Room (Male & Female) & Open Space; 5th floor : Roof (Open Space)
Design drawing	Partially Available
Foundation Type	Isolated column footing
Soil Report	Available

(2) An audit report from Patagonia.

Local Law or Code Requirement

Rules and Regulations (IRR) of Republic Act No. 9514: 3; Occupational Health and Safety Standards, Rule 1940 Fire Protection and Control, Sec. 1944.05(1)(e); FLA Workplace Code (Health, Safety & Environment Benchmarks HSE.1 and HSE.5.1)

Recommendations for Immediate Action

1. Ensure that all exits are clearly marked with signs above the emergency exits.
2. Mount fire extinguishers at heights not exceeding 1.5 meters from the ground.
3. Provide a back-up power system for the fire alarm.

COMPANY ACTION PLANS

1. 1. Ensure that all exits are clearly marked with signs above the emergency exits.

Action plan status: Completed

Planned completion date: 01/31/16

Progress update: 03/13/17 : 1. Emergency exits signs have been installed in the Frame Assembly Section. In addition, we already relocated the exit signs to make them more visible.

Completion date: 01/31/16

2. 2. Mount fire extinguishers at heights not exceeding 1.5 meters from the ground.

Action plan status: Completed

Planned completion date: 01/31/16

Progress update: 03/13/17 : 2. All fire extinguishers in the facility were methodically measured to ensure that they are all meeting the legal requirements.

Completion date: 01/31/16

3. 3. Provide a back-up power system for the fire alarm. Management is currently dry running a back up system for our biometrics once the dry run is successful we will also create a semi-weekly inspection system to avoid problem with our biometrics.

Action plan status: In Progress

Planned completion date: 11/30/16

(3) An audit report from Nudie Jeans.

INDIA

M/S ARMSTRONG KNITTING MILLS

Armstrong Group consists of four units. All units were part of the first audit round in June 2011. The units are Armstrong spinning unit, Armstrong Process and two units for CMT.

The company was founded in 1969 and has FLO certification for all units. The number of employees at the time of the first audit was at Armstrong spinning 411 persons, Armstrong Process 23 persons, Armstrong knitting mills unit II 247 persons, Armstrong Knitting mills 790 persons. Nudie Jeans have a small production of Armstrong's yearly capacity, estimated to about 2-3%. We produce backbone items and t-shirts at this supplier.

POSITIVE:

- GOTS have made a film about the process of organic cotton at Armstrong
- The factory has their own social audits with the compliance team.
- There are several committees active in the factories
- A list of employee representatives are available at the board
- No evidence of a Sumangali scheme in the spinning unit
- Nurse available at the factory twice a week

AMONG THE THINGS TO IMPROVE WE COULD FIND:

- At the spinning mill, all payments were made in cash, mostly to workers parents
- Wages paid are considered on or above minimum wage but are not considered as living wage
- Employees do not have chairs with backrests
- Emergency floor paths are blocked
- In some departments toilets were not clean

During the follow-up (December 2011 and onwards) all units were visited. We could see that many of the issues mentioned in the cap were improved. The payments to the workers at the spinning mills were now going directly to the workers' bank account, the cleaning of toilets and other departments were improved, the emergency paths were not blocked and the conditions in the spinning mill were improved. During the follow up visits we have discussed all the

Notes

We would like to thank Project JUST³⁰ for allowing us to use their publicly available information on apparel brands when validating our data on external transparency.

³⁰ <https://projectjust.com/>; Accessed May 2, 2017.

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