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SUSTAINABLE DEVELOPMENT IN THE GLOBAL FASHION INDUSTRY

Challenges for implementation

Bachelor's Thesis
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Sustainable development is a phenomenon that interest a growing number of consumers. Despite this, the implementation of its central ideas has been vastly unsuccesful in the field of fashion industry, which remains one of the biggest polluters in the world (Niinimäki et al 2020). This paper takes a look at the central challenges of the implementation of the sustainable development in the fashion industry. The challenges are discussed with the help of a few terms that can be seen as important to the sustainable development ideology of today: circular economy (CE), corporate social responsibility (CSR) and extended producer responsibility (EPR).

The modern fashion industry is characterised by a vastly globalised manufacturing supply chain (Boström and Micheletti 2016). This causes multiple challenges in the terms of the environmental and social impact of the industry, from transportation emissions (Filho et al 2019) and pre-consumer waste due to lax design-producer collaboration (Islam et al 2021), to safety violations (Lund-Thomsen and Lindgreen 2014). Besides this, the fast fashion business model, which relies on producing cheap, low-quality clothes that correspond to rapidly changing fashion trends (Ertekin and Atik 2015), contributes to globally growing numbers of fabric waste (Niinimäki et al 2020). Circular economy business model attempts at fighting the negative effects of the fast fashion industry by offering alternative way of designing clothes that takes into account the whole life cycle of the product, from beginning until the end (Levänen et al 2021).

The conclusion of the paper is that while some sustainability schemes are already in place around the world, more effort is needed in order to make true change in the fashion industry. Mont and Power (2010) and Niinimäki et al (2020) recommend the focus should be shifted from the actions of individual consumers to wider systems that keep up the growing consumption. Additionally, more research into the economic profitability of sustainability schemes such as business strategies based on CE is needed, in order to motivate companies to initiate them (Levänen et al 2021, Jia et al 2020).

Keywords sustainable development, fashion industry, fast fashion

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1. Introduction

Fashion industry is one of the biggest polluters in the world (Boström and Micheletti 2016, Niinimäki et al 2020). Ertekin and Atik (2015) argue that the current practices guiding the fashion industry need to make way for sustainable development. As a principle, sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987, cited by EUR-Lex). Unfortunately, this sentiment is yet to be accomplished in the context of fashion industry (Mont and Power 2010, Ertekin and Atik 2015).

Ertekin and Atik (2015) list barriers for successful implementation of sustainable development in the fashion industry, among which is the lack of knowledge of the relationships between economic institutions and environmental deterioration. In other words, to do better, it is important to gain knowledge about how the current fashion system is working. That is why I found it beneficial to examine and attempt to answer this question: What are the challenges of implementation of sustainable development in the global fashion industry?

Sustainable development is often closely associated with Corporate Social Responsibility (CSR), defined as ‘‘an umbrella term for a variety of theories and practices” in the business world (Blowfield et al 2015. p. 503). Generally speaking, CSR relies in the notion that companies are responsible for their impact on society and the natural environment, even beyond financial liability (Blowfield et al 2015). CSR also holds companies responsible for the behavior of groups associated with them, such as subcontractors or investors (Blowfield et al 2015.) In this thesis, I will mainly focus on the environmental aspects of the CSR, as it is the emphasis of most of the articles included in my reference list.

For this paper I have mostly read peer reviewed academic articles on sustainable development in the context of the fashion industry. Articles included in this thesis are mostly directly related to the fashion industry, although a few are written from the general perspective of sustainable development, or relate to another relevant field of business, such as renewable energy. Additionally, I read articles on corporate social responsibility (CSR), and both private and governmental regulation, which are important aspects of practical realisation of sustainable development (Aureli et al 2020). I also included a couple of non-academic sources in my research because they offered another, useful angle on the topic. I found the non-academic sources often attest the claims the academic articles present.

My conclusion is that current fashion system is still fueled by traditional, linear economic thinking based on unlimited recources (Mont and Power 2010, Levänen et al 2021). This model discourages attempts at reducing consumption, which is vital to the decrease of the negative environmental impact of the fashion industry (Niinimäki et al 2020). Reluctance to assume new ways of operating (such as circular economy, which will be discussed later in this paper) sets a remarkable initial barrier for implementing sustainable development in the fashion industry (Ertekin and Atik 2015).

During my research I found that the challenges in the implementation of sustainable development in the fashion industry are so numerous, it is not possible to dive deeply into all of them in this bachelor´s thesis. I thus focused on the challenges I found the most essential to the fashion industry: globalisation of manufacturing and supply chains, poor understanding of the economic, social and environmental impact of sustainability strategies, and ineffecient governmental and private regulation.

The structure of this thesis is as follows: First, I discuss the global fashion system and present the principles of sustainable development in the context of fashion. Second, I look at how companies are responding to current demands for sustainability. The third part of the paper starts with recommendations for agents in the fashion industry, and continues with presenting the limitations to my research. I conclude the paper with suggestions for future research.

2. Sustainable development in the fashion industry

2.1 Global landscape of the fashion industry

In this article, the fashion industry is defined as the industry that creates products that fall into the category of wearable textiles (clothes and apparel). This definition is my own, but it is based on the subject matter of the academic articles I have read during my research. While the fashion industry is often associated with the general textile industry (Niinimäki and Hassi 2011), it can be argued that the way in which consumers relate to clothes differ significantly from the ways in which they relate to other textiles such as interior decoration. According to Ertekin and Atik (2015), the way in which clothes have historically been a part of communicating status and wealth has shaped the fashion industry. Even today clothes hold social and phychological significance like no other textiles (Ertekin and Atik 2015). This is why I have made the decision to focus on only the fashion part of the textile industry in this paper.

According to Lueg et al (2015, p. 374), the fashion industry is 'characterized by a very mature production technology and relatively predictable environments, wholesalers and retailers, a very large number of customers, and globalized supply chains and large networks`. The globalisation of the supply chains started already in the 80s, (Niinimäki and Hassi 2011) when lower labor wages and lenient regulation in countries such as China and India started to attract the attention of fashion retail companies. Scattered manufacturing and supply chains have therefore resulted in a system where goods are produced in mainly developing countries, and transported to retailers in the developed countries (Boström and Micheletti 2016). In other words, the globalization of the fashion manufacturing supply chain has geographically distanced textile retailers from the manufacturers (Lueg et al, 2015) in such a manner, that entirely locally produced clothes have become a rarity all around the world.

To add to the complexity of the fashion industry, its usual manufacturing supply chain includes multiple steps: fiber production, wet processing, construction of fabric, assembly, and trims (sewing threads, buttons, zippers etc.) (Niinimäki et al 2020). Typically, different phases of the production take place in various locations, sometimes in several countries (Niinimäki et al 2020). Because of the length and complexity of the usual fashion manufacturing supply chain, garments may travel around the globe several times during the production before they are sold. This results in excessive transportation emissions (Niinimäki et al 2020, Islam et al 2021, Filho et al 2019).

The most labor-intensive phase of the clothing production being the garment assembly (i.e., sewing and trimming of the textile materials), fashion retail companies have outsourced the production to developing countries where labor is less costly (Niinimäki et al 2020). Besides lower labour costs, developing countries tend to have less strict regulations for production, as well as abundant raw materials, which further encourages textile retailers to source materials in the developing countries (Nurhayati et al, 2015).

Even if the manufacturing of the designs is outsourced to the subcontractors typically located in the developing countries (such as China, India and Bangladesh), the designing phase of the product life cycle often takes place in the developed countries (such as USA and Great Britain). In other words, the current fashion industry is structured so that the developing countries take the risks of the chemical-heavy, humanly hazardous manufacturing process while the retail companies conduct the designing phase, which is much less environmentally and socially burdening. The manufacturers face such problems as leaking of toxic chemicals into the environment (Niinimäki et al 2020), and human right violations. The negligence of the safety of the working conditions lead to the collapse of two textile factories in Bangladesh 2012-2013 (Lund-Thomsen and Lindgreen 2014). In other words, the decentralization of the design and production phases of the fashion supply chain causes uneven distribution of negative environmental and social impact (Niinimäki et al 2020) across the globe.

Another problem caused by the globalization of the manufacturing supply chain in the fashion industry relates to the communication between the parties responsible for the design and the production of the products. The vast geographic distance between those who make the clothes and those who design them (Niinimäki et al, 2020, Ertekin and Atik 2015) inevitably leads to mistakes in the production planning. This in turn leads to the production of unnecessary pre-consumer waste (Islam et al 2021), when for example errors in pattern cutting result in useless pattern pieces.

When talking about today's fashion industry, the concept of "fast fashion" cannot be avoided (Niinimäki et al 2020, Levänen et al 2021). Fast fashion is a low-cost business model developed to produce and sell clothes quickly enough to react to rapidly changing fashion trends (Ertekin and Atik 2015). Fast fashion retail companies such as Zara, which is famous for their 3-week design-and-manufacturing cycle, bring new clothes to the stores faster than individual comsumers are able to buy them (Bloomberg News 2021). Apart from the swift production, the fast fashion model aims at decreasing the production costs of the clothing in order to get maximum profit and attract customers prioritising low price (Niinimäki et al 2020). Typically, fast fashion products are of poor quality (Niinimäki and Hassi 2011), and will therefore be quickly replaced with new, presumably equally poor quality products. This results in a kind of fast fashion rat race, which can be seen in the steep decline of the usage time of an average piece of clothing (Niinimäki and Hassi 2011).

Fast fashion is amply embodied in Shein, a Chinese online fashion retailer (SHEIN 2021). According to a recent article by Bloomberg news, the company has highly developed, rapid supply chain with even shorter design and production process than the textile giant Zara, and nearly fully automated support system for designers, including an inspirational database and patented technology to harvest customers' search data (Bloomberg News 2021). Because of the company´s ability to quickly cater to the fast changing trends as well as to involve their customers in the creation of their brand image, especially the generation Z has become largely devoted to the company.

As of the present moment, Shein is the biggest web-only fashion brand in the world (Gonzalez-Rodriguez 2021). This development can be seen as alarming, since the company is currently under private ownership and therefore not obliged by law to publicly disclose pivotal information about its operations (Bloomberg News 2021). As it is difficult to find information such as the manufacturing locations of its products and the location of its headquarters, it is also difficult for the consumers to evaluate the environmental and social impact of its manufacturing and supply chain (Pedersen and Andersen 2015).

2.2 Sustainable development and the fashion industry

Ertekin and Atik (2015) point out an ideological shift towards "slow fashion" as a reaction to the issues roused by the spreading of the fast fashion business model in the fashion industry. The ideology behind the slow fashion movement (Niinimäki et al 2020, Pedersen and Andersen 2015) was originally derived from the ''Slow Design Manifesto'' presented at ''Slow Design'' symposium in Milan in 2006. The ideology represents an alternative approach to fast fashion production and consumption in which "designers, buyers, retailers, and consumers are more aware of the impacts of products on workers, communities, and ecosystems" (Fletcher 2010, cited by Ertekin and Atik 2015).

According to Ertekin and Atik (2015), slow fashion encourages diversity, as opposed to homogenueity in resources. This can mean for example an active use of knowledge sharing in the production of textiles, in which designers work in a close collaboration with other phases of production. During this kind of collaboration the designer, manufacturer and retailer may all learn about each other´s work, which in turn may make it easier for every party to understand the whole manufacturing supply chain better. Ertekin and Atik (2015) argue that the lack of this kind of awareness is one of the reasons for poor sustainable development implementation. Hence, increasing this awareness could enhance the sustainability of the entire industry. Additionally, it can be argued that a closer collaboration between all the actors in the manufacturing supply chain could benefit not only the people involved, but also increase the involvement of the local communities in making better, more sustainable clothes.

According to Levänen et al (2021, p. 2), "the current fast fashion paradigm manifests linear economy thinking". Linear economic model can be understood as the current economic model characterized by a throwavay mentality, poor-quality products and constantly growing demand for new products and services (Mont and Power 2010). Circular Economy, on the other hand, is a set of principles that attempt to debunk the traditional linear economic model (Levänen et al 2021, Jia et al 2020), which has also found its way to fashion industry in the last few years. In the context of the fashion industry, CE focuses on creating and implementing business practises that prolong the life cycle of clothes, as well as reducing fabric waste through prolonged usage schemes such as recycling and reusing (Levänen et al 2021). In CE, taking into account the whole manufacturing and supply chain, as well as the so called afterlife of the used product is of vital importance (Jia et al 2020). Therefore, CE in the fashion industry is focused on making clothes that have minimal burden on the environment during production, as well as during usage and finally after disposal.

A typical life cycle of a product of the fashion industry can be simplified in 6 phases: design, procurement, production, transport, usage, and disposal (Jia et Al 2020). As discussed in the podcast series “The Circular Economy Show” by The Ellen MacArthur Foundation, purposeful design of products meant to be reused is an essential part of Circular Economy (The circular economy show 2021). This is because being the first step of the manufacturing supply chain, design plays a vital role in the environmental impact of the product (Niinimäki et al 2020).

Because design choices such as materials and patterns guide later phases of production, design mistakes can have big negative environmental effects. When designing patterns for clothing for example, designers may either lessen the amount of cutting waste by frugal design, or increase it by not paying attention to the way in which the pattern will be cut out of the fabric (Niinimäki et al 2020). Additionally, one-directional decorative prints will create more waste than prints that can be used for the piece of clothing every which way, as the pattern pieces cannot always be cut out of the one-directionally printed fabric in a economic manner (Niinimäki et al 2020). On the other hand, design thinking based of CE principles can help reduce fabric waste through reusing and recycling fabric scraps (Niinimäki et al 2020).

Circular economy has its advocates, but opponents argue there is not enough evidence of its positive environmental impact (Jia et al 2020). There is still little research on the actual economical or environmental effects of Circular Economy (Levänen et al 2021, Jia et al 2020), which is why companies are hesitant to take on new ways of operating. According to Elshahat et al (2015), implementing sustainable development can bring companies additional costs, which affect short-term profitability. Therefore basing a business strategy on CE principles may seem risky to some companies. In order to convince more companies to consider sustainability schemes in the future, more research on the economic effects of business strategies based on CE might prove to be of vital importance.

Despite the paucity of research of the economic effects of CE, some researchers see a lot of potential in the model. Mont and Power (2010) argue circular economy could act as an incentive to make better quality products. They claim this is because extending the life cycle of an endurable product is easier, since there are more end-of-life options for those products, as opposed to poor quality products (Levänen et al 2021). I will go deeper into the end-of-life management in the fashion industry in the next chapter.

3. Challenges in implementation of sustainable fashion industry practices

3.1 Product life-cycle management in the fashion industry

Levänen et al (2021) present 5 end-of-life scenarios for clothes: basic use with waste disposal, extended use, reuse (for example re-selling) recycling (such as industrial processing into new raw materials) and sharing (for example rental service). Out of these scenarios, the prevailing linear economic thinking supports the first one, because it´s easily comparable with throw-away mentality (Mont and Power 2010). Niinimäki and Hassi (2011) claim that the recycling scenario is also easily comparable with linear economic thinking , because it doesn´t clash with already existing consumption patterns. Nevertheless, out of the 5 scenarious, Levänen et al (2021) see extended use as the scenario that has the biggest environmental benefits. In other words, they claim that keeping a piece of clothing in use by its first owner as long as possible (extended use) minimizes the environmental impact, even more effectively than for example selling it to a second hand store (reuse) or turning it into a new product, such as insulation (recycling).

Filho et al (2019) present possible reasons as to why recycling is not as effective a way to minimise the environmental impact of a piece of clothing, as one might think. While they insist recycling play a key role in helping the textile industry in transition to sustainable business practices, they claim there are multiple obstacles in the way of effective implementation of recycling practises. Lately, a lot of attention has been given to recycling plastic bottles into polyester fabric, which some might see as a great way to reduce plastic waste (Filho et al 2019). Nevertheless, Filho et al (2019) are not too optimistic about the current technology for turning discarded fibres into new fibres. As of present moment, most recycling technologies in use are mechanical, with chemical recycling only available to certain kind of fabrics (Filho et al 2019). The challenge with mechanical recycling is that it breaks the fibres into shorter fibres in the recycling process due to the shredding mechanism (Filho et al 2019). This makes the fibres less endurable, and often unfit to use as first-rate feedstock needed for textile production.

One solution to the decreased quality of mechanically recycled fibres is to use them as second-rate feedstock such as insulation, or cleaning wipes (Filho et al 2019). Filho et al (2019) point out that while this practise is an option, there are signs of saturation of the second-rate recycled materials market. To put it simply, they claim that the amount of second-rate feedstock currently produced out of recycled materials is already sufficient to meet the needs of the industries that utilise them. This means that the only way to make use of the growing amount of fabric waste (Niinimäki et al 2020) is to develop better technologies to recycle the fibers into new fibers, without decreasing the quality of the fibres.

While chemical recycling can restore fibre quality during the recycling process (Jia et al 2020), these kind of technologies are mainly available for synthetic fabrics such as polyester and acrylic. Besides for limited availability, there are also other challenges to this technology. For instance, there is a lack of adequate technologies for separating different materials from mixed fabrics such as cotton-polyester blend (Islam et al 2021). Since it is quite common for clothes to be made of these blends, the lack of technologies to handle them presents a significant barrier for widening the scale of textile recycling (Ertekin and Atik 2015). Similarly, as of now, there are no technologies for turning discarded polyester fabrics into new polyester fabrics (Islam et al 2021). Instead, garments with the "recycled polyester" label are usually made with plastic bottles, or other kind of plastic foodstuff waste (Filho et al 2019).

Because the field of recycling technologies remains currently vastly underdeveloped (Jia et al 2020), a substantial amount of clothing is disposed of using traditional means. For a long time, one of these means has been selling discarded clothes to other countries, often located (Filho et al 2019) in Africa. As of 2019, Rwanda, Kenya, Uganda, Tanzania South Sudan and Burundi have no longer accepted garment imports. It has become apparent that developed countries can no longer keep selling their second hand clothes to other countries, since many of those countries want to focus on developing a garment industry of their own (Gittleson 2018). It can be argued that since there are fewer options for simply dumping discarded garments to other countries, the countries producing the biggest amount of fabric waste are now under a lot of pressure to find ways to dispose of it. In other words, the shift in the global dynamics of textile disposal (Gittleson 2018) has made the demand for recycling technologies even more pressing.

The growing global pressure for better textile recycling is also apparent in the new directive the European Union has posed for recycling of textile waste that would affect all its member nations by 2025 (European Parliament Think Tank 2019, Aureli et al 2020). This directive can be seen as an adjunct to the idea of Extended Producer Responsibility (EPR), where the manufacturers and the retailers are responsible for the recycling of their products (Niinimäki et al 2020). EPR is concerned with both designing of new products that are easily recyclable and taking responsibility for the recycling of already existing products. It can be seen as an ambitious vision of a world where non-recyclable waste will be created no longer, and local goverments work in collaboration with companies and communities to ensure that sufficient waste collection systems are in place (The Circular Economy Show 2021).

Filho et al (2019) present positive examples of EPR implementation, such as the recycled fibre clothes line called the Conscious Collection by the fashion retailer H&M, or Brazilian brand EcoSimple that utilises 100% of recycled fabrics in its textiles. Despite positive reports like this, large percentage of the world´s fabric waste remains in the landfills (Niinimäki et al 2020). While EPR is already being implemented by singular companies, or some local communities in countries such as Chile (The Circular Economy Show 2021), the practical realisation of the principle in a wider, global scale has not yet happened. The reasons lie in the difficulty of the practical organisation of waste collection, for instance, in the inconvenience of using and establishing of collecting stations (The Circular Economy Show 2021, Ertekin and Atik 2015). Further challenges are the prevailing habits and attitudes towards sorting and waste (Ertekin and Atik 2015), since in many countries, recycling is still not socially prioritised.

Podcast series by the Ellen McArthur foundation presents a psychological challenge of implementing EPR through the concept of “The Rich World” (The circular economy show 2021). According to the podcast, “The Rich World” is a simplistic way of thinking about the value of things that is still widely maintained among designers. In “The Rich World” value system rare materials, that is materials that can be produced or found only in small quantities (such as high-quality silk or precious stones), are considered more valuable than materials readily available or easily produced (for example wood in forested areas such as Finland, and its derivative paper). Because of the “The Rich World” value assigned to rare materials, they are automatically associated with other preferred attributes such as quality, which tend to make them the first choice over commonplace materials when designing a product. As The circular economy show explains, “The Rich World” thinking can be counterproductive for EPR, because it prevents the mind from finding new ways of utilizing commonplace materials. In other words, when envisioning new uses for commodities, “The Rich World” value system may hinder a designer´s ability to see new potential in commonplace things, preventing new innovation, especially in the use of materials.

3.2 State of sustainable regulation

When it comes to implementing any of the ideas within sustainable development (EPR, Circular Economy, slow fashion etc.), regulation is needed to ensure companies have enough incentive to start (Elshahat et al 2015). Sustainable regulation is either private (Fransen and Conzelmann 2015), governmental (Jia et al 2020), or conducted by supranational alliances such as the European Union (Aureli et al 2020). In this chapter, I will briefly discuss each type and its influence in shaping the fashion industry.

Private regulation is conducted by Non-Governmental Organisations (NGOs), and often takes the form of manufacturing and supply chain assessment or consultation (Nurhayati et al 2015). In the fashion industry, it can mean for example monitoring the conditions in which cotton is grown, or the safety of working conditions during the garment assembly. For companies, taking part in a private regulation scheme is usually voluntary, but can provide them with legitimacy, which in turn might increase their economic profitability (Scherer et al 2013). When a NGO holds enough power, it can even pressure a company into making a change in their operations despite its resistance, like in the case of the international organisation for environmental protection “Greenpeace” and the multinational oil and gas company Shell (Partzsch 2017).

Often enough, a voluntary collaboration with an NGO is communicated through the usage of certificates (Partzsch 2017). According to the Ecolabel Index, there are over 100 certificates for sustainable clothing production in the world, although some of them are limited to certain geographic regions or aspects of the manufacturing supply chain only (Ecolabel Index 2021). Scherer at al (2013) claim that the lack of global agreement over the most reliable certification system makes it challenging for businesses to adopt any singular sustainability standard. This high fragmentation of private regulatory organizations can therefore be seen as a barrier for implementation of sustainable development in the fashion industry. Additional problem that excessive fragmentation presents is that when the businesses can choose among multiple standards, they have tendency to choose the most lenient one (Fransen and Conzelmann 2015). This will eventually lead into inefficient execution of sustainable development in the whole fashion industry.

Another form of sustainable regulation is conducted by national governments (Jia et al 2020). Governmental regulation differs from private especially in its mandatory nature, since companies have to comply with the local laws, no matter where they are situated. The level of conscientiousness in obeying local legislation is one of the ways companies maintain their legitimacy in the eyes of their stakeholders (Nurhayati et al 2015). Occasionally, businesses react to governmental regulation negatively (Aureli et al 2020), which can lead to poor execution of certain laws, for instance. Reasons to this may lie in poor availibility of resources to obey the laws (Ertekin and Atik 2015). In the context of fashion, this could occur for example in the case of an order to recycle more, when there are no adequate recycling technologies available (Jia et al 2020).

Mont and Power (2010) argue that for a government to truly support environmentally and socially sustainable economy, legislation should affect the entirety of the supply chain, from upstream (production, design) to downstream (usage, disposal). In the context of the fashion industry, this is a highly complex task. Complexity comes from the multiple phases of the lifecycle of a piece of clothing, in which various different social and environmental hazards are potential (Boström and Micheletti 2016). Lueg et al (2015) demonstrate this complexity in the case of an anonymous Scandinavian clothing company. One of the apparent challenges in effective realisation of a holistic sustainable development strategy was different views of sustainability across different departments of the company. Because of this fragmentation of knowledge, the company faced difficulties in obeying the sustainability expectations set by local governmental regulation (Lueg et al 2015).

There are multiple ways for governmental sustainable regulation, from financial support (Jia et al 2020) and taxation of environmentally harmful materials (Pedersen and Andersen 2015) to malpractice sanctions (Elshahat et al 2015). Despite the many options for governmental regulation, it can be argued the most common form is still disclosure legislation. One example of disclosure legislation is The Indian Companies Act (Nurhayati et al 2015), which was established in 2013. The Indian Companies Act is a directive that made Corporate Social Responsibility reporting mandatory for all Indian companies of certain size, private or public (Deo 2015). Nurhayati et al (2015) observe a low level of social and environmental disclosure by Indian textile firms, which might be one of the reasons the law was established. Future research will show how this law will affect the disclosure percentage and overall state of CSR in India.

Boström and Micheletti (2016) opine that singular governments do not have the ability to tackle the growing negative environmental and social impact of globalised fashion manufacturing supply chain. This is because of the complexity of the chain, which makes the factors behind the sustainability challenges difficult to analyze. The complexity of the chain also makes it difficult to hold the right actors liable for possible environmental of social responsibility malpractises (Boström and Micheletti 2016). Because of this, the only effective way to control the impacts of the fashion industry may be to form supranational alliances with unified sustainability policies. The recycling directive by the European Union discussed in the previous chapter of this paper is an example of such policy that also affects the fashion industry. Future will show whether these kind of policies will be succesful in tackling the global sustainability challenge in the fashion industry.

3.3 The sustainable fashion negotiation

As discussed in the previous chapter, maintaining legitimacy in the eyes of the stakeholders is a way for the companies to remain financially profitable (Scherer et al 2013). While complying with local legislation is a big part of this, equally important is the element of negotiation of the terms, under which the surrounding society expects the company to work

(Scherer et al 2013, Aureli et al 2020). When it comes to fashion, some consumers remain unaware of negative environmental and social effects, especially in the case of fast fashion (Ertekin and Atik 2015). These consumers do not necessarily project sustainability expectations towards fast fashion companies (much like in the case of Shein, which was discussed before). Despite the lack of sustainability expectations for fast fashion, Fletcher (2017) argues there is a global shift towards CSR that is currently taking place in all the fields of human operations. Many are starting to expect companies to extend their purpose from generating revenue to adding value to the society (Fletcher 2017). It can be argued it is only a matter of time before these expectations are pervasive also in the field of fashion.

As Scherer et al (2013) point out, the growing sustainability demands may come from multiple directions, for example from NGOs, local communities, customers, or employees. Additionally, Fransen and Conzelmann (2015) imply that customers direct their expectations towards companies they are familiar with, which may lead to branded retailers facing more pressure to act sustainably than no-name manufacturers. In the fashion industry, this "branded vs. non branded" bias can be seen in the way which consumers are much more concerned with the alleged sustainability of the retail companies such as H&M and Zara, but do not necessarily think about the subcontractors "hiding" behind their branded resellers.

Greenwashing, a marketing tactic companies use to make consumers think they are more environmentally responsible than they really are (Cambridge Dictionary 2021) is possible in the fashion industry partially because of the branded vs. non-branded bias (Fransen and Conzelmann 2015). For instance, when H&M communicates about the materials it utilises in the making of its clothes by labeling its clothes with "organic cotton" tags, a lot of other sustainability information is not disclosed, such as the conditions, under which the sewers work. The consumer doesn´t necessarily even think about the sewers because they work in the "hidden" part of the the manufacturing and supply chain. In other words, they are not in the possession of a brand image, whereas their reseller, H&M, is (Fransen and Conzelmann 2015).

Like in the example of organic cotton, the manipulation of perceptions typical for greenwashing happens by concealing information such as the real origins of materials

(Niinimäki et al 2020), or essential parts of the production process (Nayak and Mishra 2016). In the fashion industry, even deliberately vague labeling can be used as a technique, such as selling all kinds of bamboo-based textiles as bamboo fabric, when only some have environmentally friendly characteristics generally associated with bamboo (Nayak and Mishra 2016). The consumers often have a low level of knowledge of social and environmental impact of the materials they are buying (Pedersen and Andersen 2015), which increases the possibility for perception manipulation.

Despite the greenwashing phenomenon, some companies do engage in honest communicating of their implementation of sustainable development. In many cases, this means expressing concern of the challenges, which various sustainability schemes raise (Filho et al 2019). As Jia et al (2020) point out, many companies that would be interested in including recycling schemes in their core operations, have ran into problems because they lacked the adequate technology. For instance, sports apparel company Nike couldn´t remanufacture clothes from other companies, because they couldn´t identify the dyes used in the making of the clothes (Jia et al 2020). It can be argued that when a company discloses the problems it is facing in the implementation of sustainable development, it opens the way for its stakeholders to take part in the problem solving process. Thus, open negotiation over the implementation of sustainability could play a key role in making the fashion industry more sustainable in the future.

4. Conclusions

4.1 Recommendations for better implementation of sustainable development in the fashion industry

It can be argued that since The United Nations Conference on Environment and Development in Rio de Janeiro in 1992 (Fletcher 2017), more and more effort has been put towards alleviating the overall negative environmental and social effects of consumptive industries, one of which is fashion (Niinimäki et al 2020). However, fashion industry remains highly problematic in the terms of both environmental and social impact (Niinimäki et al 2020). Based on my research, I can see multiples areas, the development of which could help change this in the future.

First, it is important to acknowledge that pressuring individual consumers is not the key to unlocking a sustainable economy (Mont and Power 2010). Instead, an effort should be made to target the “entire ways of life that are currently based on normalized unsustainable consumption” (Mont and Power 2010, p. 15). In other words, the focus should be shifted from individual consumers to systems that keep up high levels of consumption, all the way from historical attitudes towards fashion items (Ertekin and Atik 2015), to the fast fashion business model that constantly maintains a need to buy more (Niinimäki et al 2020).

Elshahat et al (2015) argue that in order to transition towards a sustainable economy, we need system-wide understanding. This is only possible by collaboration between different agents in the fashion industry. Besides for the systemic approach, Niinimäki et al (2020) stress the importance of reducing overall production volume. They also see substituting of polyester with plant-based textiles and transitioning to sustainable shipping and garment usage as important steps towards a more sustainable manufacturing and supply chain.

Like previously mentioned, in order to change the current business logic in the fashion sector, it is important to invest in the development of new recycling technologies and business models (Filho et al 2019). Governments could play a role in this by funding development projects, as well as formulating laws that enforce extended producer responsibility (Niinimäki et al 2020). Idealogical reformation of global business conduct (Niinimäki et al 2020) could also help boost the demand for better recycling technologies. The goal of the reformation in this case could be to make more companies, as well as consumers, see recycling as an essential part of the fashion business.

There are positive examples of companies engaging in activities that promote sustainability, such as fashion retailers partnering with charity shops or a multilevel alliance promoting sustainable fashion practices called “The Sustainable Apparel Coalition” (Ertekin and Atik 2015). Yet, there may still be potential areas for improvement completely untapped. Niiniimäki and Hassi (2011, p. 1879) present an idea of a mandatory estimate of the “intended lifetime of the product” to be provided together with a piece of clothing. This would work similarly to a guarantee in electronic products, providing customers with information about the usage time they can get out of the garment, and the quality-price ratio of it. This could help the customer make an informed purchasing decision, potentially decreasing consumption of poor-quality textiles.

Coming back to systemic approach for sustainable development in the fashion industry, it may be beneficial to try and capitalise on supranational coalitions in the fight against fast fashion giants. Especially when it comes to European Union, a lot of its power could be directed towards promoting local clothing production, instead of importing of garments from the developing countries (Niinimäki et al 2020). According to Filho et al (2019) there is a shortage of qualified employees in the field of fashion retail in Europe, which currently makes it difficult to produce large quantities of garments locally. The reason is the overall image of the sector as a "low-profit, low innovation industry with low wages and questionable working conditions" (Filho et al 2019, p 14). Investing in improvement in this area and therefore increasing the clothing production in Europe might bring about indirect benefits, since the shorter geographic distance could make it easier to control the entire manufacturing supply chain (Lueg et al 2015, Niinimäki and Hassi 2011).

4.2 Limitations to the study

Sustainable development in the fashion industry is a vast topic, which could not be fully explored in this paper. Even though I tried to go over some key challenges in the implementation of sustainable development in the fashion industry, some others were only briefly mentioned, or left completely untapped. For instance, because of limited time, it was not possible for me to thoroughly explore the psychological aspects of fashion consumption. Consumer behavior in the fashion industry is a field of high complexity, and should not be ignored when formulating sustainability strategies (Ertekin and Atik 2015). This will be an important topic for another paper.

Additionally, as Ertekin and Atik (2015) underline, fashion is more than utility, including aspects of cultural meaning, social status, and aesthetics. Therefore the way in which advertisement can affect consumption of clothes and apparel, is affected by underlying currents in the local society and the global zeitgeist as a whole. Despite the importance of advertisement and its effect of consumer habits, especially its potential in promotion of sustainable lifestyles (Mont and Power 2010), this topic is largely ignored in this paper.

As is apparent in a case study about public debate on nuclear energy in Germany (Patriotta et al 2011), environmental politics is a highly complex landscape. The study analysed the political debate in Germany over an accident at a nuclear plant in Sweden 2006-2007. The way in which discussion on the safety of nuclear energy was manipulated by different political stances, such as conservative, green, and liberal (Patriotta et al 2011), may provide an insight into the debate over the sustainability of the fashion industry. As could be concluded based on the study by Patriotta et al (2011), conversations around issues of environmental protection depend greatly on the political stances of the conversers, and environmental politics cannot therefore be thoroughly discussed without examining how political processes generally work. Despite this, because of the time limit for this thesis, it was not possible to explore the dimension of environmental politics, and it is therefore mostly lacking from my finished research.

Niinimäki et al (2020) point out that in order to make the fashion industry more sustainable, it is important to limit the growing volume of production, as it contributes to both accumulation of textile waste, as well as exhaustion of planetary resources. Another problem with the planetary resources utilised in the production and consumption of clothes is that they are not divided equally among the developing and developed countries (Boström and Micheletti 2016, Niinimäki and Hassi 2011). That is why questions such as “what is the right way is to allocate planetary resources to different nations?” or “how should planetary resources be divided between the fashion industry and the rest of the human operations?” become important in the debate over sustainability in the fashion industry. These questions, while normative, may be essential in the attempts of defining the future of sustainable development in the fashion industry, because they guide strategic decisions. Unfortunately, due to the time limit, none of these questions could be explored in this study.

Finally, I want to emphasise that even though I have utilised the terms “developed” and “developing” countries throughout this paper, I find these terms highly problematic. It can be argued that utilising these kind of terms that divide the nations of the world into inherently culturally and/or intellectually advanced (=developed) and non-advanced (=developing) societies only ratifies traditionally West-centered academia. However, I found that diving deeper into this Western bias was out of scope of this article for two reasons. Firstly, the terms are not justified or explained in any of the academic literature I reference in this thesis. Secondly, in order to find better terminology, I would have had to extend my reference list with articles discussing Western thought, colonialism as the backdrop for West-centered academia, and culturally non-biased research. This I found an unrealistic strategy, given the time to complete this paper.

4.3 Potential areas for future research

While diving into the literature about the sustainable development in the fashion industry, I found some potential areas for future research. Elshahat et al (2015) conducted a quantitative study on the profitability of polluting, which I found highly interesting, as it implied that polluting is indeed profitable through short term cost savings. However, there doesn´t seem to be too much research about the potential long-term effects of excessive resource expenditure or pollution. Challenging as it may be, it could be most useful to try and model these effects, since the results could inform decision makers in formulating sustainability policies. This kind of study could also offer support for companies wishing to make long-term strategic decisions that promote sustainable development in their operations.

As mentioned before, there is a need for more research about the true economic and environmental impact of circular business models (Levänen et al 2021, Jia et al 2020). Because of the lack of proof of the economic, environmental or social effectiveness of CE practices, it is not justifiable to recommend implementation of those practices, however alluring they seem. This makes it difficult for governments to formulate new laws that would enforce CE practices, or convince individual companies to take on new ways of operating. More qualitative research on the effects of circular business practices may therefore be necessary to examine the environmental, economic and social profitability of CE in the near future.

As Micheletti and Boström (2016) point out, individual countries may not have the ability to fully prevent large corporations such as Shein, H&M or Zara from causing significant environmental and social damage. Therefore, more understanding on how these companies operate is needed in order to find ways to effectively regulate them. Deeper research into the manufacturing supply chain of individual companies, as well the local operations of the subcontractors, could help prevent more tragedies such as the collapse of the textile factories in Bangladesh (Lund-Thomsen and Lindgreen 2014). In order to decrease the negative impact of the fashion industry, the research focus could be shifted from the high consumption countries (such as USA, Great Britain) into places where the clothes are actually made (such as India, China and Bangladesh)

A special topic of interest for a case study could be the online-retailer Shein. Since its birth in 2008, Shein has been propelled to its status as the biggest online fashion retailer in the world by Gen Z and young millennial shoppers (Bloomberg News 2021). Most likely because of the remarkably rapid success of the company, it has not been a topic of a research paper yet (or at least not a paper that I could have found through the means available to me). Nevertheless, the company´s promptly growing prosperity and its ability to capitalize on a loop-hole in the US import tax law that allows it to ship under 800 dollar parcels to the country tax free (Bloomberg News 2021), could be worth a single case study in the near future. This kind of study could help understand how it is possible for a company such as Shein to take over a major market in the time where corporate social responsibility is a highly spoken-of topic.

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