LUISS

Department

of Business and Management

Course of Corporate Strategy

Giant's approach to CSR in apparel industry:

A comparison between VF corporation and PVH corporation case studies

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Abstract

I CHAPTER

This paper aims to outline the strategies of the next thirty years in the fashion apparel industry. The aim is to demonstrate the centrality of the issues of social and environmental sustainability, as the sector currently ranks fourth for the pollution generated.

In the brief introduction concerning the development of the sector, starting from the second industrial revolution, we report the events that, over time, have shaped this world in a less sustainable way. Since the second half of the 19th century, with the democratisation of fashion clothing, unsustainable developments started to occur due to factory-generated pollution, but also to the form of recruitment of human resources, as employers used to exploit immigrants, mainly women and children, who were subject to long hours of work, with low wages and workplace risks.

During the twentieth century there were two catalyst events: capitalism and consumerism. But sustainability issues continued to generate major disasters, including the famous tragedy in New York, the Great Triangle Shirtwaist Fire of 1911which was the event that gave rise to a union for the formation of a regulation for labor rights in the US apparel industry.

Nowadays, the results of academic research show that young consumers are much more involved in sustainability issues, and that their behaviour is motivated by fashion trends.

Research on clothing consumption behaviour and environmental attitudes has led to three main results

1. There is a lack of knowledge of the negative impacts of apparel products and production, and this is directly related to consumption behaviours.
2. There is a lack of knowledge of the negative environmental impacts during the consumer use phase (laundering)
3. Fast fashion has led to a throwaway mentality

In support of my thesis on the necessary orientation to sustainability by the sector, I reported the studies of the well-known company that gave its name to its personalized index: The McKinsey Global Fashion Index. This index gives a birds-eye view of the fashion industry, tracking financial development and value creation through economic profit, according to the company itself. Spanning regions, price segments and product categories, the McKinsey Global Fashion Index is comprised of public and private companies whose predominant revenue flows are from apparel, fashion, and luxury environment. This index contains the historical path of the sector, and each year lists the companies that have been most successful and highlights the reasons why they won the title of "Super winners" in their report "State of fashion".

From the results of the 2020 post-lockdown report, the Super winners were the companies that followed an innovation-driven strategy focusing both on products and customer experience and focusing on a strong brand equity and on digital (See Figure 1).

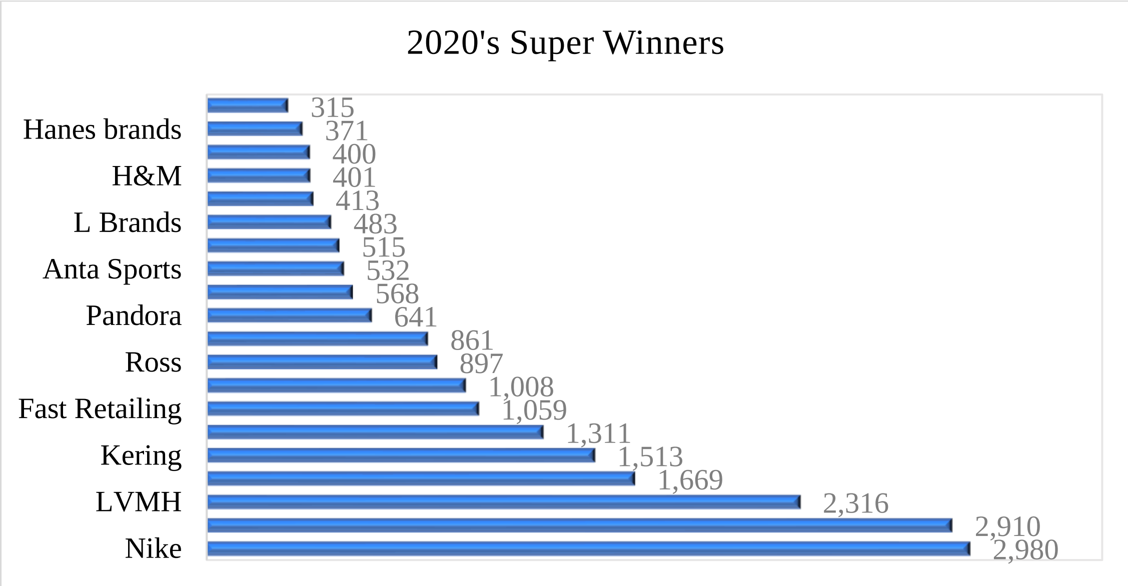

Figure 1. Top 20 Players 2018, by economic profit, $US million (McKinsey & Company, 2020).

The thesis uses two case studies to outline the attentions and specific approaches used by large clothing groups and finds an alignment with the McKinsey global fashion index.

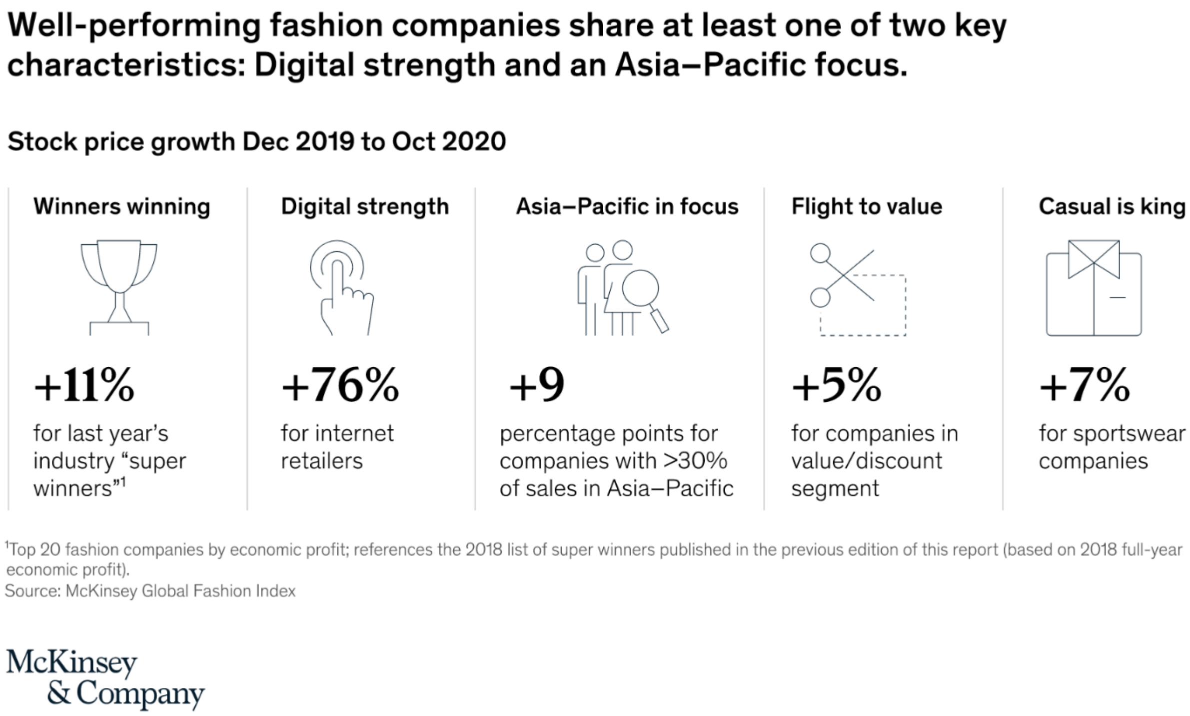

Figure 2. Stock price growth December 2019 to October 2020 (McKinsey & Co., 2021).

As you can see from Figure 2., among the axes of corporate strategies are the communication of research for social and environmental justice, and the orientation towards the application of reporting frameworks focused on sustainability. Among the most used metrics is the GRI framework, which corresponds to the United Nation's Global Reporting Initiative.

II CHAPTER

The environmental issues generated by the textile clothing industry have led the European Union to launch the Circular Economy Action Plan in 2020, which proposes new laws to reduce waste and increase the rate of reuse of materials, for example, with the aim of making all packaging reusable by 2030. With global clothing consumption expected to increase by 63% to 102 million tonnes by 2030, it is also essential to change patterns of consumption.

The most burning social issues of recent years is the tragic event of 24 April 2013: The Rana Plaza collapse in Savar, Bangladesh, which saw workers die in textile factories. Since then, there have been much more consistent actions of social responsibility than in previous years, because the sector has come under the spotlight of media attention. For this reason, the second chapter focuses on corporate social responsibility in the apparel industry. The three pillars of sustainability are explored: environmental, social, and economic.

The environmental pillar supports the European Green Deal and various social campaigns, such as the one launched by Greenpeace in 2011, known as "Detox My Fashion", and renewed every year. The Greenpeace Detox campaign targeted the elimination of hazardous chemicals which are coming under continued and increasing scrutiny, and it is calling on the apparel industry for the elimination of hazardous chemicals form its supply chains.

The social Pillar was developed almost as a framework by academics, as it needs four dimensions to consider: equity, awarness for sustainability, participation and social cohesion. Who historically played a crucial role in the equalization of labour cost is the International Labour Organization (ILO), who played an increasing role toward the amplification of its norms and values with the political opportunity of the Rana Plaza disaster. In this regard, the Bangladesh Accord, born after the tragedy of the Rana Plaza, was signed by over 200 brands, and made more secure over 1,600 factories across the country. The binding nature of the Agreement, crucial to its success, expired on 31 May 2021. Back to April 2021, brands were proposing watered down and weakened versions of the program, which makes it extremely likely that workplace safety in Bangladesh will return to the levels before the collapse of the Rana Plaza. Latest news report that the international retailers sourcing in Bangladesh have agreed to extend for two years the legal arrangements that make them partially liable for failure to meet safety standards at production sites. The Ready-Made Garments Sustainability Council (RSC) will continue to implement the so-called "Agreement" signed by the brands Building Safety" agreement in Bangladesh includes around 200 retailers. It is the European counterpart of the Alliance for Bangladesh Worker Safety, launched at the same time by predominantly American brands, and which had preferred to pass the baton in 2018, believing that he has fulfilled his mission. RSC have now committed until 2023 to assume their legal responsibilities if they do not comply with the rules of the Agreement, which provides to cease collaborations with sites deemed dangerous for employees. The signatory brands would thus tend to reduce the pressure on the prices of their orders, so as not to induce their producers to reduce investment in safety.

The economic pillar focuses on the economical aspect of the practical framework for responsible companies, long-term benefits, but profitability takes priority as well. For economic sustainability, thus, profits of the business are important, without triggering social or environmental damages.

The chapter reports that over time the perceptions of corporate sustainability have changed at stock level, leading to two scandals: the first, which involved The Gap Inc. in 2002 (Figure 3) due to bad social and environmental behaviour has not had any impact on the company’s share price trend, and also on consumer prices, customers have stated that they are willing to turn a blind eye to unsustainable practices if the companies in question were their preferred brands.

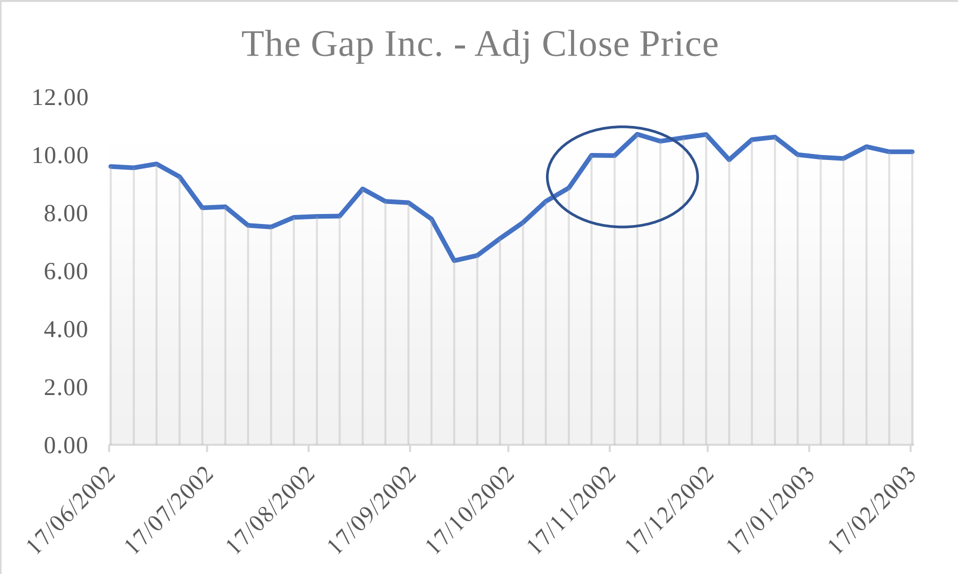

Figure 3. The Gap Inc. Adjusted close price period 17/02/2002-17/02/2003 (Yahoo Finance, n.d.)

The second scandal concerned Coca Cola Co., in 2006 (Figure 4). One of the largest American investment funds sold a large portion of the company's shares, causing a stock collapse in the immediate future, as little attention was paid to social and environmental sustainability. Subjects of this chapter, therefore, are also the Environmental, Social and Governmental (ESG) ratings. Academics recommend that a comprehensive framework for ESG reporting should contain:

- A limited set of metrics primarily related to the company's social and environmental impacts
- A standard setting body modelled on the Financial Accounting Standards Board (FASB) to develop and particularize these metrics
- Reporting infrastructures that allow companies to collect, report, and verify the relevant metrics

In the same way of indicators, the information must be sufficiently objective, verifiable, and broadly accessible to a wide range of stakeholders and regulators; the standards must be adaptable to reflect the evolution of technologies and the standard themselves. It is important also the possibility to compare the impacts of different companies within and across sectors, as well as the possibility to make indicators monetizable or at least to reduce them to a common metric such as quality adjusted life years (QALYs) and disability-adjusted life years (DALYs).

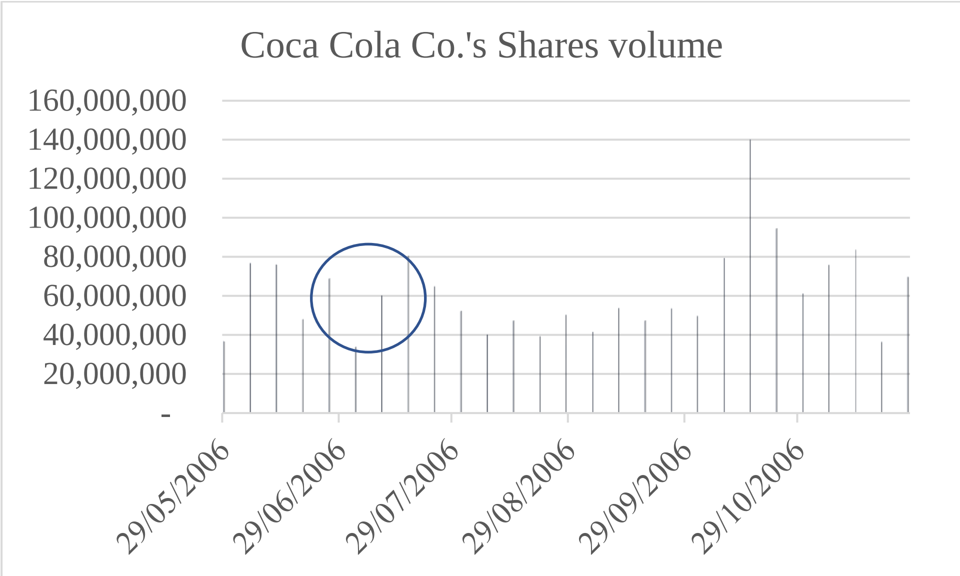

Figure 4. Coca Cola Co. historical volume period 29/05/2006-27/11/2006, weekly data from (Yahoo finance, s.d.).

The reasons why companies must pay immediate attention to sustainability are therefore also attributable to investors. Moody's declares that apparel companies need to adapt to sustainability, invest in decarbonisation and Increase sourcing Transparency. Investors are also named "socially responsible investors". Characterization of social investors are financial, deontological, consequentialist, and expressive. The first motive considered is the belief that socially responsible companies found better financial results, due to the attraction of socially responsible consumers. The second motive, labelled 'deontological', applies to investors who do not wish to profit from unethical or heinous actions. The consequentialist motive features investors and consumers to make investments to reward good behaviour and to provide an incentive for other companies to operate in a more sustainable way. The fourth and last motive which leads social investors to desire transparency about past and current social performance and managerial decision is named "expressive", because stakeholders use their purchases to express their personal identity both to themselves and to others.

As a matter of facts, between 2011 and 2019, the proportion of S&P500 firms reporting their ESG performance changed from 20 per cent to 90 percent. A single brand can be included in more than one benchmark, like Burberry in four different social ratings, or emitted at all, like Prada.

ESG raters can be distinguished by two categories: "active" raters and "passive" raters. One the one hand, the active raters use questionnaires and surveys to request information from companies passive raters run scores by either aggregating publicly available data or by conducting assessments based on public or private corporate reporting. In the social rating paragraph an illustrative summary, made by Chatterji, Levine, & Toffel (2008), about multiple metrics is presented to get an optimal index of social and environmental performance to provide transparency to stakeholders, resulting in the fact that both management quality and historical environmental performance are useful in predicting future emissions; another result is that the objective for the social rater is to minimize the average across firms of the weighted average squared deviation between the rating and environmental performance in each period. After the illustration of the academics' metrics, the Dow Jones Sustainability Indices are presented, labelling the industry of Apparel, accessories & luxury goods "TEX". As November 3rd, 2020, updates, Moncler is considered the leading company in textile apparel fashion industry (TEX index). It entered for the first time the DJSI World in 2019 and Europe and it is recognized as the industry leader in the TEX sector.

This chapter also focuses on the attention that companies must pay to creating a sustainable reporting framework involving subcontractors, in the roles of owners of manufacturing companies. In fact, to avoid lack of attention by subcontractors four possible routes are outlined:

- Encourage suppliers to allow international standards (ISO 9001, ISO 14001, OHSSAS 18001, SA8000)
- Create extended framework
- Implement supplier codes of conduct
- Conduct supplier social audits

III CHAPTER

Given the centrality of the sustainable behaviour of subcontractors for the success of a sustainable policy in the clothing sector, the third chapter is dedicated to the production chain and therefore to sustainable supply chains. Some academics assess that there is a lack of information toward processes and structure of supply chains. Apparel industry has a cardinal role in the global business environment, with many intermediaries throughout its process; in fact, it is considered one of the longest and most complex supply chains and, thus, object of several studies. Given the importance of customer interest in new products, the issue in the apparel supply chain is the necessity for ready-to-wear products; there is no more a seasonal production, because consumption hysteria led to even faster purchase habits of customers. The main issue is related to the presence of many small producers; corporations do not invest in supply chain transparency; the absence in international operations allows companies to follow their 'homemade rules'.

This chapter also discusses the theme of "economy in loops" belonging to the world of circular economy (EC), because Some academics proposed the review of the entire manufacturing supply chain, as it is an essential step towards a more environmentally friendly and sustainable production system based on resource, reuse and remanufacturing. This model could inspire the use of technologies and bio-nutritive raw materials that have no damaging influence on ecosystems. Another theme is the sustainable supply chain management (SSCM), which has grown in parallel with the CE. SSCM scope of existence is to combine various eco-friendly interests in associations by minimizing resource flows and decreasing the unintended destructive effects of supply chain operations practices.

The Reverse Logistic (RL) concept involves consumers' returning commodities to focal companies. RL is the term under which is intended the maximum use of used goods because each product becomes a resource in production of another commodity. To this matter, it is reported an interview to Sebastian Borger, managing director and partner in Boston Consulting Group who is also an expert in fashion and luxury sector. A question related to the second-hand market was answered by him: "Absolutely yes, I think it is one of the elements of the circular strategy or of the fashion world, able to close the loop. These companies help the environmental balance of the industry. They are strategies but not the solution.

In support of what is also reported by the McKinsey global fashion index, is also central to the innovative contribution of digital to improve both competitively and responsibly. In fact, this chapter brings blockchain technology as a winning weapon to improve companies' internal reporting systems. Blockchain technology is democratizing the system of data sharing, by providing distributed database. In fact, once information is registered on the blockchain (provenance, production conditions, food safety and quality indicators, etc.), all actors in the chain have the same copy of a database with all transactions visible. The simplicity of blockchain is essential for transparent and shared supply chain information because the information, once registered, can never be altered again, avoiding any form of corruption and manipulation.

From the fashion event of Pitti Immagine held in Florence last July 2021, it has been highlighted the importance of technological innovation for fashion sustainability, up to the point that UniCredit Start Lab is supporting some of the best innovative companies in this field. Certilogo is one of the supported companies by UniCredit; it is a global platform of consumer engagement and product authentication, that applies Artificial Intelligence (AI) for verifying the authenticity of a product and its traceability.

An interview held with the ex-Senior Vice President for Global Product Licensing of Tommy Hilfiger, a PVH Corporation's brand, Fabrizio Milan, highlighted the centrality of blockchains' systems within the apparel industry for the traceability of supply chains. "Transparency has become indispensable to retain consumers", declares Dr Milan, and traceability is already a widespread asset in other sectors like food, pharmaceuticals, and logistics. Another important contribute by Dr Milan to my research has been the example of the luxury Maison, Christian Dior, which started using traceability to combat counterfeiting of its products. To this purpose it has availed itself of the collaboration of Microsoft and other partners, using blockchain technology.

Several consortia of companies are being formed to track their products. On April 20th, 2021, it has been announced the creation of Aura Blockchain Consortium, and, for the first time, luxury companies who usually are in strong competition between them (LVMH, Prada and Cartier) team up on a joint blockchain project.

This sector has been accused of "greenwashing", thus, there is an extreme necessity to give clear, certified, and detailed answers to consumers. Nowadays, Dr Milan says, “Millennials and Gen Z are the most involved with environmental and social issues and by 2025 they will constitute 85% of personal goods, luxury goods, and they will hardly buy products that cannot guarantee their authenticity”.

IV CHAPTER

The fourth chapter of the thesis is aimed at comparing the case study of two companies, considered "giants" of the sector: VF Corporation and PVH corporation. The first consideration made in considering these companies, was to want to report the sustainable behaviour of two clothing groups, main competitor. The willingness of routing the research toward large groups of companies is because the sector is converging towards a deeper partnership, as reported by the State of Fashion of 2020 by McKinsey, and in fact there is an increase in M&As. To such purpose, own VF corporation, in its reshaping of the business, creating a differentiation between Core brands (Vans®, The North Face® and Timberland®) and Emerging brands, wanted to acquire the brand Supreme®, reinforcing its vision and strategy portfolio brands, despite the difficulties encountered during the tragic lockdown of 2020.

VF corporation has been awarded for being in the list of the 2021 World’s Most Ethical Companies®. VF plans to achieve significant progress in several key areas of sustainability, including people, the planet, their products, the supply chain, raw materials, and facilities, to create a positive global impact. VF’s Sustainability & Responsibility strategy, Made for Change, targets three key pillars to drive transformational change and create value for its business. The strategy is focused on new circular and sustainable business models to (i) connect retail opportunities in new sectors, (ii) scale foundational social and environmental programs to lead the industry toward greater progress at a faster rate, and (iii) empower their brands, associates, and consumers to act with purpose and impact with intention.

The company has prioritized the health and safety of its staff across the supply chain with an allocation of €500 million green bond toward VF’s eligible sustainability projects worldwide in Fiscal Year 2020. To this matter, VF published its Green Bond Impact Report in February 2021, indicating full allocation of the net proceeds to eligible sustainability projects that deliver progress toward the achievement of VF’s sustainability goals including its science-based targets. Passing to the social pillar of CSR, in FY21, it has been published their first Human Rights Report in alignment with the United Nations Guiding Principles on Business and Human Rights. In response, VF and its brands took action to build on inclusion and diversity work by establishing the Council to Advance Racial Equity (CARE). CARE headed the development of a detailed plan comprising internal actions and programs, community partnerships and public policy initiatives to support three specific opportunity gaps: 1) access to education and advancement, 2) economic equity and 3) environmental justice.

Another theme in support of the first index presented in this thesis is the geographical shift towards the area of Asia. Given that China is projected to become the world's No. 1 apparel market by 2023 the company appointed VF's first-ever President of Greater China, and they are in the process of restructuring their APAC operations by moving brands' regional centre from Hong Kong to Shanghai. This will enable their brands to strengthen their in-country presence and gain deeper insights into Chinese consumers. The restructuring process includes the transitioning of VF's Asia Product Supply Hub from Hong Kong to Singapore.

Included in the priorities of supply chain improvements there are the lives of people and the planet. In fact, VF maintains traceability maps to demonstrate the end-to- end (farm-to-front door) traceability of nine iconic VF-brand products. In Fiscal Year 2021, VF increased the number of published maps, and will continue to scale traceability efforts and enhance visibility across all VF brands.

To closely verify the company's commitment to sustainability, the concreteness of the data on the traceability of core brands products was examined. In particular, in the elaboration all the data declared on a product leader of The North Face (the Women's denali 2 jacket) were reported. The results of the research are that 63% of the data are publicly disclosed, and therefore the company still has important steps to complete for a 100% sustainable communication.

The case study on PVH corporation, on the other hand, examines one of the largest apparel companies worldwide, generating $9.9bn in annual revenues and operating in over 40 countries. The core brands for the company are Calvin Klein e Tommy Hilfiger. In 2020 it celebrated 100 years on the NYSE. It is worth noting that only 26 companies celebrated 100years in the NYSE, and PVH is the only one of the apparel industry.

Forward Fashion is the name used for their strategy to transform how clothes are made and (re)used, and the actions that will be taken to move their business and the fashion industry toward a more innovative and responsible future.

PVH's Chief Sustainability Officer, Marissa Pagnani McGowan, highlights the centrality of leadership and collaboration through the entire value chain to establish resilient systems. The pandemic year forced the company to adapt short-term strategies to address immediate needs across the organization, but at the same time enabled it to put more attention on the Forward Fashion strategy together with the reinforcement of their partnerships to inform the apparel industry's future.

The rapid growth of digital tools and innovations for circularity is acknowledged by the group, but they are trying to find a balance also with the characterization of the industry's uniquely human supply chain.

One of the most interesting outcomes from the searches on PVH corporation is the radar of the company on the African region from 2012. Some managers of the company had an extensive experience in the textile and clothing manufacturing, and they jointly decided to locate manufacturing in East Africa, to start again and build a model operation. One of them advocated full verticality and compliance with standard and safety regulations, gaining more control over the location of its suppliers. The company, in 2012, was seriously considering a vertical integration supply chain vision as a long-term strategy (Mihretu & Llobet, 2017).

In April 2014, PVH went to Africa with its main competitor VF Corp., jointly with other apparel manufacturers, transforming this event in the first joint industry effort. This novel approach of organizing a joint mission with VF executives served to emphasize that strategic decisions, such as geographic location, could best be made as an industry, rather than an individual company effort.

The chosen city for establishing PVH's Ethiopian factories is Hawassa, who became an important political and economic centre in the country, as well as having helped to improve the social conditions of the inhabitants of the city and surrounding areas. Nowadays, the Protecting Lake Hawassa initiative -launched in 2018 in partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)- addresses the manufacturing of nearly all products pertaining to the Heritage Brands business. The Hawassa Industrial Park directs solid waste management, afforestation and soil erosion control, and community and stakeholder engagement to protect the lake. With access to safely managed water, sanitation, and hygiene (WASH) becoming increasingly critical during the year of COVID-19, WASH plays a key role in helping reduce risk of outbreaks and slow the spread of coronavirus (PVH Corp., 2020, p. 16).

The combined effects of factors such as wage level, power costs, and duty-free market access coupled with Ethiopia's commitment to creating an environment that supports workers safety, and sustainable production made Ethiopia the clear choice for PVH. The government of Ethiopia put a clear commitment to the textile and apparel sector as a priority sector in the industrialization strategy.

In this section the interview with Fabrizio Milan, who is the ex-Senior Vice-President of Tommy Hilfiger, after covering the role of Senior Vice-President licensing EMEA at Calvin Klein and Tommy Hilfiger about PVH corporation approach to CSR is reported as well. In addition to statements on the company's willingness to take part in all the major associations dealing with sustainable issues, declared the centrality of supply chains for a sustainable business strategy, "because it is one of the business processes that can most positively or negatively affect the sustainability rating of the company (materials, packaging, recycling, environmental pollution, etc.)". The company seems to be in perfect alignment with the trends of the industry to which it belongs thanks to the various projects that it is continually launching, such as in October 2020, Tommy Hilfiger launched a pilot project in the city of Amsterdam aimed at recycling, in different forms and ways, garments already purchased and used by end-users (Tommy for Life).

Introduction

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Nowadays, the results of academic research show that young consumers are much more involved in sustainability issues, and that their behaviour is motivated by fashion trends. Research on clothing consumption behaviour and environmental attitudes has led to three main results that can be read in the first chapter.

In support of my thesis on the necessary orientation to sustainability by the sector, in the first chapter I reported the studies of the well-known company that gave its name to its personalized index: The McKinsey Global Fashion Index. This index gives a birds-eye view of the fashion industry, tracking financial development and value creation through economic profit, according to the company itself. Spanning regions, price segments and product categories, the McKinsey Global Fashion Index is comprised of public and private companies whose predominant revenue flows are from apparel, fashion, and luxury environment. This index contains the historical path of the sector, and each year lists the companies that have been most successful and highlights the reasons why they won the title of "Super winners" in their report "State of fashion".

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The second scandal concerned Coca Cola Co., in 2006 (Figure 2.4). One of the largest American investment funds sold a large portion of the company’s shares, causing a stock collapse in the immediate future, as little attention was paid to social and environmental sustainability. Subjects of this chapter, therefore, are also the Environmental, Social and Governmental (ESG) ratings, which are provided also with some recommendation by academics about a comprehensive reporting framework.

The reasons why companies must pay immediate attention to sustainability are therefore also attributable to investors. Moody's declares that apparel companies need to adapt to sustainability, invest in decarbonisation and Increase sourcing Transparency. Investors are also named "socially responsible investors". Characterization of social investors are financial, deontological, consequentialist, and expressive; at the end of second chapter, it will be explained each characterization.

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Tommy Hilfiger about PVH corporation approach to CSR is reported as well, it is reported a focus on the African region made by the company for its supply chain. In 2012, the company started to build a vertical integration supply chain vision as a long-term strategy. The chosen city for establishing PVH's Ethiopian factories is Hawassa, who became an important political and economic centre in the country, as well as having helped to improve the social conditions of the inhabitants of the city and surrounding areas.

1. The apparel industry

1.1 Introduction

Throughout recorded history, clothing, along with food and shelter has been recognised as one of the primary needs of mankind" (Horn, 1981).

Apparel, clothing and the general notion of identification through textiles has existed for millennia. There are many theories concerning how, why, and when clothing came to be, how we consume it and the associated language and semiotics. Apparel and apparel consumption captured the attention of many intellectuals over the centuries. Philosophers Adam Smith, Immanuel Kant, Jean-Paul Sartre, Georg Simmel, Roland Barthers and Ludwig Wittgenstein have debated its social meaning, specific functions, as a concept of taste, its literal meaning and the distinction between clothing and fashion. Along with the philosophical debates between clothing, fashion and consumption, the apparel industry had notable developments since the Industrial Revolution in the 18^{th} century. Significant moments have been the introduction of the fashion magazine in the 19^{th} century, the introduction of the ready-to-wear garments from design houses such as Dior in the 1950s, the off-shore mass production of apparel started in the 1980s and the fast fashion phenomenon started in the 2000s (Kozlowski, 2012). Fashion clothing prior to the Industrial Revolution was reserved for the elite due to the scarcity of textiles and the time-consuming nature of fashionable garments. These activities were connected to the home or village; all clothing was handmade and passed on to family members. A democratization of fashion clothing verified since the Industrial Revolution, as the mass manufacturing of clothing along with the development of paper patterns allowed for more affordable apparel. Once this pattern of clothing started to change, profit became the main purpose of production. Moreover, globalization and the Internet have further increased the dissemination of fashion and fashion trends.

The process of democratization of fashion clothing is rooted in the development of the processing of fibre into fabric in Europe and North America. By the 1820s, factories in Britain and the USA were producing cloth mechanically, increasing supply and reducing costs. By the second half of 19^{th} century noticeable negative environmental and social impacts developed in industrialized nations. The wet finishing processes of textiles required the use of mordants[1] to fix the colouring agents in dye to the fabric. Working conditions were also problematic, as manufacturers employed immigrants, mainly women and children, who were subjected to long hours, poor wages and occupational hazards.

Moving from the 19th century into the 20th century, two radical developments had established: capitalism and conspicuous consumption. The 20th century saw the introduction of casual wear, and a greater mix of gender, cultural and class codes. On the other side, advances in technology provided cheaper, more comfortable and attractive garments to an increasing proportion of population in Europe and North America. All the mentioned events increased the negative environmental and social impacts of apparel industry. A famous tragedy in New York, the great Triangle Shirtwaist Fire of 1911, was the impetus for union formation and the development of labour rights regulation sin the USA apparel industry. With growing labour and environmental regulation, the cost of producing textiles and apparel began to increase while decreasing profits. As a consequence, companies started to search less costly and less regulated offshore[2] production facilities.

The rise of a delocalized production phenomenon implied a dramatic reorganization of apparel industry, especially in the supply chain management. Nowadays, organizations are virtual, global and fragmented and suppliers have multiple functions. An outcome of this reorganization has been the elimination of supply-chain transparency and the exportation of environmental and social problems associated with apparel production (Kozlowski, 2012). The third chapter of this thesis will deepen the supply chain topic.

The continual purchasing of new and inexpensive apparel, known as fast fashion, has transformed apparel and fashion into a trillion-dollar global industry. The term “over-consumption” has emerged within the apparel industry to describe the abundant and more than necessary purchasing of fashionable clothing by the average consumer. This phenomenon has been demonized as being highly unsustainable due to its low-

[1] The most common mordants are iron, tin, chrome and copper. These were discharged directly into nearby rivers and streams along with other chemicals used in the wet processing of textiles such as organic solvents, surfactants, phenols and chloride (Kozlowski, 2012).

[2] Offshore production is the manufacturing of goods in foreign countries with inexpensive labour. It is considered a way to compete with lower costs of production and imports.

quality, low-price disposable nature. Aside from environmental and social issues, it is becoming a problem for organizations themselves, as there is no clear method to accurately predict what a consumer will buy.

A research led by Kim and Damhorst shows that younger consumers are more engaged in the fashion process, and that their apparel consumption behaviours are motivated by fashion trends (Kozlowski, 2012). Research on apparel consumption behaviours and environmental attitudes has resulted in three major findings:

1. There is a lack of knowledge of the negative impacts of apparel products and production and this is directly related to consumption behaviours.
2. There is a lack of knowledge of the negative environmental impacts during the consumer use phase (laundering)
3. Fast fashion has led to a throwaway mentality

Environmentally friendly apparel appeared in the 1990s and was criticized for offering poor quality products at premium prices. This led to a fall to the wayside as just another fashion trend. However, over the last decade, an "eco-fashion" or "sustainable fashion" movement suggests that this is in fact a movement and not just another fashion trend destined to fall out of customer favor. Mass-market retailers such as H&M, Zara; Nike and Levi's have introduced products that incorporate the use of environmentally preferred materials such as organic cotton and recycled polyester (Kozlowski, 2012).

The McKinsey Global Fashion Index

The McKinsey Global Fashion Index gives a birds-eye view of the fashion industry, tracking financial development and value creation through economic profit, according to the company itself. Spanning regions, price segments and product categories, the McKinsey Global Fashion Index is comprised of public and private companies whose predominant revenue flows are from apparel, fashion and luxury environment (McKinsey & Company, 2020). This index allows to figure out the historical path of these sectors and depicts the so-called *Super winners* each year through the specific report named *State of Fashion*. This report aims to study the factors that lead a corporation up to the top by economic profit analysis, and ultimately takes a look also to the private market in order to identify latent champions.

Nowadays, the coronavirus pandemic led the apparel industry to manage critical issues other than the already existing ones. From the analysis of the whole sector, while the economic profit from 2012 to 2016 declined, since 2016 it has continued to rise, with a 16 percent rise from improved operating margins driven by successful cost cutting and a relatively stable EBITA[3].

[3] Earnings before interest, taxes and amortisation: from 2010 to 2020 EBITA fluctuated between 10.4 percent and 11.7 percent.

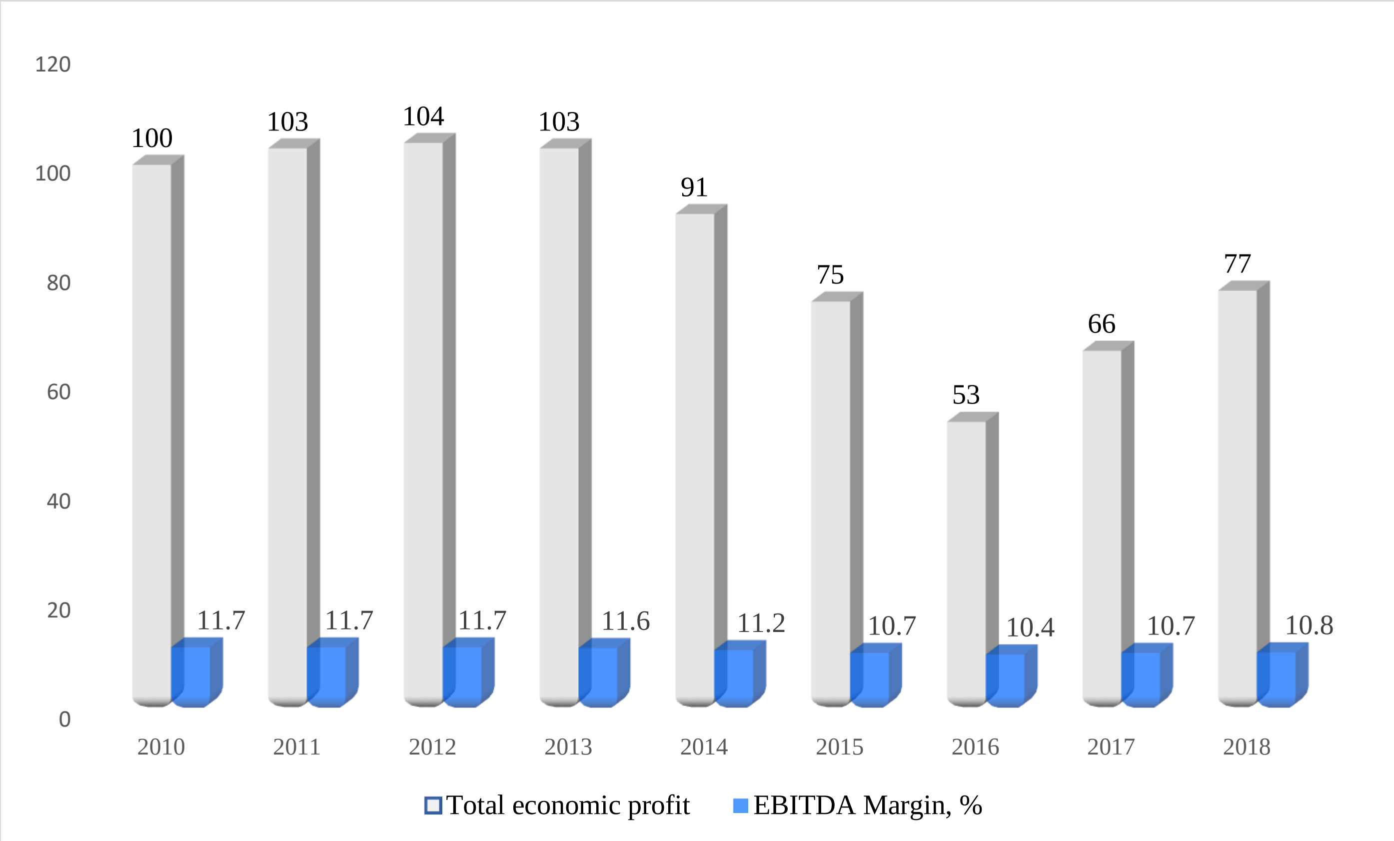

Figure 1.1 Total economic profit, indexed to 2010 economic profit as 100, % (McKinsey & Company, 2020).

The market is generally oriented to a polarisation phenomenon, with both luxury and value and discount players gaining share with an increasing number of consumers choosing to make major investment purchases while otherwise opting for value.

This year of pandemic, the Super Winners are those corporations who followed an innovation-driven strategy focusing both on products and customer experience, and also focusing on a strong brand equity and on digital. This year's top three companies by economic profit are also the most inspiring, according to the industry executives that responded to The Business of Fashion and McKinsey's Annual State of Fashion survey. The first one, Nike, mostly emerged for its commitment to the consumers' community and for the innovation across products, categories and business models; the second winner, LVMH, has been recognised for a contemporary fidelity to its core and reinvention; the third place, gained by Inditex, has been awarded for the flexible business model of the company, which quickly adjusts to new trends. Furthermore, in the sportswear division, there was a strong revenue growth in line with past year's forecast outperformance. Moreover, also luxury players experienced healthy revenue growth, with the first player on the list, Kering, which notably emerged due to the double-digit year-on-year sales growth, and high performance in Asia Pacific markets such as Japan. From a geographical point of view, the US companies benefitted from the large corporate tax cuts, and for this reason several top players, such as Richemont and H&M, have been investing heavily with the aim of securing their future in the long-term.

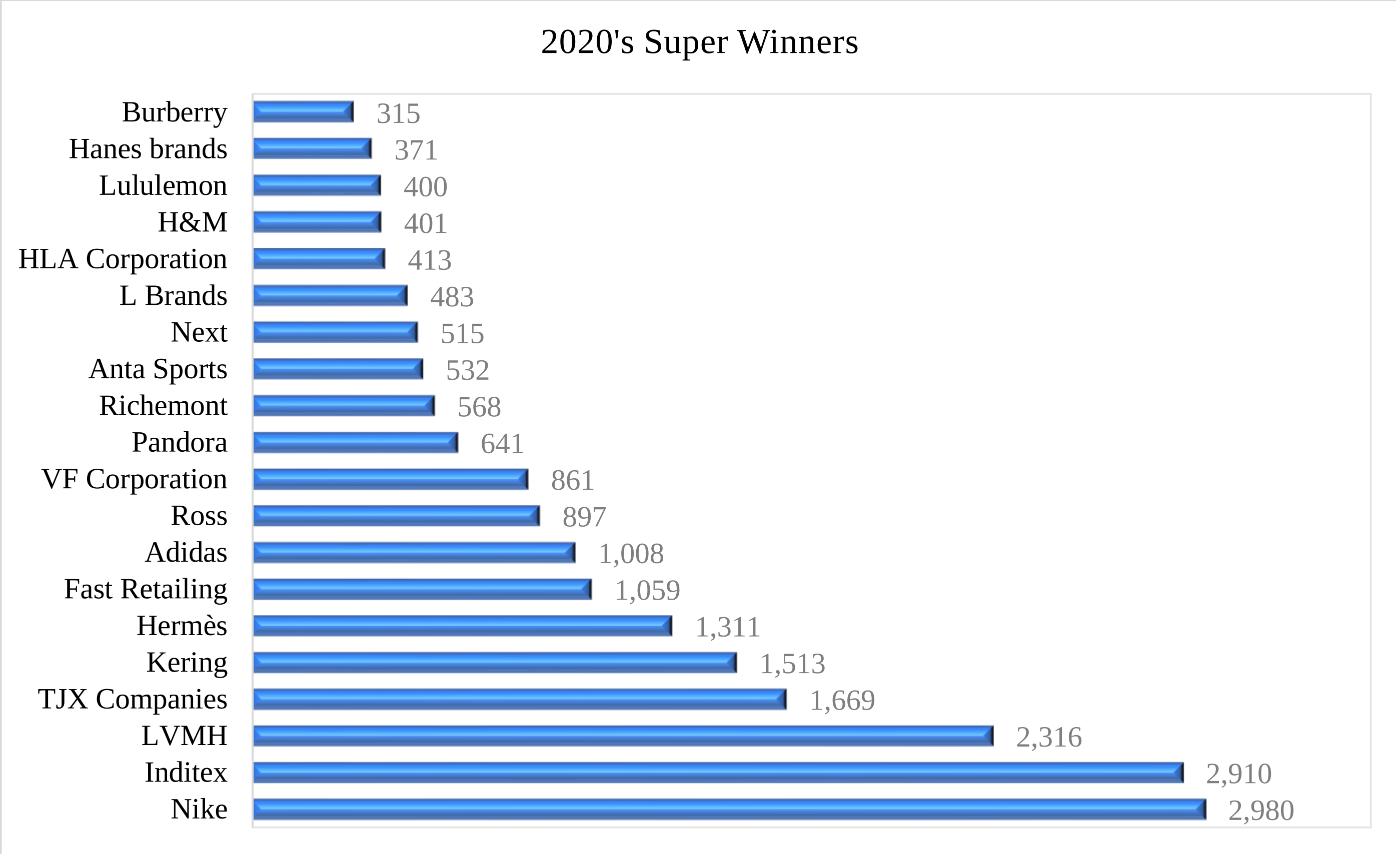

Figure 1.2 Top 20 Players 2018, by economic profit, $US million (McKinsey & Company, 2020).[4]

As it is notable by Figure 1.2, the Super Winners are twenty, with Nike, Inditex and LVMH leading the ranking. What characterize this classification is that there are all public companies, since the economic profit analysis is based all on public data (McKinsey & Company, 2020). However, there are several private companies that would qualify to join the best performing fashion corporations. Family-owned businesses account for more than 65 percent of the Latent Champions. Among these private players, some of them achieved a strong global brand recognition, such as Chanel, considered a status & luxury symbol with estimated revenues in excess of $10 billion. However, Chanel's chief financial officer Philippe Blondiaux reconfirmed recently that Chanel is not preparing for an IPO and that the company decided to publish its financial statement for the first time in 2018 to demonstrate how "amazingly solid financially we are and how we can keep our status as private company for the next few centuries" (BBC, 2018) . On the same wave of Blondiaux, Tory Burch believes that private operations enable companies to deliver on their plans, letting the leaders focus on running the business instead of worrying about the volatility of the stock price or public

[4] Given the disruptions in financial year 2019, it was not possible for McKinsey to calculate our annual list of 20 *Super Winners* accurately. Instead, the company referenced its 2018 list to gauge the fortunes of the elite group. Perhaps unsurprisingly, investors this year had more confidence in the top 20 than in other companies, and S*uper winners* were less badly hit by the April stock market sell-off than their peers were (–26 percent from December, compared with –33 percent on average) (McKinsey & Co., 2021).

scrutiny (McKinsey & Company, 2020). Another company with high brand perception is Rolex, which is one of the few large independent and private luxury watch brands remaining. At the opposite end of the price spectrum, Primark is another private well-performing company, which has a clear customer value proposition. In fact, in the last decade, Primark's expansion path led multiple pressure to traditional discount and value apparel retailer, triggering some of them to renew the format. Decathlon as well experienced high expansion drive, as one of the largest sporting goods retailers worldwide. In fact, their strong private labels, such as Artengo and Kalenji, are becoming more sophisticated to match the rising customer expectations.

Looking ahead, after a strong year in terms of economic profit growth, the prediction for 2020 revenue growth has been reduced from 3.5-4.5 percent down to 3-4 percent, due to the depression of consumer spending rooted in different situations, like, for example, the uncertainty about the lasting of European economic malaise, the Brexit uncertainty, and North American ongoing tariff war. Although the growth forecast shows only a partial slowdown in overall industry growth in 2020, geopolitical and trade tensions alongside the industry challenges are leading to a general anxiety and wariness in fashion for the coming year (McKinsey & Company, 2020).

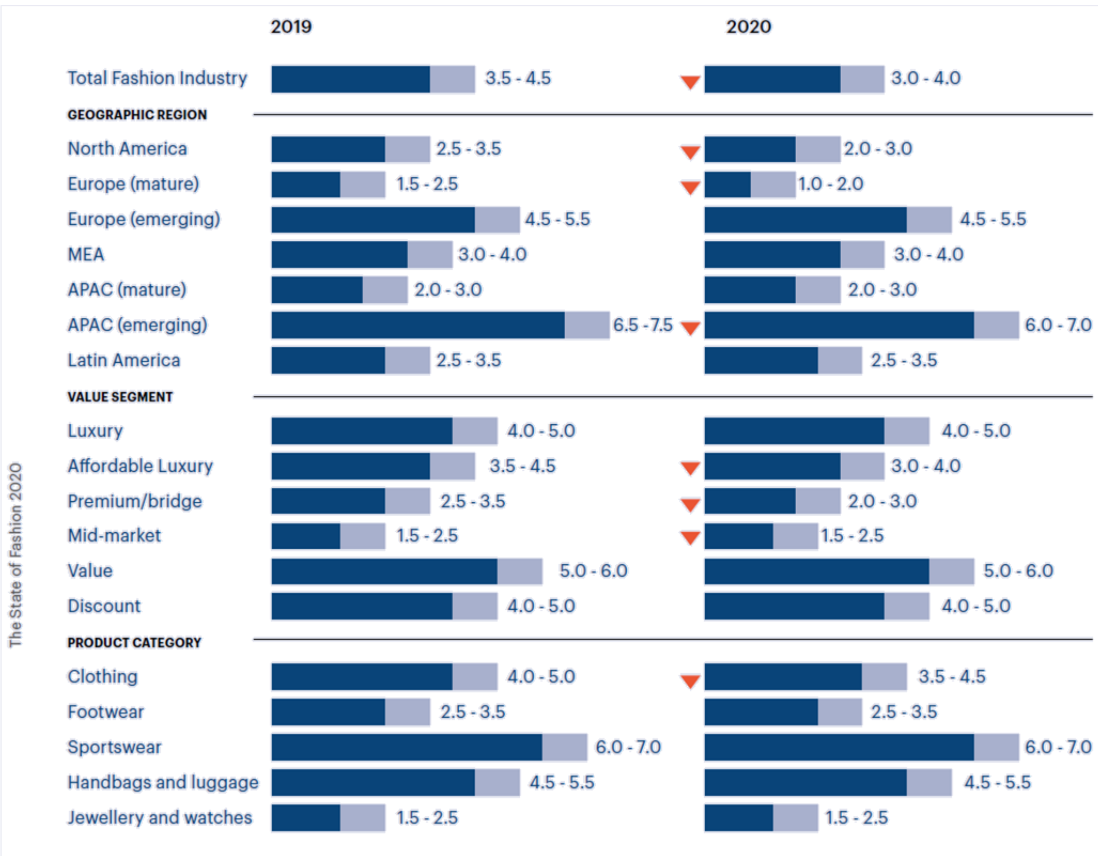

Figure 1.3 Fashion industry sales growth by region, category, and segment, 2019-2020. Year-on-year growth, % (McKinsey & Company, 2020).

Coronavirus has devasted the industry economic profit; form the forecasts made for 2020 FY, there is a 93% drop in economic profit, all indexed to 2016 data (i.e., 100=2016), as it is notable in the following Figure 1.4:

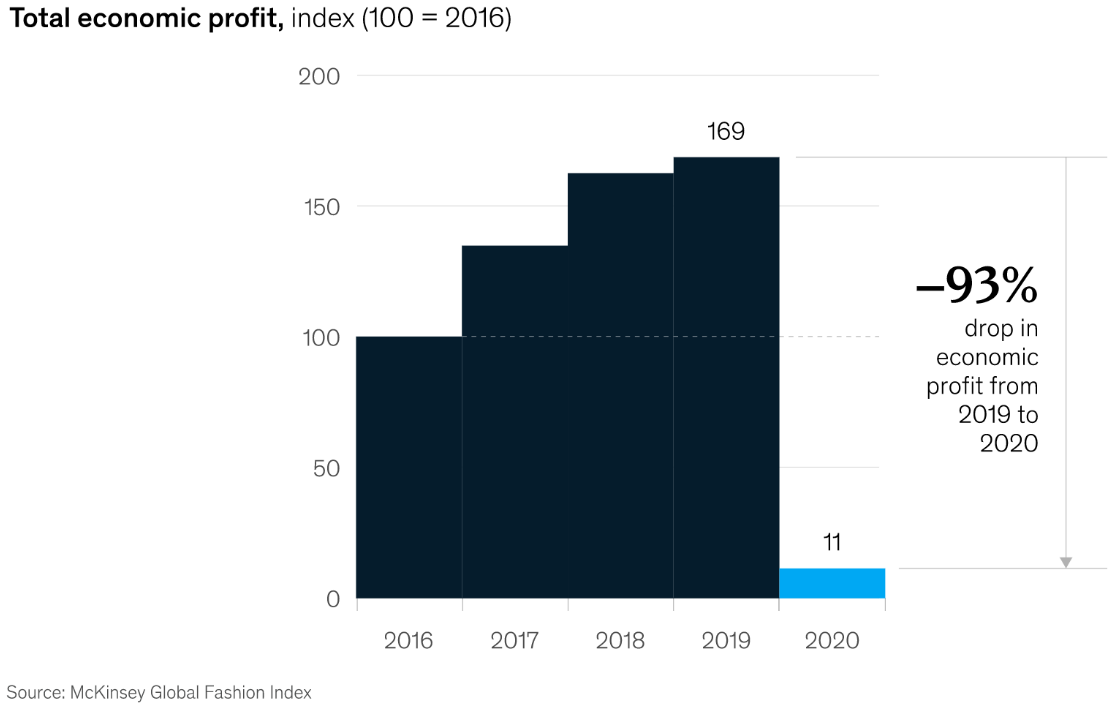

Figure 1.4 Economic profit in fashion industry 2016-2020, indexed to 2016 Economic Profit as 100 (McKinsey, 2021).

Nowadays, with the COVID-19 pandemic, fashion executives are hoping for a speedy global recovery. What is happening is an increasing pressure on performance, a shifting of consumer behaviours, and an acceleration of demand of digital. To enforce this last sentence, it is worth noting that E-commerce players, such as ASOS, FARFETCH UK, Revolve, and Zalando, have consistently outperformed in 2020, as locked-down customers turned to digital devices to shop. By August, such digital-first players were trading 35 percent higher, on average, than they did in December 2019 (McKinsey & Co., 2021).

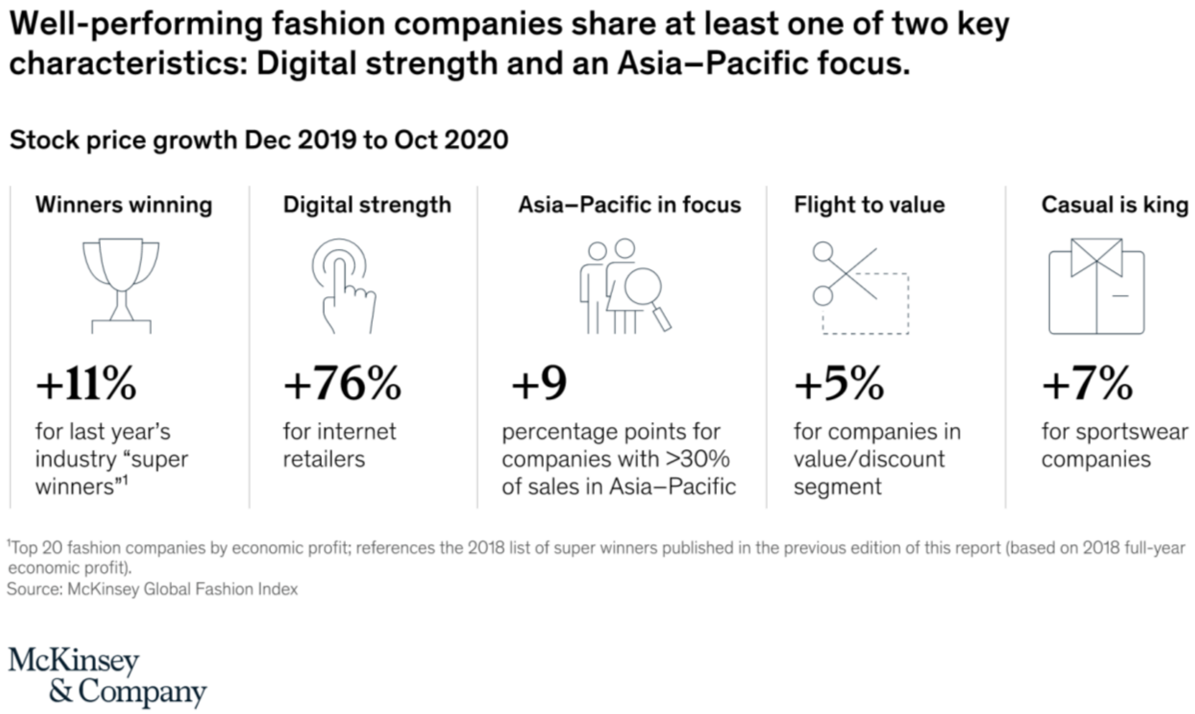

Figure 1.5 Stock price growth December 2019 to October 2020 (McKinsey & Co., 2021).

Therefore, there is an imperative to act to prepare for the *next normal*. McKinsey's calculations, based on the changes in market capitalization over time in their index on global fashion, suggest that the industry's economic profit will fall by 93 percent in 2020 after rising 4 percent in 2019. As all crisis, there is always a negative face and positive one: the dark side of the pandemic is the devasting impact on businesses and jobs; the positive outcome is that many fashion companies exploited this period to reshape their business models, streamline their operations, and sharpen their customer proposition.

Looking forward, McKinsey & Co. is quite optimistic, considering the hypothesis of a more controlled virus over the coming year, thanks to a strong public-health response. At the same time, they consider government interventions to offset the economic impacts. In this scenario they said:

> We predict a 5 to 10 percent sales growth in China in 2021 compared with 2019. Europe, on the other hand, will probably continue to feel the effects of subdued tourist arrivals, leading in 2021 to a 2 to 7 percent sales decline from 2019. Moreover, precrisis levels of activity are unlikely to return before the third quarter of 2022. We expect a similar trajectory in the United States, with sales down 7 to 12 percent next year compared with 2019, and only a modest recovery before the first quarter of 2023 (McKinsey & Co., 2021).

The defining themes in the business of fashion, arisen from discussions with business executives, are mainly the consumer shift and the need to build more efficient, and demand-focused operating models. Thus, living with the virus diminished demand as well as travelling, but it verified a strong digital sprint, and quest for justice.

Consumption hysteria led to a consumer shift

In the modern world, the "desire for fast fashion has created demand for 80 billion new garments per year, which represent a consumption hysteria that far exceeds human needs and planetary boundaries". Therefore, this need for constant variation of people's appearance leads to overproduction and waste. For this reason, apparel companies are seeking integration within the supply chain, as it can be possible to quickly deliver garments to the market before the style changes (Księżak, 2017).

Customer awarness is a driving force for Textile and Apparel industry to accept a Circular Economy (CE). As a matter of facts, consumers are increasingly interested in moving from a linear economy to a circular one. Consumers expect environmentally friendly commodities as they received sustainable development information from the government or through improved public awarness. In this regard, environmental cooperation with customers has also become a critical driver for building a closed-loop supply chain (CLSC) (Jia, Yin, Chen, & Chen, 2020).

Considering the consumer-shift side of the ten themes arisen from the discussions with business executives, the digital pillar is predominant as well as seeking justice. Even though decision makers will have to face management with uncertainty, now more than ever it is important a focus on an omnichannel perspective, emphasizing the importance of sustainability through the value chain. Consumers together with investors will reward companies that treat their employees and the environment with respect.

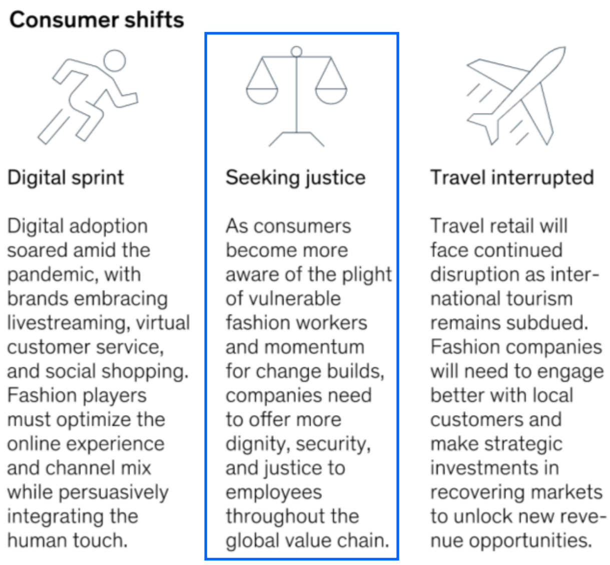

Figure 1.6 Critical themes across consumer-shifts category for the fashion business for 2021 (McKinsey & Co., 2021).

Considering the digital pillar, the State of Fashion 2021 highlights that in 2020, Nike announced the acceleration of its digital strategy and investment in its highest potential areas, which it said would lead to job cuts in stores. Zara said that it plans to cut 1,200 stores over two years and invest €2.7 billion in store-based digital. Even though there is a strong shift towards digital shops, there is no reason to believe that the curtain is falling on physical channels. Instead, from the problems of 2020, a more elegant and adjusted offering will emerge. That offering will combine the best of human and automated services considered to become a sort of “bionic” customer experience (McKinsey & Co., 2021).

Seeking justice

Looking at Figure 1.6, the present dissertation puts in light the centrality of the second theme of the consumer-shifts category. In this regard, during the lockdown period of 2020, even the “West of the World”[5] understood the importance of rights within the working environment, as well as the necessity of adopting proactive “green” strategies in the short-term with respect to the global environment. The concept “Seeking justice”, within corporate field, is a complex prism that is rapidly gaining ground under the generalised term of Corporate Social Responsibility, acronymised CSR and this elaborate depicts the three key fields of CSR (Environmental, Social and Economic) focusing mainly on the apparel sector.

The prominent environmental issues in fashion industry are waste, toxic chemicals and air pollution. For instance, Brennan et al. (2013) investigated how the fashion brands deal with the criticism raised by the Greenpeace about the environmental pollution and the toxic chemicals adoption in the China manufacturing factory. Brennan et al. (2013) researches have shown that, to be environmentally responsible, fashion retailers tend to engage suppliers who are able to provide high transparency about their fabric sourcing, environmental impacts of their production and so on (Caniato F., 2012).

As momentum for change builds alongside campaigns to end exploitation, consumers will expect companies to offer more dignity, security, and justice to workers throughout the global industry. In this regard, the pandemic has amplified the public awarness of social injustice in the supply chain; in fact, from the 2021 State of Fashion report emerges that, in May, the labour rights activist Kalpona Akter painted a picture of the plight of garment workers: “Everyone in the supply chain needs to understand that all the… cancellations [and] not getting money is put on the workers’ shoulders,” said the founder and executive director of the Bangladesh Centre for Worker Solidarity, in an interview for The Business of Fashion Podcast. The above quotation of the activist refers to the cancelled orders and deferred or renegotiated payments during 2020, as factories closed at the beginning of the year. McKinsey made a survey in August 2020 and the results showed that 66 percent of consumers are ready to stop or significantly reduce shopping at a brand if they found it was not treating its employees or suppliers’ employees fairly.

[5] This terminology has been used to emphasize the concept of the “West” and the “Rest”, or Global North and South (Ozkazanc-Pan, CSR as Gendered Neocoloniality in the Global South, 2019).

Firms want to establish a sustainable brand image for consumers, but at the same time managers are not willing to compromise the quality of the end-product by using recycled materials. To avoid this, firms establish manufacturing rules that strengthen the recovery of the hidden secondary value of returned goods. As a matter of facts, many textiles and apparel (T&A) firms started to participate in the recycling chain for commodities in the supply chain. Therefore, what is happening is a paradigm shift by enterprises in relaxing their rules for integrating returned products to cost-effectively improve value; this could translate in a competitive advantage for the company itself (Jia, Yin, Chen, & Chen, 2020).

To the purpose of establishment of a sustainable brand image, companies changed the advertisement strategy, favouring a human-centric strategy that communicates added values such as environmental, social and product related factors (So Young Song, 2018). A human-centred approach to environmental ethics to examine which perceived factors in advertising predict consumers' intention to purchase "green", or sustainably and ethically produced, apparel. So Young Song et al. (2020) used eight different types of green apparel advertisements to build a decision tree model to determine the most influential factors that lead to future purchases of green apparel. Their results show that four factors (perception of the apparel's quality, its uniqueness, caring, and nature connectedness) predict consumers 'intention to purchase green apparel (So Young Song, 2018). Moreover, the results showed that the group which perceives greater levels of apparel quality and caring is the largest segment of consumers (36%): this group corresponds to the so-called high-purchase group, and it perceives greater levels of apparel quality and caring. This result means that the perception of apparel quality and the feeling of caring in green apparel advertising are the most influential factors in predicting high purchase intent. Moreover, a low level of perceived apparel uniqueness will most likely lead to nonpurchase of green apparel in response to an advertisement (So Young Song, 2018).

1.2 Fashion system today

Revenue in apparel market amounts to €1,510,281m in 2021. The market is expected to grow annually by 7.13% (CAGR 2021-2025); moreover, by 2021, 96% of sales will be attributable to non-Luxury goods.

The average volume per person in the apparel market is expected to amount to 0.95 pieces in 2021 (Statista, 2021).

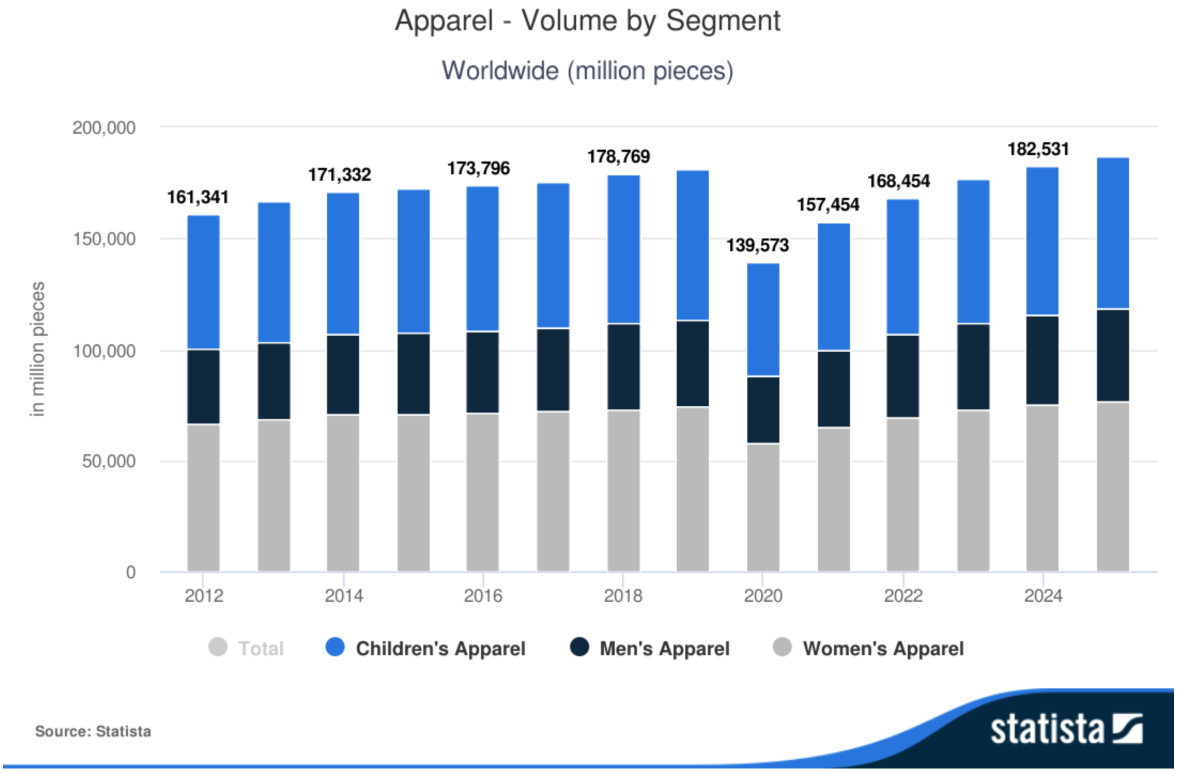

Figure 1.7 Apparel - volume by segment worldwide (million pieces). (Statista, 2021).

In accordance with Figure 1.7, after the immediate period of crisis, the team of McKinsey expects a recovery period characterized by a strong decline in spending and a general decrease in demand across channels, and this is not all attributable to the pandemic. In fact, the characteristic of this crisis, is the speeding-up of slowly emerging customers' mindsets before the pandemic.

Figure 1.8 Critical themes across Fashion-system category for the fashion business for 2021 (McKinsey & Co., 2021).

What the team expects is also the beginning of a period of collaboration even among competing companies (see Figure 1.8), translating in a share of strategies, data and insights on how to navigate the storm, while trying to find a way to share the burden with suppliers, contractors and so on (McKinsey & Co., 2021). Year 2021 is also driven by the imperative of managing commercial opportunities actively, and this applies also to domestic companies more now than ever due to the limitation in tourism.

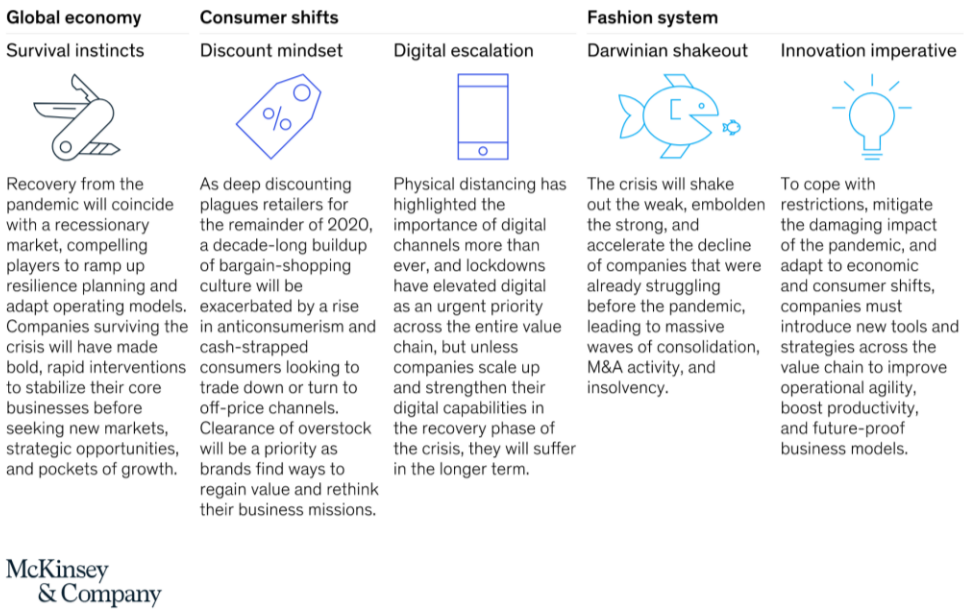

Figure 1.9 Five areas of the fashion industry could be particularly affected by the Coronavirus outbreak (McKinsey & Co., 2021).

Brands will need to focus on three key priorities in the course of 2021 and 2022: accelerate their shift toward a demand-led model, reduce assortment complexity toward a smarter one, and address the recalibration of the price-volume equation. In fact, the events of 2020 highlighted the outperformance of brands that applied more intelligent and smarter assortment compared to those that did not. Moreover, brands will need to become more agile to pursue price optimisation by adopting a measured and sensible approach to production of the industry's new mantra: "Less is more" (McKinsey, 2021).

As consumers become more engaged with green economy sustainability, what arises for companies in fashion industries is the circularity concern, and thus the optimisation of the supply chain is aimed at closing the loop. Circularity is a candidate keyword for the next decade enterprises' strategies. From the State of Fashion report, some actions are suggested for the companies, such as offering rental operations, like subscription services and the option to buy rented products at a discount; borrowing online marketplace techniques to filter, sort and group assortments, or leveraging retailer-curated collections; enabling peer-to-peer business, including resale and rental; creating timeless collections taking in consideration the relevance of the seasonality; enabling returns and recycling; developing data strategies in order to inform business decisions.

Deeper partnership: Giants in fashion industry

Year 2021 is expected to welcome plenty of Mergers and Acquisitions (hereinafter, M&As), as companies may take advantage of low valuations and gain share in fast-growing markets (McKinsey & Co., 2021). A McKinsey survey, 73 percent of the sourcing community expected the trends towards deeper partnerships to accelerate over the coming year. In fact, a deeper number of executives has recognised that cultivating closer relationships is one way to be more resilient within their supply chains, in terms of sustainability, and more flexibility.

1.3 Corporate groups as a way of researching large dimensions

It is worthy of note that the fashion and apparel industry is characterised mainly by large group of firms, such as those fashion in the Super Winners ranking. The economic reasons that determine the growth process can be based on the type of economic activity that the company intends to add to those it already carries out, like to increase the size of the company within the same activity; to undertake activities that arise upstream or downstream from those that are already being realized; to develop activities that have as their object the production and marketing of new products. Therefore, there are mainly three reasons rooted in the growing strategy of the enterprise: increase of bargaining power; research of economies of scale; exploitation of economies of experience. For example, a group sometimes picks a horizontal integration strategy, which typically requires the development of activities in different sectors from the actual business of the group. The main reasons that push the executives to horizontal integration are two: risk diversification and exploitation of economies of scope (Lassini).

1.4 Background of fashion, apparel, and luxury groups

The historical trend of fashion industry is characterised by conglomerations; the reason is attributable to its volatile economy, thus having the know-how of a specific industry is a key lever when diversifying in the same segment. Luxury sector takes advantage from economies of scale, centralization of capabilities (for example, purchasing power, technology, advertising), access to an exclusive network of suppliers, access to capital, access to professional talent, amongst others. The bigger the corporation is, the more control of competitive advantages in a specific industry will have (Segura, Luxury and Fashion Corporations, 2019). The acquisition strategies are driven by plenty of reasons and deals not always see the desired conclusion. Some have established cash cows and start-ups in their portfolio and having to deal different business models and different growth rates and business needs is not easy. In 2018, while Puma and Stella McCartney exited Kering group, Coach acquired Kate Spade and Michael Kors did so with Jimmy Choo.

The current fashion retail paradigm focuses primarily on new acquisitions, but also on liquid design based on crowdsourcing. The Liquid value chain in Fashion is composed by six stages: Design, Plan, Source Production, Deliver and E-Tail. As a matter of facts, technology is accelerating the process of value creation, transforming the traditional linear one into a seamless, liquid value chain. To this purpose, brands are using social media to track customers behaviour, and these insights are analysed through Artificial intelligence (AI). The leader in liquid value chain nowadays is Zara, which is integrating retail and online capabilities (Segura, Fashion Co-Creation: As-a-Service Liquid Design Model, 2018). In the same line there is another trend in fashion retail industry: the new-concept stores, which exploit online insights to customize stores in different locations powering the trend in and around the city where the store is located; the first new concept store has been the Nike by Melrose, in Melrose Avenue in Los Angeles (Segura, Nike´s new retail approach: curated stores, 2018). Other latest news is the automation in manufacturing field, such as automated manufacturing at Adidas, and new skills related to Virtual Reality (Segura, The New Fashion Retail Paradigm, 2018).

There are many variables that differentiate and rank[6] brands: Marketing, which is the most common tool and an important expense in the P&L of al luxury brands; Flagship Stores in key locations; Architecture/design, as retailers are hiring famous architects to create a unique atmosphere in their flagship stores; Museums of luxury houses, margin art and grandeur such as *La Fondation Louis Vuitton* by Frank Gehry; Customer service and loyalty programs; Experience in Every single point of contact (store/internet/app); Quality; Exclusivity, which generally is a concept applied to raw materials; Designers; DNA, intended as the roots and the history of the founders (Segura, Maslow, evolution and Luxury Fashion, 2017).

Nowadays, fashion industry needs an explicit CSR communication and to this purpose many studies are in development. Two studies in particular (Beards, 2008) (Fulton K, 2013), observed specifically communication about eco-fashion and sustainable apparel goods; the first paper analysed websites to determine how sustainability issues are communicated, and the outcome was that the United Nation's Global Reporting Initiative (GRI) is the most useful framework to assess sustainability issues along the supply chain. The second, and more conceptual, article focused on the intensification of eco-fashion and the rhetoric that surrounds it. The authors Fulton and Lee concluded that eco-fashion is based more often on branding and marketing than on actual sustainable and ethical practices of the companies. They noted that many phrases such as fair trade, organic, recycled, and vintage are used to persuade consumers and give them reasons to buy, and note that these promotional strategies often confuse consumers (Candace White, 2017).

The ones that driving companies to sustainable practices are Millenials. New generations demand for sustainable products and a visible and transparent value chain ("from sheep to shop") and this is something that blockchain is already enabling. There are different initiatives that has been launched in these times, such ad *Make Fashion Circular*; this initiative brings together industry leaders including Burberry, Gap Inc., H&M, HSBC, Nike Inc., PVH and Stella McCartney as core partners (Segura, Circular Economy in Fashion, 2019). A definition of Circular Fashion is the following: "Clothes, shoes or accessories that are designed, sourced, produced and provided with the intention to be used and circulate responsibly and effectively in

[6] This ranking refers to the Top luxury fashion retailers from the Maslow's pyramid (Segura, Maslow, evolution and Luxury Fashion, 2017).

society for as long as possible in their most valuable form, and hereafter return safely to the biosphere when no longer of human use (Dr. Anna Brismar, 2017, circularfashion.com).

As the United Nation's Global Reporting Initiative (GRI) is the most useful to assess sustainability issues along the supply chain, after a brief introduction of the landscape of the most important fashion & luxury corporations, we will see which of them applies these guidelines (Segura, Luxury and Fashion Corporations, 2019):

LVMH- Louis Vuitton Moët Hennessy

LVMH is a French multinational luxury conglomerate formed in 1987. It is the only group present in all five major sectors of the luxury market: Wines & Spirits, Fashion & Leather Goods, Perfumes & Cosmetics, Watches & Jewellery and Selective Retailing. LVMH currently employs 156,000 people across the world and reported sales of 46.8 billion euros in 2018. It´s current president and CEO is Bernard Arnault.

LVMH Fashion brands are: Berluti, Celine, Christian Dior, Emilio Pucci, Fendi, Givenchy, Kenzo, Loewe, Loro Piana, Louis Vuitton, Marc Jacobs, Moynat, Nicholas Kirkwood, Pink Shirtmaker, RIMOWA. In July 2019, Stella McCartney and LVMH have reached an agreement to further develop the Stella McCartney House.

Kering

It has been founded by François Pinault in 1963, in Rennes (France). The group's first strategic move dates back to 1990 with its diversification into specialized retail distribution. Its focus then shifted to the luxury industry in the late 1990s. After acquiring Le Printemps and an equity stake in La Redoute, it becomes Pinault Printemps Redoute in 1994, PPR in 2005 and Kering in 2013. Kering is a global Luxury group composed of iconic and dynamic Houses in Fashion, Leather Goods, Jewelry and Watches. In 2018, the Group achieved revenues of €13.7 billion with a EBITDA margin of 32,5%. See Group Key Figures here.

KERING Fashion Brands: Alexander McQueen, Brioni, Gucci, Bottega Veneta, Balenciaga, Saint Lauren.

Richemont

Switzerland-based luxury goods holding company founded in 1988 by South African businessman Johann Rupert. Richemont owns several of the world's leading companies in the field of luxury goods, with strengths in jewellery, watches and writing instruments. In 2010, Richemont acquired the majority of the shares of NET-A-PORTER.COM, the premier online luxury fashion retailer that merged with YOOX Group in 2015. In 2018, Richemont achieved revenues of €10.9 billion with an operating profit of €1,8 billion.

Richemont fashion brands: Peter Millar, Chloé, Purdey, Alaïa, Serapian and Dunhill.

Prada Group

Prada is an Italian luxury fashion house, specializing in leather handbags, travel accessories, shoes, ready-to-wear, perfumes and other fashion accessories, founded in 1913 by Mario Prada. Today, Miuccia Prada is head of Design and Patrizio Bertelli is the CEO. Prada Group achieved revenues of €3 billion in 2017, an EBIT margin of 11,8% with 625 DOS in 70 countries.

Prada fashion brands: Prada, Miu Miu, Car Shoe and Church´s.

OTB

OTB is an international fashion group, the parent company of fashion brands Diesel, Maison Margiela, Paula Cademartori, Marni, Viktor & Rolf, Brave Kid and Staff International. The brand is chaired by Diesel founder Renzo Rosso. In 2017, OTB achieved revenues of 1.52 billion euro and EBIT of 21.5 million euros.

AEFFE

Italian luxury group created in 1988 by Alberta Ferretti. In 2018 achieved revenues of €346,6 million and EBITDA of €43,3 million.

AEFFE brands include Alberta Ferreti, Moschino, Philosophy di Lorenzo Serafini and Pollini.

Arcadia Group

Arcadia Group is a British multinational retailing company headquartered in London and owned by Taveta Investments. Their story began in the early 1900s when 18-year-old Lithuanian émigré Montague Burton established a chain of Burton stores selling ready-to-wear and bespoke suits. In 2017, Arcadia Group achieved revenues of £1,9 billion and EBIT of £119,3 M.

Arcadia fashion brands: Burton, Dorothy Perkins, Evans, Miss Selfridge, Topman, Topshop and Wallis.

Group	Application of the GRI Sustainability Reporting Guidelines
LVMH	Yes
Kering	Yes
Richemont	Yes
Prada Group	Yes
OTB	No
Aeffe	Yes

Arcadia Group	Yes

Table 1.1 Application of the United Nation's Global Reporting Initiative (GRI) framework.

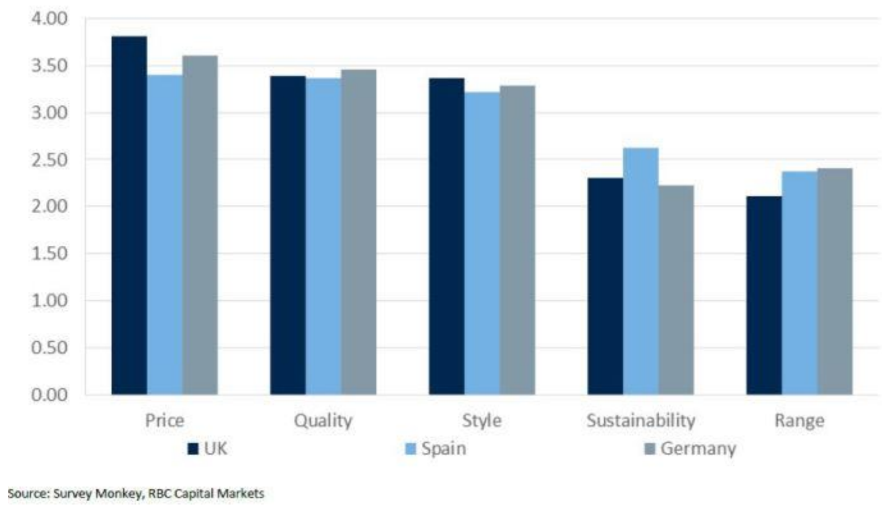

Figure 1.10 ESG in General Retail (Segura, How Cool is Sustainability in Fashion, 2021).

Considering nowadays trends of fashion and apparel industry, Figure 1.10 shows results of the report that surveyed 750 consumers from the UK, Spain and Germany; there appears to be a shift away from fast fashion, with over 60% of respondents 'likely' or 'very likely' to buy higher quality items in lower volumes instead of high volumes of cheaper garments in the next year. This is a negative news for Primark, as consumers move away from cheaper, mass-produced items and look towards more sustainably, longer lasting clothing. Price and Quality remain the two most important factors that consumers consider when buying clothing, followed closely by Style (Segura, How Cool is Sustainability in Fashion, 2021). Another problem with fast fashion is related to the raised concerns, mainly in UK, over the workers at online fast fashion retailers, who do not have sufficient access to unions. In this time of crisis, this may put workers at unnecessary risk.

VF and PVH Corporations

This thesis will use as case study VF Corporation and PVH Corporation, as they are two major companies in apparel industry; in the following paragraphs a brief introduction of the corporations is provided. Further information on how these two groups take in consideration Corporate Social Responsibility will be provided in Chapter 4.

VF Corporation

In October 1899, the company is first established in Pennsylvania as the Reading Glove and Mitten Manufacturing Company by John Barbey and a group of investors. Today VF is an American worldwide apparel and footwear company with more than 25 brands organized into four categories: outdoor, active, work and jeans. In 2017, achieved revenues of $11,8 billion and EBIT margin of 12,7%. See annual report here.

VF brands: Altra, Icebreaker, Eastpak, Smartwool, JanSport, The North Face, Timberland, Eagle Creek, Kipling, Napapijri, Vans, Bulwark, Dickies, Horace Small, Kodiak, Red Kap, Terra, Walls, Workrite, VF Solutions, Lee, Riders by Lee, Rock & Republic, Wrangler (Segura, Luxury and Fashion Corporations, 2019).

PVH Corporation

PVH Corp., formerly known as the Phillips-Van Heusen Corporation, is an American clothing company founded in 1881. Today, is one of the largest global apparel companies with nearly $9 billion in revenues and an EBIT of 632 million in 2017.

PVH Brands are Calvin Klein, Tommy Hilfiger, Van Heusen, IZOD, ARROW, Speedo, Warner´s, Olga, Geoffrey Beene and True&Co (Segura, Luxury and Fashion Corporations, 2019).

1.5 Environmental issues in apparel sector

The most polluting industries ranking is leaded, in order, by Energy & Oil, Transport, and Agricolture. The fourth industry in the ranking of the most polluting ones is the Fashion industry (Omondi, 2021). It uses more water and is responsible for around 10% of global carbon emissions, more than all international flights and ships combined. Moreover, the clothing industry's carbon footprint is growing significantly – with CO_2 emissions estimated to reach nearly 2.8 billion tonnes a year by 2030.

At the same time, wastewater from many textile factories releases toxic substances into rivers, while fibre production causes water pollution, soil degradation and deforestation. An important issue is that less than 1% of material used to produce clothing is recycled into new clothing, considering that clothes are also a major contributor to the problem of plastic in the ocean (Barilla, ESG in pills, issue II, 2020). Washing synthetic materials, such as polyester, nylon, or acrylic, generates plastic microfibres, that consequently releases millions of tonnes of plastic microfibers into the ocean every year, equivalent to more than 50 billion plastic bottles. According to Ellen MacArthur Foundation, every second, the equivalent of one garbage truck of textiles is landfilled or burned. An estimated USD $ 500 billion value is lost every year due to clothing being barely worn and rarely recycled. If nothing changes, by 2050 the fashion industry will use up a quarter of the world's carbon budget (Segura, Circular Economy in Fashion, 2019).

A sustainability ambassador within this sector is Patagonia, which was born with the aim of respecting the environment; from its early ages, the company applied circular economy, transparency over supply chain and a close collaboration with "heavy users" in order to innovate and perform their products.

Patagonia defends the ecosystem since 2011, introducing the *Common Threads Initiative – Reduce, Repair, Reuse, Recycle, Reimagine*. Moreover, it launched other initiatives or programs like *Worn Wear*, that allows customers to trade in their older gear for credit toward buying new products from the company. Nowadays, the California-based company is more than a brand, because it is on the side of democratic candidates that will help protecting natural resources in Nevada and Montana, for example. The company declared it is making the move "because of the urgent and unprecedented threats to our public lands and waters" as described in Fashion Politics. The North Face, which is a direct competitor of Patagonia, and it is one of the brands of VF Corporation's portfolio, is also investing in circular economy with its *Renewed Program* that reduces waste by remaking refurbished clothing (Segura, Circular Economy in Fashion, 2019).

H&M Group, a fast-fashion company, even though it is still far from Inditex Zara in that sense, publishes a *Sustainability Summary* every year. Anna Gedda, Head of Sustainability at H&M, said "a company of our size and scale has a responsibility as well as a great opportunity to lead the change towards a more sustainable fashion and design industry." H&M´s website, like Patagonia one, shows a list of suppliers (name and address) by country to give visibility of their supply chain. Moreover, in 2017, the Swedish retailer launched the *Conscious Collection*, an exclusive collection allowing customers to check where garments are made, what materials are used and who the suppliers are. H&M is also supporting innovative companies that are leading circularity like re:newcell, Worn Again and Treetotextile. Inditex is investing in circular fashion and sustainability in every phase of their value chain. During 2017 it received many sustainability awards like the gold medal in the Sustainability Yearbook, Shanghai Green Supply Chain Good Case Award, the Gartner Supply Chain top 25, Dow Jones Sustainability Index (score 78/100), amongst others. The Spanish retailer created the Join Life, an environmental labelling standard to evaluate the environmental and social impact of the textile sector. Join Life products have been manufactured by suppliers with an A or B rating in the social audit. In addition, all factories where wet processes of the main fabric or component take place, must be evaluated by the Green to Wear Standard of environmental sustainability and receive a classification of A or B, or have a continuous improvement plan. Customers will continue to purchase fashionable, trendy basics while looking for fresh wardrobe renewal, and it is key that those corporations (Inditex, H&M, GAP, Fast Retailing, C&A…) invest in sustainability and circular economy to respond to this "non-sustainable", self-fulfilment need. The impact in the industry and ecosystem will be huge as those companies produce tons of textiles every year (Inditex produces more than 1 billion clothes a year, for example) (Segura, Circular Economy in Fashion, 2019).

In clothing industry, a separate discussion about DENIM & sustainability can be made, as this is probably the most "discriminated" product category in the Fashion industry. The United Nations Sustainability report says that, in order to make a single pair of jeans, 10,000 litres of water are required. In 2010, Levi's launched the *Better Cotton Initiative*, which trains farmers to use less water, pesticides, insecticides, and synthetic fertilizers when growing cotton plants. Other brands that make sustainable jeans using eco-friendly materials and production methods are Everlane, Warp + Weft or Frank and Oak (Business Insider) (Segura, How Cool is Sustainability in Fashion, 2021).

On the regulatory front as well, it is possible to see some signs change. In fact, the EU in 2020 has launched an updated Circular Economy Action Plan[7], which includes new legislative proposals to reduce waste and increase recycling rates, with the aim to make all packaging reusable or recyclable by 2030. The new Circular Economy Action Plan presents measures to:

- Make sustainable products the norm in the EU;
- Empower consumers and public buyers;
- Focus on the sectors that use most resources and where the potential for circularity is high such as: electronics and ICT; batteries and vehicles; packaging; plastics; textiles; construction and buildings; food; water and nutrients;
- Ensure less waste;
- Make circularity work for people, regions and cities;
- Lead global efforts on circular economy (European Commission, n.d.).

The UK government has also declared it will introduce an extended producer responsibility system for packaging in 2023.

With global clothing consumption expected to increase by 63% to 102 million tonnes by 2030, it is also essential to change patterns of consumption. A societal move towards repairing, re-wearing or renting clothes could help encourage more sustainable behaviour. Concerted action from companies and governments will give the best chance of a sustainable future (Barilla, ESG in pills, issue II, 2020).

Considering again single companies, on the one hand, over 60% of Adidas products will be made with sustainable materials like recycled polyester or sustainable cotton, moving closer toward its objective to end plastic waste. Adidas has in fact committed to using only recycled polyester by 2024. The company has been using exclusively sustainable cotton since 2018 and has also been collaborating with the environmental organisation Parley for the Oceans. This year, it aims to produce 17 million pairs of shoes with recycled plastic waste collected from beaches and coastal regions, after more than 15 million in 2020. It is also continuously

[7]The Circular Economy Action Plan is one of the main blocks of the European Green Deal, Europe's new agenda for sustainable growth.

expanding its vegan product offer and completely renounces the use of fur and creating partnerships for the development of plant-based leather, recycled cotton as well as a particularly climate-friendly running show. In partnership with suppliers, Adidas has committed to achieving global climate neutrality by 2050 and in its entire supply chain. Company-owned photovoltaic systems with a current installed capacity of 1.4 megawatts generate green electricity and it has reduced its overall carbon footprint at its sites by more than 50 percent compared to 2015. The Adidas sustainability bond amounting to €500 million issued in September 2020 was five times oversubscribed. Proceeds from the offering will be used in endeavours like procuring recycled materials, investing in renewable energy production, and supporting underrepresented communities, the press release added. (Barilla, ESG in pills, 2021).

On the other hand, recent failures in sustainability promises comes from the Victoria's Secret's lack of transparency: it has failed to prove it has eliminated toxic waste from the supply chain by 2020. Additionally, it sources cotton from the Better Cotton Initiative but the company does not list the exact amount or extent to which this cotton makes up their clothing (Barilla, ESG in pills, 2021).

1.6 Social issues in apparel sector

Multinational corporations (MNCs) have been in the front line for expanding their business operations to locations beyond their own countries and for employing low-wage workers (Doh, 2005). However, the rising media attention and public pressure have led some of these MNCs to adopt pro-social activities. CSR programs and activities have the potential to impact significantly the living and working conditions of the mostly female Global South laborers in the global economy. In this regard, there is a growing discussion around gender and CSR from feminist perspectives (Ozkazanc-Pan, CSR as Gendered Neocoloniality in the Global South, 2018).

Pearson in 2007 has noted CSR initiatives do not necessarily remedy gender inequalities given that they exist in "labour markets that are themselves gendered institutions which reflect socially constructed divisions of labour". Women are concentrated in the lower and so-called less skilled end of the occupational hierarchy and are therefore particularly vulnerable to both structural and individual discrimination and abuse in terms of working conditions, levels of pay, insecurity of employment and harsh or undignified employment (Pearson, 2007). Using the deaths of women workers in Mexico's Maquiladoras as her example, Pearson's analysis sheds light on the fact that a narrow and instrumental version of CSR dominates corporate (in)action in particular circumstances, and based on this finding, she states that a much broader sense of business responsibility to society is necessary in order to further an effective and comprehensive CSR agenda.

There are several facts from the apparel industry. For example, H&M is known for underpaying its overseas workers. Despite promises, David Savman, H&M's global head of production, says none of the workers are being paid living wages due to disagreements on what qualifies as a fair figure (Barilla, ESG in pills, 2021). An important event that caused several developments around CSR in this sector dates back to April 24th 2013: The Rana Plaza collapse in Savar, Bangladesh.

In the second chapter of this thesis, the “social pillar” paragraph will discuss further the Rana Plaza disaster and other issues and development about the social aspects within the supply chain of the clothing industry. Furthermore, it will be showed how social sustainability is a part of strategic goals as policies and commitments, and as several actions have been developed along the supply chain to promote human rights, labour conditions, social development and product responsibility, with external stakeholders’ collaboration (Marta Elisa Bubicz, 2020).

2. CSR in apparel industry

2.1 Introduction

In 2000, the total expenditure on clothes worldwide has been around US$1 trillion. Within apparel industry work more than 26.5 million employees, 70% of whom are women, and the concept of corporate social responsibility is gaining every year more importance with new “tailor-made” solutions, continuously found and applied, given the strong labour intensity that characterizes this sector. However, there are still many stakeholders, especially among small-medium enterprises (SMEs,), whose knowledge about CSR is insufficient (Księżak, 2017).

Drivers of CSR in the clothing industry are like those associated to other sectors, like stakeholders’, NGOs’ and general public’s pressures, global warming or the willingness to gain competitive advantage. Perry and Towers (2013) found the main issues of CSR in clothing industry mainly related to working conditions, working hours and wages; given that offshore and out-sourcing are common ways to operate through the supply chain, clothing firms have to apply the same ethical view they adopt in their headquarters even outside. Most of the times it happens that the company itself pays attention to ethical principles, but its subcontractors are negligent. There are four possible routes in order to avoid this lack of attention of subcontractors:

- Encourage suppliers to allow international standards (ISO 9001, ISO 14001, OHSSAS 18001, SA8000)
- Create extended framework
- Implement supplier codes of conduct
- Conduct supplier social audits

In 2015 Abreu identified some drivers, mechanisms, practices, and outcomes of CSR in the apparel industry, through daily developments of socially responsible methods aimed at providing healthy working conditions, reducing environmental damage, helping local communities, and maintaining optimal relations with stakeholders (Księżak, 2017). Increasing transparency over all stakeholders as well as reducing corruption contributes to increase the enterprise value of the company. A scholar proposed several solutions for CSR policy regarding environmental-friendly production and eco-packaging, due to the resource-intensive characterization of the apparel sector; furthermore, she highlighted the necessity for safe working conditions and worthy salaries of employees through the whole value chain (Księżak, 2017).

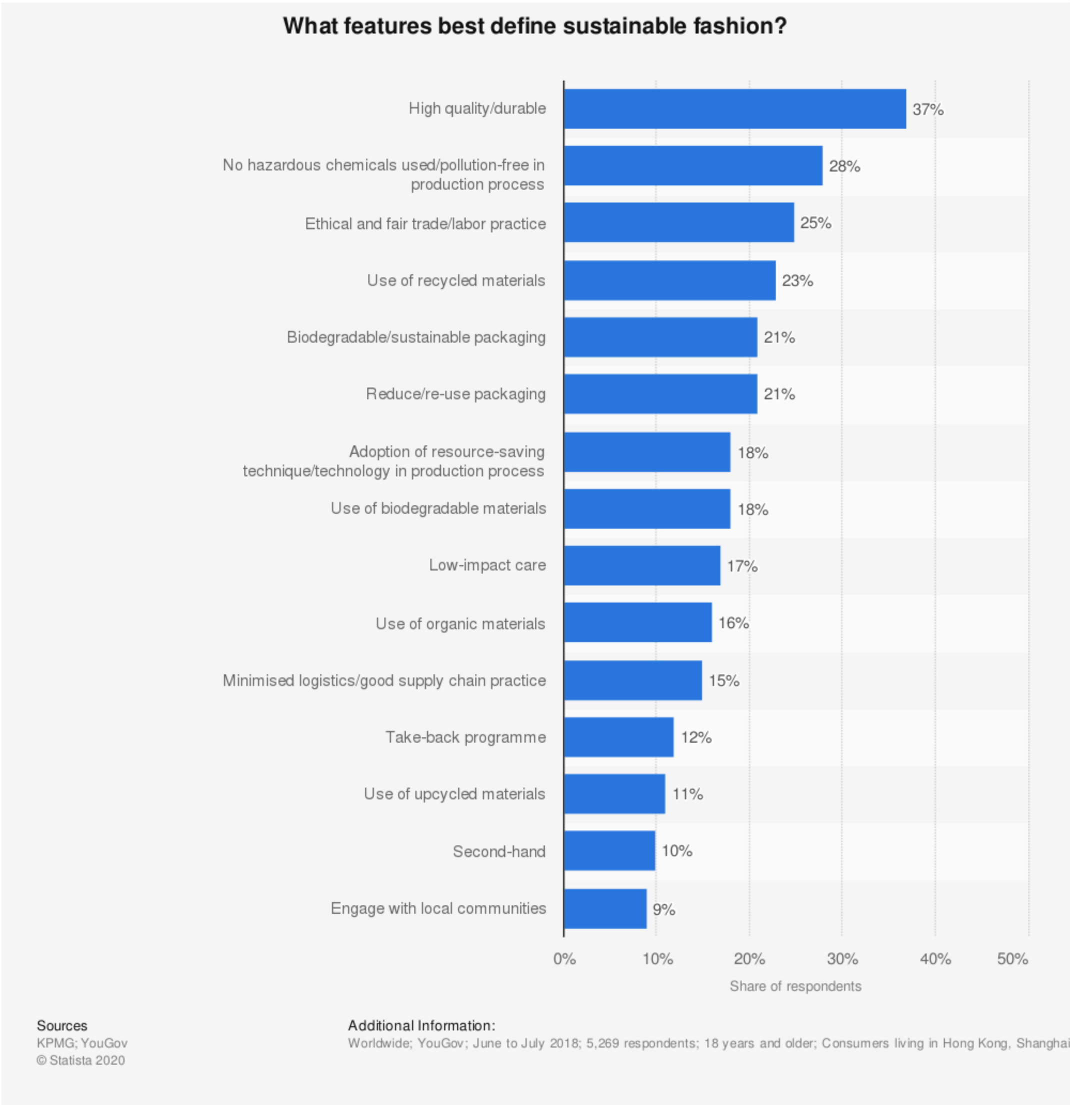

Figure 2.1 What features best define sustainable fashion? (KPMG, 2019)

Figure 2.1 shows the key features defining sustainable fashion in 2018. According to this survey, 37% of respondents affirmed that the durability of garments is a feature of sustainable fashion.

CSR and CSR Image conceptualizations

Through an analysis of 37 definitions of CSR provided in the academic literature, Dahsrud (2008) demonstrates that 88% of the proposals include the “interaction with stakeholders” (Pérez & Rodriguez Del

Bosque, Measuring CSR Image: Three studies to Develop and to Validate a Reliable Measurement Tool, 2012). Some of the dimensional proposals most associated to the study of CSR are summarized in Table 2.1.

Perspective	**Referential author**	**Dimensionality**	**Other references**
CSR pyramidal model	Carroll (1979)	Economic Legal Ethical Philanthropic	Wartick and Cochran (1985); Maignan et al. (1999) – Corporate citizenship; Joyner and Payne (2002) and Schwartz and Carroll (2003)
Sustainable development theory	UN World Commission on Environment and Development (1987)	Economic Environmental Social	Van Marrewijk (2003), Panapanaan et al. (2003); Panwar et l. (2006); Jamrozy (2007) and Timur and Getz (2009)
Stakeholder management theory	Freeman (1984)	Shareholders Customers Employees Society Others	Clarkson (1995); Decker (2004), Maignan and Ferrell (2004) and Pérez and Rodríguez del Bosque (2012)

Table 2.1 Dimensional perspective of CSR: illustration of multiple theoretical and methodological approaches applied to CSR (Pérez & Rodriguez Del Bosque, Measuring CSR Image: Three studies to Develop and to Validate a Reliable Measurement Tool, 2012).

The pyramidal approach is presented by Carrol and defines CSR as all the economic, legal, ethical and discretionary expectations that society has of organizations at a given point in time (Carrol, 1979). A second perspective to explain the multiple dimensions of CSR is related to the Sustainable development theory; this perspective defines CSR as a "Context-specific, strategic, proactive, and synergistic philosophy of doing business according to which corporations need to pay attention to economic, environmental and social issues in a balanced way" (Panwar et al., 2006). To conclude, the third most frequent perspective of CSR is provided by Freeman (1984) within the stakeholder[8] theory (Pérez & Rodriguez Del Bosque, Measuring CSR Image: Three studies to Develop and to Validate a Reliable Measurement Tool, 2012). In general, the stakeholders' theory classifies a business as an open and flexible system with multiple actors in a network of relationships.

Another study on CSR on research and methodologies of CSR and Corporate Social Performance (CSP, hereinafter) has been conducted by De Bakker et al. in 2005, over a thirty-year period (1972-2002). The outcome of their research is that both CSR and CSP tend to be cumulative, but also to purpose new constructs and new linkages. Alcañiz et al. (2010) through a content analysis studied epistemological evolution of the

[8] Freeman (1984) defines stakeholders as "those groups or individuals who can affect or are affected by the achievement of the organization objectives or are those actors with a direct or indirect interest in the company".

CSR field in relation to management and marketing disciplines (White, Nielsen, & Valentini, 2017). CSP became a pillar of study for the application of theories of CSR to corporate reality in the 1980s. Actually, the three key themes of focus where: stakeholder theory, business ethics and corporate social performance. CSP is articulated in two approaches: the first one is focused on a “fair process” which combines stakeholders’ and company’s interests; the second approach is focused on socio-economical products and on their measurement (Lezioni di economia aziendale, 2015/2016).

Considering the above provided definitions, sustainability is perceived as having three dimensions: social, economic and environmental, which is labelled as the triple bottom line (TBL). Economic dimensions are the major competitive concern of many organizations negligent of the other two dimensions of the TBL; the outcome is that the organization may lose its credibility, reputation and corporate image (Gbolarumi, 2021). An example has been The Gap, Inc. which faced in early 2000s adverse media publicity and customer boycotts, because of standard violations in their supplier’s manufacturing facilities (Księżak, 2017). In the following paragraphs the TBL concepts will be treated as pillars of CSR. An article by The Guardian reported the following:

> An Indonesian worker from a Gap plant in north Jakarta described how low wages left employees unable to buy enough to eat. The union accused Gap of systematically driving down wages. "Gap does not readily disclose the locations of its factories. But now workers in Gap contractor factories have reported abuses that demonstrate a pattern of global exploitation," it says (Lawrence, 2002).

Even though the scandal has been highlighted by a famous newspaper like The Guardian, the financial consequences have not been so disruptive, as it is notable in Figure 2.2.

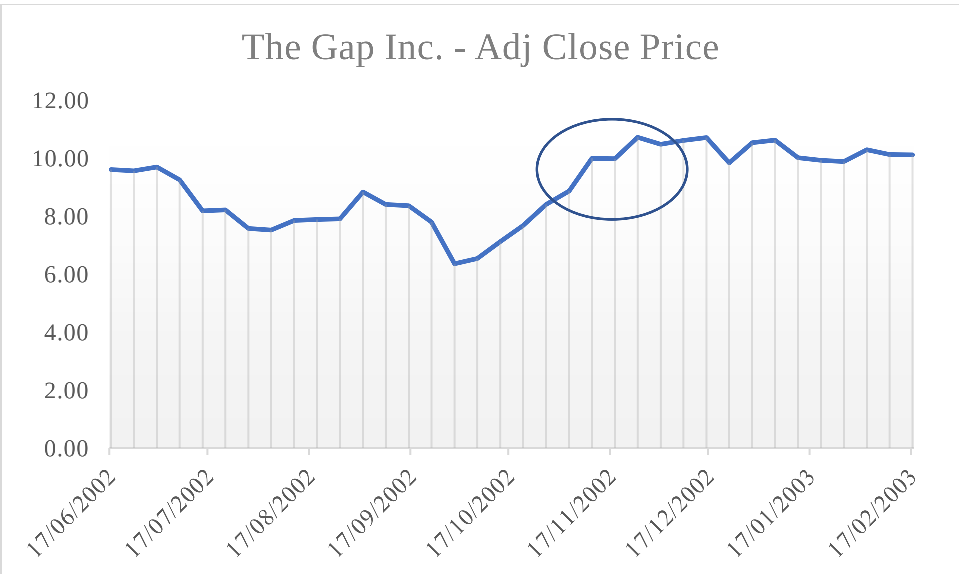

Figure 2.2 The Gap Inc. Adjusted close price period 17/02/2002-17/02/2003 (Yahoo Finance, n.d.).

Therefore, in the early 2000s the sensibilisation among customers was almost null. In fact, the already mentioned article also reported the following:

> Research International polled 1,500 young urban shoppers in 41 countries and found consumers were prepared to turn a blind eye to ethical malpractices when they involved favourite brands (Lawrence, 2002).

In the following chapters, it will be reported the evolution of financial consequences in the context of corporate sustainability scandals occurred in the following years.

2.1.1 Environmental pillar

Nowadays, manufacturing firms are focusing more on the environmental pillar than on the social and economic pillars. In fact, many projects are in state of development to find a way to reduce the carbon footprint[9], water and energy consumption, packaging waste (Gbolarumi, 2021). Likewise, considering the Recovery Plan launched by the European Union, the challenge for the Next Generation EU concerning the environmental impact is in pole position for the next twenty years. In fact, the European Green Deal is considered an essential booster and recovery tool for the European economy.

- The first driver of the European Green Deal is based on the idea that the Commission must ensure an effective carbon pricing throughout the economy, by both extending the European Emission Trading system (ETS) to new sectors and aligning taxation with climate goals. However, one of the major risks is of industrial delocalization into countries with less strict carbon rules (Belladonna A, 2020).
- The second driver of a transition toward a sustainable economy are sustainable investments and discovers the energy sector at the forefront of the transition, with its 25% of EU GhG. A crucial element for a smarter Europe, is the investment in transport infrastructure.
- The third driver is represented by a new EU industrial strategy, because a more competitive European industry will be essential to face the economic consequences of the coronavirus outburst. The first step is to increase investments towards R&D. Among the other objectives of the new European industrial strategy (Belladonna A, 2020), joint environmental standards, a common energy taxation and shared support measures for clean technologies can help to create cleantech companies of European dimensions.
- The fourth, and last, driver of the Green Deal is the Just Transition Mechanism (JTM), which is a compensation scheme to overcome the problem of compensation distribution among EU

[9] One of the first commitments of the European Green Deal is to reduce greenhouse gas emissions by 40% by 2030.

territories. To this purpose, the JTM will use the Just Transition Fund (JTF) to finance the territories with high employment in coal, lignite, oil shale and peat production, as well as territories with greenhouse gas-intensive industries, which could be severely impacted by the transition. In practice, the European Commission, through the Next-Generation EU Plan, is proposing to strengthen the JTF with additional €30 billion funding, with a further €2.5 billion under the next long-term EU budget. This brings the total of the JTF to €40 billion (instead of the initial €7.5 billion) (Belladonna A, 2020).

Within the clothing sector, Greenpeace launched a campaign in 2011, known as Detox My Fashion, which every year is reorganized. The objective of this campaign is to conduct the fashion sector to a sustainable one, by inviting fashion brands to manufacture in a more environmental responsible way. Greenpeace addresses first of all Fast Fashion brands and fashion houses. The Greenpeace Detox campaign targeted the elimination of hazardous chemicals which are coming under continued and increasing scrutiny, and it is calling on the apparel industry for the elimination of hazardous chemicals form its supply chains. The amount of chemicals used for 1kg of finished textiles varies between 1.5-6.9kg. approximately one quarter of world consumption of insecticide is spent for textile industry. The world average consumption per capita in 2015 has grown to 13kg from 2kg in 1900's (Ozek, 2017).

Figure 2.2 shows the key metrics for the companies with activities in the apparel sector that disclosed through CDP's water questionnaire in 2019; this questionnaire has been developed by CDP in the context of a business case for tackling water pollution in apparel and textile value chains. The two groups, PVH corp. and VF Corporation, which will be presented in Chapter 4 present respectively a CDP Water Security Score of A- and B-.

Organization	Country	Primary industry	Disclosure	CDP Water Security Score 2019	Value chain engagement with suppliers and customers	Conduct a water-related risk assessment	Identify water pollution risks which pose a substantive financial or strategic risk to the company
adidas AG	Germany	Apparel	Public	B	●	●	●
Ahold Delhaize	Netherlands	Retail	Public	D	✕	●	✕
Asics Corporation	Japan	Manufacturing	Public	B-	✕	●	✕
Associated British Foods	United Kingdom of Great Britain and Northern Ireland	Retail	Public	B	●	●	✕
Bic Camera Inc	Japan	Retail	Public	D	✕	✕	✕
Burberry Group	United Kingdom of Great Britain and Northern Ireland	Apparel	Public	B	✕	●	●
Capri Holdings Limited	China, Hong Kong Special Administrative Region	Retail	Non-public	N/A	Private	Private	Private
Citizen Watch Co.,Ltd.	Japan	Manufacturing	Public	B	✕	●	✕
Clicks Group Ltd	South Africa	Retail	Non-public	B	Private	Private	Private
Don Quijote Holdings Co., Ltd.	Japan	Retail	Non-public	C-	Private	Private	Private
Eclat Textile Co Ltd	Taiwan, Greater China	Apparel	Public	C	✕	●	✕
Fast Retailing Co., Ltd.	Japan	Retail	Public	B	✕	●	●
Foot Locker Inc	United States of America	Retail	Non-public	N/A	Private	Private	Private
Formosa Taffeta Co.	Taiwan, Greater China	Apparel	Public	B	✕	●	●
Foschini Group Ltd	South Africa	Retail	Non-public	F	Private	Private	Private
Gap Inc.	United States of America	Retail	Public	A-	●	●	✕
Gildan Activewear Inc.	Canada	Apparel	Non-public	B	Private	Private	Private
Guala Closures Group	Italy	Manufacturing	Public	N/A	✕	●	✕
H&M Hennes & Mauritz AB	Sweden	Retail	Public	B	●	●	●
Hanesbrands Inc.	United States of America	Apparel	Public	B-	●	●	✕
Hermes International	France	Apparel	Non-public	B	Private	Private	Private
Inditex	Spain	Retail	Public	A-	●	●	●
J Sainsbury Plc	United Kingdom of Great Britain and Northern Ireland	Retail	Public	A	●	●	●
Kering	France	Apparel	Public	B	●	●	●
Kroger	United States of America	Retail	Public	C	✕	●	✕
Lowe's Companies, Inc.	United States of America	Retail	Public	C	✕	✕	✕
LVMH	France	Apparel	Public	C	●	●	✕
Metro AG	Germany	Retail	Public	B	●	●	✕
MİGROS TİCARET A.Ş.	Turkey	Retail	Public	B	●	●	●
NIKE Inc.	United States of America	Apparel	Non-public	N/A	Private	Private	Private
Nisshinbo Holdings Inc.	Japan	Manufacturing	Public	B-	✕	●	✕
Pick 'n Pay Stores Ltd	South Africa	Retail	Public	B	●	●	✕
PUMA SE	Germany	Apparel	Non-public	C	Private	Private	Private
PVH Corp	United States of America	Apparel	Public	A-	✕	●	●
Shoprite Holdings Ltd	South Africa	Retail	Public	B-	✕	●	✕
SUNNYLITE TRADING CO., LTD	Taiwan, Greater China	Apparel	Public	N/A	✕	✕	✕
Tapestry Inc	United States of America	Retail	Public	C	✕	●	✕
Target Corporation	United States of America	Retail	Public	B-	✕	●	✕
Teejay Lanka PLC	Sri Lanka	Apparel	Public	B-	✕	✕	✕
Toyota Tsusho Corporation	Japan	Services	Non-public	B	Private	Private	Private
Under Armour Inc	United States of America	Apparel	Non-public	N/A	Private	Private	Private
VF Corporation	United States of America	Apparel	Public	B-	●	●	✕
Wal Mart de Mexico	Mexico	Retail	Non-public	B-	Private	Private	Private
Walmart, Inc.	United States of America	Retail	Public	C	●	●	✕
WM Morrison Supermarkets Plc	United Kingdom of Great Britain and Northern Ireland	Retail	Public	C	✕	✕	✕
Woolworths Holdings Ltd	South Africa	Retail	Public	B	●	●	●
YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.	Turkey	Apparel	Public	B-	✕	●	✕

Figure 2.3 Key metrics disclosure for the companies with activities in the apparel and textile sector (CDP- Disclosure insight action, 2020).

2.1.2 Social pillar

The social pillar refers to public policies that support social issues; aspects like healthcare, education, housing, employment, etc. are included in the circle of social issues. They ensure that individuals can access to social services, and also that they do not suffer through lack of knowledge of their rights and exercise a responsible influence on the development of social policies and services, both locally and nationally (Policy forum on development). To better understand the social policies objectives, Table 2.2 identifies some classifications and examples. The social pillar concerns with the capacity of a group of people to function at a defined level of wellbeing for an indefinite period and must be retained in the long term. The human capital support and approval within an organization is the basis for a sustainable business (Gbolarumi, 2021).

Author	**Social Classification**	**Description of Policy Objective**
Litting & Griessler (2005) "Social dimensions of sustainability"	Basic needs and quality of life Social justice Social coherence	Satisfaction of basic material needs and self-fulfilment; Equality of opportunity; Harmony among different social groups.
Chan & Lee (2008) "factors of social sustainability"	Social infrastructure Availability of job opportunities accessibility	Physical infrastructure which delivers locally based services and opportunities for social interaction

	Townscape design Preservation of local characteristics Ability to fulfil psychological needs	Employment; Engaging in essential work and leisure activities should not entail too much travel; Townscape design that is aesthetically pleasing, functional and promotes social interaction; Conserving physical and social/community characteristics particular to the locality.
Cuthill (2008) “Key factors of social sustainability”	Social capital Social infrastructure Social justice + equity Engaged governance	Promoting social networks and a sense of social responsibility; Providing facilities which address need and capacity for participation; Providing equitable access to essential welfare services and employment, especially for vulnerable groups; Promoting bottom-up participatory democracy.
Dempsey et al. (2001) “dimensions of social sustainability”	Social equity Sustainability of community	Reducing inequality in life chances by ensuring local access to key services; Encouraging social interaction/social networks in the community; Encouraging participation in collective groups in the community Ensuring safety and security.
Vavik & Keitsch (2010) “Three goals of social sustainable development”	Poverty Illiteracy Access	Promoting “Inclusion” by providing basic needs; Promoting access to education; Promoting access to participation in decision making;

Table 2.2 Social policy concepts and objectives from the social sustainability literature (Murphy, 2012).

A social pillar framework has been illustrated by Murphy (2012), who considers four necessary dimensions: equity, awarness for sustainability, participation and social cohesion.

With respect to the apparel industry, multinational corporations (MNCs) play a central role in facilitating globalized capitalism through gendered circuits of labour and their actions in the Global South exemplify postcolonial feminist concerns regarding the living and working conditions of women laborers. As illustrative example of gendered neo coloniality in the last ten years, in the following paragraph will be presented the Rana Plaza factory collapse. Globally, young women in the Southern part of the world count for up to 90% of factory workers (Ozkazanc-Pan, CSR as Gendered Neocoloniality in the Global South, 2018) in many developing economies like China, Vietnam, Indonesia and Mexico. The CSR initiatives in the Global South represent a codification of rules intended to regulate the behaviours of their gendered subaltern subject: the female factory worker. After the tragedy of the Rana Plaza factory, even though many labour laws were born toward the social responsibility field in Bangladesh, there remain significant problems for women workers, who still today are victims of physical and verbal abuse by male employers and are fired after becoming pregnant.

An example of good resilience comes from Mexico, where women garment workers have organized themselves to pretend better wages and working conditions arguing that factories do *need* their labour; furthermore, they are conscious of their role within the MNCs' entire supply chain. "Women laborers are no longer passive about corporate decisions, because finally they are having voice and power in shaping the CSR arena" (Ozkazanc-Pan, CSR as Gendered Neocoloniality in the Global South, 2018).

An important institution who historically played a crucial role in the equalization of labour cost is the International Labour Organization (ILO), who played an increasing role toward the amplification of its norms and values with the political opportunity of the Rana Plaza disaster. The ILO is the only international organization with the constitutional mandate to bring capital, labour, and the state together to promote decent work in global labour supply chains. For the ILO, global value chains represent a particular challenge, due to the volumes of workers involved (over 450 million workers are employed in these chains, according to ILO report of 2015) and also due to the governance structure of labour standards. In fact, the multilevel governance structure of ILO Conventions, that correspond to the international labour standards ratified by member states, do not follow the vertical lines of global supply chains, but the horizontal (sovereign) space of member states' jurisdictions. A global labour governance regime also demands a vertical regulation of labour standards, to promote decent work in global supply chains. The challenge for the ILO in the 21st century is to go beyond the articulation of policy ideas to the instigation of a new policy programme that might eventually guarantee decent work in supply chains all over the world; the framework is intended to include not only the goals of policy and instruments that can be used to attain them, but also the real nature of the problems they are meant to be addressing (Thomas & Turnbull, 2018).

Rana Plaza factory tragedy

In April 24, 2013, in the Bangladeshi city of Savar, the collapse of the Rana Plaza building caused death to more than 1,000 garment workers. In the building there were more than 3,000 garment workers producing for MNCs such as Walmart and Benetton, whose more than 80% of the garment workers were young women. The following year, many committees, such as trade unions, NGOs and the International Labour Organization (ILO) in collaboration with the Bangladesh government, put in practice several developments (Ozkazanc-Pan, CSR as Gendered Neocoloniality in the Global South, 2018). They organized a memorandum of understanding for the compensation of victims, their families, and dependents; individuals other than of these groups could made donations to the "Rana Plaza Donors Trust Fund" in supporting the victims of the collapse.

The Rana Plaza disaster also changed the discourse outside the ILO and led to an accord between the two global union federations (GUFs) and over 200 MNCs, with the ILO as an independent chair. This represented a significant step for the ILO in global labour governance, working directly with international actors rather than with the organization's tripartite constituents in the textile and garment sector (Thomas & Turnbull, 2018).

Nowadays, apparel industry is overwhelmed by Covid-19; consequently, also labourer fights for their rights are suffering. As a matter of facts, once the crisis started to cause problems to apparel MNCs, all risk and cost has been automatically reversed to the lowest grade of the supply chain, by avoiding payments for already carried out orders and postponing production payments. For this reason, factories' owners run out of cash and could not pay their employees. Today, millions of workers have no salary and no certainty of job security, added to the issue of health risks. Some brands keep some measures to guarantee minimum standards even in this critical situation, such as paying manufacturing orders, issuing new funds for addressing short-term needs of factories' workers. Still today, some leading brands have not made any commitment to this purpose - ASOS, Gap, Primark, Under Armour, Urban Outfitters and Walmart (La Repubblica, 2020).

The Bangladesh Accord was signed by over 200 brands and made more secure over 1,600 factories across the country. The binding nature of the Agreement, crucial to its success, expired on 31 May. Back to April 2021: «No brand or distributor currently a member of the Agreement - denounced the Clean Clothes Campaign - has undertaken to sign an equally legally binding new programme. On the contrary, the brands are proposing watered down and weakened versions of the program, which makes it extremely likely that workplace safety in Bangladesh will return to the levels before the collapse of the Rana Plaza» (Liverani, 2021).

Latest news report that the international retailers sourcing in Bangladesh have agreed to extend for two years the legal arrangements that make them partially liable for failure to meet safety standards at production sites. The Ready-Made Garments Sustainability Council (RSC) will continue to implement the so-called "Agreement" signed by the brands following the murderous tragedy of the Rana Plaza in 2013. The "Fire and Building Safety" agreement in Bangladesh includes around 200 retailers, including H&M, Inditex (Zara), Fast Retailing (Uniqlo), Adidas and Hugo Boss. It is the European counterpart of the Alliance for Bangladesh Worker Safety, launched at the same time by predominantly American brands, and which had preferred to pass the baton in 2018, believing that he has fulfilled his mission. Indeed, in 2018, the Agreement started to transfer its responsibilities to the RSC, which also brings together trade unions, industrial producers, and brands. The RSC have now committed until 2023 to assume their legal responsibilities if they do not comply with the rules of the Agreement, which provides in particular to cease collaborations with sites deemed dangerous for employees. The signatory brands would thus tend to reduce the pressure on the prices of their orders, so as not to induce their producers to reduce investment in safety (Guinebault, 2021).

2.1.3 Economic pillar

The third pillar is about giving individuals what they want without compromising quality of life, particularly in the developing world and reduced the financial burden. Organizations are incentivized to follow the sustainability guidelines beyond their normal legislative requirement. Therefore, a sustainable economic model proposes an equitable distribution, responsible and efficient allocation of resources. Within this pillar focused on the economical aspect of the practical framework for responsible companies, long-term benefits and profitability take priority as well. As a matter of facts, a profitable business is more likely to remain stable and continue to operate in the long-term. For economic sustainability, thus, profits of the business take priority, without triggering social or environmental damages (FrontStream, 2013).

2.2 Background and challenges of CSR

Implementing corporate social responsibility into business strategy and practices represents a wide spectrum of challenges, one of which is CSR communication. CSR communication is an arena which puts together communication about social issues in public relations, marketing communication, management, and organizational communication. CSR communication is becoming increasingly important as proof of demonstrations and documentations about practical actions regarding CSR taken by businesses. Scholarly attention started to grow since early 2000s with the stakeholder engagement and dialog, CSR reporting, and participation in and adoption of international frameworks of CSR standardization practices including codes of ethics (White, Nielsen, & Valentini, 2017).

2.3 Corporate social performance of different types of fashion brands

A firm having CSR practices can develop a positive brand reputation to the public and usually it reflects also on a better financial performance. The Global Fashion Agenda and the Boston Consulting Group estimated that the fashion companies can achieve up to €160 billion annually if the society and environmental risks are resolved (Chan, Wei , Guo, & Leung, 2020). CSR disclosure can help stakeholders to better understand sustainability performance of a firm, and for this reason it is possible to find sustainability report on many official websites of apparel brands, as it is a way to respond quickly to the ever-changing business environment and disclose the timely information in a less costly manner. An important point is that fashion brands must understand firstly the consumer expectations and then they have to make the operational decisions that can benefit the fashion brands and manufacturers keeping in consideration the CSR commitment. Chan et al. (2020) stated that luxury fashion brands seem to be less enthusiastic in CSR, despite enjoying a very high profit margin. Nike has the highest CSR engagement, followed H&M and LV, and Chan et al. study (2020) demonstrates that it is optimal for the higher-priced fast fashion and functional brands to commit a high CSR and a low advertisement level. To be specific, the optimal CSR engagement and advertisement level decisions are governed by the cost effectiveness of CSR commitment. In practice, Nike should keep seeking ways to improve the product safety to maintain a high CSR commitment level. For the fast fashion H&M, it should set a higher selling price for the "conscious" product line. On the opposite side, an interesting finding of Chan et al. regards the luxury brands; in fact, brands like LV should act oppositely with a low CSR but a higher advertisement level, and it should consider to increase CSR by adopting disruptive technology such as blockchain for ethical sourcing and enhancing the supply chain transparency to deal with the CSR issues (Chan, Wei , Guo, & Leung, 2020).

From Chan et al. case study (2020) some measures are proposed to help analysing the best fit of CSR engagement for any type of fashion brand (i.e., fast fashion, functional fashion, and luxury fashion).

2.4 Key current metrics for measuring CSR

In 2007, Raymond W. McDaniel, president of Moody's investors service defined credit ratings a tool to "enhance transparency and efficiency in debt capital markets by reducing the information asymmetry between borrowers and lenders"; in the same way, social ratings aim to provide social investors accurate information that makes transparent the extent to which firms' behaviours are socially responsible (Chatterji, Levine, & Toffel, 2008).

In the past, the idea of CSR or ESG was mostly a marketing trick, but demand for real impact across many sectors has forced companies to mature in their approach to capturing their CSR metrics. This is a good sign, and there is even an increase in marketing on how companies are implementing sustainability and efficiency practices in their business. Types of metrics used depend on the type of CSR program adopted. Environmental metrics focus on things like greenhouse gas emissions per dollar of revenue or per product produced, amount of wastewater products and so on. The following lines depicts the subcategories of environmental metrics and the related number of metrics available (Schindler, 2019):

- Energy (37)
- Emissions (35)
- Disclosure (30)
- Water (24)
- Materials (23)
- Effluents and Waste (19)
- Biodiversity (10)

Social metrics relate to anything having to do with an organization's performance in equality and social justice. Metrics for this category are much more complicated to keep track of, in comparison to environmental ones. Some of the subcategories of social metrics can be divided according to private and public sector, with their relative number of available metrics (Schindler, 2019).

Private sector:

- Human rights & resources (40)
- Performance in products (10)
- Production & Supply chain (20)

Public sector:

- Safety & Health (84)
- Population (12)
- Infrastructure (11)
- Budget & expenditure (9)
- Education (7)

Governance metrics track tools like responsiveness of a company to their investors, stakeholder rights and other elements. Some of the most important subcategories with their relative number of available metrics are enlisted below (Schindler, 2019):

- Transparency (121)
- Equality & Fairness (36)
- Efficiency (21)
- Corruption (18)

It is not surprising that various ESG ratings services are poorly correlated with each other. Despite their increasing popularity, social ratings are criticized for the lack of transparency. ESG metrics, probably, will never have the accuracy, validity, reliability, and commensurability of financial metrics. Nevertheless, this does not mean that the considerable efforts to improve them is considered a waste of energies. An example of centrality of CSR commitment is given by the poor labour and environmental practices in developing world adopted by Coca Cola Co. In fact, Kinder, Lydenberg, Domini (KLD) Research & Analytics dropped the beverage company from its Broad Market Social index in July 2006 because of the above written concerns. The consequence to this action saw the largest U.S. retirement fund, TIAA-CREF, selling more than 50 million shares of Coca Cola Co. (Chatterji, Levine, & Toffel, 2008). Figure 2.4 reflects the share volume of Coca Cola Co. of this period, which caused also a decline of adjusted closed prices in the summer period (Yahoo finance, s.d.). KLD social and environmental ratings are considered one of the most widely analysed by academics.

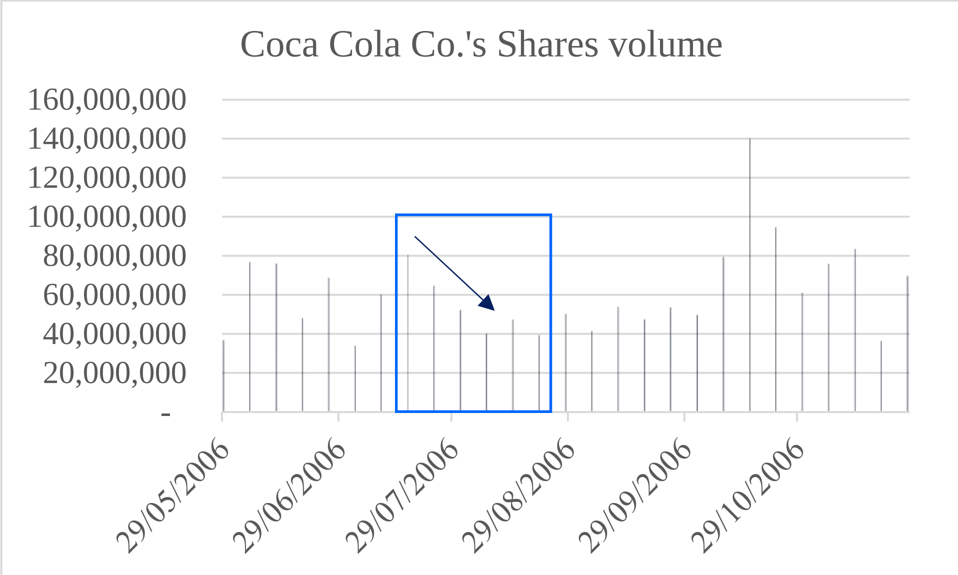

Figure 2.4 Coca Cola Co. historical volume period 29/05/2006-27/11/2006, weekly data from (Yahoo finance, s.d.)

Brest and Honigsberg (2021) suggest a comprehensive framework for ESG reporting which must address the following three factors:

- A limited set of metrics primarily related to the company's social and environmental impacts
- A standard setting body modelled on the Financial Accounting Standards Board (FASB) to develop and particularize these metrics
- Reporting infrastructures that allow companies to collect, report, and verify the relevant metrics

Nowadays, ESG reporting is still in a primitive stage, but there are entities who already tried to improve reporting standards; some of them are reported below (Brest & Honingsberg, 2021):

- CDP, CDSB, GRI and SASB[10] have announced a "Statement of Intent to Work Together Toward a Comprehensive Reporting Requirements"
- IFRS foundation proposed to create a Sustainability Standards Board, initially focused on 'material' climate risks caused by companies and in a second moment on further environmental risks aside form financially material risks.
- A recent report by the World Economic Forum (WEF) proposes metrics that "reflect not only financial impacts but 'pre-financial' information that may not be strictly material in the short term but are material to society and planet and therefore may become material to financial performance over the medium or longer term".

[10] Respectively, acronyms of Carbon Disclosure Project (CDP), Climate Disclosure Standards Board (CDSB), Global Reporting Initiative (GRI), International Integrated reporting Council (IIRC), and Sustainability Accounting Standards Board (SASB).

Therefore, there are several elements for a suitable ESG framework within a corporation, according to Brest and Honigsberg (2021):

1. Overcoming the single focus on financial values, by broadly measuring the material effects on the economy, environment, and people in terms of benefits and external costs, keeping a stakeholders' perspective.
2. Timely report of information.
3. Take in consideration not only the company's impacts, but also the ones pertaining to its suppliers, consumers, services and (if possible) competitors.
4. Indicators must be accurate, valid and reliable.
5. In the same way of indicators, the information must be sufficiently objective, verifiable and broadly accessible to a wide range of stakeholders and regulators.
6. The standards must be adaptable to reflect the evolution of technologies and the standard themselves.
7. Possibility to compare the impacts of different companies within and across sectors.
8. Possibility to make indicators monetizable or at least to reduce them to a common metric such as quality adjusted life years (QALYs) and disability-adjusted life years (DALYs).
9. Standards should be set independently by any political and industry pressure, to the extent of legality.

The focus on standards alone is insufficient if it is not matched with the production of high-quality metrics. Internal reporting infrastructure in companies refers to the reporting systems and controls that companies rely on to produce data; external reporting, on the other hand, refers to the auditing and regulatory enforcement mechanisms that verify reporting accuracy and correct misreporting. The organizations that consider ESG issues are divided into three groups. The first group is characterized by the definition of indicators with environmental and social roots, but do not prescribe behaviours to respect them. A paradigmatic organization which belongs to the fist group is the Global Reporting Initiative (GRI). The second group is characterized by the prescription of acceptable behaviours; typically in this group there are some sub categories, such as the ones who choose external auditors to certify the meeting of standards concerning social or environmental issues, or companies like Nike who actively sanction or shame firms in supply chains that violate labour standards, or even some companies who awards companies that achieve a minimum verified score concerning their impact on its stakeholders and the environment. The third group of organizations gathers rating services like Bloomberg, that provide investors with ESG information.

2.5 Motivations of socially responsible investors

Based on Figure 2.4 about the share price and volumes decline of Coca Cola Co. in 2006, it is relevant to outline the multiple existing motives that drives investors decisions, and thus that corporations might keep always in consideration. Characterization of social investors are financial, deontological, consequentialist, and expressive. Stakeholders of the company can be driven by any of the mentioned motivations. In the following lines it will be provided a description of how each motive guides investors to value social ratings that 1) gives transparency about historical social performance, and 2) gives transparency about current management practices that influence future social performance.

The first motive considered is the belief that socially responsible companies found better financial results, due to the attraction of socially responsible consumers; indeed, it has been examined by Bagnoli and Watts (2003) that attracting socially responsible consumers reduces the threat of regulation as well as improves brand reputation towards them. Another benefit of attracting socially responsible consumers comes from the reduction of concern from activists and non-governmental organizations (Chatterji, Levine, & Toffel, 2008).

The second motive, labelled 'deontological', applies to investors who do not wish to profit from unethical or heinous actions. Deontological actors pay attention to past performance because he or she wants to be sure that current profits are not a result of unethical behaviour. This motive brings the company to care deeply about the quality of the current management, to avoid future scandals.

The consequentialist motive features investors and consumers to make investments to reward good behaviour and to provide an incentive for other companies to operate in a more sustainable way. In the same way of deontological motive, consumers and investors look at past performance in order to check whether the company behaved responsibly also in the past, but they also have a forward-looking perspective toward long-term sustainability assessments.

The fourth and last motive which leads social investors to desire transparency about past and current social performance and managerial decision is named "expressive", because stakeholders use their purchases to express their personal identity both to themselves and to others. They worry that negative social performance badly affects companies and, consequently, those who invest in them (Chatterji, Levine, & Toffel, 2008). Social rating agencies such as KLD typically measure both past performance and estimated future outcomes.

Investor motivation to use environmental ratings	**Importance of social ratings incorporating:**	
	Firms' prior record	**Management quality**
Financial investors believe that superior environmental	Identify firms' prior environmental problems, which	Better quality of environmental management is predictive of

performance leads to superior financial performance	indicate high expected liability and future penalties.	future profitability via less waste, lower compliance penalties, and better reputation with stakeholders and is indicative of better management quality more broadly.
Deontological investors seek to avoid investments in companies that act irresponsibly towards the environment because they consider it unethical to earn profits from irresponsible companies.	Identify firms' prior environmental problems, which taint current profits.	Identify responsible management practices to avoid tainted future profits.
Consequentialist investors seek to direct their funds to raise the cost of capital for misbehaving firms and lower it for socially responsible firms.	Identify firms' environmental records to punish or reward firms, as appropriate.	Provide incentives for current investment in long-term environmental performance by rewarding responsible management decisions today.
Expressive investors base their social identity in part on their investments and associations with good causes, and thus seek to invest in companies widely perceived to be "environmentally responsible."	Avoid firms with prior environmental problems to avoid social stigma; seek firms with favourable environmental records to bolster social status.	Seek high quality environmental management to avoid future social stigmas and to enhance future social status.

Table 2.3 Motives of Socially Responsible Investors (Chatterji, Levine, & Toffel, 2008).

2.6 Social rating

ESG has exploded from a niche concern to table stakes. As a matter of facts, between 2011 and 2019, the proportion of S&P500 firms reporting their ESG performance changed from 20 per cent to 90 percent (Malik Chua, 2020). To fill the pressure or brands toward more sustainable practices, many rating and ranking platforms, including the Dow Jones Sustainability Indices (DJSI), EcoVadis, Sustainalytics and MSCI, have sprung up to help asset managers, institutional investors, and other stakeholders to assess, measure and benchmark companies' ESG performance. A single brand can be included in more than one benchmark, like Burberry in four different social ratings, or emitted at all, like Prada.

ESG raters can be distinguished by two categories: "active" raters and "passive" raters. One the one hand, the active raters use questionnaires and surveys to request information from companies, which they then compile to produce ratings. On the other hand, the passive raters run scores by either aggregating publicly available data or by conducting assessments based on public or private corporate reporting; even though it is reasonable to think that the passive approach is easier, it is worth of note that sustainability reports lack of unique standards of disclosure. Furthermore, requirements for ESG key performance indicators can vary widely from country to country[11]. Another limitation of ESG ratings is that they are based on past or backwards-looking data, rather than values they aspire to reach. To this purpose, the ESG consultant Luna Atamian Hahn-Petersen declares: “The problem with ratings is that, by nature, they’re quite subjective […] there are different ways of interpreting the data.” Hugo Boss, which has appeared in the DJSI since 2017 and is featured in the German Stock Exchange’s new DAX 50 ESG Index, uses ESG ratings to quantify its progress over time, but also to compare its performance with its peers and identify areas for improvement in a way that’s visible to multiple stakeholders. At Burberry, the ESG disclosure process “drives accountability, helps inform our strategy and supports continuous improvement”, says Pam Batty, its vice president of corporate responsibility (Malik Chua, 2020).

Ten years ago, the Bloomberg Terminal began to provide ESG data; from these data analysts realized that these areas could have a material impact on business up to become a value driver within their portfolios. For this reason, in collaboration with the Sustainability Accounting Standards Board (SASB) using R-Factor™ [12], Bloomberg developed its own index, labelled SASB ESG index, which includes U.S large cap equity and investment-grade corporate bond ESG indices (Bloomberg, s.d.).

The sustainability scoring in apparel industry, analysed by Gonçalves et al. (2021), despite the existence of GRI standard reporting is declined with different methods by the companies.

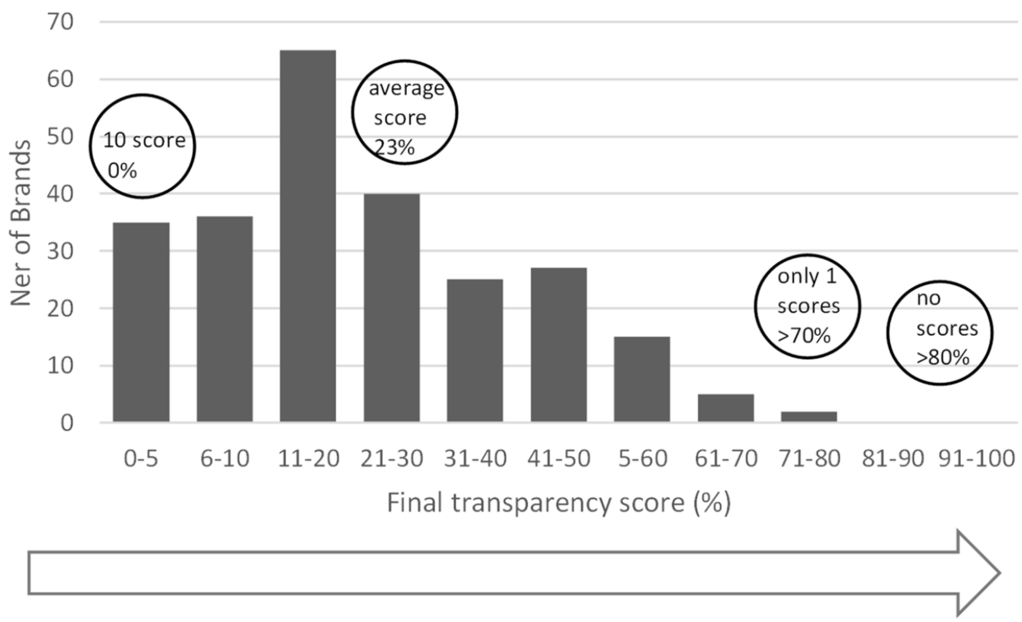

Figure 2.5 Quantity of companies versus the Transparency Index (in percent; 100% corresponds to a maximum of 220 points) (Gonçalves & Silva, 2021).

[11] In France, where one of the major fashion and luxury groups like Kering is based, listed companies have to disclose any financial is related to the effects of climate change in their annual reports (Malik Chua, 2020).

[12] R-Factor™ is an environmental, social and governance (ESG) scoring solution developed by State Street Global Advisors.

Fashion Transparency Index (Created by Activist Organization to Apparel Industry) is an index aimed to measure the extent of disclosure by retail companies about their social and environmental policies, practices, supply chain, and impacts. This index is based on 220 indicators transmitted to companies via questionnaires, and usually only half of the selected companies compiles them. In 2020, the average score was 23% out of 100% (see Figure 2.4) and the worse indicators among the five considered (policy and commitments; governance; traceability; know, show and fix; spotlight issues) were traceability and spotlight issues. The former refers to the supply-chain levels of manufacturing, processing facilities and mills, and raw materials; the latter refers to working conditions, consumption, product/material composition, and climate (Gonçalves & Silva, 2021).

In the current year, Moody's declares that apparel companies need to adapt to sustainability, invest in decarbonisation and increase sourcing transparency; at the same time, it declares also that fast fashion and discount brands have the riskiest business transformation. "Changing behaviour among environmentally conscious and socially aware consumers will put more competitive pressure on global fashion brands to adapt to sustainability measures. Longer term, environmental and social factors will put the apparel industry's profitability at risk," says Guillaume Leglise, Assistant Vice President – Analyst, at Moody's Investors Service (Moody's Investors Service, 2021).

In the present paragraph an illustrative summary, made by Chatterji, Levine, & Toffel (2008), about multiple metrics is presented to get an optimal index of social and environmental performance to provide transparency to stakeholders.

The social rater builds its rating $K_{f,0}$ for firm f in year 0 from two data: its measure of the firm's management quality[13] measured in year 0 ($m_{f,0}$) and information available in year 0 on this firm's historical environmental performance ($Y_{f,0}$). The measure of management quality m is then normalized, in order to have the same units as environmental performance Y and mean of zero. Assuming that the social score depends on these two factors with a weight α chosen optimally by the social rater:

$$K_{f,0} = \alpha\, m_{f,0} + (1 - \alpha)\, Y_{f,0} \tag{A1}$$

Future environmental performance is determined by both management quality and by a specific historical environmental performance; hence, both management quality and historical environmental performance are useful in predicting future emissions:

$$Y_{f,1} = c_1\, m_{f,0} + c_2\, Y_{f,0} + v_f \tag{A2}$$

[13] Management quality refers to its ability to make investments that improve environmental performance and reduce risks of environmental problems (Chatterji, Levine, & Toffel, 2008).

Equation A2 is thus considered the best linear predictor of future environmental performance. It is assumed that customers of the social rater desire transparency about firms' historical environmental performance $Y_{f,0}$ and future environmental performance $Y_{f,1}$. At this point, it is assumed that the objective for the social rater is to minimize the average across firms of the weighted average squared deviation between the rating and environmental performance in each period:

$$Min\ (\alpha) = \Sigma_f [\beta\ (K_{f,0} - Y_{f,0})^2 + (1 - \beta)E_0(K_{f,0} - Y_{f,1})^2]$$

The parameter β summarizes what the rater perceives customers want in terms of summarizing the past (β near 1) versus predicting the future (β near zero). The expectation E_0 is taken at time 0. This illustrative model yields a first result:

Theorem 1 (Chatterji, Levine, & Toffel, 2008): The optimal weight α to apply to the measure of management quality $m_{f,0}$ is:

$$\alpha^* = (1 - \beta)\ (1 - c_2)$$

The implications behind *Theorem 1* want that the social rater looks carefully to management quality when the social rater perceives that its customers care more about the future (that is, β is low) and when emissions Y are not strongly predicted by history, even conditioning on the rater's measure of management quality (c_2 is low). Chatterji et al. (2008) also provided a sketch of the proof: "*Theorem 1* follows from the social rater's first-order condition for optimizing its goal (equation 1); that is, setting the derivative of the social rater's objective (1) with respect to its choice variable α equal to zero". This result leads to two corollaries. First, the boundary condition $\beta = 0$ means the social rater is only interested in summing up the past, meaning that the rater sets its social rating equal to the past, $K_{f,1} = Y_{f,0}$.

Corollary 1: When the social rater cares only about the past (β = 0), the R^2 of the regression of the optimal rating on the future should equal the R^2 of the regression using historical data.

On the other side, when the social rater cares both about the future and the past, it can sacrifice some fit in the first term of equation A3 $(K_{f,1} - y_{f,0})^2$ to increase fit in the second term $E_0(K_{f,1} - y_{f,1})^2$. This possibility leads to:

Corollary 2: When the social rater cares about the future as well as the past, the R^2 of the regression of the optimal rating on the future should be higher than the R^2 of using only historical data to predict the future.

2.6.1 Dow Jones Sustainability Indices

The Dow Jones Sustainability Indices are float-adjusted market capitalization weighted indices aimed at measuring the performance of companies selected with ESG criteria using a "best-in-class" approach. The DJSI allow the creation of portfolios of companies that fulfil certain sustainability criteria better than most of their peers within a given industry. To address specific investor requirements, the DJSI index family includes sub-indices that exclude companies engaged in certain activities widely considered as unsustainable, such as armaments and tobacco. The capping factors are reviewed and updated quarterly.

The DJSI are divided in geographical categories: DJSI World (for example, DJS Emerging Markets Index), DJSI Regions (for example, DJS Europe Index) and DJSI Countries (for example, DJS Australia Index). The key factor in selecting companies for the present index is a company's S&P Global ESG Score (S&P Dow Jones Indices, 2021). The industry of Apparel, Accessories & Luxury Goods is labelled "TEX".

As November 3rd, 2020, updates, Moncler is considered the leading company in textile apparel fashion industry (TEX index). It entered for the first time the DJSI World in 2019 and Europe and it is recognized as the industry leader in the TEX sector. Remo Ruffini, Moncler's Chairman and CEO declared that "At Moncler, we have long been committed to creating value for all stakeholders through the continuous integration of sustainability into our business model. A lot has been done to date, but we know that we need to do much more to find solutions to the imminent social and environmental challenges facing humankind globally. Entering the Dow Jones Sustainability Indices as Industry Leader is an extraordinary result for Moncler and testament to the great commitment of our more than 4,000 people who put their professionalism and best energy into their work every day to contribute to delivering a bright future for generations to come" (Moncler SpA).

2.7 Measuring CSR image from a customer viewpoint

CSR is defined as stakeholder perceptions of corporate responses to the general social concerns of stakeholder groups; the definition provided by Lai et al. (2010) answers to the question: can CSR and corporate reputation of a firm lead to its brand equity in business-to-business (B2B) markets? And thus, already in 2010, there were studies discussing CSR from a customer viewpoint. Empirical results have supported the hypothesis, by indicating that CSR and corporate reputation have positive effects on industrial brand equity and brand performance (Lai, Chiu, Yang, & al., 2010). Corporate marketing, the integrated process of organization level marketing, encompasses the importance of stakeholder perceptions for establishing a firm's perceived commitment to social responsibility. For this reason, companies need to identify what customers consider to be CSR-related activities and put enough resources to put them in practice.

Academics have proposed many methodologies to measure customer perceptions, but all of them have in common personal interviews and the development of measurement scales included in formal questionnaires. In this field, an effort is necessary to make a systematic validation and generalization to different context, as the scales developed in these works are generally applied to single studies. One of the reasons of the lack of consistent findings is the lack of consistency in the specific activities that researchers use to define CSR and

CSR image. Thus, even though CSR definitions are very similar at a conceptual level, at the operational level problems do arise. In a rapidly changing context, new solid and reliable CSR management tools are necessary to develop and implement a successful business strategy. In fact, previous studies focused only on specific dimensions of CSR like supporting charitable causes or protecting environment. To this purpose Dahlsrud (2008) declared that “the challenge for business is not so much to define CSR, as it is to understand how CSR is socially constructed in a specific context and how to take this into account when business strategies are developed”.

As illustrated in Table 2.1, scholars have identified several CSR dimensions by considering the stakeholders management theory: customers, employees, shareholders, society, the environment, and the market. Economic and legal responsibilities are the basic level of CSR, which is necessarily carried out by corporations. An exploratory examination of CSR image suggests the need of merging ethical and legal dimensions of CSR. Thus, according to some authors, three dimensions are used to evaluate customer perceptions: economic, ethical–legal and philanthropic corporate responsibilities. Furthermore, other academics merge ethical and philanthropic CSR expectations and evaluate CSR image also based on three dimensions. Therefore, their proposition is significantly different to the former ones, because the latter evaluate economic, legal and ethical–philanthropic CSR expectations (Pérez & Rodriguez Del Bosque, Measuring CSR Image: Three studies to Develop and to Validate a Reliable Measurement Tool, 2012). The results arising from the interviews of Pérez et al. (2012) demonstrate the adequacy of the classification of CSR image activities into four dimensions: customers, shareholders and supervising boards, employees, and society.

3. Sustainable supply chains in response to consumption hysteria

3.1 Overview on the concept of Supply chain

The apparel industry has seen a dramatic reorganization, especially in supply chain management, over the last thirty years since its shift to offshore production. Some years ago, it was a linear system with clear delineations between supplier and customer and nowadays it has developed into a virtual, global and fragmented organization where suppliers have multiple functions.

This network is characterized by the following main processes: extraction and treatment of raw material; first process of design, dyeing, weaving, knitting and washing of Textile/Fibre production; second process of design, finishing and washing during the Manufacturing process; Distribution; Sales; Recycling (See Figure 3.1). Going back to the first process, *raw materials*, Bubicz et al (2021) figure out that raw materials come from different countries and continents in international trade, being treated and processed in different areas of the world. The main producers are Australia, China, Thailand, India and Brazil. Then, the main exported countries are USA, China, Australia, India, Thailand and Italy. Considering the *Textile and fibre production* process it is worth noting that also the raw material processing is distributed in several stages, being necessary a complex structure of transport and logistic. The *Manufacturing* process consists in the transformation of treated textile/fibre into clothes, shoes and accessories; for this reason, in this process there exist several sub-processes, such as design, garments, finishing and embellishment. What characterizes this process is the significant fragmentation and its distance from consumption, generating long lead times (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021). *Distribution* is defined as the physical movement of the products from suppliers to sale points. The focal company usually considers the distribution process holistically because of the interrelation of activities. The *sales* process embraces activities like quality control, marketing, customer service, branding and human resources. This step keeps the attention of the Strategic control at focal company level, because the sale strategy is defined by the profile and visibility, following the global market trends. The last process, recycling, is still at an early stage in clothing sector; in fact, the circularity in fashion is still not well developed and according to the reports of the Ellen McArthur Foundation in 2017 and UNEP in 2018, only 1% of the textile materials have the end-of-life control and the remain wastes are landfilled, often in inadequate locations, without treatment. The Economy in loops concept will be deepened in the next paragraphs.

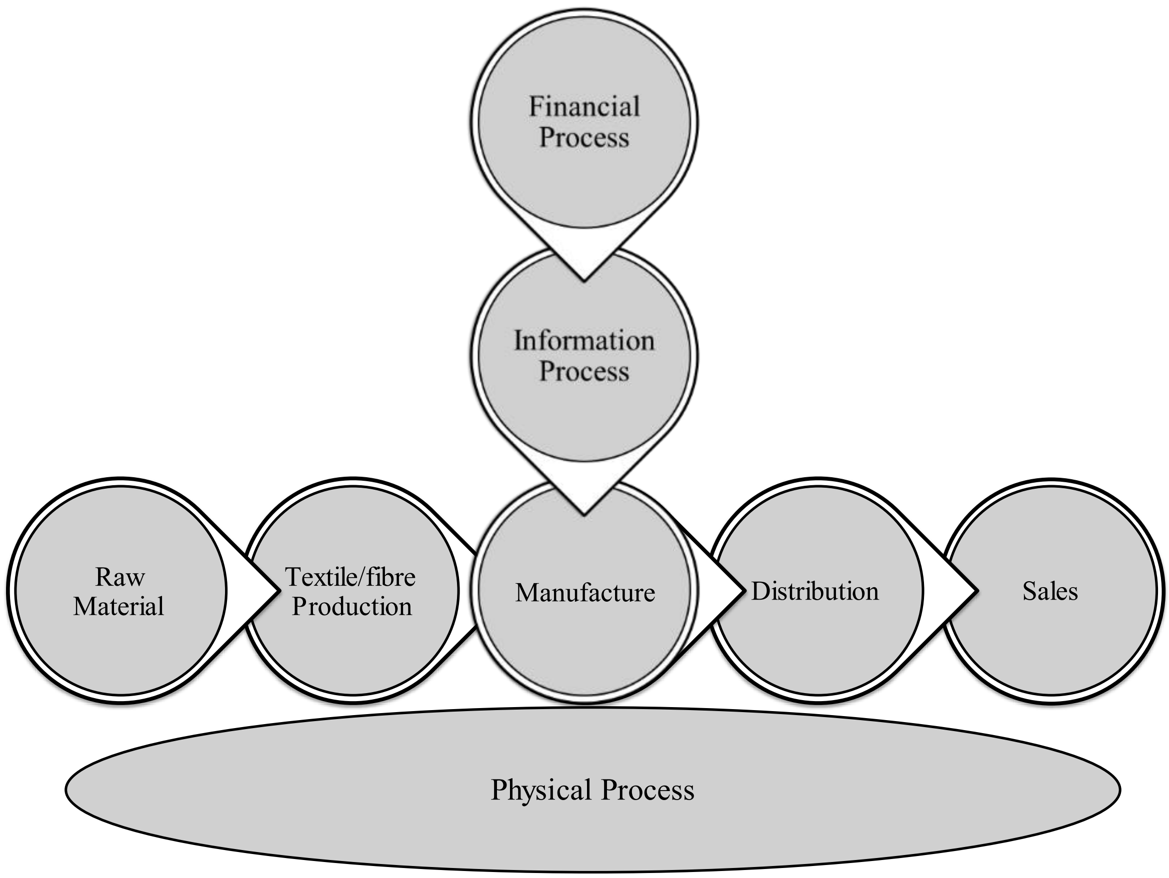

Figure 3.1 Generic apparel supply chain network (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021).

Behind this, the main entities are suppliers, sub suppliers, informal suppliers and workers, focal company, sales and customers (See Figure 3.2). The *focal company (1)* performs strategic control for brand management, through the use of Information and Communication Technology activities and processes across the several suppliers involved. The focal company is the base and foundation of the supply chain structure and it defines the business model, the management strategy, sustainability guidelines and Codes of Conduct, audits and also the financial strategy, marketing and customer experience. About the involved suppliers there are four tiers. The *1st tier supplier (2)* is the prime manufacturer and here the highest level of codes of conducts and compliance audits are performed; in this chain level the size of employees varies from five to ten thousand employees. The *2nd tier supplier (3)* deals with the fabric production, parts of products like pieces, footwear parts and so on; dyes and washes can be found at this level, often leading to environmental damages and workers contamination by the chemical used. At this supply chain level, the compliance control has a significant part, requesting certificates such as product origin, no toxic chemicals, non-use of child labour and employment contracts. However, in several cases there is no direct contact and control at this level and the documents provided by the 1st tier supplier are accepted. The *3rd tier supplier (4)* is the first step of treatment, yarn fibre, weaving, knitting, wool and leather tanning and crusting and for exported products international law toward environmental protection should be followed, but there are still many irregularities. The *4h tier supplier (5)* is mainly characterized by agricultural activity like planting and cotton extraction, rubber, wool production, etc.; there are also metal materials and synthetic fibres. These activities call in action the social pillar of CSR, because they generate irregular working conditions, child labour exploitation, human rights violation and so on.

Within the *Sale (6)* stage the product assortment occurs, and it is associated with quality, quantity and price. The *Customer (7)* is the central point of brands' strategy and for this reason several channels are used as well as an adequate communication. Indeed, segmentation by consumption profile is part of the supply chain management process. In the apparel sector, the consumer has demanded a greater number of different items in less time and, consequently, in less quantity. This implies that there is a faster presence of new collections, requiring a collaborative development effort throughout the supply chain. The *End-of-life component* (8) is still under development, but there are some companies that are using recycled materials. For example, Patagonia's clothes and Adidas' shoes are made of polyester from recycled plastic bottles (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021).

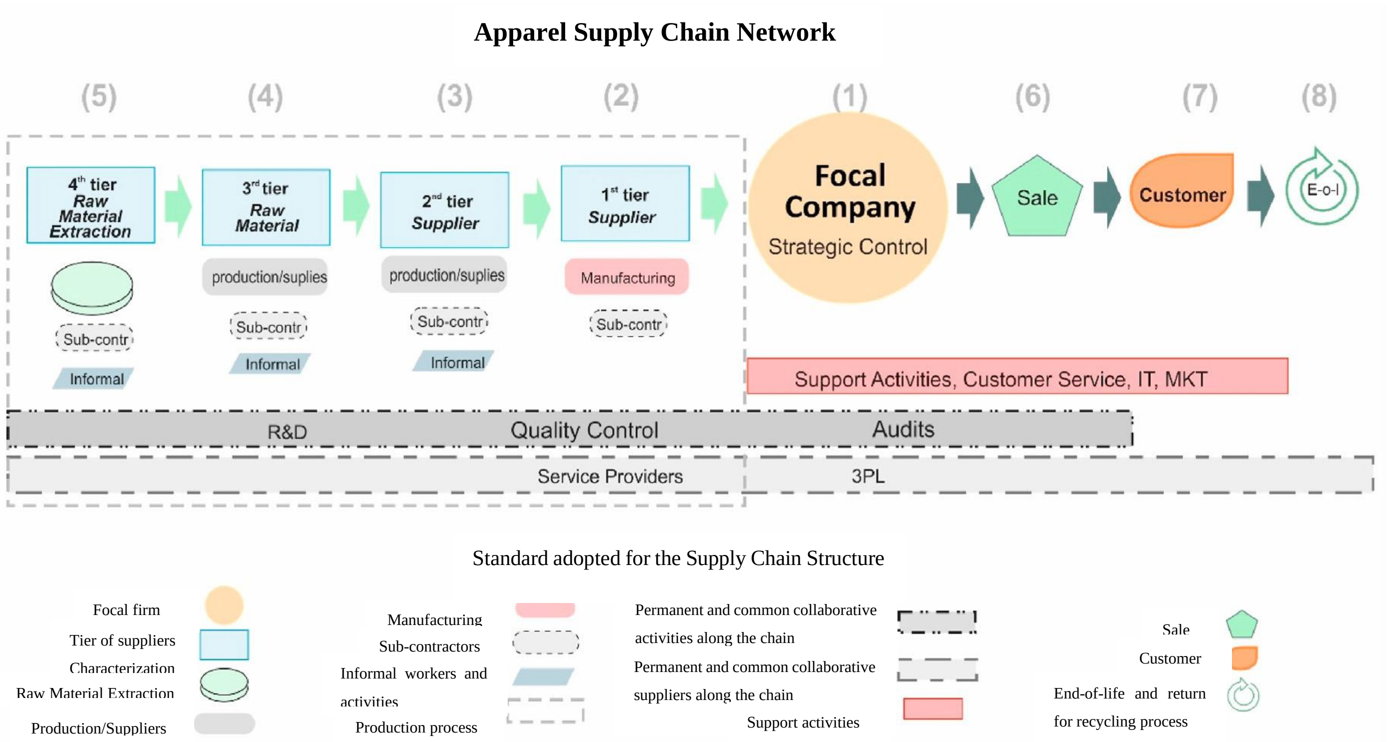

Figure 3.2 Apparel Supply Chain Network (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021).

Supply chain management is a key success factor within the apparel industry, due to the production of millions of garments every day, and this is the reason why the core focus of top management is to develop an effective supply chain management system. Managing supply chains means dealing with resources and their movement from one place to another, from one section to another section, as well from one department to another one in the right time, with adequate quantity, where the process cost is minimum. Supply chain management is applicable to technologies, resources, money and workforce.

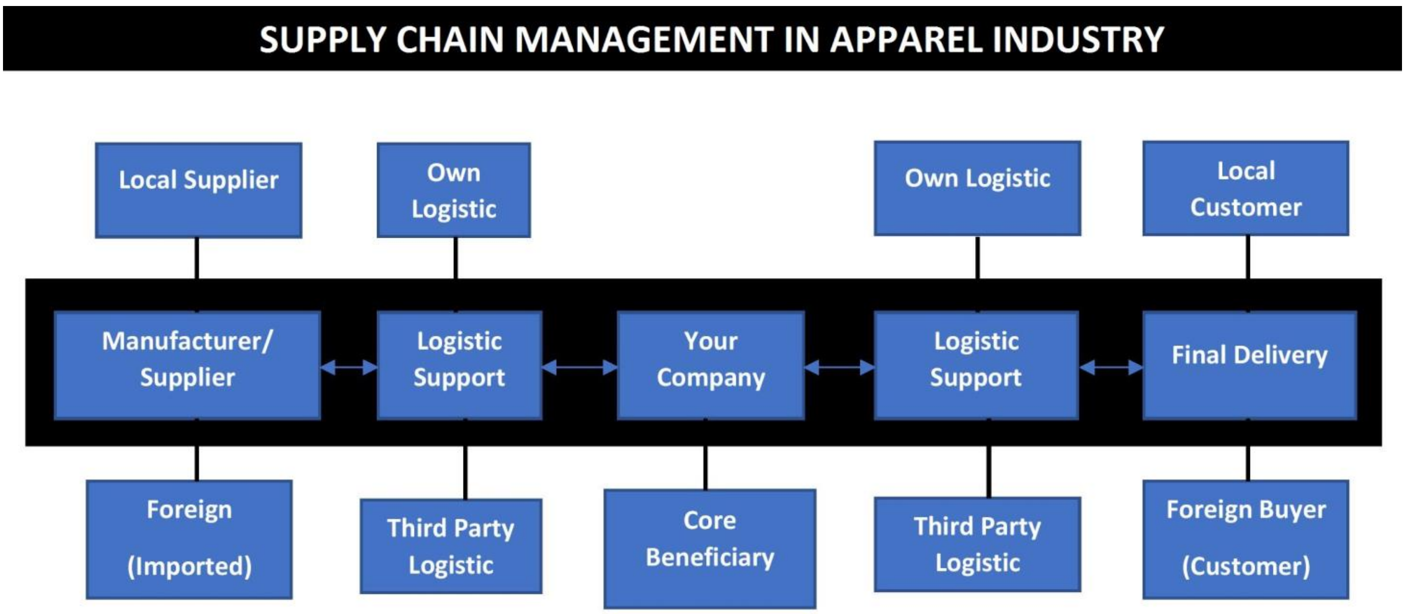

Figure 3.3 Supply chain management in apparel industry (Mahmud Shaikat, 2018).

Manufacturers make garments both for local and export market, but industrial scale production is for export. According to Mahmud Shaikat (2018) an apparel management should carefully develop the supply chain and they would be successful only if they have a proper planning for supply chain management (SCM), gaining a competitive advantage over competitors. Md. Nahian Mahmud Shaikat (2018) enlisted five elements that justify the importance of SCM in Apparel industry:

- It creates flexibility in operation
- The positive effect of mobility of resources
- Minimization of Total Cost of Owning (TCO)
- Properly utilization of available resources
- Ensure logistics management in terms of both raw materials sourcing and delivery of final product

result.

In the fashion supply chain, if the existing CSR commitment is at low levels, increasing CSR commitment will help to improve the manufacturer's profit since the leading fashion brand can provide additional CSR support to the manufacturer, which can benefit the whole supply chain including the manufacturer (Chan, Wei , Guo, & Leung, 2020). SCM toward human rights, labour and employee treatment is a major concern throughout the apparel industry. The issue of supply chain management continues to represent the most important issue for corporations who have outsourced their production to developing nations. Furthermore, it is also the most challenging CSR issue for businesses to handle because of the problems of disclosure and control over processes and activities along the supply chain. Stories of bad working conditions in distant, poorly-maintained production plants in the media call the attention of critical activists; to this regard, an example has been the Rana Plaza collapse, mentioned in Section 2.1.2.

Considering the consumer point of view, a fashion corporation is socially responsible in the same way of the other companies along its supply chain, and thus strategic communication about CSR practices along a company's supply chain is necessary to manage criticism from stakeholders. Ethical treatment of workers and sustainable practices must be applied at all stages of the value chain. As already mentioned, when enlisting the main pillars of CSR, other important issues are the environmental sustainability management and consumer perceptions, attitudes, and behaviours in terms of assessing or increasing purchase intention, that envisage the stakeholder engagement (White, Nielsen, & Valentini, 2017).

Most of the existent research reports on the apparel supply chain structure look into aspects of management, processes, technology, risks, and networks classification but do not explore an integrated view of the network and not even identify the origin of the products. Thus, some academics assess that there is a lack of information toward processes and structure of supply chains. Apparel industry has a cardinal role in the global business environment, with many intermediaries throughout its process; in fact, it is considered one of the longest and most complex supply chains and, thus, object of several studies. Given the importance of customer interest in new products, the issue in the apparel supply chain is the necessity for ready-to-wear products; there is no more a seasonal production, because consumption hysteria led to even faster purchase habits of customers. Behind the high demand of consumers, there is the management of mutual collaboration for good performance and quality. Although the apparel is an industry with many processes at different levels of supply, many academics emphasize that it is worthy of note that each level still works independently with its own forecast, following its own processes with little shared information and a low collaboration between the supply chain actors. The main issue is related to the presence many small producers of various items and each supply chain tier is made up of a large group of small businesses, and most often it is needed some sort of association between manufacturers. However, such associations lead to a cluster formation, in which there is no information sharing. Moreover, corporations do not invest in supply chain transparency, and so there is no clear understanding on what elements should compose the associated information (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021). Lack of transparency is highlighted in this chapter because it is crucial for assessing the supply chain sustainability; indeed, data are not always available and the distance of the operations can also influence the difficulty of access. The longer and fragmented the chain, the less interaction between the different actors, and the auditing process and controlling compliance with codes of conduct becomes more complex. The absence of regulation in international operations allows companies to follow their ‘homemade rules’. Although companies have their codes of ethics and conduct, the lack of transparency in processes can be impeding audits by generating reports that may not correspond with reality. Bubicz et al. (2021) found that some companies already provide this information in their annual reports and websites, but “for most organisations, this is not a common practice, which also makes it difficult to understand the processes and practices along this supply chain. Although many companies have sustainability speech, it has been noted that there is no effective practice to erases problems along the supply chain, especially when production is outsourced”.

There are initiatives to encourage the sustainable development of clothing industry, with ethical, environmentally safe products (e.g., Better Cotton Initiative and Sustainable Trade Initiative), or socially responsible ones, but for them there is no defined standard yet. Nevertheless, there is a consensus on the need to change the standards because this phenomenon is becoming not only a brand promotion, but also a necessity for the human development. Stakeholders’ pressure is one of the main drivers for improving laws and also increasing transparency (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021).

The former general secretary of the International Trade Union Confederation (ITUC), Guy Ryder considered global supply chains to be within his mission already in 1988. Guy Ryder was highly critical toward global supply chains: “What is not acceptable is that companies shift production and locate supply chains to avoid trade unions and to avoid respect for workers’ rights. That is not about comparative advantage. It’s about absolute abuse, and any approach to the global economy has to make it possible”. When he became Director-General of the ILO he avoided ‘naming’ and implicitly ‘shaming’ any specific member state where the violation of health and safety regulations or other abuses of workers’ rights are in the spotlight. However, after the Rana Plaza tragedy, he claimed: “The labour issues related to supply chains periodically hit the headlines when a case of serious abuse is brought to public attention or when a tragedy occurs at a workplace, causing appalling loss of life (Thomas & Turnbull, 2018). From a conference of 2015, Guy Ryder raised the issue of ILO about its missing “the boat of the CSR explosion”. In fact, the ILO has no involvement in international framework agreements.

Everything is connected in an organization and Supply Chain Managers identify the elements and process, analyse them and plan for a better connection. Nowadays, the coronavirus presents the fashion industry with a chance to reset and reshape the industry’s value chain completely as well as an opportunity to reassess the values by which it measures actions. The team of McKinsey expects that themes of digital acceleration, discounting, industry consolidation, and corporate innovation will be prioritized once the immediate crisis subsides. “Even after witnessing waves of insolvencies, industry leaders will need to get comfortable with uncertainty and ramp up future-proofing efforts as the potential for further outbreaks and lockdowns loom” (McKinsey & Co., 2021).

3.2 Circular economy and Reverse Logistic: “Clothes the loop” project

Sarkis (1995) stated that “in the future, life-cycle assessments are expected to play a large role in shaping public policy and may become even more important in corporate strategy development. The apparel industry was one of the first industries to be targeted by public shaming campaigns and has tried to respond to increasing public pressure to adopt CSR practices along all points in the supply chain. The “Economy in Loops” (European Commission, 1976) is not a new concept to characterize the right end of life for products and circularity, bringing them back to the production process. However, still in 2015 high investments in technology were missing, as well as R&D and logistic (Bubicz, Ferreira Dias Barbosa-Pòvoa, & Carvalho, 2021).

The circular economy (CE) is an industrial economy targeting enriched sustainability through restorative objects and design and Ashby (2018) stated that the core of CE is recovering value form tangible commodities through a narrower closed-loop of reuse and restoration which could increase both economic and environmental performance to recycling and energy recovering (Jia, Yin, Chen, & Chen, 2020). Some academics proposed the review of the entire manufacturing supply chain, as it is an essential step towards a more environmentally friendly and sustainable production system based on resource, reuse and remanufacturing. This model could inspire the use of technologies and bio-nutritive raw materials that have no damaging influence on ecosystems; it has been stated that CE is also concerned with the establishment of a metabolism that allows for approaches to manufacture that are self-sustaining and true to nature. Another theme is the sustainable supply chain management (SSCM), which has grown in parallel with the CE. SSCM scope of existence is to combine various eco-friendly interests in associations by minimizing resource flows and decreasing the unintended destructive effects of supply chain operations practices. According to the findings of Jia et al. (2020), the distribution of publications per year are increasing the attention across a variety of disciplines and journals[14]. Another important finding is that researchers have preferred to apply qualitative methodologies when researching the CE and SSCM, and thus the case study method.

The Reverse Logistic (RL) concept involves consumers' returning commodities to focal companies. RL is the term under which is intended the maximum use of used goods because each product becomes a resource in production of another commodity. It is defined as a tool that closes the supply chain loop and allows for environmental focused recycling, reuse, remanufacturing and repair operations.

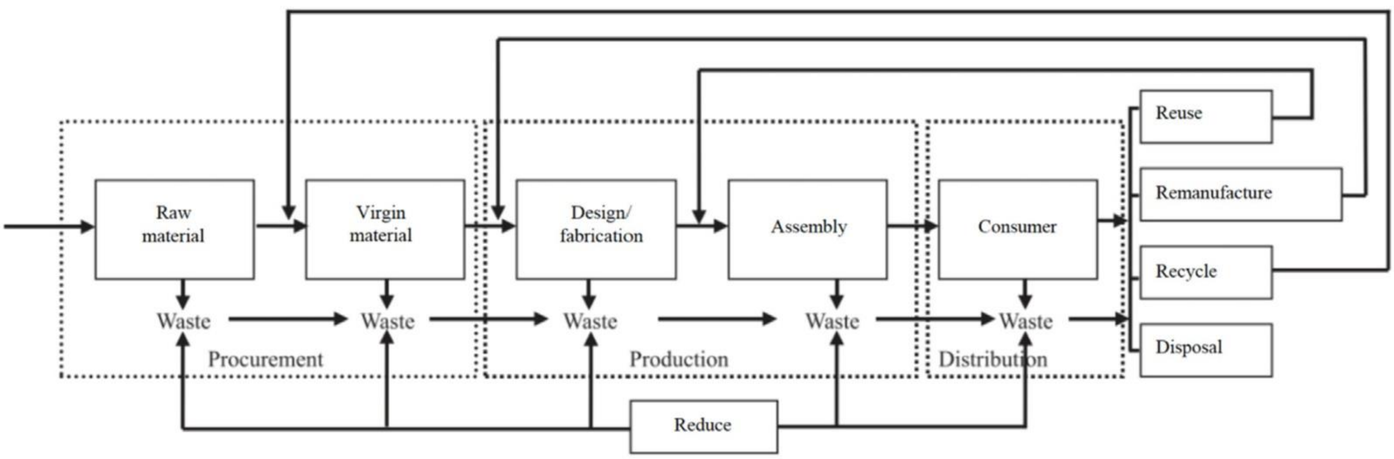

Figure 3.4 Circular economy model in T&A industry (Sarkis, 1995).

In an interview held in April 29th 2021, led by Danilo Tanio, special correspondent of the Italian newspaper *Il Corriere della Sera*, to Sebastian Borger, managing director and partner in Boston Consulting Group who is also an expert in fashion and luxury sector, a question related to the second-hand market has been answered as follows:

> "Absolutely yes, I think it is one of the elements of the circular strategy or of the fashion world, able to close the loop. These companies help the environmental balance of the industry. They are strategies but not the solution. There is no future where people only live on used products, but it is a good addition to the sustainability proposal."

[14] It is worth noting that the Journal of Cleaner Production contributed to 50% of the papers under examination.

3.3 Blockchain technology to improve Supply Chain Management reporting

Technology is improving companies' internal reporting systems since many years. For example, reporting software have increased the accuracy of reported information and consequently the profitability of the business can be better forecasted. Nowadays, there is still no presence of ESG reporting software, but the blockchain technology is a candidate; in fact, it has the potential to improve reporting quality in accounting in general, and with respect to social issues such as supply chain in particular (Brest & Honingsberg, 2021).

Blockchain was born as disposal system for the financial sector and crypto currencies. Nowadays, it is enlarging its horizons enabling increased transparency through traceability throughout the chain. Furthermore, blockchain are democratizing the system of data sharing, by providing distributed database. In fact, once information is registered on the blockchain (provenance, production conditions, food safety and quality indicators, etc.), all actors in the chain have the same copy of a database with all transactions visible. The simplicity of blockchain is essential for transparent and shared supply chain information, because the information, once registered, can never be altered again, avoiding any form of corruption and manipulation.

Blockchain technology is an open and distributed ledger. With the use of the Peer-to-Peer (P2P) technology, it allows to make transactions in a simplified way and it is permanent, because data are contained in a block and they cannot be modified. Blockchains are a form of distributed ledger in which the details of a transaction are contained in a ledger in the form of blocks of info**.** A computerised process allows to attach new info to the chain of the pre-existing blocks, automatically validating the transactions. Therefore, blockchains enable parties to exchange any kind of digital data on a P2P basis. In Italy, digital ledger technologies (DLTs) are defined as *technologies based on a shared ledger, which can be distributed, replicable, accessible simultaneously with a decentralized structure on a cryptographic basis* (Bonolis, 2020). The cryptographic basis allows to maintain more privacy within transactions. Blockchains are an example of Distributed Ledger, and they can evolve both form a centralized system and a decentralized system.

- *Centralized system*: based on a central relationship, where everything is managed form a pre-existing authority. In this case the trust in the authority represents the main element of the organization
- *Decentralized system*: based on centralization on a local level, with different satellites. There is no one single "big" central subject, but many different central subjects. In this case, trust is given to one subject dealing with another subject but still centralized
- *Distributed system* does not provide any central party. No one has the possibility to prevail. The decisional process develops through a consent structuring process (Bonolis, 2020).

The main characteristics of blockchains are: Decentralization, Non-modifiability, Traceability of transfers, Disintermediation, Transparency and verifiability, Programmability (it is possible to program certain actions which take place only in case of predetermined circumstances, and this constitutes the basis of the smart contracts) (Bonolis, 2020).

The main elements of a blockchain are:

- Peers' Transactions
- Block, which is made of a group of transactions
- Ledger, which is the public register in which all the transactions are recorded in a non-modifiable and transparent way. All the blocks are linked one to another through the use of
- Hash= it is a unique code created by a math function. The hash function will always generate a code of the same length. This is the element that uniquely and securely identifies each block. Each block contains also the hash of the previous block in the chain, in order to keep far from fraud hackers. Recalculating every hash, in fact, would be very difficult (Bonolis, 2020).

This technology aims to create and maintain a big database distributed for the management of transactions, and it is immutable, cryptographically protected and keeps the system in harmony thanks to the so-called "proof of work", that is the consent algorithm at the base of the blockchain network. To summarize, blockchain is a peer-to-peer network, without a central authority which manages data. Its participants are users' server, labelled nodes, that control the entire blockchain network. Blockchain technology can be integrated with other digital technologies, such as IoT, reducing fragmentation and simplifying payment procedures and reconciliations.

With a blockchain solution, providing a permissionless distributed ledger, the farms and workers themselves could provide data to the system and decide how to share this data with other supply chains partners.

If on the one hand blockchain has the potential to reduce inefficiencies and increase transparency, on the other hand it cannot avoid malpractice by its users. If primary data are not objectively verified before uploading on the blockchain, there is a risk for insecure data. Therefore, blockchain must be combined with data verification and validations, smart IoT solutions such as sensors or chips, to guarantee that the digital twin of the physical product tells the right story about the product (Axfood, 2019).

From the fashion event of *Pitti Immagine* held in Florence last July 2021, it has been highlighted the importance of technological innovation for fashion sustainability, up to the point that UniCredit Start Lab is supporting some of the best innovative companies in this field. Certilogo is one of the supported companies by UniCredit; it is a global platform of consumer engagement and product authentication, that applies Artificial Intelligence (AI) for verifying the authenticity of a product and its traceability. This platform helps fashion and luxury brands to link their products to the consumers and transforming them in strategic touchpoints to publicly disclose also sustainable and transparency initiatives of the supply chain. This service was born in 2006 and toady it is used by 1 user every 8 seconds in over 180 countries in 10 languages. Winner of the "Best Use of Artificial Intelligence in Fashion" award in 2018-2019 (Pitti immagine, 2021).

An interview held with the ex-Senior Vice President for Global Product Licensing of Tommy Hilfiger, a PVH Corporation's brand, Fabrizio Milan, highlighted the centrality of blockchains' systems within the apparel industry for the traceability of supply chains. "Transparency has become indispensable to retain consumers", declares Dr Milan, and traceability is already a widespread asset in other sectors like food, pharmaceuticals and logistics. The main applications of traceability at product life cycle stages deals with supply chain, logistic, communication and legal. In this regard, Dr Milan used some examples from the pharmaceutical industry; for two years now, a company in the sector has found it necessity to demonstrate the truthfulness of its claims to its customers, and with the help of a software company specialized in traceability, it has inserted in its messages keywords (e.g., recycled, supports charity, etc.). Clicking on the keyword icon, it is possible to access the certification, and to read a clear explanation of its meaning. The company has found success of the initiative (+125% on an Instagram post that announced the beginning). Most clicks were linked to keywords as clinical studies, packaging, community aid. Another important contribute by Dr Milan to my research has been the example of the luxury Maison, Christian Dior, which started using traceability to combat counterfeiting of its products. To this purpose it has availed itself of the collaboration of Microsoft and other partners, using blockchain technology.

Several consortia of companies are being formed to track their products. On April 20th, 2021, it has been announced the creation of Aura Blockchain Consortium, and, for the first time, luxury companies who usually are in strong competition between them (LVMH, Prada and Cartier) team up on a joint blockchain project. On April 23rd, 2021 it has been announced the creation of the first digital platform of blockchain for textile industry. This platform will be available for Small-Medium-Enterprises (SMEs) and it will ensure affordable prices (Milan, 2021).

The companies that are dedicated to the development of these blockchain systems allow to access with profiled visibility and secret information on the availability of products in companies and distribution networks. This sector has been accused of "greenwashing", thus, there is an extreme necessity to give clear, certified and detailed answers to consumers. Nowadays, Dr Milan says, "Millennials and Gen Z are the most involved with environmental and social issues and by 2025 they will constitute 85% of personal goods, luxury goods, and they will hardly buy products that cannot guarantee their authenticity". Therefore, the advantages of traceability are:

- increasing the transparency of its products
- certifying brand messages (sustainability, inclusion, etc.)
- increasing the efficiency of the supply chain
- being able to communicate directly with the end customer in a clear and timely manner
- collect data on the final consumer of its products
- combatting counterfeiting
- simplifying and clearly explaining complex data (e.g., chemicals) to the final consumer

4. Giants' approach to CSR

4.1 VF Corporation Case study

In the present Chapter two major apparel groups will be analysed with a focus on their sustainability approach. To highlight the importance of the companies' object of this case study, the S&P 1500 Apparel, Accessories & Luxury Goods Subindustry Index ("S&P 1500 Apparel Index") includes 15 companies, including both, VF corporation and PVH corporation.

VF Corporation is an American manufacturer of branded apparel, footwear and accessories headquartered in Greensboro, North Carolina. Founded in 1899, the company has grown to become one of the world's apparel and accessories leaders, and nowadays it owns more than 30 brands. VF Corporation has products in over five thousand stores worldwide, many of which are in the Americas' region. The United States represents the font of most of the company's revenue, which amounted to a total of over 13.8 billion U.S. dollars in 2019 (Sabanoglu, V Corporation, 2021), and global revenues of $9.2 billion in 2021[15].

To make VF a more integrated brand-building company, brands has been grouped into two categories: Core Brands and Emerging Brands. The Core Brands (Vans®, The North Face® and Timberland®) have different needs and thus should be managed differently than the Emerging Brands of the portfolio, and vice versa. Complementarily to this approach, the company is continuing to explore disruptive technologies and new business model innovations that can benefit both the Core and Emerging Brands (VF Corporation, 2021, p. 6).

[15] Including the contribution from Supreme® in the fourth quarter of 2021 (VF Corporation, 2021, p. 3).

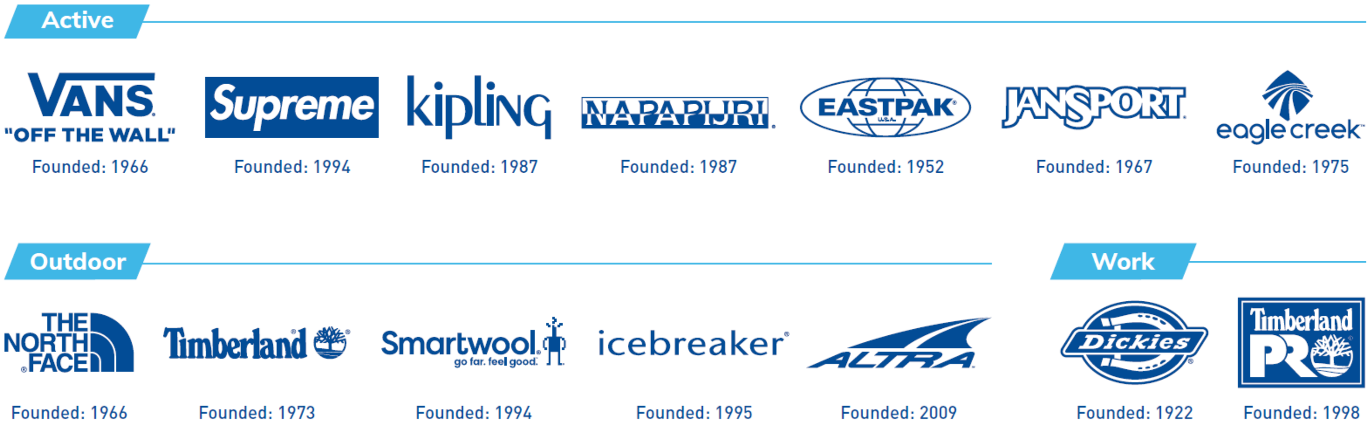

Figure 4.1 The brand portfolio of VF Corporation (VF Corporation, 2021).

In 2019, profit from VF Corporation's jeanswear segment amounted to over 720 million U.S. dollars and over 742 million U.S. dollars in revenue was generated from VF Corporation's work brand segment (See Figure 4.2).

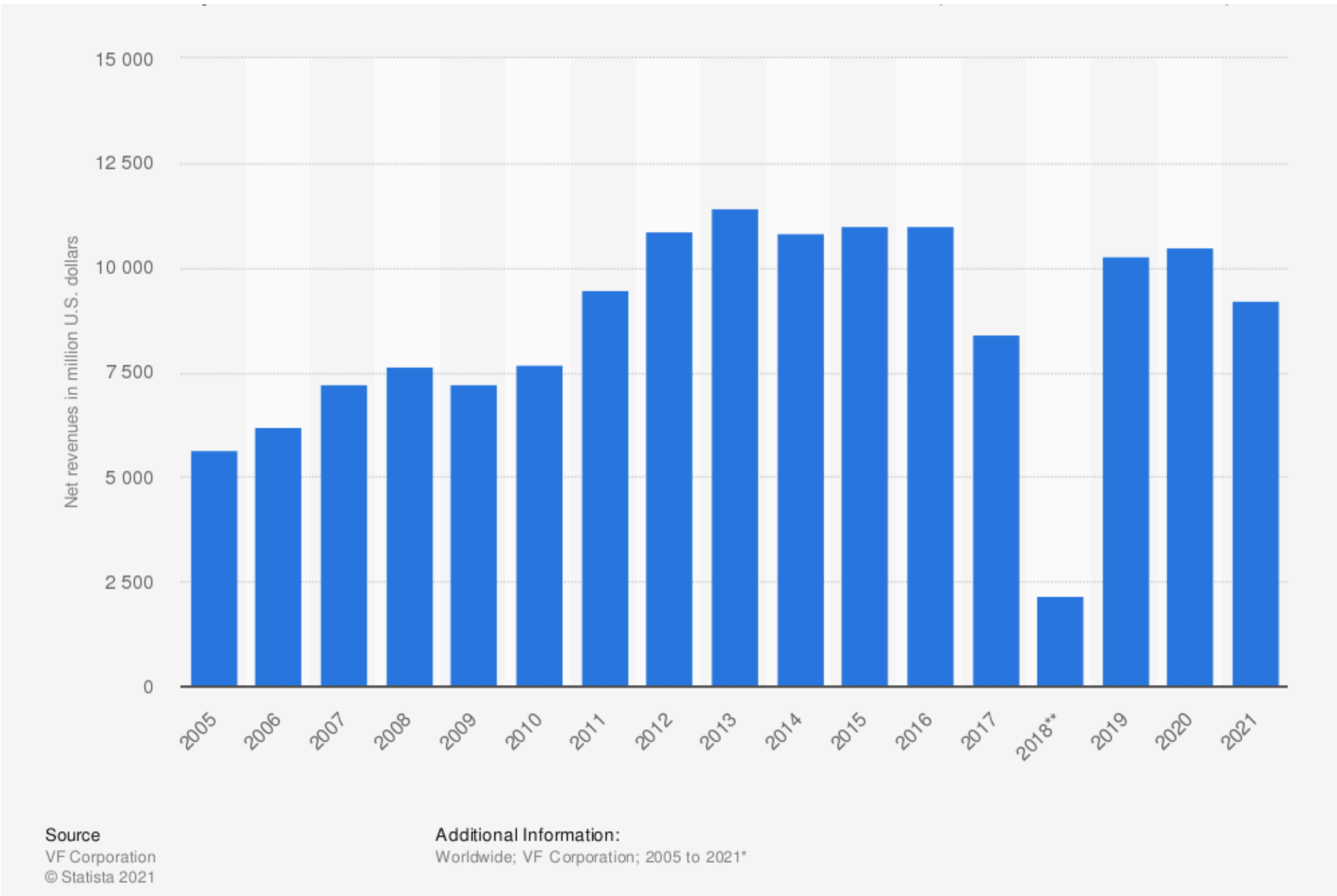

Figure 4.2 VF Corporation's Total Revenues worldwide from 2005 to 2021[16] *(in U.S. million dollars) (Sabanoglu , Total revenues of the VF Corporation worldwide from 2005 to 2021, 2021).*

[16] All references to "Fiscal Year 2021" relate to VF's current fiscal year which ran from March 29, 2020 through April 3, 2021 (VF Corporation, 2021, p. 17).

This successful company has faced the difficulties of the Covid-19 pandemic also by acquiring the Supreme® brand, which is one of the elements that reinforced both vision and strategy to evolve their portfolio and to align with the market opportunities they see driving the apparel and footwear sector (VF Corporation, 2021, p. 2). In parallel to this acquisition, the company announced right after the close of FY21 that they have entered a definitive agreement to sell the Occupational Workwear brands and businesses (See Figure 4.1), because this will give them greater financial flexibility to fuel their long-term strategic growth initiatives. Year Ended March 2021 Compared to Year Ended March 2020 VF reported a 12% decrease in revenues in Fiscal 2021 compared to Fiscal 2020. The revenue decrease was primarily attributable to the negative impact of COVID-19, including closures of VF-operated retail and VF's wholesale customer stores, supply chain disruption and reduced consumer demand (VF Corporation, 2021, p. 42).

4.1.1 CSR in VF Corporation

VF corporation has been awarded for being in the list of *the 2021 World's Most Ethical Companies® Honoree List*. In 2021, 135 companies are recognized for their unwavering commitment to business integrity. Among the honourees there are 22 countries and 47 industries and includes 9 first-time honourees and six companies that have been named to the list every year since its inception, and VF Corp. is one of the two representative companies of the apparel industry this year (Ethisphire, 2021).

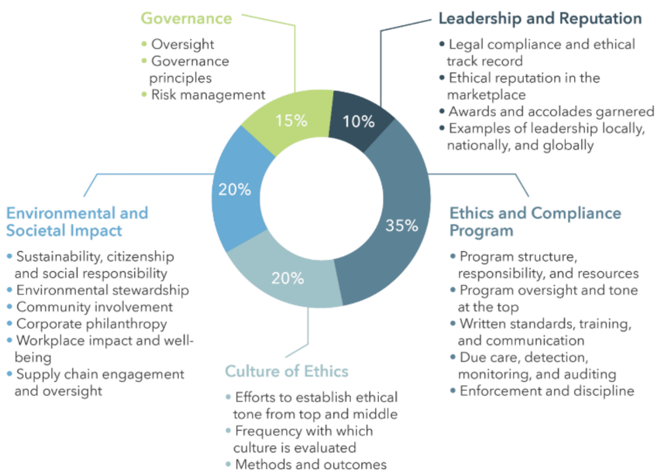

Figure 4.3 The methodology behind the selection process (Ethisphere, 2021).

Ethisphere's Ethics Quotient® consists of a private rating system that collects and objectively scores self-reported data in five weighted categories (See Figure 4.3) (Ethisphere, 2021).

"We have both an opportunity and responsibility to make a positive impact on our industry and planet through advancing sustainable business practices. VF plans to achieve significant progress in several key areas of sustainability, including people, the planet, our products, the supply chain, raw materials and facilities, to create a positive global impact. VF's Sustainability & Responsibility strategy, *Made for Change*, targets three key pillars to drive transformational change and create value for its business. The strategy is focused on new circular and sustainable business models to (i) connect retail opportunities in new sectors, (ii) scale foundational social and environmental programs to lead the industry toward greater progress at a faster rate, and (iii) empower their brands, associates, and consumers to act with purpose and impact with intention" (VF Corporation, 2021, p. 22).

From the annual report of fiscal year 2021 it is highlighted in the first pages the concept of "Purpose-led and People-first":

> We prioritized the health and safety of our people worldwide, going to great lengths to support their mental and financial well-being. I am extremely proud to say that even during the darkest days of the crisis, when nearly all our stores around the world were closed for months on end, not one of our retail associates was laid off or furloughed because of the pandemic (VF Corporation, 2021, p. 4).

An important innovation brought by the holding deals with the first time – for apparel and footwear industry- allocation of €500 million green bond toward VF's eligible sustainability projects worldwide in Fiscal Year 2020. To this matter, VF published its Green Bond Impact Report in February 2021, indicating full allocation of the net proceeds to eligible sustainability projects that deliver progress toward the achievement of VF's sustainability goals including its science-based targets. Jointly, the sustainability projects are helping to deliver meaningful environmental benefits, such as the potential to avoid an estimated 16,000 metric tonnes of carbon dioxide equivalents and 970 million litres of water consumption annually through the procurement of more sustainable materials. On the other hand, another important innovation was the goal announcement of eliminating all single-use plastic packaging, including polybags, by 2025.

Passing to the social pillar of CSR, in FY21, it has been published their first Human Rights Report in alignment with the United Nations Guiding Principles on Business and Human Rights. In response, VF and its brands took action to build on inclusion and diversity work by establishing the Council to Advance Racial Equity (CARE). CARE headed the development of a detailed plan comprising internal actions and programs, community partnerships and public policy initiatives to support three specific opportunity gaps: 1) access to education and advancement, 2) economic equity and 3) environmental justice. Although CARE is still young, VF (2021) believes it will be a stimulating power for the entire company.

VF and its associates actively support their communities and various charities. For instance, The North Face® brand has committed to programs that encourage and enable outdoor participation, such as The North Face Endurance Challenge® and The North Face Explore Fund™ programs. The Timberland® brand has a strong heritage of volunteerism, including the Path of Service™ program that offers full-time employees up to 40 hours of paid time off a year to serve their local communities through global service events. The Vans®

brand has hosted Vans® *Gives Back Day* events in which all employees at the brand's headquarters spend the day volunteering in the community. In Fiscal 2021, Vans® *Foot the Bill* program partnered with local and community-driven skate shops, restaurants, art galleries and music venues to design Vans® custom footwear. The net proceeds from the sale of each pair of the customized shoes went directly to small business partners in this critical lapse of time.

VF has decided to improve the lives of two million supply chain labours and others within their communities, by 2030. In fact, the company launched the *Worker and Community Development Program* with strategic initiatives focused on (i) water and sanitation, (ii) health and nutrition, and (iii) childcare and education. A particular dedication is directed to the supply of more sustainable raw materials; indeed, VF's goal is to source 50% recycled nylon and polyester for products by 2025, with a targeted 35% reduction in negative impact of key materials. The Company has a sustainable-materials vision which outlines a clear path for environmental impact reduction through its commitment that 100% of its top nine materials, which account for approximately 90% of its materials-related carbon emissions, will originate from regenerative, responsibly sourced renewable, or recycled sources by 2030.

The commitment of this corporation is relevant also among its peers, as in 2017 it classified 11th among the leading companies worldwide for using sustainable cotton (Statista, 2017). In fact, academic literature reports VF's brands as example of organic cotton usage within fashion companies; Timberland has adopted organic cotton programs for a range of clothing and footwear product since 2003, and it used 227 thousand pounds of total cotton in 2005 (Guo, Choi, & Shen, 2020)

4.1.2. Sustainable supply chains in VF Corporation

Given that China is projected to become the world's No. 1 apparel market by 2023 they appointed VF's first-ever President of Greater China, and they are in the process of restructuring their APAC operations by moving brands' regional centre from Hong Kong to Shanghai. This will enable their brands to strengthen their in-country presence and gain deeper insights into Chinese consumers. The restructuring process includes the transitioning of VF's Asia Product Supply Hub from Hong Kong to Singapore. And they are redistributing some of the product supply talent and resources throughout their primary sourcing countries in a way that the latter can work more closely with key suppliers and drive greater efficiency (VF Corporation, 2021, p. 7).

Figure 4.4 VF Corporation Value Chain (VF Corporation, 2018).

Included in the priorities of supply chain improvements there are the lives of people and the planet. In fact, VF maintains traceability maps to demonstrate the end-to- end (farm-to-front door) traceability of nine iconic VF-brand products. In Fiscal Year 2021, VF increased the number of published maps, and will continue to scale traceability efforts and enhance visibility across all VF brands. Nowadays, maps are available on the corporate website, but only for few products of few brands (See Table 4.1) and not always they present a full description of data. For instance, keeping one product which is familiar to Millennials and Gen Z consumers, the Women's denali 2 jacket (see Figure 4.5) is one of the 9 mapped garmets of The North Face®; in the personal mapping page of this product, it is firstly presented with the following sentences: "We've redesigned the iconic Denali Hoodie and crafted it out of recycled fleece for unmatched warmth, comfort and durability. The Denali Collection is inspired by our original Denali Jacket that debuted in 1988[…]". The available data show with different colours, according to the typology of centers (e.g., Distribution centers, factories, textile mills, material suppliers), the places where each component of the jacket has been produced (Source map, 2019). In this case the locations that took part to the value chain are:

Figure 4.5 Women's denali 2 jacket (The North Face, s.d.)

1) Thailand (Not disclosed data): Distributor of recycled polyester chips.
2) Malaysia (Not disclosed data): Yarn supplier of natural rubber thread, natural rubber yarn.
3) Taiwan, Taipei (Disclosed data): Dyeing and finishing mill
4) Taiwan, Taoyuan (Disclosed data): Fabric of Interlining, Polyester Insole, Polyester Interlining.
5) Taiwan, Changhua (Not disclosed data): Yarn supplier
6) Taiwan, New Maipei City (Disclosed data): Fiber Supplier

7) Taiwan, Douliu (Disclosed data): Fabric mill of nylon
8) Taiwan, New Taipei City (Disclosed data): Yarn supplier
9) South Korea, North Gyeongsang (Disclosed data): Fabric mill of recycled nylon, nylon fiber, nylon yarn, plastic, yarn
10) South Korea, Gyeonggi (Disclosed data): Zipper supplier
11) China, Guangdong (Disclosed data): Trim supplier
12) China, Fujian (Not disclosed data): Yarn supplier
13) Colombia, Antioquia (Partially disclosed data): Trim supplier of eyelet
14) Colombia, Antioquia (Partially disclosed data): Trim supplier of metal and metal eyelet
15) El Salvador, La Paz (Disclosed data): Garment manufacturer
16) El Salvador, Santa Ana (Disclosed data): Fabric mill
17) Honduras, Cortés (Disclosed data):Thread supplier
18) Guatemala, Amatitlan (Disclosed data):Dyeing & Finishing Mill
19) Guatemala, Amatitlan (Not disclosed data): Yarn supplier
20) Guatemala, Guatemala city (Disclosed data):Trim supplier
21) El Salvador, La Libertad (Disclosed data): Yarn Supplier
22) Guatemala, Colonia Santa Fe (Partially disclosed): Fabric mill
23) El Salvador, La Libertad (Partially disclosed): Zipper supplier
24) South Carolina, Lake City (Disclosed data): Yarn supplier
25) South Carolina, Wando (Disclosed data): Chemical supplier
26) North Carolina, Reidsville (Disclosed data): Yarn supplier
27) Virginia, Waynesboro (Disclosed data): Yarn Supplier
28) California, Bakersfield (Not disclosed data): Fiber supplier
29) El Salvador, La Libertad (Disclosed data): Thread supplier
30) California, Visalia (Disclosed data): Distribution center

Considering that, out of the numerous products marketed by The North Face®, only 9 of them are tracked, even though a great effort has been made, a complete data declaration is not available. As a matter of facts, 11 out of 30 locations of the supply chain of the *Denali 2 jacket* have Not-disclosed (Partially-disclosed) data, thus, only 63% data are publicly disclosed. Therefore, the margins for improvement for the traceability of the company's products are still very large.

VF Brand	**No. of available mapped products**
Other	4

Dickies	6
Eagle Creek	5
Eastpak	4
Icebreaker	3
JanSport	5
Kipling	5
Napapijri	5
Smartwool	3
The North Face	9
Timberland	10
Vans	9

Table 4.1 Number of available mapped products per VF's brands. Data from: (VF Corporation, s.d.).

4.2 PVH Corporation Case study

PVH was born in 1881 by Moses and Endel Phillips, who mended and sale shirts for coal miners in the Pottsville (Pennsylvania); Nine years later, in 1890, *Moses Phillips & Son* family relocated their business in New York City. In 1907, the name of the company became *Phillips-Jones Corporation*. In 1920 the *Phillips-Jones Corporation* became listed in the NYSE. In 1943, after several changes, the corporation has been awarded for excellence in wartime production of shirts. In 1957, in honour of its best-selling shirt brand, Phillips-Jones Corporation changes its name to *Phillips-Van Heusen Corporation*, becoming the number one dress shirt brand in the United States (1991). In 2000 *Phillips-Van Heusen* acquired the rights to the Van Hausen trademark in Europe and Asia, gaining the ownership of the brand worldwide. A big step of the company goes back to 2003, when it acquired Calvin Klein, the marketing leader to its brand portfolio, and again in 2010, when it acquired Tommy Hilfiger. 2011 is the year in which the company changed its name in PVH Corp. to reflect the growth and change of the company with the acquisitions of Calving Klein and Tommy Hilfiger. In 2013 it entered in the S&P500 (PVH Company, n.d.).

Nowadays, PVH is one of the largest apparel companies worldwide, generating $9.9bn in annual revenues and operating in over 40 countries. In 2020 it celebrated 100 years on the NYSE. It is worth noting that only 26 companies celebrated 100years in the NYSE, and PVH is the only one of the apparel industry.

The leading brands of PVH are Calving Klein and Tommy Hilfiger. The Heritage brands are: Van Heusen, IZOD, Arrow, Warner's, Olga by Warner's, Geoffrey Beene, and True.

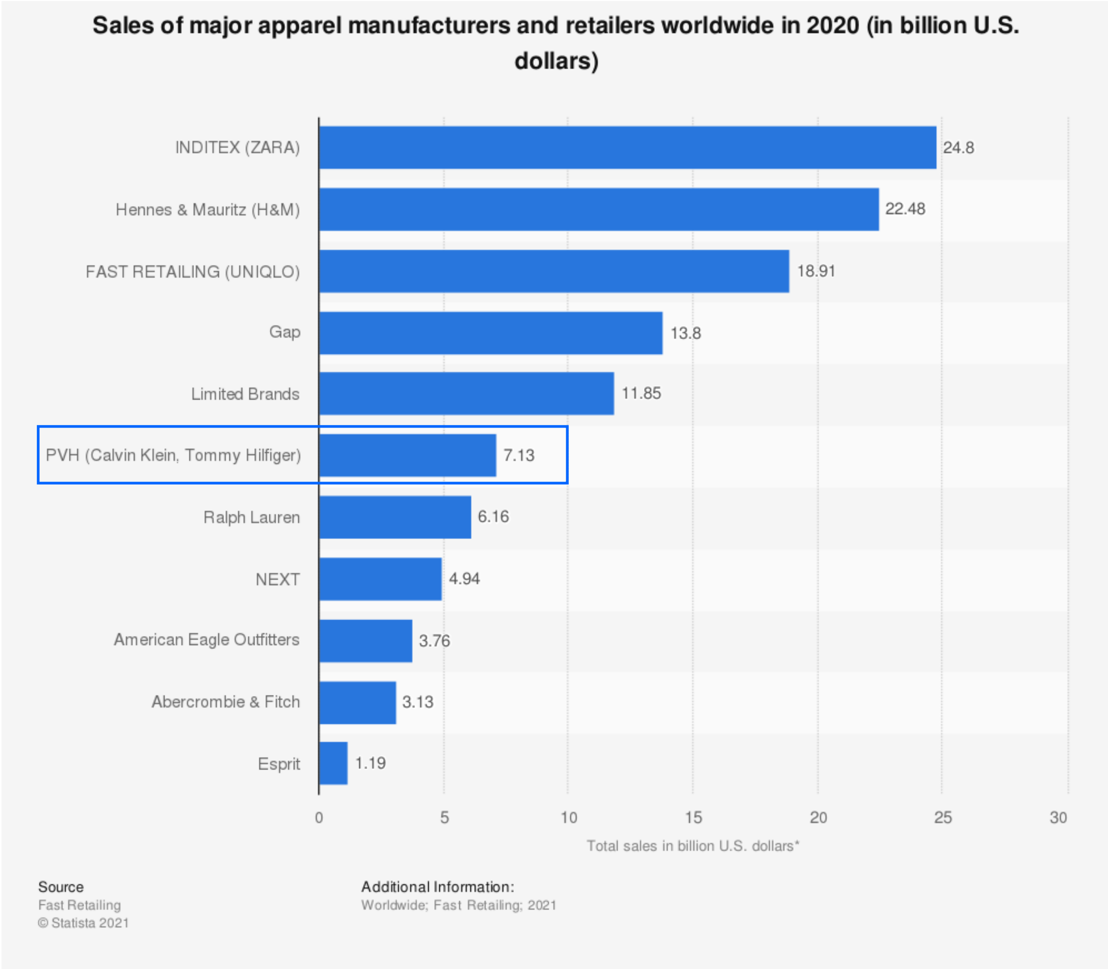

Figure 4.6 Sales of major apparel manufacturers and retailers worldwide in 2020 (in billion U.S. dollars) (Statista Research Department, 2021)

4.2.1 CSR in PVH Corporation: the concept of Forward fashion

The first annual Corporate Responsibility (CR) report of this company has been published in 2008 and, in 2019, the company launched the CR strategy *Forward Fashion* with a vision to establish a new level of ambition and transparency for sustainable business. Forward Fashion is the name used for their strategy to transform how clothes are made and (re)used, and the actions that will be taken to move their business and the fashion industry toward a more innovative and responsible future (See Figure 4.6):

> Through *Forward Fashion*, we aim to reduce our negative impacts to zero, increase positive impacts to 100% and improve the over 1 million lives throughout our value chain: our associates and supply chain workers, their families, and their communities. The fashion industry is changing, and, at PVH,

> we recognize our responsibility and opportunity to drive fashion forward—for good (PVH Corp., 2020, p. 8).

For PVH, the Annual CR report usually refers to the period going from February to the end of January, thus, the 2020 fiscal year report provides information and performance data for the period from February 3, 2020, to January 31, 2020.

The note at the beginning of the CR Report of 2020 by Stefan Larsson, the Group's Chief Executive Officer, highlights the "notable progress across key initiatives on inclusion and diversity, environmental sustainability, human rights and climate change. These areas of focus and our values are at the heart of everything we do" (PVH Corp., 2020, p. 6). The Performance Summary of 2020 saw an alignment to the Task Force on Climate-Related Financial Disclosures (TCFD) Standard and the GRI framework.

In the same way, the Chief Sustainability Officer, Marissa Pagnani McGowan, highlights the centrality of leadership and collaboration through the entire value chain to establish resilient systems. The pandemic year forced the company to adapt short-term strategies to address immediate needs across the organization, but at the same time enabled it to put more attention on the *Forward Fashion* strategy together with the reinforcement of their partnerships to inform the apparel industry's future. Dr Pagnani McGowan, in the 2020 CR Report, says "I am proud of the progress we have driven forward, from working across the apparel sector to create and endorse The International Labour Organization (ILO) Call to Action, to partnering with our suppliers to accelerate the adoption of industry tools to measure and improve social and environmental performance, and joining over 300 companies in the LEAD on climate initiative to continue to prioritize climate action". The rapid growth of digital tools and innovations for circularity is acknowledged by the group, but they are trying to find a balance also with the characterization of the industry's uniquely human supply chain, to account for the workers who comprise our industry's uniquely human supply chain. "These challenges are not easy, yet fashion has always had the ability to reinvent and renew, and this is what motivates all of us to strive for impactful solutions, unlock new opportunities, and continue to drive fashion forward—for good" (PVH Corp., 2020, p. 7).

Figure 4.7 PVH Corp. action points for the Forward Fashion strategy (PVH Corp., 2020, p. 9).

The newly introduced "Eco Series" across several product categories, including jeans, sportswear, and performance, count a 90% more sustainable denim for Tommy Hilfiger, and 2.1 million pieces have been produced containing 20% post-consumer recycled cotton (PVH Corp., 2020, p. 14). For what concerns the other leading brand, Calvin Klein doubled the use of sustainable materials in 2020 FY and for the first time it launched the clean fragrance, CK EVERYONE, which is vegan, made from naturally derived alcohol and infused with ingredients sourced from natural origins. This gender-neutral fragrance has been awarded with the Silver Level Material Health Certificate from Cradle-to-Cradle Products Innovation Institute[17]. The Heritage brands saw a commitment of 100% use of sustainable cotton and 100% recycled polyester and nylon by 2025.

Public perception of its brands is a significant component of the company's value. This high sensitivity to reputational risk requires PVH to be very careful when making sourcing decisions. As global consumers become more sophisticated and aware, a company can only be considered sustainable if all its suppliers are equally responsible and sustainable. As the Chief Supply Chain Officer of the time, Bill McRaith, stated in 2015, "We want to be in places where we can install not just good factories, but codes of conduct, values, environmental sustainability, positive worker relations, and the highest business and ethical principles to ensure the long-term success of our commitments.… We like to be the first into an area to help establish the workplace rules to be followed by future investors and market participants" (Mihretu & Llobet, 2017).

[17] Cradle to Cradle Certified® is a globally recognized measure of safer, more sustainable products made for the circular economy (PVH Corp., 2020, p. 12)

4.2.2 Sustainable supply chains in PVH Corporation: manufacturing in Ethiopia

PVH radar focuses on the African region since 2012, when it started to develop its African Strategy. To this matter, it started by sourcing a limited range of products from Egypt, Kenya, Lesotho, and Mauritius, while studying the rest of the region to find potential unexplored areas. PVH hired Roy Ashurst to become their Hub Leader for Africa and the Middle East, whose mission was to fully understand the different countries' capabilities. The superior of Roy Ashurst, Bill McRaith, had an extensive experience in the textile and clothing manufacturing and they jointly decided to locate manufacturing in East Africa, to start again and build a model operation. He advocated full verticality and compliance with standard and safety regulations, gaining more control over the location of its suppliers. The company, at that time, was seriously considering a vertical integration supply chain vision as a long-term strategy (Mihretu & Llobet, 2017).

In April 2014, PVH went to Africa with its main competitor VF Corp., jointly with other apparel manufacturers, transforming this event in the first joint industry effort. This novel approach of organizing a joint mission with VF executives served to emphasize that strategic decisions, such as geographic location, could best be made as an industry, rather than an individual company effort. Approximately 48 companies, mainly from Asia, with whom PVH has long-standing relationships, participated in the trip, and visited Uganda, Kenya and Ethiopia. In the first trip to Ethiopia, McRaith was impressed by the country's potential. The trip's outcomes were the expression of interest in sourcing by many companies, together with the willingness to establish operations, especially in Kenya and Ethiopia. Uganda raised less interest due to its anti-same sex relationship regulations and policies. In deciding its new location, PVH considered five key factors: government stability, land and port accessibility, cost of energy, and labour availability. To invest, PVH needed assurance of true long-term commitment by government authorities that they would satisfy these essential conditions

> "The level of professionalism, commitment, and maturity that we are seeing from some governments in Africa reassures our interest to not only source from Africa, but to produce in Africa.… As a result of our trip, we identified a great opportunity for the industry to invest nearly a billion dollars to create a vertically integrated apparel supply chain in some regions of Africa. In other words, create jobs in Africa not just in apparel, but also in the textile and even agricultural industry through better cotton production techniques" (McRaith, Senate Committee on Foreign Relations 2015).

After studying for almost one year the experiences of successfully industrialized countries such as South Korea, Singapore, China, Vietnam and Mauritius and less successful ones such as Nigeria, the Ethiopian government found out that a key finding of this assessment is that industrial parks played a significant role in structurally transforming the manufacturing sector. The government decided to set out the key elements of the strategy in a white paper called “Development of Industrial Parks and Industrialization in Ethiopia”, who has been shared and discussed among the key members of Ethiopia’s key members of government and political leadership. Government’s objectives included promoting employment increasing exports, and attracting foreign investment, although additional goals may come into play, depending on circumstances and stage of development. These additional goals include promotion of regional economic development, facilitation of technological transfer, creation of linkages with domestic industries, and using industrial parks to experiment with new development strategies (Mihretu & Llobet, 2017).

The chosen city for establishing PVH’s Ethiopian factories is Hawassa, who became an important political and economic centre in the country, as well as having helped to improve the social conditions of the inhabitants of the city and surrounding areas. Nowadays, the Protecting Lake Hawassa initiative -launched in 2018 in partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)- addresses the manufacturing of nearly all products pertaining to the Heritage Brands business. The Hawassa Industrial Park directs solid waste management, afforestation and soil erosion control, and community and stakeholder engagement to protect the lake. With access to safely managed water, sanitation, and hygiene (WASH) becoming increasingly critical during the year of COVID-19, WASH plays a key role in helping reduce risk of outbreaks and slow the spread of coronavirus (PVH Corp., 2020, p. 16). According to the WTO, the value of the world textiles (SITC 65) and apparel (SITC 84) exports totalled $305bn and $492bn in 2019, respectively, decreasing by 2.4% and 0.4% in one year. The recent developments of the global landscape became more regional, especially in Asia, with bilateral trade agreements containing preferential arrangements for textiles and apparel.

Therefore, PVH saw Ethiopia as a great revolutionary opportunity to build a fully vertically integrated socially responsible supply chain in Africa. The combined effects of factors such as wage level, power costs, and duty-free market access coupled with Ethiopia’s commitment to creating an environment that supports workers safety, and sustainable production made Ethiopia the clear choice for PVH. The government of Ethiopia put a clear commitment to the textile and apparel sector as a priority sector in the industrialization strategy. Ethiopia’s effort in attracting and facilitating PVH’s production was fundamentally informed by the country’s economic strategy and desire to achieve structural transformation.

4.2.3 Interview

In this section is reported the interview about PVH corporation approach to CSR with Fabrizio Milan, who is the ex-Senior Vice-President of Tommy Hilfiger, after covering the role of Senior Vice-President licensing EMEA at Calvin Klein and Tommy Hilfiger.

Q: What does it mean for a clothing company to be sustainable and follow the ESG factors? What does it mean to be ESG-compliant?

A: In addition to respecting the rules imposed by various agreements signed by the company in terms of compliance with rules of conduct to respect the environment, social behaviour and governance, Sustainability has become in recent years a critical success factor to reach and attract an important group of consumers (especially GenZ and Millenials, but not only) who are very interested and sensitive to these topics.

Q: Do you think the company is more focused on social or environmental sustainability?

A: To both equally.

Q: Have you announced business projects to collect used clothing for recycling?

A: In October 2020, Tommy Hilfiger launched a pilot project in the city of Amsterdam aimed at recycling, in different forms and ways, garments already purchased and used by end-users (Tommy for Life).

Q: Multinational Corporations also have a responsibility to do what is right for the people within their supply chain, the employees who work in their shops and factories, the planet, and the communities in which we live. How can be balanced the priorities of the various stakeholders now that it is not just about maximizing profit?

A: With the daily commitment of listening to the various components of the entire product chain, from the design made in a more conscious and aimed at the reuse of the product, to the sustainability of the materials used and packaging, the working conditions of its own employees and those of its suppliers, respect for the environment, supporting social initiatives in the communities in which it operates. All with the intention of being more sustainable without losing sight of the profit that serves to prosper the company and to support these initiatives.

Q: Moncler has been classified as a reference brand for the DJSI textile/clothing/fashion index in 2019 and 2020. Does the company aim to become part of these better-known indices?

A: I don’t know exactly, but PVH certainly wants to be part of all the major associations that deal with these issues and has already signed several protocols along with companies like Nike and the others.

Q: What role do you think the supply chain can play in a sustainable business strategy?

A: A very important role, because it is one of the business processes that can most positively or negatively affect the sustainability rating of the company (materials, packaging, recycling, environmental pollution, etc.).

5. Conclusion

The lockdown period of 2020 highlighted the trend of fashion industry mostly for the digital sprint and for seeking justice. As a matter of facts, even though there is a strong shift towards digital shops there is no reason to believe that the curtain is falling on digital channels. Instead, from the problems of 2020, a more elegant and adjusted offering is emerging, combining the best of human and automated service considered to become a sort of "bionic" customer experience.

The truthfulness of seeking for justice comes from evidence of ESG ratings and customer engagement in the fashion process: both consumers and investors tend to reward companies that treat their employees and the environment with respect. ESG metrics, probably, will never have the accuracy, validity, reliability, and commensurability of financial metrics. Nevertheless, this does not mean that the considerable efforts to improve them is considered a waste of energies, because these ratings are becoming increasingly important also for investors, up to the point of creating a huge fall in a company's share volume if it results that it does not follow a sustainable business (remember Figure 2.4, reflecting the largest US retirement fund who, in 2006, sale more than 50 million shares of Coca Cola Co. after having discovered the poor labour and environmental practices adopted in developing countries). Consumers' engagement in sustainable fashion results from a research led by Kim and Damhorst, from an academic point of view, and it is confirmed from the reported interview with Dr. Milan, who declares that Millennials and GenZ are the most involved in these theme and corporations cannot avoid this slice of market. New generations demand for sustainable products and a visible and transparent value chain ("from sheep to shop") and this is something that blockchain is already enabling, as reported in Section 4.1.2, about the traceability of a VF Corporation's leading product, the women's denali 2 jacket.

Another aspect of the industry object of this dissertation is the need for a deeper partnership, translating in the share of strategies, data, and insights, as well as the need to find a joint way to share the burden with suppliers, contractors and so on. Even though the historical trend of fashion industry is characterized by conglomerations, we have seen that nowadays an increase in M&As (in the past pages we have seen how VF Corp. acquired Supreme despite the difficult times of pandemic). Furthermore, it is also verifying the share of values and strategies toward the concept of CSR, by actively creating consortia of companies to track their products, like the Aura Blockchain consortium. For the first time, luxury companies who usually are in strong competition between them (LVMH, Prada and Cartier) team up on a joint blockchain project.

Multiple studies about CSR communication surround the discourse about different aspects of CSR within the fashion industry. The most touched fields look at the communication about eco-fashion and sustainable apparel good; indeed, the former refers to the use of websites to determine how sustainability issues are communicated, and it found that the United Nation's Global Reporting Initiative (GRI) is the most useful framework to assess sustainability issues within the supply chain (Look at Table 1.1). The latter, refers to the rise of eco-fashion talks and the rhetoric that surrounds it; the final findings are that eco-fashion is based more often on branding and marketing that on actual sustainable and ethical practices of the companies.

As one of the most complex industries, apparel industry's strategies put effort on a proper supply chain management. Issues of SCM continues to represent the most important issue for corporations who have outsourced their production to developing nations, and for what concerns the traceability and control over processes and activities along the supply chain. Still today there is a lack of information toward processes and structure of supply chains. The findings of this thesis concerns two leading apparel groups. Concerning to the reliability of sustainable supply chains, even though VF corp. is among the leading companies, still today it presents a lack of traceability for its customers, but further adjustments are in a development phase. As reported in the section of VF Corporation case study, not all fields of a leading product are filled because the required data are numerous, and the active responsible actions are a recent fact.

In this thesis, interesting findings relate to the shape of PVH supply chain in the form of vertical integration, and a further cooperation with its main competitor, VF corporation, as in April 2014, they went together to Africa, jointly with other apparel manufacturers, transforming this event in the first joint industry effort. This novel approach of organizing a joint mission with VF executives served to emphasize that strategic decisions, such as geographic location, could best be made as an industry, rather than an individual company effort.

Blockchains are democratizing the system of data sharing, by providing distributed database. It is on eof the most important themes among the sustainable supply chain management because it has the potential to reduce inefficiencies and increase transparency, but the issue relates to the necessity of a combination with data verification and validations, smart IoT solutions such as chips, to guarantee that the digital twin of the physical product is tells the right story about the product. From the recent event held in Florence in July 2021, Pitti Immagine, new startups were presented, like Certilogo, which is a global platform of consumer engagement and product authentication aimed at verifying the authenticity of a product and its traceability. "Millennials and Gen Z are the most involved with environmental and social issues and by 2025 they will constitute 85% of personal goods, luxury goods, and they will hardly buy products that cannot guarantee their authenticity" declared Dr.Milan in the held interview.

Recycling projects and turning businesses onto more sustainable models are presented in the sustainability reports, like the goal announcement of eliminating all single-use plastic packaging by 2025 (VF Corporations, 2021) and the establishment of the Council to Advance Racial Equity (CARE) for supporting initiatives to support three specific opportunity gaps: 1) access to education and advancement, 2) economic equity and 3) environmental justice. PVH corporation, on the other side, named its sustainability report “forward fashion”, with the aim to establish a real CSR strategy for the company. This year the Chief Sustainability Officer of PVH highlighted the centrality of leadership and collaboration through the entire value chain to establish resilient systems.

Both companies seem to be in perfect alignment with the trends of the industry to which it belongs thanks to the various projects that are continually launching, and to the reporting framework that are helping them to respect the environmental and social community. They are fitting with the trend of Circular Economy and the second-hand market, which is considered an important strategy to help the environmental balance of the industry also by Sebastian Borger, managing director and partner in Boston Consulting Group who is also an expert in fashion and luxury sector, who declares that “There is no future where people only live on used products, but it is a good addition to the sustainability proposal.”

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