

A Work Project, presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics.

TRANSITION TO A GREENER FASHION:  
HOW AND WHY MAIN BRANDS ARE MOVING TOWARDS  
A MORE SUSTAINABLE BUSINESS?

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**Abstract:** The fashion industry has long been identified as a main driver of systemic environmental damage. Especially for so-called “fast fashion” giants that operate on a strategic model based on both overproduction and overconsumption. As environmental concerns become ever more relevant in public discourse, several key corporate players have taken steps to reduce their environmental impact and make their supply chains more sustainable.

In order to investigate on this matter, we readapt existing research frameworks to measure the economic and sustainability performance, and their correlation, of eight-company sample selected among the great fast-fashion “giants” and evaluate their commitment to sustainability issues.

**Keywords:** Fashion, Sustainability, Economic Growth, Corporate Social Responsibility

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# 1. Introduction

**Individual Part - Filippo De Petris (44821)**

## 1.1 The Rise of Fast Fashion

In the early 1990s, the fashion industry centered around the so-called Big Four fashion capitals: New York, Paris, Milan, and London (Godart, 2014). In the wake of iconic runway presentations, a general trend began to emerge across America and Europe - a demand from consumers to purchase replicas of the latest fashion trends, as long as they came with a relevant decrease in price, even if it meant a lower quality standard. Therefore, fashion retail executives saw a great opportunity, which prompted the need for manufacturers to produce high fashion designs with higher frequency, lower quality and leaner costs (Bhardwaj & Fairhurst, 2010). Such a strategy led to the emergence a new market segment called fast fashion, which aims to provide consumers with famous clothing styles and designs for a fraction of the original price. Thus began a highly competitive race between brands to bring designs from runway to real life with affordable prices. This concept revolutionized the entire dynamic of the fashion industry. As a matter of fact, the increasing demand for cheaper clothing spurred the massive development of textiles production factories across the developing world. This allowed western companies to outsource their production abroad, leveraging the less expensive labor cost to mass-produce high fashion clothing for mainstream consumers (Linden, 2016).

## 1.2 Fashion Industry Overview

Nowadays, accounting for 2% of the world's GDP, the fashion industry holds a market value of over 3 trillion dollars (Global Fashion Industry Statistics, 2021). Such an outstanding figure is the result of constant economic and technological development that has brought society to grow past

the basic need to buy clothes, as it was before the mid-19th century (Huei, 2018). The meaning of “fashion” has evolved to describe a sector in which brands, designers, manufacturers, and marketing strategies must be continuously aligned and updated with new styles and trends (Barnes & Lea-Greenwood, 2006). As a result, the fashion industry is probably one of the most competitive markets (Gazzola, Pavone, Pozzetti & Grechi, 2020). Nevertheless, every day new brands emerge with different positions and targets.

Overall and since the early 2000s, only a few brands have been able to overcome competition and become dominant in their sectors. Examples include now-multibillion companies such as Nike, Louis Vuitton, Hermes, Gucci and Adidas, which rank as the top 5 most valuable brands. Their aggregate market value amounts to 121,8 billion dollars (Fashion United Index, 2020). By looking at these giants, it becomes evident that it does not matter if your company sells sportswear or high luxury clothes as long as innovation and differentiation are the core values (Ünay & Zehir, 2012). This statement applies not only to well-established companies but to whoever wants to be part of this market. In fact, the fashion industry is now probably one of the main stages for creative brands that want to take advantage of uniqueness (Bukantité, 2021). For instance, Alpha Tauri (an Austrian brand owned by Red Bull), produces specialized avant-garde textiles. Their latest collection involved a technology capable of returning energy by reflecting the infrared rays naturally emitted by the human body and promoting blood circulation, without altering the body’s natural microclimate (Alpha Tauri, 2022).

Furthermore, as technology improves, new fashion trends evolve (McKinsey, 2021). For instance, the Metaverse is already disrupting the strategies of major companies. Nike, for one, has invested millions of dollars in digital royalties and trademarks. According to trademark attorney Josh Gerben, “Nike is protecting their trademarks for this new era”. It has already secured its most

valuable and famous logos and trademarks like “Nike”, “Just do it”, “Air Jordan” and “Jumpman” (CBNC, Golden, 2021). Showing once again that innovation is crucial to remain at the highest level in this market.

Moreover, the fashion industry is highly decentralized, structuring across a large number of different branches. In the same industry, we can find brands focusing on luxury, fast fashion, e-commerce, streetwear, wholesale, and many others. As such, it would make sense to say that the fashion industry is made out of a vast variety of other smaller industries. It is crucial to understand these differences: it would be illogical to trace comparisons between the different paradigms of luxury brands and wholesale brands- As studies have shown, fast fashion is one of the most influential sectors in regard to sustainability, albeit negatively so. (Niinimäki, Peters, Dahlbo, Perry, Rissanen, & Gwilt, 2020).

### **Individual Part - Luca Longhi (45055)**

#### **1.3 Sustainability in Fashion**

Corporate sustainability does not simply require a more efficient supply chain or more functional recycling processes: it must also define company culture and goals, aligning operations with both stakeholders and the environment (Spiliakos, 2018). There are several different definitions for the term: economic sustainability might focus on maintaining economic stability over long periods (Investopedia, 2021), while environmental sustainability would privilege companies that operate to avoid depletion of natural resources (Oxford Dictionary).

Accordingly, we could consider the 75 million people employed in the fashion industry (SolidarityCenter, 2019), the billions of dollars’ worth of GDP, the lower prices that allow a much wider range of people to purchase clothes (Linden, 2016). Or we could look at the fashion industry as the second-worst polluter in the world after the oil and gas industries (Bailey, Basu & Sharma,

2022). In the UK alone, it is estimated that around 1.8 million tons of waste are generated annually from garments, accounting for around 5% of total UK household waste. On average, just one person in the UK produces 70 Kg of textiles waste per year (Forge Recycling, 2016). Even worse are Italy and Portugal, which rank respectively 1st and 2nd in Europe with 547,640 tons of textile waste, almost 60% of which ends up in landfills (Moore, 2020).

In addition to the significant level of material waste, the fashion industry is the second industry for water consumption (Scott, 2020). This “achievement” should not sound surprising: as stated by the UN it takes up to 7,500 liters of water to make a single pair of jeans, and such requirements account for 20% of the world's water consumption (United Nations, 2019). Unfortunately, according to the *Global Fashion Agenda* and *Boston Consulting Group*, water usage will increase by 50% in 2030. What is more, when discussing fashion footprint we should also consider carbon emissions, forced labor, and animal captivity (which will be discussed in detail in the following paragraphs). Overall, it seems that this industry is ready to do everything in its power to lower prices and costs to increase profits, regardless of the environmental health.

However, the guilt should not only be laid at the feet of executives and managers, or consumers that want to stay trendy. It is rather the perception of what we really need that should be changed. We could look at the fashion industry as a loop in which brands follow what consumers want, but the latter always demand something new, pushing companies to produce at ever faster rates (Niinimäki et al., 2020). Therefore, the current business logic of the fashion industry is based on production and consumption with a constant increase in volume and frequency. By this view, we can consider two conditions that influence the market. The first one is that consumers demand is extremely variable, meaning that purchase options need to be changed continuously and rapidly. Leading to the second condition – the need for companies to produce constantly, exploiting

economies of scale (Linden, 2016). For this reason, it is crucial to explain the two concepts that keep fashion (and more specifically fast fashion) moving and growing at this rate can be termed Overconsumption and Overproduction.

#### 1.4 Overconsumption and Overproduction

The availability of clothing items at low prices and in a variety of locations has never been greater (Linden, 2016). Moreover, wearing trendy clothes has become part and parcel of the needs and aspirations of the individual (Huei, 2018). This phenomenon is related to the increased relevance of mass media and social networks (Szabo, 2021). Everyone wants to look good -- and more importantly wants to spend less money. As stated before, the fast fashion industry is a poorer and cheaper projection of what passes through the most important runways in the world (Sachidhanandham, 2019). Therefore, fast fashion can be represented by a vicious circle in which consumers are very demanding, and suppliers and retailers have to produce as fast as possible to satisfy the demand (i.e. Zara takes only 4 weeks to produce new lines) (Lee, 2019).

The term Fast Fashion in that sense can be compared to Fast Food, as both these categories rely on the same basis: rapidity of production, economies of scale, lean cost production, cheap prices, and questionable quality (Joy, Sherry, Venkatesh, Wang & Chan, 2012). By sticking to these principles, fast fashion companies are able to produce, sell and advertise at a tremendous rate. Considering objective data on this dimension, yearly global production amounts from 80 to 150 billion items, for an average of 20 pieces per capita every year in the world (Wicker, 2020).

Therefore, one of the main questions to answer is why companies are creating a surplus of production on a regular basis. Supposedly, companies like Zara or H&M should have the capabilities and data to better understand and match the level of demand. The surplus is a strategic



decision. It costs much less to produce more (to reduce expenses per item) and deal with excess stock in the future through last sales (Fashinnovation, 2021). According to the *Circular Textile Association*, only 20%-30% of apparel is sold at full price, leaving the rest for Black Fridays, Christmas, old season sales, and many other occasions. Consequently, not each piece is sold and, very often, more than 30% will remain unsold (Rudenko, 2018). For instance, H&M has alarmed the world when in 2018 has declared that at the end of the year its inventory was worth \$4.3 billion (Paton, 2018). Nevertheless, companies still prefer to manage waste and huge inventories, as consumers are triggered by the rapidity and change of clothes in stores (Fashinnovation, 2021).

Such examples show how surpluses depend on both the productivity of companies and the preferences of consumers. Every business is driven by its consumers, and the fashion industry is no exception. Companies would not be forced to overproduce if consumers were not requesting a continuous stock renewal. In that sense, if companies are working with overproduction, consumers are purchasing with overconsumption (Vladimirova, 2021). This essentially means that both the supply and demand curves are higher than optimal. Instead, studies have shown that the purchase of garments and their actual use do not follow the same pattern. Consumers have increased their frequency of buying new clothes by 60% from 2000 to 2014, but have used them almost 40% less (GreenPeace, 2017). For instance, over the last three decades, purchases of clothes in the US have quintupled, but on average each garment is worn only seven times (CBS, 2021).

This relationship between consumption and use is even more interesting considering that people are buying more but spending less (Knošková & Garosova, 2018). Again in the USA, women now own on average more than 30 outfits (one per day of the month), whereas back in 1930 they only had 9, with a current average expenditure per item of around \$14: much lower than it used to be in the 60s (Johnson, 2015).

This begs the question: how is it possible that people are consuming more by spending less? The answer is in the quality of what they purchase. Lower quality garments cut production costs to allow for an increase in supply. In that sense, drastic decreases in prices mean a very high price to pay for the environment due to the very low quality of materials and production (Niinimäki et al., 2020). Nevertheless, nowadays there is much more awareness regarding sustainability and responsible consumption (Hur & Cassidy, 2019). More and more consumers, especially the younger generations, are demanding higher standards and increased quality for their clothes even if it requires an increase in price (Gazzola et al., 2020). As a consequence, companies have started following this trend and are working harder and harder to deliver what consumers want, or at least this is their claim in marketing campaigns and new launches (PwC, 2020).

### 1.5 Fashion towards the solution?

The Fashion Transparency Index (FTI) makes for a useful tool to gauge the effectiveness of companies' sustainability efforts. Since its first edition in 2016, each year 250 of the world's biggest fashion brands and retailers are examined and ranked based on the information they disclose about their social and environmental policies, practices, and impacts, as well as about their operations and supply chain. "Transparency should not be confused with sustainability. However, without transparency, it will be impossible to achieve a sustainable, responsible, and fair fashion industry. Transparency is a first step; it is not radical, but it is necessary." (Fashion Revolution, 2022).

Additionally, several new laws and regulations are expected to strengthen the protection of human and environmental rights in the global fashion industry. For instance, in the European Union,

companies will be required to proactively and transparently assess, act and report on people's and environmental risks related to their supply chains (Fox & Taylor, 2021).

However, expectations often do not reflect reality. In fact, the key results of the 2021 FTI survey indicate that supply chain transparency continues to improve among major fashion brands and retailers, yet still only 47% of brands disclose their manufacturing facilities.

For instance, just 2 out of 250 brands are transparent on data on the number of workers in the supply chain who are actually paid living wages, and 95% of 250 brands analyzed by FTI do not disclose their annual water footprint for raw material level. Moreover, nearly half of major brands and retailers publish targets on sustainable materials, yet fewer than one-third define what constitutes a so-called 'sustainable' material.

As such, it appears that many of the major brands in the fashion industry still lag far behind current sustainability standards. Usually, big fashion companies communicate their human rights policies and environmental efforts in a way that is vague, incomplete, repetitive, and hard to find, making it very difficult for customers and stakeholders to assess. In the course of our research, we experienced this firsthand. In other cases, information distortion can lead to the phenomena of Green-washing and Woke-washing. In contrast to authentic brand activism, they occur when brands superficially address environmental and sociopolitical issues as a bandwagon to enhance their reputation and increase their revenues (Campbell, 2007).

A striking example of woke-washing in the fast fashion industry is the one that takes place every year on International Women's Day. Almost every company in the industry, such as Inditex (the owner group of Zara) and H&M, run advertising campaigns featuring feminist slogans and/or feminist ambassadors, emphasizing the need to link adjectives such as powerful, independent, and respectable to the female sphere. However, the results of several researches show a hidden side. In

fact, women make up most of the fast fashion workforce. According to the documentary *The True Cost*, roughly 85% of all garment workers are women. Moreover, they are often confined to the lowest-paid positions and risk sexual harassment by superiors (The True Cost, 2015).

As a result, these information distortions could increase short-term profit from the advertising campaigns but will result in customers' distrust considering in the medium and long run. As shown by recent research, only 18% of consumers would trust social and environmental sustainability information provided directly by the brands themselves (Clean Clothes Campaign & Changing Markets Foundation, 2020). This distrust stems from information overload, data dumping, and fluffy storytelling, and remains an issue among many major fashion brands.

## Group Part

# 2. Methodology

## 2.1 Research Context

As stated in the previous paragraphs, the fashion industry generates high levels of waste and pollution, resulting in harmful effects on our ecosystem. However, new considerations and actions have been taken to improve the current situation. Many companies are trying to align their strategies to enhance their production and distribution targets. Step by step fashion might be able to make a huge difference in reaching the targets set by the Paris Agreement. The market is in fact deeply involved in several of the 17 Sustainable Development Goals (SDGs) set by the United Nations as part of the Agenda 2030 (United Nations, 2015). For example, SDG n.6 (Clean Water and Sanitation) weighs heavily on fashion as the second industry for water usage (Scott, 2020). Considering that it takes the same amount of water that a person will drink in 3 years to produce

only one t-shirt (The Conscious Club, 2019), it becomes imperative to dramatically reduce water usage by implementing new technologies and more efficient supply chains.

SDG n.8 (Decent Work and Economic Growth), which focuses on economic development and working conditions, is another important topic for the fashion industry. Even though fashion employs millions of workers, a relevant percentage of its employees do not work under fair conditions. Nasreen Sheikh's touching documentary denounces the covert use of forced labor and child workers. It is crucial that the fashion industry stops leveraging costs at the expense of developing countries and improves working conditions in accordance with international labor standards (International Labor Organization, 2019).

Finally, SDG n.12 (Responsible Consumption and Production) aims to increase usage of recycled materials produced, collected, and sold to limit the outstanding amount of textile waste. Currently the ratio of textile waste and recycling is respectively around 75% and 25%, where the first figure represents the amount of material that ends in landfills (Juanga-Labayen, Labayen, & Yuan, 2022). Having assessed the huge responsibility that fashion bears to both society and the environment, we have chosen to focus our thesis on the fashion industry, its market leaders, and the evolution of their sustainability strategies. To do so, we have operated on the basis of several research questions, that find their basis on

**RQ1: How are main fashion brands moving towards a more sustainable business?**

**RQ2: What led companies to invest and focus more on sustainability?**

**RQ3: Why should brands understand the importance of sustainability for their economic growth?**

To sum up, this research aims to understand whether companies are still solely adopting profit-based business models or if they also implement sustainability measures in a factual, concrete way.

## 2.2 Research Design

This research builds upon the framework designed by Shepherd, Williams, and Zhao's (2019) to explore the evolution of sustainability strategies and applies it to the fashion industry. The purpose of the investigation is to understand whether major companies in one of the world's most environmentally and socially polluting industries are truly committing to a greener future, and whether they can do so without sacrificing economic performance.

To achieve this goal, the project makes use of both quantitative and qualitative research. The first approach is mainly focused on the collection and sourcing of data derived from the economic performance of companies, using official statements and annual reports as main sources. Qualitative research has focused more on the study of the sustainability initiatives of each company in our sample, using annual sustainability reports and online platforms of brand ranking as the main sources.

## 2.3 Sampling Process

The first step taken was to determine the sample size, i.e. the brands and companies that deserve attention for the purposes of the investigation. We structured the sampling process by looking at the ranking of the 100 most valuable fashion brands (FashionUnited Index, 2020) as the statistical population for the research, and then included three additional selection requirements. The sampling process, and its selection requirements, are summarized in the table in *Appendix 7.1*.

First of all, the company had to fall within the top 25 most valuable brands (FashionUnited Index, 2020). In this way we reduced the population size by 75% and focused on the real giants of the fashion industry.

Second, the subject had to belong to the Footwear, Apparel & Textile Products sector. In doing so, companies producing luxury goods have been removed from the selection, such as *Gucci* and *Rolux*. Companies built upon a marketplace business model, such as the German company *Zalando*, have been excluded due to the lack of any direct production activity.

To justify the exclusion of luxury goods producers from the sample we need to understand them in more depth.

Luxury brands are often viewed in the same way as fast fashion and other disposable fashion types (Kapferer & Bastien, 2009). However, luxury products can be broadly defined as products that are able to command a significantly higher price than others with comparable tangible functions (Campos Franco, Hussain & McColl, 2019).

The study conducted by Van Nes and Cramer (2005) has concluded that consumers interested in eco-fashion will

prioritize durability, quality, and style. Not surprisingly, these characteristics materially differentiate luxury brands from fast fashion in terms of both company strategy and the personal sense of accomplishment derived by the consumer. Luxury brands create appeal through innovative design and, by influencing consumption processes, can become leaders in sustainability and effectively fight some of the problems of ‘mass fashion’. Therefore, the methods by which products are manufactured, purchased, used, and disposed can influence positively the environment in many ways (Joy et al., 2012).

As a consequence, while Fast Fashion companies may be able to replicate luxury products, they are unlikely to match deeper value elements, such as high ethical standards in sourcing, efficient



Figure 1 - Sampling Process Funnel

use of materials, low-impact manufacturing, and distribution as well as the availability of repair and upgrade services. Such structural differences, added to the harmful impacts of fast fashion exposed in *Paragraph 1.4*, have prompted us to exclude luxury fashion brands from our research. A fundamental third requirement concerns brands that belong to a larger group or corporation. To evaluate these cases, a necessary condition has been imposed: the brand’s participation in the revenues of the group must be at least equal to 75%.

If this condition is met, by convention the holding’s data is used for research purposes (i.e. Fast Retailing instead of Uniqlo). The rationale behind this last requirement is given by the absence of satisfactory data for smaller brands that belong to holdings, as they are statistically reported within their respective groups. After skimming the brands’ ranking through the previous choice requirements, we were able to filter the statistical population to a final sample composed of eight companies as shown in *Table 1*.

Final Sample	
<b>1. Nike Inc.</b>	<b>5. Lululemon</b>
<b>2. Adidas Group</b>	<b>6. Uniqlo (Fast Retailing)</b>
<b>3. Zara (Inditex)</b>	<b>7. Ralph Lauren Corp.</b>
<b>4. H&amp;M Group</b>	<b>8. Levi Strauss &amp; Co.</b>

*Table 1 - Final Sample*

### 2.4 Data Collection

Once the functional sample for the research had been established, we assessed the economic and sustainability performances of the selected brands. To do so, we evaluated the Annual Economic Performance and the Annual Sustainable Performance of each company from 2010 to 2021 using appropriate Key Indicators. We chose to focus our research on this specific time period because data should be updated and not obsolete. The rapid pace of innovation within the fashion industry would have made older data less reflective of the current equilibria.



### 2.4.1 Economic Key Performance Indicators (KPIs):

We established 4 different KPIs to evaluate brand performance: Revenues, Net Income, Number of Stores worldwide, and Number of Employees. The rationale behind these economic indicators is as follows. First of all, Marr's guide (2012) on the use of KPIs for business strategies, states that metrics must be easy to interpret and comparable across companies. Secondly, it is essential for an effective and accurate collection that data be transparent and readily available.

As receivables are not very common in the industry (i.e. I purchase your product, I pay for it immediately), revenues directly reflect the company's ability to sell items and generate money. Net income has been chosen as synonymous of the company's profit in the accounting period. It represents efficiency and scalability across operations, especially production capacity. This parameter also was essential for our analysis as it takes production costs and other expenses into consideration. Moreover, net income helped us to eliminate the risk of misinterpreting revenues, as having high volumes of sales does not necessarily mean being profitable.

The number of employees and shops serve as a stand-in for company expansion across the last twelve years, with the latter parameter showing the physical presence of each company in the fashion industry. Main sources for these data were mainly official financial and non-financial company reports and, in other cases, external data-collection platforms such as *Statista.com*, *Macrotrends.com*, and *Orbis database*. An example of data visualization of these metrics is shown in *Table 2* below. The complete dataset of Economic Key Performance Indicators for each brand/company in the period 2010-2021 is visible in *Appendix 7.2*.



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	14,51	16,12	18,01	17,19	17,59	20,47	22,36	25,67	26,52	28,60	24,01	23,83
Net Profit (in millions\$)	754	933	674	1049	659	704	1125	1240	2010	2213	493	1492
N# Store	2270	2384	2446	2740	2913	2722	2811	2588	2395	2533	2185	2184
N# Employees	42541	46824	46306	49808	53731	55555	58902	56888	57016	65194	62285	61401

Table 2 - Data Collection of Economic Key Performance Indicators for Adidas

#### 2.4.2 Key Sustainability Indicators (KSIs):

To determine each brand's Annual Sustainable Performance, we referred to the *Good on You* (GOY) platform. This innovative and useful website is the fruit of collaboration between activists, fashion professionals, scientists, writers, and developers who have come together to drive change towards a more sustainable and fairer world (GOY, 2022). In fact, GOY is the world's leading source for sustainability assessments of fashion brands. The elaboration of aggregate data follows an evaluation method that classifies ratings across the three categories Planet, People and Animals, employing expert analysts to give each brand an intuitive 1-5 score.

For our analysis, we decided to follow the rating model used by the platform as closely as possible. To do so, we used 12 of the most relevant and significant certifications, associations, accreditations, and initiatives related to sustainability as Key Indicators. Specifically, we considered 5 certifications for Planet, 5 for People and 2 for Animals. We collected data only for 2 indicators for the Animal category because the amount of animal-derived materials used in productions of the companies under consideration, such as leather and fur, is significantly less than others such as cotton, viscose and polyester (Niinimäki et al., 2020). All twelve certifications, accreditations and associations used for the research are listed in *Table 3*.

PLANET	PEOPLE	ANIMALS
1. Better Cotton Initiative	1. UN Global Compact	Leather Working Group
2. Blue Sign	2. Ethical Trade	Responsible Down Standard
3. Canopy Style Initiative	3. Sustainable Apparel Coalition	
4. Textile Exchange	4. Fair Labour Association	
5. CDP (Climate Change)	5. Better Work	

*Table 3 - Certifications, Accreditations & Associations used*

A selection of examined certifications can help understand the type of initiatives related to each category. Certifications that definitely deserve a more in-depth explanation include Better Cotton Initiative, Canopy Style Initiative, Fair Labour Association and Leather Working Group.

The Better Cotton Initiative (BCI) is the largest cotton sustainability program in the world. In just over a decade, they have convinced industry stakeholders to create a strong network in support of sustainability across the process of working with one of the world's most important natural resources, involving farmers, suppliers, manufacturers, brand owners, retailers, civil society organizations, donors and governments. This adds up to more than 2,300 members in the Better Cotton network. Through a 360-degree approach that engages agricultural communities socially, environmentally, and economically, BCI incentivizes people to produce cotton in ways that enhance the quality of the final product. As a result, more than 2.4 million farmers in 25 countries now have a license to sell their certified “Better Cotton”. In total, the program has reached nearly 4 million people whose working lives are connected to cotton production (Better Cotton Initiative, 2022).

Working with more than 750 companies and the world's most experienced innovators, the Canopy Style Initiative (CSI) is committed to fighting unsustainable supply chains that involve the exploitation of forests and their inhabitants. In fact, every year more than 3.2 billion trees are cut down to produce paper packaging or fabrics like rayon and viscose. Many of these trees come from the world's oldest and most endangered forests, constituting an integral part of life on Earth. In

fact, the collaboration with numerous brands, with a total value of over \$803 billion dollars in revenue, was necessary to create a common commitment to eliminate ancient and endangered forests from their supply chains, including some of the world's largest companies, like H&M, Zara, Uniqlo, and fashion group LVMH (Canopy Style Initiative, 2022).

Since items are often produced in developing countries, we must also examine the the strength of workers' right in the sector. Unfortunately, labor standards are often flouted by companies and manufacturing factories. Initiatives such as those by the Fair Labor Association (FLA) exist to protect employees against their infringement. The FLA stems from the collaborative effort of universities, civil society organizations and socially responsible companies dedicated to protecting the rights of workers around the world. Based on a cooperative approach, the association enables civil society organizations, socially responsible companies and other institutions to sit at the same table and find effective solutions to labor issues (Fair Labour Association, 2022).

Finally, it is also important to consider the certifications specialized in the protection of animal rights, which aim to avoid any animal involvement in the fashion companies' productions. Among these, one of the most important and long-standing coalitions is undoubtedly the Leather Working Group (LWG). Formed in 2005, the LWG is a non-profit organization responsible for the world's leading environmental certification for the leather industry. As a multi-stakeholder group, it boasts over 1300 members across the leather supply chain, including brands and retailers, manufacturers, suppliers and associations within and related to the leather industry. (Leather Working Group, 2022). Considering both Economic Key Performance Indicators and Sustainable Key Indicators, a total of 88 reports have been analyzed together with a similar amount of financial statements across the twelve years period.

## 2.5 Data Analysis

Once data collection was completed, we set up our evaluation of each Economic KPI with a yearly 1 to 5 score, considering 5 as best performance and adjusting for the other brands. This process allowed us to obtain a score for the Annual Economic Performance of each brand. Moreover, to better reflect reality and derive a more reliable score, we assigned different weights to each indicator. Specifically, we weighted Revenues with 30%, Net Income with 40%, Number of Employees with 20%, and Number of Stores worldwide with 10%. This last indicator is weighted less as some of the analyzed companies derive a significant portion of their revenues from wholesale and e-commerce (for instance, Nike often boasts the highest sales across several years, but with a much lower number of stores than others). Other assigned weights find explanation in the description of the indicators' choice, expressed in the previous paragraph (*3.3.1 Economic Key Performance Indicators*).

We applied a similar logic to each company's yearly sustainability assessment. After analyzing each of the initiatives and certifications, we sought to verify whether or not each brand participated in them and from which year (within our reporting period). We were thus able to obtain an annual company score from 1 to 5 across the three different categories (Planet, People and Animals), by adding up the number of certifications held per year. Finally, in order to get an overall score for the Annual Sustainable Performance of each company, we again used a weighted average across the various categories. Specifically, we assigned 40% for both Planet and People, and 20% for Animals. The percentage relative to the “animal” category follows the same reasoning described in the paragraph *3.3.2 Key Sustainability Indicators*. In doing so, we were able to effectively reproduce the *Good On You* rating system. Therefore, while that platform offered a current scoring

on companies, our research allowed us to obtain a chronology of the sustainability efforts of each company from 2010 to date.

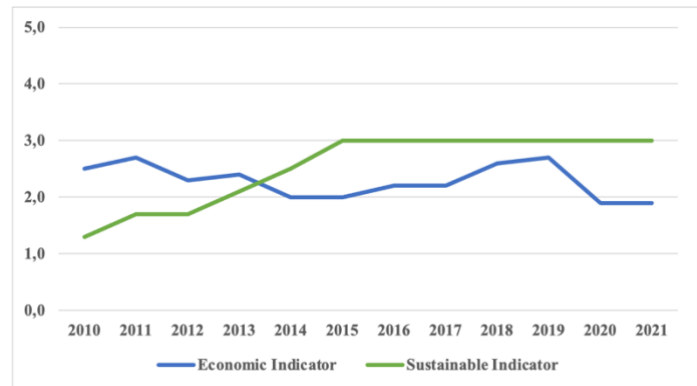
### 2.5.1 Final Performances Scores

After gathering all the information for both economic and sustainable indicators of our full sample, we were able to compute an annual score for each brand. Using the aforementioned weights, we then calculated a weighted average score to determine brands' overall performance.

To give an example, *Table 4* shows how Adidas has performed from 2010 to 2021 (each brand's scores are visible in *Appendix 7.6*).

**adidas**

Year	Economic Indicator	Sustainable Indicator
2010	2,5	1,3
2011	2,7	1,7
2012	2,3	1,7
2013	2,4	2,1
2014	2,0	2,5
2015	2,0	3,0
2016	2,2	3,0
2017	2,2	3,0
2018	2,6	3,0
2019	2,7	3,0
2020	1,9	3,0
2021	1,9	3,0



*Table 4 - Adidas Sustainability and Economic Performance scores over time*

The following graphs visualize patterns and movements along the “Economic Performance Curve” and the “Sustainable Performance Curve” derived from the data elaboration process. This passage of our research was essential to determine which brands were better performing under which indicators., To make for easier reading, the X-axis shows the time period, whereas the Y-axis shows brand scores. This method enhanced the analysis of individual performance curves. In order to explain and continue with the analysis of what has been found, *Figure 2* below shows the evolution chart of each brand.

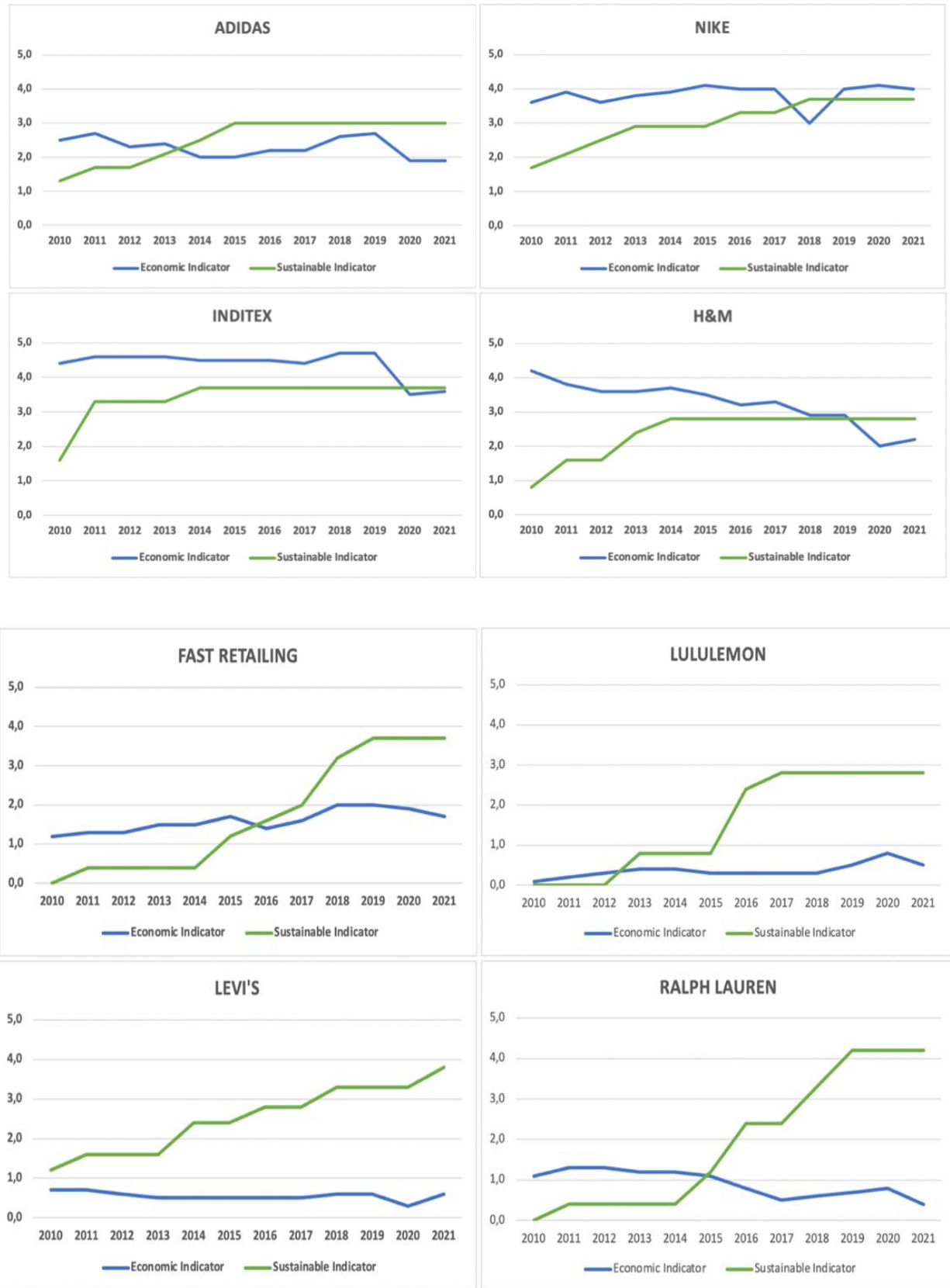


Figure 2 - Companies Sustainable & Economic Evolution 2010-2021

### 3. Presentation of Findings

#### 3.1 Division of Clusters

Having visualized data through the elaboration of evolution graphs, specific metrics were then used to continue the analysis with the aim of dividing the sample into different clusters. This was made possible by the observation of patterns common to several brands. Particularly, Adidas, Nike, Inditex and H&M seemed to share patterns that set them apart from the other four brands in the sample (Fast Retailing, Lululemon, Levi's and Ralph Lauren). The former seemed to be "chased" by the latter from a sustainability perspective, and the metrics confirmed this.

To substantiate our empirical findings we defined two indicators-conditions, the Average Economic Performance Score (AEPS) for economic differentiation and the Differential Sustainability Score (DSS) for the sustainability perspective. The AEPS indicator was calculated by averaging the economic score of each brand from 2010 to 2021, while the DSS is simply the difference of each brand's sustainability scores between the first and last year. We therefore imposed two conditions linked to the indicators used, setting a clear mathematical distinction. Namely, the condition that the brand must meet in order to be included in Cluster 1, called *Pursuers*, is to have an AESP lower than 2.0 and a higher DSS than 2.5, while for Cluster 2, called *Chased*, the condition is exactly the opposite (*Table 5* summarizes the criteria for the clusters distinction).

	Pursuers (Cluster 1)	Chased (Cluster 2)
Economic	Average Economic Performance Score (AEPS) <b>lower than 2,0</b>	Average Economic Performance Score (AEPS) <b>higher than 2,0</b>
Sustainable	Differential Sustainability Score (DSS) <b>higher than 2,5</b>	Differential Sustainability Score (DSS) <b>lower than 2,5</b>

Table 5 - Cluster Distinction Criteria & Conditions



Such calculations for each brand allowed us to classify Adidas, Nike, Inditex and H&M in the *Chased*, and Fast Retailing, Lululemon, Levi's and Ralph Lauren in the *Pursuer* category (Brands' individual results for AEPS and DSS can be found in *Figure 3*, together with the final clusters' division).



Figure 3 - Clusters & Brands AEPS & DSS results

The results have in fact highlighted a relevant gap between two groups of brands: from an economic perspective, *Pursuers* range from 0.4 (Lululemon) and 1.6 (Fast Retailing), whereas *Chased* have much higher economic scores from 2.3 (Adidas) and 4.4 (Inditex). Certainly, this difference is not surprising, as *Chased* Cluster has an aggregate brand value of almost \$80 billion, whereas *Pursuers* only \$30 billion (FashionUnited Index, 2020) underlying once again the great distance that these two groups have when considering their economic and financial performances. Looking at the sustainability scores, findings have demonstrated again that these two groups follow distinctive patterns. More specifically, *Chased* brands have much lower DSS, meaning that these companies have been able to balance their profits vis-à-vis their sustainable operations. This strategy led to a positive growth rate that has stayed constant over the years. *Pursuers* face a harsher scenario, in which brands have to catch up and drastically improve their sustainability scores. As a result, the green curve in *Pursuer* graphs remains very low until 2014, when it upslopes dramatically: which means that they had to change suppliers, production and materials

in accordance with our sustainable indicator much faster than brands in *Chased* Cluster needed to, leading to much higher DSS scores.

### 3.2 RQ1: How are main fashion brands moving towards a more sustainable business?

Considering the final dataset, its scoring process, and the clusters' distinction, we are able to define a clearer scenario. As discussed in section *1.4 Fashion toward the solution?*, brands often showcase environmental initiatives, improvements in the quality of materials, and protection of human rights along the supply chain, but those claims may not represent the reality, leading consumers not to trust corporate sources (Clean Clothes Campaign & Changing Markets Foundation, 2020). In this regard, our research has helped us to understand whether fashion giants are actually strengthening their commitment to sustainability.

Thankfully, sample results give evidence of progress towards sustainability goals set by the selected brands, with more ambitious targets and improved efforts to achieve a greener fashion. This statement is supported by both charts in *Figure 2* and *Appendix 7.6*, whatever the cluster or the brand selected: all of them have actually moved towards a more sustainable business model.

However, as companies' sustainable reports do not have a common format, goals, and target, the comparisons between them are not often very transparent and clear. Nonetheless, by using the eight indicators listed in *Table 3* we had the opportunity to overcome the noticeable lack of standardization, seeing that brands are increasingly seeking participation in coalitions and sustainable groups.

In fact, all of them have increased the relevance and importance in their production for materials that can benefit the environment. For instance, each brand in our sample is now a member of Better Cotton (Lululemon latest in 2017), Textile Exchange (Ralph Lauren latest in 2018), Carbon

Disclosure Project, and 75% of them are also owners of the Bluesign certification (Lululemon latest in 2015): keeping in mind that to be part of these projects and receive their acceptance and certifications, brands are required to source quality materials and meet specific sustainability standards. Furthermore, apart from Adidas which has only one accreditation for the People category, and Lululemon, which has two, all other brands count for three or four, meaning that they have increased their attention to the welfare of employees, fair wages, and workers' rights. Last but not least, even if we have already explained why Animals have a smaller role in this analysis (paragraph 2.4.2 *Key Sustainability Indicators (KSIs)*), except for H&M and Lululemon, all brands work either with Responsible Down Standard or Leather Working Group.

Even though all sample brands are moving to a greener business, some brands are significantly more sustainable than others or approached the issue much earlier. This finding suggests that main companies of the fashion market are trying to improve their current sustainable parameters. We believe that such progress will provide a faster and better implementation of sustainable activities and behaviors, leading towards a more responsible industry. The second research question thus considered the rationales and motivation behind stronger sustainability drivers.

### **Individual Part - Filippo De Petris (44821)**

#### **3.3 RQ2: What led companies to invest and focus more on sustainability?**

To get a more accurate view of brands' progress towards sustainability goals and understand the reasons for action, it proved necessary to individually analyze each case. To do so, we have accounted for disruptive events, both positive and negative, and the extent to which they affected company strategy. This operation has been conducted first both a broad and a narrower focus, by associating company/industry reactions to each related milestone event. An analysis of market

trends was subsequently conducted with the help of several studies, including the *11th Global Consumer Insight Survey* by PwC (2020). The goal of this second part of the analysis was to assess consumers’ perceptions and understand their relation to social and environmental efforts by the selected brands.

Results showed that both the repercussions of impactful events and the evolution of the ethical preferences of consumers highlighted the importance of reputation as a driving force of both corporate profits and sustainability goals.

**3.3.1 Global Impactful Events – the effects on the different clusters**

The first event considered, unfortunately, deserves attention due to its strong impact on the whole fashion industry, involving suppliers, brands, and consumers. On April 24<sup>th</sup>, 2013 the entire Rana Plaza factory building in Dacca, Bangladesh collapsed, leading to the death of at least 1,135 clothing workers and an estimated 2,500 injured (Star Business Report, 2016), in what is recalled as the deadliest structural failure in modern history. The effects of this catastrophe on factory workers and their families are well summarized in the figure below (*Figure 4*) (SQ Group, 2014).

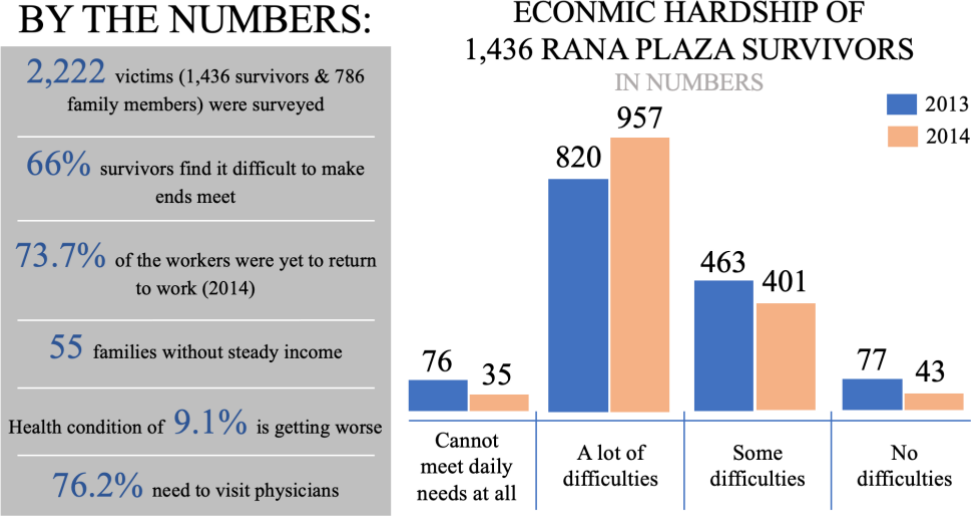


Figure 4 - Rana Plaza collapse effects on survivors

During its period of activity, the Rana Plaza housed five local garment factories that were producing clothes for 31 Western multinational corporations (Clean Clothes Campaign, 2015), among which stood out Primark, Inditex, Benetton, Walmart, H&M and C&A. Due to media pressure, within a week from the collapse major apparel firms and retailers held their first meeting to determine an industry response (Greenhouse, 2013). Two weeks later the Bangladesh Accord was signed: a legally-binding agreement that committed signatories to a five-year program of safety audits and remediation investments in their Bangladeshi supplier bases. H&M and Inditex spearheaded the campaign to obtain corporate signatories, and the Accord quickly gained the support of major European companies (Boudreau, Makioka & Tanaka, 2015).

An analysis of H&M’s and Inditex’s remedial measures, through sustainability and economic performance curves, is necessary to understand the impact of that event on the companies’ lives. We can see how both companies in the *Chased* cluster (Figure 5) recorded in 2015 an increase of around 15% in their sustainability score (H&M from 2.4 to 2.8, and Inditex from 3.3 to 3.7), demonstrating that this catastrophic event brought a positive reaction on two industry giants.

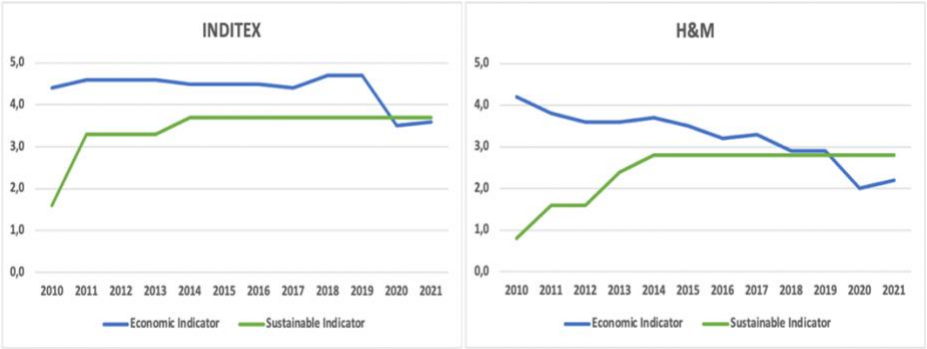


Figure 5 - Inditex & H&M Evolution

Particularly, the Swedish company donated a significant amount to the *Rana Plaza Donors Trust Fund*, despite being one of the least involved in the tragic event, to help reach the \$30M needed to compensate victims’ families and injured (Clean Clothes Campaign, 2017). In addition, in the

same year, H&M Group and *Bureau Veritas*, a “Business to Business to Society” services company (Bureau Veritas, 2022), started developing a tool to measure chemical usage and discharge, called BVe3 (H&M Group, 2022). On the other hand, Inditex committed to donate more than \$1.5M to the *Trust Fund* after the collapse. Moreover, the Spanish holding increased its investments in social programs by 36% from 2014 to 2015, passing from \$25M to \$35M and achieving a total of 456 social initiatives worldwide (Inditex Annual Report, 2015). Among them, for instance, as indicated by our research, Inditex has become part of the Canopy Style Initiative since 2014, committing against deforestation. For what concerns actions for the protection of human rights, the two fast fashion giants have intensified their initiatives to combat forced and child labor, ensure living wages and safer working conditions and avoid catastrophes similar to Rana Plaza (or at least this is what emerges from their sustainability reports).

Although they were not directly involved, Adidas and Nike were also affected by an event of such magnitude through a knock-on effect. In fact, both sportswear groups recorded an increase in their sustainability score, even though a little later than the other two *Chased* brands. Respectively, Adidas went from 2.1 in 2013 to 3.0 in 2016 (43%), while Nike from 2.9 to 3.3 in the same time frame (14%) (*Figure 6*).

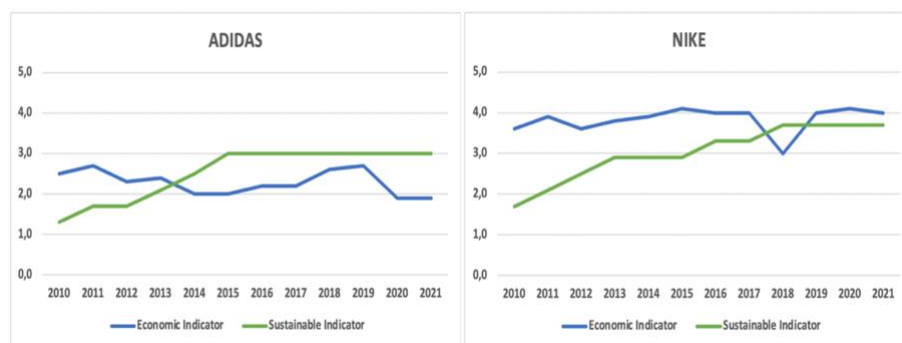


Figure 6 - Adidas & Nike Evolution

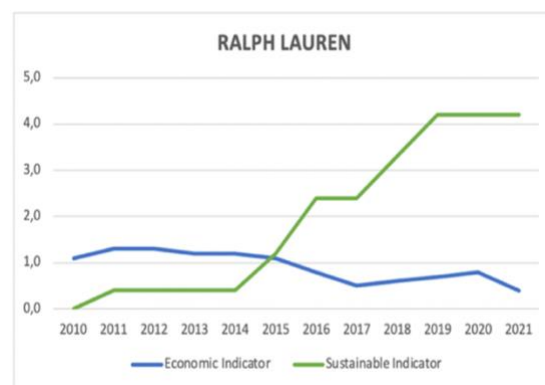
This knock-on effect led other companies to be more diligent when it comes to sustainability. It was caused by a chain reaction to previous, lesser-known events that directly involved the

companies considered. For instance, in the run-up to London 2012 Olympics the Playfair Campaign, supported by the British anti-poverty charity *War on Want*, highlighted the appalling experiences of Adidas workers making official Olympic and Team Great Britain goods in China, Sri Lanka, and the Philippines. None of the workers Playfair researchers interviewed in these countries were paid a living wage, and regularly worked overtime in excess of the legal limit in order to meet the production targets (War on Want, 2012). Moreover, an investigation of *The Independent* in the same year brought to light a real scandal: such workers were often ‘forced to lie’ during safety inspections. Those were always announced beforehand so employees had to clean, they were told what to say to inspectors, and were even hidden in bathrooms so there were fewer people in the production line (The Independent Digital News and Media, 2012). Additionally, the US footwear and sportswear titan Nike and the German brand Puma were accused of the same exploitation during the intensive productions before the 2012 Olympics (The Guardian News and Media, 2012).

So far, we have seen how companies belonging to the *Chased* cluster, thanks to their resources, have the ability to react almost immediately to an event or situation that may affect their reputation or performance. Moreover, these brands have generally improved their approach to sustainability since the early years and have managed to keep it constant over time. For instance, in 2010 (first year of our research period) Nike was already part of three major coalitions advocating for a greener future, in the areas of planet, people and animals – namely, Better Cotton Initiative, UN Global Compact, Fair Labour Association, and Leather Working Group. Similarly, Inditex saw a significant jump between 2010 and 2011, doubling its sustainability score. In fact, in just one year, it joined Better Cotton Initiative, Textile Exchange, Sustainable Apparel Coalition, and Leather Working Group programs. Furthermore, one of the main factors that led the Spanish company to

follow a 'greener' path occurred in 2001, when it became listed on the Spanish stock market. On that occasion there was a surprise: despite the fast fashion business model, SETEM, the Spanish representative of Clean Clothes Campaign (CCC), bought shares taking steps towards integrating a corporate social responsibility policy (Marcuello et al., 2007).

On the other hand, the path taken by the second group of brands, the *Pursuers*, is different. As already mentioned, they have undertaken a much more decisive and exponential sustainable transition. Due to their late start, they have experienced an initial struggle to keep up with larger competitors, but shortening the gap in the middle years of our research period, and then performing even better in some cases. One of the most striking examples reflecting this attitude is Ralph Lauren Corporation. The American company passed from a 0.4 sustainability score in 2014 to a 4.2 in 2019, representing a ten-fold increase in five years (*Figure 7*). And this is also demonstrated by its DSS, the higher score of the entire sample (*Figure 3*).



*Figure 7 - Ralph Lauren Corp. Evolution*

Using the same logic and considering Ralph Lauren as the company representing the *Pursuer* Cluster, we analyzed the impact of the following event as one of the driving forces behind the 'green' transition for the American firm. In 2015 it was accused of being one of the chief



responsible parties behind deforestation in Indonesia, Canada, Brazil and South Africa (Rainforest Action Network, 2015), while flaunting protection of the biodiversity and Earth's natural resources on its citizenship reports (Ralph Lauren Corp. Annual Report, 2015). To better understand the phenomenon, as stated by the Canopy Style Initiative founder, N. Rycroft, around 30% of the rayon and viscose fabrics going into clothing comes from dissolvable pulp sourced from endangered and ancient forests (The Guardian News and Media, 2014). As a consequence, environmental damage on this scale is also harmful for the communities living in those areas, which suffer serious violations such as forced displacement, loss of livelihood, and brutal repression.

Therefore, in an attempt to avoid further accusations of green-washing and prevent further reputational damage, Ralph Lauren Corp. has dramatically increased its commitment to sustainability. In fact, according to our research, the company acquired most of the certifications and joined coalitions around the period in which the accusations first surfaced. These included Canopy Style, Better Cotton and Carbon Disclosure Project in 2016, and Fair Labor Association and Better Work in the previous year. In terms of animals' welfare, the American brand acted a bit later, joining the Leather Working Group in 2019 and complying with the Responsible Down Standard from 2018.

Nonetheless, it's not always negative events that substantially influence a company's behavior in terms of sustainability and commitment to the future. Therefore, the Paris Agreement (PA) must be taken into consideration, together with its impact on signatory countries and companies, being defined by many as "the world's greatest diplomatic success" (The Guardian News and Media, 2015). The PA is a legally-binding framework for an internationally coordinated effort to tackle

climate change, signed by 196 parties on the 12<sup>th</sup> of December 2015 (Streck, Keenlyside, & von Unger, 2016). Therefore, all 196 parties are obliged to propose a target and a goal and to report and assess their progress toward that goal every five years. Should they fail to meet their self-imposed targets, countries may face a range of informal or 'community' sanctions. These include 'naming and shaming', and the threat or use of public opinion to affect reputation. And it is precisely the 'soft power' of reputation that is the essential factor in the PA framework. In fact, reputational effects work on individuals, corporations, countries, and companies (Jacquet, 2017). Accordingly, this is the rationale that leads us to consider the Paris Agreement as one of the most impactful events, in a positive sense, for fashion companies. In fact, our analysis shows that all the companies in the *Pursuer* cluster have recorded a surge in their sustainability score immediately after 2015, while the *Chased* companies have kept their scores consistent, being already at a high level thanks to their ability to act preventively (Charts visible in *Figure 2*).

This can be confirmed by the private sector's commitment to sustainability, which emerges from a study conducted by the Carbon Disclosure Project (CDP)(2015) called *Business and the Paris Agreement*. Companies were invited to respond to two new questions in CDP's annual global climate change questionnaire: firstly, to say whether their board supports an international agreement between governments at the UNFCCC Climate Change Conference in Paris (COP 21), and secondly to describe their board's position on what an effective agreement would mean for their company and the activities they are taking to deliver this agreement. The results showed that more than 800 of the largest listed companies around the world favor a global deal to tackle climate change.

In conclusion, we can extrapolate from this section that one of the main reasons beyond the increase in sustainability practices is the protection of the firm's reputation. This statement can be

strengthened by the exhaustive literature review conducted by the authors Gomez, Velez and Gonzalez (2020). In fact, analyzing a total of 156 articles from the period 2000-2019, the findings showed that in 60% of cases “sustainability appears to be an antecedent of corporate reputation and a tool to enhance stakeholders’ acceptance and perceptions on companies’ activities”.

Therefore, given the analysis of the events and factors influencing approaches and behaviors towards sustainability, it emerges that reputation and perception of individuals and institutions have an enormous weight, whether they are consumers, shareholders, stakeholders, or competitors.

### 3.3.2 Customers’ Perceptions and Choices

What consumers know about a brand influences their reaction to any future contact they have with the brand itself, be it advertisement, products, or staff (Koll & von Wallpach, 2009). In fact, as stated in the *Circular Fashion Report 2020* (a collective report initiated by Circular Fashion Summit by Lablaco in partnership with Vogue Business, PwC, Anthesis, Startupbootcamp, and other leading organizations), “community is the main driver for circular fashion impact” (Lablaco, 2020).

Overall, consumers today place a high value on brands' sustainability efforts when choosing what to buy. They are much more aware of the need to reduce waste and energy consumption and expect action to be taken by both governments and private companies, in an effort to curb the impact on the planet. This trend is confirmed by the *11<sup>th</sup> Global Consumer Insight Survey* conducted by PwC, which analyzed 23,545 respondents across nine countries, between January and June 2020. The results of the questionnaire are clear: the demand for sustainable and ethically manufactured products is rising among younger generations, the main driver for business growth. Concretely, in 2020 63% of consumers chose sustainable products, up from 29% in 2019. In fact, Millennials and Gen Z are sensitive to personal and planetary health and playing particular attention to eco-

products. They are also conscious of the need to reduce plastic use and expect brands/retailers to support this. In fact, 45% of consumers avoid the use of plastic whenever possible, 41% favor items with less packaging, and 34% actively look for environmentally-friendly products.

While, on the other hand, only 6% of respondents declare not to be interested in sustainability, versus 13% in 2019.

Yet another research, conducted by the Department of Economics and Management of the University of Padova, suggests that brands' eco-friendliness has a strong positive relation to the fashion perceptual attribute (Blasi, Brigato & Sedita, 2020). Taking into account luxury, high fashion, and fast fashion brands, the study introduces an innovative approach to evaluating consumers' perceptions: Twitter data mining. In this way, the researchers found a most reliable and transparent method, replacing the survey approach, historically used to evaluate these subjects. The survey method, in fact, may present some bias: people are unwilling to provide accurate answers that reflect unpopular attitudes or opinions. As explained in the research, there is a social common sense that tends to view positively a person who cares about ethical and environmental issues, and because of this social desirability, respondents tend to give biased answers (Bobo & Dawson, 2009). While, on the other hand, this new approach measures consumers' perceptions through the act of following a Twitter account, a social digital behavior more inclined to show loyalty to the brand.

From a managerial perspective, the authors Blasi et al. (2020), through their research, present interesting insights for clothing companies looking to increase the effectiveness of their social and environmental sustainability initiatives. In fact, the strong connection between brands' eco-friendliness and fashion perceptual attributes should push companies to increase their commitment and investments for that purpose.

In conclusion, it is clear from previously examined literature, whether through the traditional survey method or a novel one, that fashion companies have no choice. Their transition to a greener future, whether carried by an ethical or strategic motivation, must take place. Companies/brands that do not adapt to this trend may not be able to meet the needs and desires of consumers (Lablaco, 2020).

Being under strict public scrutiny and experiencing growing pressures from different stakeholders makes corporate and environmental responsibility imperative to survive in such a competitive environment. Brands have to evolve and embrace a more sustainable model which will enable them to grow from both a social and financial perspective. We have decided to focus our third Research Question and the following chapter on the matter.

### **Individual Part – Luca Longhi (45055)**

## **3.4 RQ3: Why should brands understand the importance of sustainability for their economic growth?**

### **3.4.1 Does being more sustainable mean being more profitable?**

In a very controversial and strongly-worded article called “The case against Corporate Social Responsibility”, the author Robert B. Reich accuses companies to put on a responsible appearance with the sole aim of increasing profitability. “Dow Chemical reduces its carbon emissions so it can lower its energy costs. McDonald’s employs more humane slaughtering techniques, which prevent costly worker injuries and yield more meat. Wal-Mart has adopted “green” packaging for its fresh produce because it’s cheaper than petroleum-based packaging.” He also underlines the fact that investing in sustainability is just the same as burning cash “...as meaningful as cotton candy. The more you try to bite into it, the faster it dissolves” (Reich, 2008).

Even though the approach might be relevant to a certain level, it is dated almost 15 years ago and a lot has changed since then. Throughout the course of our research, we have seen how our sample has improved its sustainability scores. Nevertheless, we chose to save one crucial factor for a more detailed analysis. This factor is purely economic and it looks at how sustainability is related to profitability.


A large number of studies have tried to decrypt the association between corporate sustainability performance and financial performance. Nevertheless, prior research provides no clear and precise relationship between the two variables, as results are mixed and often contradictory. For instance, comparing financial performance of a sample of firms composed of both highly sustainable and poorly sustainable firms, Ameer and Othman (2012) found that return on assets, and profit before taxes increase in companies listed as top sustainability performers. However, results differ across industries, with a higher impact of sustainability performance within service industries.

On the other hand, McPeak et al. (2010) found a negative association. Thus, firms that do not invest in sustainability appear to have higher profits than firms engaged in sustainable practices. As explained in the study, a possible explanation for the result is that green investments may take more time to show their results. In other words, capital investments in sustainability are plentiful and the benefits may be obtained over time rather than in the next few years in which changes are implemented.

Looking at the results of our investigation, scores and graphs have shown that there is a common pattern in our sample for an increase in sustainable activities, but its correlation with economic performance is not as clear. As such, we have tried to dive deeper and calculated the Annual Growth Rate of each brand for both economic and sustainable scores. All growth tables can be

found in *Appendix 7.7*, but to provide some factual examples and better visualize the data, in this paragraph we chose to analyze only one company for each cluster.

Starting with Nike and the *Chased Cluster*, looking at *Table 6*, the sustainability level keeps growing from 2010 to 2021. For instance, for three consecutive years (2011- 2013), Nike has increased and invested in sustainability, even if at a lower rate.



Year	Economic Score	Growth Rate	Sustainable Score	Growth Rate
2010	3,6	/	1,7	/
2011	3,9	8,3%	2,1	23,5%
2012	3,6	-7,7%	2,5	19,0%
2013	3,8	5,6%	2,9	16,0%
2014	3,9	2,6%	2,9	0,0%
2015	4,1	5,1%	2,9	0,0%
2016	4,0	-2,4%	3,3	13,8%
2017	4,0	0,0%	3,3	0,0%
2018	3,0	-25,0%	3,7	12,1%
2019	4,0	33,3%	3,7	0,0%
2020	4,1	2,5%	3,7	0,0%
2021	4,0	-2,4%	3,7	0,0%

*Table 6 - Nike Annual Growth Rates of both Economic Performance & Sustainability Scores*

These results are given by the brands' entrance and participation in Sustainable Apparel Coalition (2011), Carbon Disclosure Project (2012), and Bluesign (2013). If the hypothesis that being more sustainable also means to be more profitable was proven, then Nike should have increased its economic performance, even partially. However, the American company recorded a decrease in its Economic Performance Score by 7.7% (2012). Furthermore, the brand improved its financial scores from 2014 to 2015 without any new investment in sustainability (as classified according to our method). In short, the correlation between Nike's economic and sustainability performances appears to be very weak.

Nevertheless, sustainability scores are not enough to assess the robustness of a company, as negative economic performances can be explained by several different causes. For instance, in 2018, Nike experienced a strong decline of -25% in its economic performance. In this case, a lack of sustainability is not the main driver of the brands' loss. In fact, despite a 6% increase in

revenues, the group recorded a 54% decrease in net profit, and the reason behind this sharp slowdown was the impact of the U.S. Tax Act (Nike Annual Report, 2018).

In addition to Nike, we also considered another example from the *Pursuer* Cluster. Like the previous case, Fast Retailing shows no statistical evidence of a direct correlation between its sustainability level and financial performance (*Table 7*).

<b>FAST RETAILING</b>	<b>Year</b>	<b>Economic Score</b>	<b>Growth Rate</b>	<b>Sustainable Score</b>	<b>Growth Rate</b>
	2010	1,2	/	0,0	/
	2011	1,3	8,3%	0,4	0,0%
	2012	1,3	0,0%	0,4	0,0%
	2013	1,5	15,4%	0,4	0,0%
	2014	1,5	0,0%	0,4	0,0%
	2015	1,7	13,3%	1,2	200,0%
	2016	1,4	-17,6%	1,6	33,3%
	2017	1,6	14,3%	2,0	25,0%
	2018	2,0	25,0%	3,2	60,0%
	2019	2,0	0,0%	3,7	15,6%
	2020	1,9	-5,0%	3,7	0,0%
	2021	1,7	-10,5%	3,7	0,0%

*Table 7 - Fast Retailing Annual Growth Rates of both Economic Performance & sustainability Scores*

More specifically, Fast Retailing registered stable growth in its economic performance from 2010 to 2014 without changing its sustainability initiatives (according to our method). Interestingly, the Japanese holding faced its first economic drop in 2015, when it started to invest heavily in sustainability. As a matter of fact, that year Fast Retailing maintained constant its revenues but strongly decreased (almost 60%) its Net Profit, due to greater SG&A costs (Selling, General and Administrative expense) (Fast Retailing Annual Report, 2016). The Japanese firm kept investing in sustainability until 2019 (*Appendix 7.5*) and its economic scores increased from 2017 to 2018 until it faced another deep down in 2020 which might be explained by COVID-19 (Fast Retailing Annual Report, 2020).

The Fast Retailing example effectively shows that brands belonging to different clusters register similar performances. Belonging to different clusters seems to have little to no effect on the brand's



overall performances, showing once again that as sustainability and economic performance seem to lack significant short-term correlation.

However, we must still consider that sustainability does play a role in the company's overall performance. We cannot guarantee that investing in sustainability equals increasing companies' cash flow, but we also cannot say the opposite with certainty. As customer awareness and pressure towards corporate activities increase, together with the constant rising of climate and environmental concerns, the importance of corporate responsibility becomes paramount to avoid reputational and financial damage. Therefore, as we have seen in *Paragraph 3.3.2*, consumption patterns have become increasingly sensitive to sustainability themes, and such relevance concerns investors as well as buyers.

#### 3.4.2 Economic benefits given by sustainability

As stated in a meticulous study conducted by the author N. Raccuglia (2022), the prevalence of short-termism on sustainability issues in many businesses creates potential barriers to invest in long-term sustainability practices. Following market logics, firms' management might sacrifice sustainable value creation to boost earnings and secure high stock prices. However, over the past two decades, the top management of many companies, along with the investing audience, has begun to view sustainability as an opportunity, rather than a constraint on the company's reputation and relationships with shareholders (Raccuglia, 2022).

Consequentially, Investors have started to give much more importance on environmental, social and corporate governance (ESG) factors before making investments decisions (Stobierski, 2021). This is another reason that encourages companies to embrace sustainable principles, which can provide long-term social and financial gains. Accordingly, Sustainable Investing does not necessarily mean a loss on financial returns. To better understand the efficiency of this type of

investments, we can look at the insights given by a research from Bank of America. In this regard, top ESG-Ranked companies recorded better performance than the average S&P 500 companies. More specifically, companies with good ESG ratings experienced lower future earnings-per-share volatility than careless ones. On the other hand, when companies face problems related to ESG issues, their stock price tends to suffer for a year or even longer. As direct consequences, expectations for the market of Sustainable Investing are relevant: new investments in ESG funds could total an estimated \$20 trillion in the next two decades (Bank of America Corp., 2020).

As such, even if sustainability and profitability might not yet be strongly interlinked, we believe that having a more responsible business model would help brands to improve their reputation and increase long-term financial returns (Raccuglia, 2020). A study conducted by Nastanski and Baglione (2014) shows that a responsible business increases the value-maximization of the firm, including not only shareholders and customers, but the conscious integration of community interests. In fact, many companies have seen the value of linking their sustainability practices to improve brand's reputation and profits. Nike is an example. Once viewed as a company without any kind of human rights protection for its workers, the company is now considered a pioneer in social responsiveness and a “catalyst for innovation...and use of Sustainability principles to generate ongoing value creation” (Paine, 2014). In fact, according to our research, the U.S. company's economic performance has increased over the years, becoming the most valuable brand in the whole fashion industry with \$44 billion in revenue (FashionUnited Index, 2020).

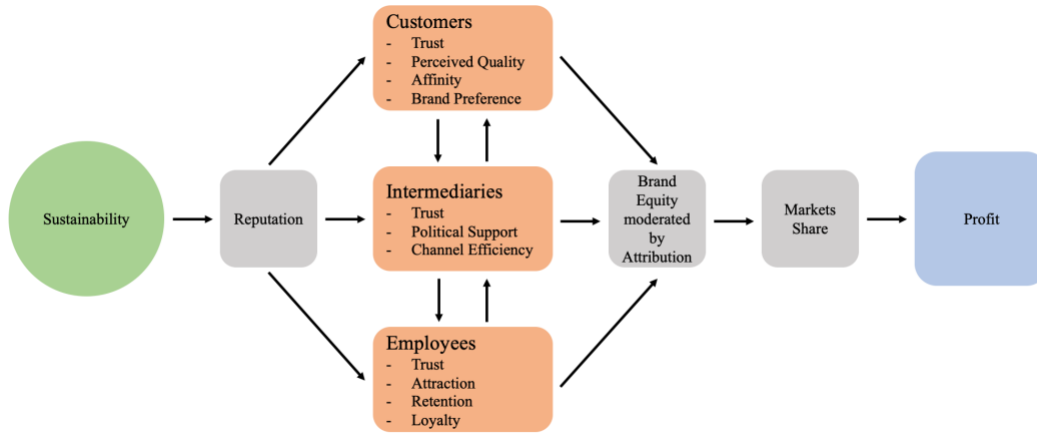


Figure 8 - Sustainability, Profitability Relationship Model

Therefore, Nastanski and Baglione conclude in their paper saying that “sustainability and its emphasis on a socially responsible orientation increases profitability and firm survivability through mutually beneficial exchanges with key stakeholders including employees, intermediaries, and its customers. This is achieved through improved employee commitment, intermediary alignment, and strong customer relationships as a result of increased trust, brand value and purchases and the perceived socially responsible actions within the firm.” (Their framework is summarized in *Figure 8*). Our findings confirm the validity of the framework, highlighting how brands that fixed sustainability goal earlier are also the ones belonging to the more valuable cluster.

In conclusion, even if with our results we are not able to generate a statistical relevance supporting the hypothesis that more sustainability means more profitability, we still believe that sustainability plays a crucial role in the strategic growth of a firm, especially in a long-term perspective. The “strategic logic for sustainability also includes self-preservation...achieving excellence and long-term success...” (Rainey, 2006).

## Group Part

### 4. Discussion

Within this final section we review existing literature on our research questions and contrast its findings with our own to confirm, disconfirm or otherwise extend the arguments they make.

Table 8 conveys the results immediately, quickly summarizing the answers to each question based on related references, literature findings and the result of our own research.

		Reference	Literature Findings	Our Findings
<b>RQ1</b>	<b>How are main brands moving towards a more sustainable business?</b>	<i>PwC (2020)</i>	Apparently the fashion industry is moving towards a more sustainable business, however some of these claims might be overstated making consumers more skeptical	Sample results give evidence of progress towards sustainability goals set by the selected brands with more ambitious targets and improved efforts to achieve a greener fashion
		<i>Fashion Transparency Index (2022)</i>		
		<i>Clean Clothes Campaign &amp; Changing Markets Foundation (2020)</i>		
<b>RQ2</b>	<b>What led companies to invest and focus more on sustainability?</b>	<i>Carbon Disclosure project (2015)</i>	The introduction of the Paris Agreement and its sanctions, together with the weight of reputation on companies' strategies, led to new progress in sustainability approach by the corporate sector	The repercussion of impactful events and the evolution of ethical preference of consumers highlighted the importance of reputation as a driving force of both corporate profits and sustainability goals
		<i>Jacquet (2015)</i>		
		<i>Blasi et al. (2020)</i>		
		<i>Lablaco (2020)</i>		
		<i>PwC (2020)</i>		
<b>RQ3</b>	<b>Why should brands understand the importance of sustainability for their economic growth?</b>	<i>Reich (2008)</i>	Discordant opinions have brought to believe in an "intangible" connection between sustainability and profitability. However, sustainable activities might be able to increase value maximization of the firm, especially in the long-term due to consumers' perception and Sustainable Investing	According to our results, there is no statistical evidence of true connection between sustainability and profitability. However, looking at our cluster we do believe that a more sustainable approach will benefit companies' economic growth in the long-term
		<i>Ameer and Othman (2012)</i>		
		<i>McPeak et al. (2010)</i>		
		<i>Bank of America (2020)</i>		
		<i>Nastanski &amp; Baglione (2014)</i>		
		<i>Richardson (2013)</i>		
		<i>Talan &amp; Sharma (2019)</i>		

*Table 8 - Literature & Findings Comparison*

Our first question asked if and how selected brands were moving towards a more sustainable business model. Existing research, drawing from data elaborated through the Fashion Transparency Index and other similar tools, confirmed that the fashion industry is indeed shifting towards higher standards of environmental responsibility. Nonetheless, it also pointed out how certain claims could be overstated due to the possible bias of utilized sources, mainly sustainability reports redacted by the brands themselves, making consumers more skeptical of whether brand declarations are trustworthy. Our sample results, however, give evidence of concrete progress on indicators by brands that set more ambitious sustainability targets,

suggesting that a commitment to greener fashion usually results in the adoption of sustainability and environmental policies.

Secondly, we analyzed the reasons that might lead companies to invest and adopt a more socially and environmentally responsible focus. Existing literature (Jacquet 2015, Blasi et al. 2020, Lablaco 2020, PwC 2020) points to the necessity of keeping brands' reputation intact as the main driver of corporate commitment to sustainability policies, together with the ratification of the Paris Agreement and related sanctions for non-compliance, in order to avoid economic and financial damage. Our research expands on such findings by identifying the repercussions of impactful externalities (such as the 2013 Rana Plaza disaster) and the evolution of consumers' ethical preferences as the key factors that influence corporate reputation, acting as a driving force of both corporate profits and sustainability goals.

Finally, our last question focused on the importance of sustainability for brands' economic growth. Reviewed sources (Richardson 2013, Nastanski 2014, Talan & Sharma 2019) yield discordant opinions, often settling on the belief of an "intangible" connection between sustainability and profitability. According to our results, no significant statistical connection exists between sustainability and corporate profits. However, we counter that the positive effect of sustainability is underestimated by the focus of companies on short-term profit and could be more evident in the long run, as the public adoption of sustainable targets and practices would boost the brands' public image and prevent the accruing of reputational damage, eventually making up for short-term implementation costs. Future research will therefore need to abandon its focus on short-term profit and analyze the effects of sustainability commitments over greater lengths of time.

## **5. Conclusion, Limitations & Further Research**

Data elaboration shows that positive change in environmental policies is reflected by a significant increase in corporate sustainability scores, as measured according to company sustainability reports and networking activities with corporate responsibility coalitions and interest groups. Concrete change in company policy also enhances the brand's reputation and strategic positioning in both public opinion and institutional relations. The weak linkage between economic performance and sustainability standards, on the other hand, suggests the need for further research on the long-term effects of corporate sustainability, as chronic short-termism in business decisions points to the possibility of accruing reputational damage over time, eventually resulting in economic and financial disadvantage.

We are also forced to acknowledge a few limitations in our research method. We have selected a rather small sample to begin with, although we have striven for a selection that is representative of the entire "fast fashion" market segment. Moreover, logistical and time constraints forced us to only consider flagship sustainable initiatives and coalitions, renouncing to a more nuanced understanding of the sector in favor of capturing broad patterns. The research framework would also benefit from the inclusion of more key performance indicators related to the economic and financial performance of selected brands, in order to better substantiate quantitative findings about the effect of sustainability policies on companies' profit margins. Finally, we should also add that our research might paint a somewhat rosier picture than is found in reality, as findings might be biased by the fact that most sustainability sources stem from sustainability reports written by the examined companies themselves. As a final note, we should always be aware that, as passionate advocates of sustainability practices in business, confirmation bias always lurks behind the corner.

It is our hope that this work constitutes a solid basis for further research. Consumer perception and patterns in particular should be the subject of more in-depth analysis: an investigation that should extend across the next few years, as sustainability issues and practices rapidly develop and evolve. Research should also be bolstered to include a wider branch of industries, venturing beyond the boundaries of fast fashion to include, for example, the oft-neglected sector of luxury goods.

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# 7. Appendix

## 7.1 Sampling Process & Selection Requirements

Top 25	Sector	Group Revenue Participation
- Based on brand value	- Footwear - Apparel - No Luxury - No Market Place - No Distributor - No Jewelry	- At least 75%  If brands contribute more than 75% of the whole group revenue, holding's data have been used for data collection

Brand	Ranking Position	Sector	Group Revenue Participation	Considered
Nike	1	Footwear, Appareal, Textile Products	>75%	YES
Louis Vuitton	2	Luxury	NOT RELEVANT	NO
Hermes	3	Luxury	NOT RELEVANT	NO
Gucci	4	Luxury	NOT RELEVANT	NO
Zalando	5	Market Place	NOT RELEVANT	NO
Adidas	6	Footwear, Appareal, Textile Products	>75%	YES
Tiffany & Co	7	Luxury, Jewelry	NOT RELEVANT	NO
Zara (Inditex)	8	Footwear, Appareal, Textile Products	>75%	YES
H&M	9	Footwear, Appareal, Textile Products	>75%	YES
Cartier	10	Luxury, Jewelry	NOT RELEVANT	NO
Lululemon	11	Footwear, Appareal, Textile Products	>75%	YES
Moncler	12	Luxury	NOT RELEVANT	NO
Chanel	13	Luxury, Jewelry	NOT RELEVANT	NO
Rolax	14	Luxury, Jewelry	NOT RELEVANT	NO
Patek Philippe	15	Luxury, Jewelry	NOT RELEVANT	NO
Prada	16	Luxury	NOT RELEVANT	NO
Uniqlo (Fast Retailing)	16	Footwear, Appareal, Textile Products	>75%	YES
Chow Tai Fook	17	Jewelry	NOT RELEVANT	NO
Swarovski	18	Luxury, Jewelry	NOT RELEVANT	NO
Burberry	19	Luxury	NOT RELEVANT	NO
Ralph Lauren	20	Footwear, Appareal, Textile Products	>75%	YES
Tom Ford	21	Luxury	NOT RELEVANT	NO
The North Face	22	Footwear, Appareal, Textile Products	<75%	NO
Levi's	23	Footwear, Appareal, Textile Products	>75%	YES
Victoria's Secret	24	Luxury	NOT RELEVANT	NO

### Final Sample

1. Nike Inc.

5. Lululemon

2. Adidas Group

6. Uniqlo (Fast Retailing)

3. Zara (Inditex)

7. Ralph Lauren Corp.


4. H&M Group

8. Levi Strauss & Co.

## 7.2 Economic Key Performance Indicators for each brand/company of the sample for the period 2010-2021

**adidas**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	14,51	16,12	18,01	17,19	17,59	20,47	22,36	25,67	26,52	28,60	24,01	23,83
Net Profit (in millions\$)	754	933	674	1049	659	704	1125	1240	2010	2213	493	1492
N# Store	2270	2384	2446	2740	2913	2722	2811	2588	2395	2533	2185	2184
N# Employees	42541	46824	46306	49808	53731	55555	58902	56888	57016	65194	62285	61401



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	19,01	20,12	23,33	25,31	27,80	30,60	32,38	34,35	36,40	39,12	37,40	44,54
Net Profit (in millions\$)	1907	2133	2211	2472	2693	3273	3760	4240	1933	4029	2539	5727
N# Store	689	756	826	753	858	931	1045	1142	1182	1152	1096	1048
N# Employees	34400	38000	44000	48000	56500	62600	70700	74400	73100	76700	75400	73300

**INDITEX**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	13,42	14,72	17,01	18,18	19,28	22,19	24,84	27,39	28,42	31,31	24,83	28,24
Net Profit (in millions\$)	1915	2141	2604	2620	2761	3170	3473	3705	3788	4012	1214	3200
N# Store	5044	5527	6009	6340	6683	7013	7292	7475	7490	7469	6829	6477
N# Employees	100138	109512	120314	128313	137054	152854	162450	171839	174839	176611	144116	165000

**Levi's**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	4,41	4,76	4,61	4,68	4,75	4,49	4,55	4,90	5,58	5,76	4,45	5,77
Net Profit (in millions\$)	157	128	144	229	106	209	291	281	283	395	-127	554
N# Store	412	482	511	852	1100	1191	1271	1341	1334	1205	1120	1032
N# Employees	16200	17000	17000	16000	15000	12500	13200	13800	15100	15800	14800	16600

**H&M**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	18,13	18,59	21,18	22,91	23,80	24,00	25,51	27,70	23,23	24,34	20,16	23,19
Net Profit (in millions\$)	2055	1740	1855	1880	2197	2299	2050	1780	1720	1913	137	1166
N# Store	2206	2472	2776	3132	3511	3924	4351	7736	4968	5076	5018	4801
N# Employees	53430	59440	64874	72276	81009	93351	104634	114586	120191	126376	110325	107375

**FAST RETAILING**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	6,76	6,81	7,71	9,49	11,48	13,96	14,83	15,45	17,68	19,01	16,67	17,70
Net Profit (in millions\$)	512	451	595	750	619	935	399	1070	1406	1478	750	1402
N# Store	808	2088	2222	2449	2753	2978	3160	3294	3445	3589	3630	3527
N# Employees	11596	14612	18854	23982	30448	41646	43639	44242	52839	56523	57727	55589

**lululemon**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	0,45	0,71	1,00	1,37	1,59	1,80	2,06	2,34	2,65	3,29	3,98	4,40
Net Profit (in millions\$)	58	122	184	271	280	239	266	303	259	484	646	589
N# Store	112	140	174	211	254	302	363	406	404	440	491	521
N# Employees	3219	4572	5807	6383	7622	8628	11000	12500	13400	15700	19000	25000

**RALPH LAUREN**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue (in billions\$)	4,98	5,66	6,86	6,95	7,45	7,62	7,41	6,65	6,18	6,31	6,16	4,40
Net Profit (in millions\$)	480	568	681	750	776	702	396	-99	163	431	384	-121
N# Store	631	877	987	1040	1115	1216	1344	1348	1382	1439	1434	1480
N# Employees	19000	24000	25000	23000	23000	25000	26000	23300	23500	24300	24900	20300

7.3 Data Collection of Key Sustainability Indicators for each brand/company of the sample

**ENVIRONMENT**

	Better Cotton Initiative	from Y	bluesign	from Y	Canopy Style Initiative	from Y	Textile Exchange	from Y	CDP (Climate Change)	from Y
Adidas	yes	2010	yes	2014	no	-	yes	2013	yes	2011
Levi's	yes	2010	no	-	yes	2014	yes	2014	yes	2016
Inditex	yes	2011	no	-	yes	2014	yes	2011	yes	2010
H&M	yes	2010	no	-	yes	2014	yes	2013	yes	2010
Fast Retailing	yes	2018	no	-	yes	2018	yes	2017	yes	2016
Nike	yes	2010	yes	2013	no	-	yes	2016	yes	2012
Lululemon	yes	2017	yes	2015	yes	2013	yes	2016	yes	2013
Ralph Lauren	yes	2016	no	-	yes	2016	yes	2018	yes	2016

**PEOPLE**

	UN Global Compact	from Y	Ethical Trade	from Y	Fair Labour Association	from Y	Sustainable Apparel Coalition	from Y	Better Work	from Y
Adidas	no	-	no	-	yes	2003	no	-	no	-
Levi's	yes	2006	no	-	no	-	yes	2011	yes	2005
Inditex	yes	2001	yes	2006	no	-	yes	2011	yes	2007
H&M	no	-	yes	2011	no	-	yes	2011	yes	2013
Fast Retailing	yes	2018	no	-	yes	2015	yes	2011	yes	2015
Nike	yes	2000	no	-	yes	2005	yes	2011	yes	2018
Lululemon	no	-	no	-	no	-	yes	2015	yes	2016
Ralph Lauren	yes	2019	no	-	yes	2015	yes	2011	yes	2015

**ANIMALS**

	Leather Working Group	from Y	Responsible Down Standard	from Y
Adidas	yes	2007	yes	2015
Levi's	yes	2021	yes	2018
Inditex	yes	2011	no	-
H&M	no	-	no	-
Fast Retailing	no	-	yes	2019
Nike	yes	2007	no	-
Lululemon	no	-	no	-
Ralph Lauren	yes	2019	yes	2018

## 7.4 Economic Performance Scoring Process

PERFORMANCE SCORES WEIGHTS			
Revenue	Net Profit	N# Stores	N# Employees
30%	40%	10%	20%

2010

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,8	1,8	2,3	2,1	2,5
Levi's	1,2	0,4	0,4	0,8	0,7
Inditex	3,5	4,7	5,0	5,0	4,4
H&M	4,8	5,0	2,2	2,7	4,2
Fast Retailing	1,8	1,2	0,8	0,6	1,2
Nike	5,0	4,6	0,7	1,7	3,8
Lululemon	0,1	0,1	0,1	0,2	0,1
Ralph Lauren	1,3	1,2	0,6	0,9	1,1

2011

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	4,0	2,2	2,2	2,1	2,7
Levi's	1,2	0,3	0,4	0,8	0,7
Inditex	3,7	5,0	5,0	5,0	4,6
H&M	4,6	4,1	2,2	2,7	3,8
Fast Retailing	1,7	1,1	1,9	0,7	1,3
Nike	5,0	5,0	0,7	1,7	3,9
Lululemon	0,2	0,1	0,1	0,2	0,2
Ralph Lauren	1,4	1,3	0,8	1,1	1,3



2012

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,9	1,3	2,0	1,9	2,3
Levi's	1,0	0,3	0,4	0,7	0,6
Inditex	3,6	5,0	5,0	5,0	4,6
H&M	4,5	3,6	2,3	2,7	3,6
Fast Retailing	1,7	1,1	1,8	0,8	1,3
Nike	5,0	4,2	0,7	1,8	3,6
Lululemon	0,2	0,4	0,1	0,2	0,3
Ralph Lauren	1,5	1,3	0,8	1,0	1,3

2013

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,4	2,0	2,2	1,9	2,4
Levi's	0,9	0,2	0,7	0,6	0,5
Inditex	3,6	5,0	5,0	5,0	4,6
H&M	4,5	3,6	2,5	2,8	3,6
Fast Retailing	1,9	1,4	1,9	0,9	1,5
Nike	5,0	4,7	0,6	1,9	3,8
Lululemon	0,3	0,5	0,2	0,2	0,4
Ralph Lauren	1,4	1,4	0,8	0,9	1,2

2014

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,2	1,2	2,2	2,0	2,0
Levi's	0,9	0,2	0,8	0,5	0,5
Inditex	3,5	5,0	5,0	5,0	4,5
H&M	4,3	4,0	2,6	3,0	3,7
Fast Retailing	2,1	1,1	2,1	1,1	1,5
Nike	5,0	4,9	0,6	2,1	3,9
Lululemon	0,3	0,5	0,2	0,3	0,4
Ralph Lauren	1,3	1,4	0,8	0,8	1,2

2015

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,3	1,1	1,9	1,8	2,0
Levi's	0,7	0,3	0,8	0,4	0,5
Inditex	3,6	4,8	5,0	5,0	4,5
H&M	3,9	3,5	2,8	3,1	3,5
Fast Retailing	2,3	1,4	2,1	1,4	1,7
Nike	5,0	5,0	1,4	2,0	4,1
Lululemon	0,3	0,4	0,2	0,3	0,3
Ralph Lauren	1,2	1,1	0,9	0,8	1,1

2016

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,5	1,5	1,9	1,8	2,2
Levi's	0,7	0,4	0,9	0,4	0,5
Inditex	3,8	4,6	5,0	5,0	4,5
H&M	3,9	2,7	3,0	3,2	3,2
Fast Retailing	2,3	0,5	2,2	1,3	1,4
Nike	5,0	5,0	0,7	2,2	4,0
Lululemon	0,3	0,4	0,2	0,3	0,3
Ralph Lauren	1,1	0,5	0,9	0,8	0,8

2017

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,7	1,5	1,7	1,7	2,2
Levi's	0,7	0,3	0,9	0,4	0,5
Inditex	4,0	4,4	4,8	5,0	4,4
H&M	4,0	2,4	5,0	3,3	3,3
Fast Retailing	2,2	1,3	2,1	1,3	1,6
Nike	5,0	5,0	0,7	2,2	4,0
Lululemon	0,3	0,4	0,3	0,4	0,3
Ralph Lauren	1,0	0,0	0,9	0,7	0,5

2018

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,6	2,7	1,7	1,6	2,6
Levi's	0,8	0,4	0,9	0,4	0,6
Inditex	3,9	5,0	5,0	5,0	4,7
H&M	3,2	2,3	3,3	3,4	2,9
Fast Retailing	2,4	1,9	2,3	1,5	2,0
Nike	5,0	2,6	0,8	2,1	3,0
Lululemon	0,4	0,3	0,3	0,4	0,3
Ralph Lauren	0,8	0,2	0,9	0,7	0,6

2019

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,7	2,7	1,7	1,8	2,7
Levi's	0,7	0,5	0,8	0,4	0,6
Inditex	4,0	5,0	5,0	5,0	4,7
H&M	3,1	2,4	3,4	3,6	2,9
Fast Retailing	2,4	1,8	2,4	1,6	2,0
Nike	5,0	5,0	0,8	2,2	4,0
Lululemon	0,4	0,6	0,3	0,4	0,5
Ralph Lauren	0,8	0,5	1,0	0,7	0,7

2020

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	3,2	1,0	1,6	2,2	1,9
Levi's	0,6	0,0	0,8	0,0	0,3
Inditex	3,3	2,4	5,0	5,0	3,5
H&M	2,7	0,3	3,7	3,8	2,0
Fast Retailing	2,2	1,5	2,7	2,0	1,9
Nike	5,0	5,0	0,8	2,6	4,1
Lululemon	0,5	1,3	0,4	0,7	0,8
Ralph Lauren	0,8	0,8	1,0	0,9	0,8

# 2021

Brands	Economic Indicator				AVG. WEIGHTED SCORE
	Revenue Score	Net Profit Score	N# Store Score	N# Employees Score	
Adidas	2,7	1,3	1,7	1,9	1,9
Levi's	0,6	0,5	0,8	0,5	0,6
Inditex	3,2	2,8	5,0	5,0	3,6
H&M	2,6	1,0	3,7	3,3	2,2
Fast Retailing	2,0	1,2	2,7	1,7	1,7
Nike	5,0	5,0	0,8	2,2	4,0
Lululemon	0,5	0,5	0,4	0,8	0,5
Ralph Lauren	0,5	0,0	1,1	0,6	0,4

## 7.5 Sustainability Scoring Process

SUSTAINABILITY SCORES WEIGHTS		
Planet	People	Animal
40%	40%	20%

**adidas**

	PLANET					SCORE
	Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)	
2010	✓	X	X	X	X	1
2011	✓	X	X	X	✓	2
2012	✓	X	X	X	✓	2
2013	✓	X	X	✓	✓	3
2014	✓	✓	X	✓	✓	4
2015	✓	✓	X	✓	✓	4
2016	✓	✓	X	✓	✓	4
2017	✓	✓	X	✓	✓	4
2018	✓	✓	X	✓	✓	4
2019	✓	✓	X	✓	✓	4
2020	✓	✓	X	✓	✓	4
2021	✓	✓	X	✓	✓	4

	PEOPLE					SCORE
	UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work	
2010	X	X	X	✓	X	1
2011	X	X	X	✓	X	1
2012	X	X	X	✓	X	1
2013	X	X	X	✓	X	1
2014	X	X	X	✓	X	1
2015	X	X	X	✓	X	1
2016	X	X	X	✓	X	1
2017	X	X	X	✓	X	1
2018	X	X	X	✓	X	1
2019	X	X	X	✓	X	1
2020	X	X	X	✓	X	1
2021	X	X	X	✓	X	1

	ANIMALS		SCORE
	Leather Working Group	Responsible Down Standard	
2010	✓	X	2.50
2011	✓	X	2.50
2012	✓	X	2.50
2013	✓	X	2.50
2014	✓	X	2.50
2015	✓	✓	5.00
2016	✓	✓	5.00
2017	✓	✓	5.00
2018	✓	✓	5.00
2019	✓	✓	5.00
2020	✓	✓	5.00
2021	✓	✓	5.00

TOT AVG SCORE
1.3
1.7
1.7
2.1
2.5
3.0
3.0
3.0
3.0
3.0
3.0
3.0



PLANET						
Year	Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)	SCORE
2010	✓	X	X	X	X	1
2011	✓	X	X	X	X	1
2012	✓	X	X	X	✓	2
2013	✓	✓	X	X	✓	3
2014	✓	✓	X	X	✓	3
2015	✓	✓	X	X	✓	3
2016	✓	✓	X	✓	✓	4
2017	✓	✓	X	✓	✓	4
2018	✓	✓	X	✓	✓	4
2019	✓	✓	X	✓	✓	4
2020	✓	✓	X	✓	✓	4
2021	✓	✓	X	✓	✓	4

PEOPLE						
Year	UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work	SCORE
2010	✓	X	X	✓	X	2
2011	✓	X	✓	✓	X	3
2012	✓	X	✓	✓	X	3
2013	✓	X	✓	✓	X	3
2014	✓	X	✓	✓	X	3
2015	✓	X	✓	✓	X	3
2016	✓	X	✓	✓	X	3
2017	✓	X	✓	✓	X	3
2018	✓	X	✓	✓	✓	4
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

ANIMALS				SCORE	TOT AVG SCORE
Year	Leather Working Group	Responsible Down Standard	SCORE		
2010	✓	X	2,50	1,7	
2011	✓	X	2,50	2,1	
2012	✓	X	2,50	2,5	
2013	✓	X	2,50	2,9	
2014	✓	X	2,50	2,9	
2015	✓	X	2,50	2,9	
2016	✓	X	2,50	3,3	
2017	✓	X	2,50	3,3	
2018	✓	X	2,50	3,7	
2019	✓	X	2,50	3,7	
2020	✓	X	2,50	3,7	
2021	✓	X	2,50	3,7	

## INDITEX

PLANET						
Year	Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)	SCORE
2010	X	X	X	X	✓	1
2011	✓	X	X	✓	✓	3
2012	✓	X	X	✓	✓	3
2013	✓	X	X	✓	✓	3
2014	✓	X	✓	✓	✓	4
2015	✓	X	✓	✓	✓	4
2016	✓	X	✓	✓	✓	4
2017	✓	X	✓	✓	✓	4
2018	✓	X	✓	✓	✓	4
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

PEOPLE						
Year	UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work	SCORE
2010	✓	✓	X	X	✓	3
2011	✓	✓	✓	X	✓	4
2012	✓	✓	✓	X	✓	4
2013	✓	✓	✓	X	✓	4
2014	✓	✓	✓	X	✓	4
2015	✓	✓	✓	X	✓	4
2016	✓	✓	✓	X	✓	4
2017	✓	✓	✓	X	✓	4
2018	✓	✓	✓	X	✓	4
2019	✓	✓	✓	X	✓	4
2020	✓	✓	✓	X	✓	4
2021	✓	✓	✓	X	✓	4

ANIMALS				SCORE	TOT AVG SCORE
Year	Leather Working Group	Responsible Down Standard	SCORE		
2010	X	X	0	1,6	
2011	✓	X	2,50	3,3	
2012	✓	X	2,50	3,3	
2013	✓	X	2,50	3,3	
2014	✓	X	2,50	3,7	
2015	✓	X	2,50	3,7	
2016	✓	X	2,50	3,7	
2017	✓	X	2,50	3,7	
2018	✓	X	2,50	3,7	
2019	✓	X	2,50	3,7	
2020	✓	X	2,50	3,7	
2021	✓	X	2,50	3,7	



PLANET						SCORE
Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)		
2010	✓	X	X	X	✓	2
2011	✓	X	X	X	✓	2
2012	✓	X	X	X	✓	2
2013	✓	X	X	✓	✓	3
2014	✓	X	✓	✓	✓	4
2015	✓	X	✓	✓	✓	4
2016	✓	X	✓	✓	✓	4
2017	✓	X	✓	✓	✓	4
2018	✓	X	✓	✓	✓	4
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

PEOPLE						SCORE
UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work		
2010	X	X	X	X	X	0
2011	X	✓	✓	X	X	2
2012	X	✓	✓	X	X	2
2013	X	✓	✓	X	✓	3
2014	X	✓	✓	X	✓	3
2015	X	✓	✓	X	✓	3
2016	X	✓	✓	X	✓	3
2017	X	✓	✓	X	✓	3
2018	X	✓	✓	X	✓	3
2019	X	✓	✓	X	✓	3
2020	X	✓	✓	X	✓	3
2021	X	✓	✓	X	✓	3

ANIMALS			SCORE	TOT AVG SCORE
Leather Working Group	Responsible Down Standard			
2010	X	X	0	0,8
2011	X	X	0	1,6
2012	X	X	0	1,6
2013	X	X	0	2,4
2014	X	X	0	2,8
2015	X	X	0	2,8
2016	X	X	0	2,8
2017	X	X	0	2,8
2018	X	X	0	2,8
2019	X	X	0	2,8
2020	X	X	0	2,8
2021	X	X	0	2,8

### FAST RETAILING

PLANET						SCORE
Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)		
2010	X	X	X	X	X	0
2011	X	X	X	X	X	0
2012	X	X	X	X	X	0
2013	X	X	X	X	X	0
2014	X	X	X	X	X	0
2015	X	X	X	X	X	0
2016	X	X	X	X	✓	1
2017	X	X	X	✓	✓	2
2018	✓	X	✓	✓	✓	4
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

PEOPLE						SCORE
UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work		
2010	X	X	X	X	X	0
2011	X	X	✓	X	X	1
2012	X	X	✓	X	X	1
2013	X	X	✓	X	X	1
2014	X	X	✓	X	X	1
2015	X	X	✓	✓	✓	3
2016	X	X	✓	✓	✓	3
2017	X	X	✓	✓	✓	3
2018	✓	X	✓	✓	✓	4
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

ANIMALS			SCORE	TOT AVG SCORE
Leather Working Group	Responsible Down Standard			
2010	X	X	0	0,0
2011	X	X	0	0,4
2012	X	X	0	0,4
2013	X	X	0	0,4
2014	X	X	0	0,4
2015	X	X	0	1,2
2016	X	X	0	1,6
2017	X	X	0	2,0
2018	X	X	0	3,2
2019	X	✓	2,50	3,7
2020	X	✓	2,50	3,7
2021	X	✓	2,50	3,7



PLANET						SCORE
Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)		
2010	X	X	X	X	X	0
2011	X	X	X	X	X	0
2012	X	X	X	X	X	0
2013	X	X	✓	X	✓	2
2014	X	X	✓	X	✓	2
2015	X	X	✓	X	✓	2
2016	X	✓	✓	✓	✓	4
2017	✓	✓	✓	✓	✓	5
2018	✓	✓	✓	✓	✓	5
2019	✓	✓	✓	✓	✓	5
2020	✓	✓	✓	✓	✓	5
2021	✓	✓	✓	✓	✓	5

PEOPLE						SCORE
UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work		
2010	X	X	X	X	X	0
2011	X	X	X	X	X	0
2012	X	X	X	X	X	0
2013	X	X	X	X	X	0
2014	X	X	X	X	X	0
2015	X	X	X	X	X	0
2016	X	X	✓	X	✓	2
2017	X	X	✓	X	✓	2
2018	X	X	✓	X	✓	2
2019	X	X	✓	X	✓	2
2020	X	X	✓	X	✓	2
2021	X	X	✓	X	✓	2

ANIMALS			SCORE	TOT AVG SCORE
Leather Working Group	Responsible Down Standard			
2010	X	X	0	0,0
2011	X	X	0	0,0
2012	X	X	0	0,0
2013	X	X	0	0,8
2014	X	X	0	0,8
2015	X	X	0	0,8
2016	X	X	0	2,4
2017	X	X	0	2,8
2018	X	X	0	2,8
2019	X	X	0	2,8
2020	X	X	0	2,8
2021	X	X	0	2,8

RALPH LAUREN

PLANET						SCORE
Better Cotton Initiative	Blue Sign	Canopy Style Initiative	Textile Exchange	CDP (Climate Change)		
2010	X	X	X	X	X	0
2011	X	X	X	X	X	0
2012	X	X	X	X	X	0
2013	X	X	X	X	X	0
2014	X	X	X	X	X	0
2015	X	X	X	X	X	0
2016	✓	X	✓	X	✓	3
2017	✓	X	✓	X	✓	3
2018	✓	X	✓	✓	✓	4
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

PEOPLE						SCORE
UN Global Compact	Ethical Trade	Sustainable Apparel Coalition	Fair Labour Association	Better Work		
2010	X	X	X	X	X	0
2011	X	X	✓	X	X	1
2012	X	X	✓	X	X	1
2013	X	X	✓	X	X	1
2014	X	X	✓	X	X	1
2015	X	X	✓	✓	✓	3
2016	X	X	✓	✓	✓	3
2017	X	X	✓	✓	✓	3
2018	X	X	✓	✓	✓	3
2019	✓	X	✓	✓	✓	4
2020	✓	X	✓	✓	✓	4
2021	✓	X	✓	✓	✓	4

ANIMALS			SCORE	TOT AVG SCORE
Leather Working Group	Responsible Down Standard			
2010	X	X	0,00	0,0
2011	X	X	0,00	0,4
2012	X	X	0,00	0,4
2013	X	X	0,00	0,4
2014	X	X	0,00	0,4
2015	X	X	0,00	1,2
2016	X	X	0,00	2,4
2017	X	X	0,00	2,4
2018	X	✓	2,50	3,3
2019	✓	✓	5,00	4,2
2020	✓	✓	5,00	4,2
2021	✓	✓	5,00	4,2



## 7.6 Data Visualization of both Economic Performance and Sustainability Scores of each brand/company

**adidas**

Year	Economic Indicator	Sustainable Indicator
2010	2,5	1,3
2011	2,7	1,7
2012	2,3	1,7
2013	2,4	2,1
2014	2,0	2,5
2015	2,0	3,0
2016	2,2	3,0
2017	2,2	3,0
2018	2,6	3,0
2019	2,7	3,0
2020	1,9	3,0
2021	1,9	3,0
<b>Avg. Score</b>	<b>2,3</b>	<b>2,5</b>

**Levi's**

Year	Economic Indicator	Sustainable Indicator
2010	0,7	1,2
2011	0,7	1,6
2012	0,6	1,6
2013	0,5	1,6
2014	0,5	2,4
2015	0,5	2,4
2016	0,5	2,8
2017	0,5	2,8
2018	0,6	3,3
2019	0,6	3,3
2020	0,3	3,3
2021	0,6	3,8
<b>Avg. Score</b>	<b>0,6</b>	<b>2,5</b>

**INDITEX**

Year	Economic Indicator	Sustainable Indicator
2010	4,4	1,6
2011	4,6	3,3
2012	4,6	3,3
2013	4,6	3,3
2014	4,5	3,7
2015	4,5	3,7
2016	4,5	3,7
2017	4,4	3,7
2018	4,7	3,7
2019	4,7	3,7
2020	3,5	3,7
2021	3,6	3,7
<b>Avg. Score</b>	<b>4,4</b>	<b>3,4</b>



Year	Economic Indicator	Sustainable Indicator
2010	3,6	1,7
2011	3,9	2,1
2012	3,6	2,5
2013	3,8	2,9
2014	3,9	2,9
2015	4,1	2,9
2016	4,0	3,3
2017	4,0	3,3
2018	3,0	3,7
2019	4,0	3,7
2020	4,1	3,7
2021	4,0	3,7
<b>Avg. Score</b>	<b>3,8</b>	<b>3,0</b>

**H&M**

Year	Economic Indicator	Sustainable Indicator
2010	4,2	0,8
2011	3,8	1,6
2012	3,6	1,6
2013	3,6	2,4
2014	3,7	2,8
2015	3,5	2,8
2016	3,2	2,8
2017	3,3	2,8
2018	2,9	2,8
2019	2,9	2,8
2020	2,0	2,8
2021	2,2	2,8
<b>Avg. Score</b>	<b>3,2</b>	<b>2,4</b>

**FAST RETAILING**

Year	Economic Indicator	Sustainable Indicator
2010	1,2	0,0
2011	1,3	0,4
2012	1,3	0,4
2013	1,5	0,4
2014	1,5	0,4
2015	1,7	1,2
2016	1,4	1,6
2017	1,6	2,0
2018	2,0	3,2
2019	2,0	3,7
2020	1,9	3,7
2021	1,7	3,7
<b>Avg. Score</b>	<b>1,6</b>	<b>1,7</b>

**lululemon**

Year	Economic Indicator	Sustainable Indicator
2010	0,1	0,0
2011	0,2	0,0
2012	0,3	0,0
2013	0,4	0,8
2014	0,4	0,8
2015	0,3	0,8
2016	0,3	2,4
2017	0,3	2,8
2018	0,3	2,8
2019	0,5	2,8
2020	0,8	2,8
2021	0,5	2,8
<b>Avg. Score</b>	<b>0,4</b>	<b>1,6</b>

**RALPH LAUREN**

Year	Economic Indicator	Sustainable Indicator
2010	1,1	0,0
2011	1,3	0,4
2012	1,3	0,4
2013	1,2	0,4
2014	1,2	0,4
2015	1,1	1,2
2016	0,8	2,4
2017	0,5	2,4
2018	0,6	3,3
2019	0,7	4,2
2020	0,8	4,2
2021	0,4	4,2
<b>Avg. Score</b>	<b>0,9</b>	<b>2,0</b>

7.7 Data Visualization of both Economic Performance and Sustainability Annual Growth Rates for each brand/companies

**adidas**

Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	8,0%	30,8%
2012	-14,8%	0,0%
2013	4,3%	23,5%
2014	-16,7%	19,0%
2015	0,0%	20,0%
2016	10,0%	0,0%
2017	0,0%	0,0%
2018	18,2%	0,0%
2019	3,8%	0,0%
2020	-29,6%	0,0%
2021	0,0%	0,0%

**INDITEX**

Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	4,5%	106,3%
2012	0,0%	0,0%
2013	0,0%	0,0%
2014	-2,2%	12,1%
2015	0,0%	0,0%
2016	0,0%	0,0%
2017	-2,2%	0,0%
2018	6,8%	0,0%
2019	0,0%	0,0%
2020	-25,5%	0,0%
2021	2,9%	0,0%



Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	8,3%	23,5%
2012	-7,7%	19,0%
2013	5,6%	16,0%
2014	2,6%	0,0%
2015	5,1%	0,0%
2016	-2,4%	13,8%
2017	0,0%	0,0%
2018	-25,0%	12,1%
2019	33,3%	0,0%
2020	2,5%	0,0%
2021	-2,4%	0,0%



Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	-9,5%	100,0%
2012	-5,3%	0,0%
2013	0,0%	50,0%
2014	2,8%	16,7%
2015	-5,4%	0,0%
2016	-8,6%	0,0%
2017	3,1%	0,0%
2018	-12,1%	0,0%
2019	0,0%	0,0%
2020	-31,0%	0,0%
2021	10,0%	0,0%

# Levi's

Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	0,0%	33,3%
2012	-14,3%	0,0%
2013	-16,7%	0,0%
2014	0,0%	50,0%
2015	0,0%	0,0%
2016	0,0%	16,7%
2017	0,0%	0,0%
2018	20,0%	17,9%
2019	0,0%	0,0%
2020	-50,0%	0,0%
2021	100,0%	15,2%

# FAST RETAILING

Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	8,3%	0,0%
2012	0,0%	0,0%
2013	15,4%	0,0%
2014	0,0%	0,0%
2015	13,3%	200,0%
2016	-17,6%	33,3%
2017	14,3%	25,0%
2018	25,0%	60,0%
2019	0,0%	15,6%
2020	-5,0%	0,0%
2021	-10,5%	0,0%

# Lululemon

Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	100,0%	0,0%
2012	50,0%	0,0%
2013	33,3%	0,0%
2014	0,0%	0,0%
2015	-25,0%	0,0%
2016	0,0%	200,0%
2017	0,0%	16,7%
2018	0,0%	0,0%
2019	66,7%	0,0%
2020	60,0%	0,0%
2021	-37,5%	0,0%

# RALPH LAUREN

Year	Economic Growth Rate	Sustainable Growth Rate
2010	/	/
2011	18,2%	0,0%
2012	0,0%	0,0%
2013	-7,7%	0,0%
2014	0,0%	0,0%
2015	-8,3%	200,0%
2016	-27,3%	100,0%
2017	-37,5%	0,0%
2018	20,0%	37,5%
2019	16,7%	27,3%
2020	14,3%	0,0%
2021	-50,0%	0,0%