

Sustainability in the Fashion Industry:
Two Case Studies Highlighting Consumer Purchasing Actions Related to Brand Sustainability

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Abstract

The rise of competition in the fashion industry has called for companies to differentiate themselves. One way of differentiation that has been seen in recent years is an increase in sustainable and environmentally friendly practices. This paper explores the use of press releases by fashion companies to see if the releases impact the companies' bottom line. The purpose of this study was to evaluate if sustainability related press releases impact consumers in the United States decision making in purchasing products or supporting certain brands or companies. To conduct this study, yearly and quarterly financial data was collected to find trends within a company's revenue, as well as data on press releases that advertise the company's sustainability efforts. These two data sources were connected to then analyze if environmental press releases impacted the company's bottom line. To connect this information to the real world, two case studies were conducted: H&M, a well-known fast fashion company, and Levi's, a tried-and-true sustainable denim company. As these companies were different sizes, the percent change formula was applied between years and quarters to ensure that the data was not skewed by historically higher or lower revenues. In analyzing the data, results indicated that years with sustainability related press releases resulted in a 2.89% higher percent change than total average percent change between yearly revenue, and a 4.81% higher percent change than total average quarterly percent change between quarters. This provided evidence that press releases that include the company's promise to act sustainably impacted consumer decisions and in turn created more profits in the quarter and year the press release was published, overall benefitting the company's bottom line.

1. Introduction

Fast fashion has taken the fashion industry by storm, completely revolutionizing how people purchase, use, and discard clothing. Over eighty billion pieces of clothing are bought globally each year, making the market for the fashion industry over \$1.2 trillion dollars. While fast fashion may be convenient for consumers, the entire practice is extremely damaging to the environment.

According to the Merriam-Webster Dictionary, the definition of fast fashion is "an approach to the design, creation, and marketing of clothing fashions that emphasizes making fashion trends quickly and cheaply available to consumers." As consumers demand trendy and cheap clothing options, fast fashion is the easiest and most cost-effective method for companies to meet demand. However, as stated before, fast fashion is extremely wasteful, as 85% of the clothing Americans consume goes to landfills, and the process of making clothing is extremely damaging to the environment (Bick et al., 2018). The harm to the environment starts at the base, the materials that are used to make clothing, and the inputs that are put into these materials. Cotton is 30% of textile fabric consumption in the US, which is very prone to insect attack and fungi. Because of this, cotton production accounts for 25% of the world's pesticides usage. These

pesticides get washed off in the rain and pollute rainwater runoff that then funnels into our waterways and drinking water. The other main textile that is used is polyester, which is derived from oil, which is a nonrenewable source (Chen & Burns, 2006). After materials are harvested, dyeing and finishing practices for clothing also are extremely damaging to the environment. Chemicals that are used for dyeing and finishing can pollute both air and water, and once the color is set in the fabric, tons of fabric are cut away, creating deadstock fabric that is too small to be used for other garments. Dyeing and finishing chemicals also cause harm to human health as we absorb the chemicals into our skin and breathe in evaporated residual chemicals from the manufacturing process (Eryuruk, 2012).

However, it does not end at the actual creation of the product. 60% of the energy used in the life cycle of a cotton t-shirt is related to post-purchase washing and drying (Claudio, 2007). The use phase, including wearing, washing, and drying contributes to the high use of water, energy, and chemicals. These may seem insignificant but because of their constant repetition by everyone in the world at almost all hours, together they have a huge environmental impact. Apart from the energy and water used by washing and drying machines, microplastics are also a big threat to our environment from the constant cleaning of clothes. There are estimates that 20-35% of primary source microplastics in the marine environment are from the creation and use of synthetic clothing (Laitala et al., 2018). These microplastics end up back in our water and can severely affect all ecosystems, damaging both animal and human health.

The process of cutting, dying, and producing clothing is not only hurting our planet, but also the livelihoods of disadvantaged people and their health. Low and middle-income countries produce 90% of the entire world's clothing, and in these countries, occupation and safety standards are not upheld, or even nonexistent. Clothing is highly labor intensive as it is soft and malleable, unlike rigid materials that are easy to mechanize (Mair et al., 2016). As an example of this, China is the largest exporter of fast fashion, accounting for about 30% of the world's clothing exports. However, Chinese clothing workers only make around \$0.12- \$0.18 per hour (Claudio, 2007). These are not living wages, and these workers are not being treated ethically. Fast fashion has proven to be a real issue that we must tackle, and as globalization continues to grow, consumers are growing more aware of this fact.

The issues stated above have led to a rise in knowledge about sustainable and ethical practices within the fashion industry. A rise of sustainable fashion in recent years has been shown through a 75% uptick in sustainability-related terms on a global fashion search site, Lyst (Rotish, 2020). There have been studies in the past that have addressed the problem of fast fashion and unsustainable consumption and how consumers are changing their views on these subjects. One study by Kristen Billeson and Karolina Klasander describes the four barriers between consumer attitudes and behavior regarding sustainable consumption. They researched if the gap was due to style, price, convenience, and/or knowledge. Their findings included that respondents were most

concerned with quality, comfort, and durability rather than style, and that they had a slight willingness to pay more for sustainable fashion. One of their final and largest findings was that factors regarding conveniences and knowledge/information were the most important to bridge the gap between attitudes and behaviors (Billeson & Klasander, 2015). Similar to the above study, another study found that the attitudes of consumers toward fashion purchasing is determined by their overall concern for environmental well-being. Because of this, many designers are considering this in their clothing production processes (McNeill & Moore, 2015). These studies all show the rise in consumer knowledge and purchasing decisions when it comes to sustainable fashion.

Most studies already conducted on sustainable practices in the fashion industry cover the shifts that companies have made in order to become more sustainable. Studies have found that large companies tend to focus on product and process improvement, and smaller companies have been able to reshape their entire supply chain to be more sustainable (Caniato et al., 2012). These supply chains are an integral part of fashion business operations, which cannot be overlooked. Another study about perceptions of sustainable supply chains and the circular economy analyzed the most important factors that are influencing the fashion market and drivers for competitiveness. The circular economy is a really interesting concept that has been developed in recent years. The circular economy is defined by Gazzola et al. (2020) as “[a] model [that] builds economic, natural, and social capital based on three principles: minimize waste and pollution, keep products and materials in use (circular system), regenerate natural systems.” This study found that there was a positive trend of consumer wants of sustainability for the future, and respondents showed hope for an increase in the ethical approaches to business. They found that mainly younger generations are paying more attention to sustainability and the circular economy, giving a source of competitive advantage to companies that are able to capitalize on this. The values and motivations behind sustainable fashion consumption also explores the values and motivations that are the groundwork for actual sustainable consumption. However, Lunblad and Davies (2016) took a more individualistic approach and found that consumers seek individual benefits (need for belonging, self-esteem, gaining acceptance from others) when purchasing clothing.

While these studies are terrific for gaining knowledge about consumer attitudes and behavior at both an individual and nationwide level, they do little to tell us about the financial driving factors for the rise in sustainable fashion. Consumer behavior is one aspect of the marketplace, but there may be other components that are unaddressed in these studies. This paper attempts to fill the gaps in knowledge about why companies are releasing their sustainability related public releases by using a multiple case study methodology. New businesses that are starting out need to know the driving forces behind the shifting marketplace. They may ask if consumers are demanding sustainable and ethical practices, or if the reason for the shift is because businesses are becoming more responsible in general and just following the trends of the industry, or they are just seeking

ways to increase their revenue. Additionally, this paper is significant for stakeholders in the fashion industry. This includes corporate members of fashion companies, as they are the ones that are creating and reporting new policies regarding sustainability and the environment. Specifically, members of the corporate social responsibility departments of these companies are the ones interested in consumer behavior and trends in the marketplace.

The purpose of this study is to analyze the relationship between the sustainable fashion industry's supply and consumer demand, in order to improve the methods used by the market to gauge trends. I hypothesize that there has been a growing demand for sustainable fashion brands and a marketplace shift in the fashion industry towards more sustainable practices due to financial pressures from consumers after companies release sustainability related press releases.

2. Methodology

Data Summary

The first data that was collected was the selection of companies to perform the case studies on. As mentioned above, the companies had to be public and well established to have public financial and press release information from the last ten years. After doing some preliminary research on a multitude of fashion companies, H&M was chosen as the fast fashion company, and Levi Strauss and Co. was chosen as the sustainable company.

The data that was needed for analysis was from two sources from each of the companies: their public financial statements and their public press releases. Because the selected companies were publicly owned, they have their financial statements available for the public. The study began with the collection of each company's yearly net sales from 2010 to 2019 for the US. A 9-year period was chosen as this period was enough information to cover public consumption of press and financial fluctuations. H&M gave net sales for the US in SEK, the local currency of Sweden, where the headquarters are located, so SEK was then converted to US dollars (H&M Group, n.d.). The conversion factor of \$0.12 to 1 SEK was used in the conversion (Table 1). Levi's net sales were more straightforward and gave the percentage of net sales that were from the US (Levi Strass & Co, n.d.). To find total net sales in the US for Levi's, the total net sales were multiplied by the percentages provided (Table 2). These calculations provided a visualization of yearly net sales for the US for both Levi's and H&M.

After this initial collection, each company's net sales for each quarter of each year were collected. H&M provided their net sales for each quarter through their quarterly financial statements and Levi's gave a percentage of net sales from yearly sales for each quarter. After finding these, tables were created outlining net sales based on year and based on quarter. Table 3 outlines H&M's net sales per quarter, and Table 4 outlines Levi's net sales per quarter. These

data tables were essential to the research question, as after the press release data was found, the dates needed to be connected to the net sales from the corresponding quarters.

After finding the financial data, the press release data was found for the companies chosen. Each fashion company had a press release section on their website, so the data was regularly available to the public as well. The press releases were sectioned by year, so the press release titles were then read through to choose the releases that were related to sustainability. All the titles for H&M from 2010- 2019 were read through and six total press releases that were big headlines regarding their movement to more sustainable practices were chosen (Table 5). The dates found were March 2010, May 2013, November 2013, January 2016, October 2016, and April 2019 (Newsroom, n.d.). After sorting through Levi's press releases, six press releases from 2010- 2019 that were related to the environment were also chosen. The dates of these releases were October 2012, November 2013, March 2015, July 2018, July 2018, and November 2019 (Press room, n.d.).

Then, all of the dates that these releases were made were noted to connect them to the related financial quarter. The 1st quarter of each financial statement was December 1st -March 1st, the 2nd quarter was March 1st – June 1st, the 3rd quarter June 1st – September 1st, and the 4th quarter September 1st – December 1st. When finishing the correlations, the analysis of the press releases and financial data began.

Data Analysis

To begin analyzing the data, the financial data needed to be manipulated to show the fluctuations between years and quarters. To do this, the percent change formula was used to calculate the percent change from one quarter to the next. To do this the percent change formula following was used:

$$\frac{\text{New value} - \text{initial value}}{\text{initial value}} \times 100$$

Initially, the percent change was calculated between years for both Levi's and H&M. The formula listed above was applied for all years 2010- 2019. This percent change was needed to see changes in revenue from the previous year in connection with the press release year. Percent change was also calculated for each year between Q1- Q2, Q2- Q3, Q3- Q4, and Q4- Q1 of the following year. These numbers showed trends across the board, so the averages of each of the four categories for the 9-year period for each company were then calculated.

After calculating the percent changes between quarter, the press releases were analyzed with the financial data in connection to when the press releases were released. To begin, the month and year the press releases were published was marked down. As all the press releases were for immediate release, the public would be influenced by the data in the quarter it was released. For example, if a release was published in March of 2012, the percent change for Q1-Q2 in 2012

would be analyzed. To analyze the quarterly data, the certain quarters were highlighted if a sustainability related press release was released during that period. Then, the averages of the highlighted boxes were averaged by quarter to compare to the overall averages of each quarter. To analyze the yearly data, the percent change of the years where sustainability related press releases were published were also highlighted to compare the averages. Table 6 shows the percent changes with the quarters with press releases highlighted for H&M, and Table 7 shows the percent changes with the quarters with press releases highlighted for Levi's.

3. Results

The average percent change between each quarter for years 2010- 2019 for H&M is shown in Table 8. From Quarter 1 to Quarter 2, the average percent change was 10.91% and the average percent change of quarters with sustainability related press releases was 16.05%. For Q2 to Q3, the average percent change across all years was 5.69%, and there were no sustainability related press releases in Quarter 3. From Q3 to Q4, the average percent change was 7.54%, while the average percent change of quarters with sustainability related press releases was 10.70%. From Q4 to Q1, the average percent change of all years was -8.11%, while the average percent change of quarters with sustainability related press releases was -5.90%.

For all three categories presented for H&M, all of the average percent change of quarters with sustainability related press releases were higher than the average percent changes of all years. The average of all percent changes for all 9 years and all quarters categories was 4.01%. The average of all the percent changes of quarters with sustainability related press releases across all 9 years was 6.95%, which is 2.94% greater than the previous average (Table 8).

The same table that was outlined for H&M is shown in Table 9 for Levi's. From Quarter 1 to Quarter 2, the average percent change was -4.94% and the average percent change of quarters that had sustainability related press releases was 0%. From Q2 to Q3, the average percent change was 10.28%, while the average percent change of quarters with sustainability related press releases was 13.62%. From Q3 to Q4, the average percent change between quarters was 15.31% and the average percent change of quarters with sustainability related press releases was 13.78%. This was the only quarter where the percent change was lower for PR quarters than total quarters. From Q4 to Q1, the average percent change was -10.80% and there were no press releases in Quarter 1.

The average of all percent changes for all quarters for Levi's was 2.46% and the average of all percent changes of quarters with sustainability related press releases was 9.14% (Table 9). This accounts for a 6.68% greater average of percent changes of quarters with press releases than of total quarters from 2010- 2019.

Moreover, analysis of the financial data and press release data was done yearly as well. After finding the percent change of net sales from year to year, the average change from all 9 years was 15.99% for H&M. All of the changes were positive except for 2017 to 2018, which had a negative percent change of -5.82%. The average for years that had sustainability press releases (2013, 2015, 2016, and 2019) was 20.45%. From this information, the years that had sustainability related press releases had an average 4.46% greater percent change from previous years than the total 9 years.

For Levi's, there were both negative and positive percent changes from 2010-2019. 2011, 2012, 2013, 2017, and 2018 all had positive percent changes, and 2014, 2015, 2016, and 2019 were all negative percentages. The average across all 9 years was 2.30%, and the average of the years with sustainability related press releases (2012, 2013, 2015, and 2018) was 3.62%. The difference between these numbers was 1.32%, which is the average amount higher that net sales were for years with sustainability related press releases.

To help visualize these results further, graphs were constructed to highlight the difference in percent change between quarters with and without sustainability related press releases. Out of a total 27 positive percent changes for H&M, it is clear that five of these were quarters with the press releases. Ten of the total percent changes were negative, and percent changes of sustainability related press releases only accounted for one of these negative percentages (Figure 10). The graph also shows the general range of what the percent changes by quarter were for H&M from 2010- 2019. As shown by the graph, the majority of negative percent changes between quarters took place in Q4- Q1.

Similar to H&M, a graph was constructed for Levi's to show the percent change between quarters from 2010- 2019 (Figure 11). There were a total of 21 percent changes between quarters that were positive, and all six of the press releases were located in quarters with this positive percent change. On the contrary, there were 16 percent changes for Levi's that were negative during the time frame. The graph shows that all of the negative percent changes between quarters were in the categories Q1- Q2 and Q4- Q1.

4. Discussion & Conclusions

The results show that in quarters and years that both H&M and Levi's released sustainability related press releases, on average, their changes in financial earnings were higher than the previous year or quarter. Although it is not certain if these factors are completely related, it is a good indication that in general consumers are purchasing with more thought after learning about a company's environmental practices through press releases.

H&M

Diving into more analyses about the companies themselves, H&M is a well-known fast-fashion company worldwide. Headquartered in Sweden, many of their customers are EU based, but they have been also very successful in the US as well. After doing some research on the company, they have a rather short sustainability timeline. In 2012, H&M announced their eco-conscious line, which they claim their eco-conscious line “must contain at least 50% sustainable materials, such as organic cotton and recycled polyester” to have the green hangtag (*Conscious products explained*, n.d.). However, the Norwegian Consumer Authority called H&M out as misleading their customers by not providing enough detail about how “green” their eco-conscious clothing actually is. By lumping two different materials into the same sustainable category that are inherently different, especially regarding the footprint of the materials, H&M is not being truly transparent about their practices and materials (Segran, 2019). This brings up an interesting paradox in relating sustainability claims vs. actions. While observing that there is an increase of net sales in the quarters after sustainability related press releases are published, how many of these claims are actually fully factual? This implies that consumers are more focused on what companies are stating that they are doing, rather than their actual practices. Consumers want to financially support companies that look like they are bettering society and the environment but are actually not very knowledgeable about these practices.

Looking at this topic within the mining and energy industry, a study has shown that corporate social responsibility performance is strongly associated with disclosure. They found that when energy companies were to disclose their sustainability practices, often times their performance was correlated with their disclosure (Herbohn et al., 2014). While this may hold true for certain industries, such as mining and energy, industries that heavily influence the environment in the eyes of the public, I question whether this is applicable to the fashion industry. A large majority of consumers looking for clothing items are often focused on the price and look of items, not how the items were processed or the materials of them. Because of this, it is a lot easier for clothing companies to get away with harmful environmental practices.

While hopefully H&M is not following typical greenwashing techniques in their processes, the results of this data make me hopeful that consumers are paying more attention to sustainable clothing and being conscious consumers. In recent years, there have been additional trends that suggest that clothing companies that have historically been quiet about their sustainability goals are publishing how they are changing practices to be more environmentally friendly. In 2017, H&M published a new set of sustainability goals that included only using recycled and sustainably produced materials by 2030, and to be climate positive throughout their value chain by 2040 (*Goals and ambitions*, n.d.). I believe as H&M progresses towards these goals and releases statements about their new milestones, consumers will notice and support H&M’s bottom line to continue the trend of rewarding companies for their sustainability efforts.

Levi Strauss and Co.

Levi’s has been around for generations and was founded in 1853 in San Francisco, CA. Being a hometown US made company, it is exciting to see such an iconic brand take sustainability measures seriously. One big contribution to this was their Levi’s® Water<Less® innovations in 2011, which removes most of the water from the finishing process of making jeans, the most resources intensive process of finishing denim. One press release focused on this water savings,

highlighting that Levi's reached one billion of water saved through their sustainability initiatives in 2015. When looking at the financial data in comparison to this release, the percent change from Q4- Q1 for 2015 was 0%, when the average for Q4- Q1 across all years was -4.94% (Table 9). This financial information makes it clear that this innovation was positively viewed in consumers' minds, pushing them to make purchasing decisions for Levi's that they might not have made in the past.

This study was primarily focused on press releases, but I was also interested in the driving factors behind consumer purchasing decisions. The public views Levi's as a company that has been sustainable over the past ten years, and their press releases about their sustainability would be no surprise. While I wasn't able to find any past studies about press releases and consumer attitudes, there have been studies regarding sustainable product purchase and social media. A study by Saeed et al., found that both positive and negative sustainability-related information on social media influences the customer's attitudes and intention to purchase products (Saeed et al., 2019). Social media and press releases are inherently different and can capture different age ranges of attention, but I believe they function similarly. As seen by these results and the results of the study mentioned, consumers trust information from larger social sources, making them essential for companies to utilize to maintain and help their bottom lines.

Fast Fashion vs. Sustainable Fashion

Part of the analysis for this study was also to see how financial data differed for a historically known fast fashion and a sustainable fashion brand. The average percent changes for all the quarters after press releases were published for H&M was 6.95%, and 9.14% for Levi's. From this data, it implies that for sustainable brands, press releases regarding sustainability raises their income for the next quarter more than fast fashion brands. I believe this is logical, as consumers of sustainable brands are more conscious of the impact they're making on the environment. Shoppers of fast fashion brands often shop at these companies because they are cheap and trendy, not for the company's mission. One study named *Slow Fashion in a Fast Fashion World: Promoting Sustainability and Responsibility* dives into analyses about the traditional notions of corporate responsibility within the fashion industry. It challenges that fast fashion is the only way to connect with consumers and gives solutions for enhancing sustainability in a traditional fast fashion model (Brewer, 2019). With this research, it is clear that fast fashion companies have the capacity to become more sustainable. However, as of now, sustainable companies releasing information on their new environmentally friendly practices raises their net sales more than fast fashion companies partaking in the same activities.

Another factor in these analyses is the reason why companies are releasing information regarding sustainability. Levi's sustainability director explained that they are not measuring the impact of their investments on sales revenue, but they are measuring across their business operations. He also said, "we know that younger consumers increasingly seek out companies that demonstrate social purpose and are more likely to buy from companies that support social and environmental causes" (Kondej, 2016). Levi's is focused on their own operations more than their net sales, and they understand the changing marketplace of individuals starting to use sustainable consumption practices. H&M also sees this shift in customer behavior, as their head of sustainability talked about their goal of increased transparency in 2019 (*Interview with Anna Gedda, 2019*). However,

in her interview she sees the change as a slow process. Because of this, maybe H&M is less productive with their sustainability goals than other companies, such as Levi's, as H&M believes they have a much farther distance to go in comparison to already sustainable companies. These differences in beliefs may account for how the companies create their sustainability plans and how they advertise themselves to the public.

An interesting question about how different countries view sustainability is also compelling. This study only focused on net sales from the US, and it would be interesting to see data about net sales from different countries. Another research topic that would be interesting is to see how sustainability related press releases impact European consumers, as Europeans are known to be more sustainable and instill better environmentally friendly initiatives and technology than the US. According to a study on consumer awareness of sustainable fashion, 50% of European citizens are willing to pay a higher price for sustainable products, which is similar to the number of Americans that stated the same thing (Shen & Richards, 2013). It would be interesting to see if Europeans act similarly to US citizens in supporting companies that claim to be bettering their sustainability processes.

After conducting the research, there were also limitations that came to light. One limitation that may cause the data to be inaccurate is that the public releases and sales may not have happened concurrently. The study predicted that the sales from consumers happened the quarter of when the press release was published by the company, but that may not be true. Consumers may have seen advertising or press about the sustainability release months or years after the press release, which would influence them after the quarter. Additionally, after the press release is put out, there is no obligation for the media or press to republish the release information. Another limitation is that there are many other factors that impact the bottom line. There are external economic conditions, such as rises and dips in the economy, even a global pandemic. These companies may have also pushed out more advertising those specific quarters or years for other reasons unknown to us. There are many other factors that could have come into play that were not accounted for in this study.

Conclusion

This study upholds my hypothesis that there has been a growing demand for sustainable practices within fashion brands and a marketplace shift in the fashion industry towards more sustainable practices due to financial pressures from consumers after companies release sustainability related press releases. Through the two case studies, the data shows that quarters and years with press releases showing environmentally friendly practices earned more net sales on average than their previous years and quarters. Results from these studies is important for stakeholders in the fashion industry, such as sustainability managers and directors as it directly impacts their performance. Both fast and sustainable fashion companies need to take into account the impact of press releases on consumer decision making. In the future, this knowledge can be used to not only better businesses' bottom lines but the environment as a whole.

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Figures and Tables

Table 1: H&M Net Sales by Year

H&M	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Net Sales in US (SEK)	8,490,000	9,202,000	11,950,000	13,001,000	16,429,000	23,884,000	25,495,000	26,330,000	24,798,000	29,976,000
Net Sales in US (\$)	\$ 1,002,219.03	\$ 1,086,268.49	\$ 1,410,661.65	\$ 1,534,729.05	\$ 1,939,394.16	\$ 2,819,434.55	\$ 3,009,608.27	\$ 3,108,177.51	\$ 2,927,329.51	\$ 3,538,576.87

Net sales in the US for each year from 2010- 2019 for H&M given by financial statements.

Table 2: Levi's Net Sales by Year

Levi's	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Net Sales	4,325,908	4,674,426	4,681,700.00	4,754,000.00	4,753,992.00	4,494,500.00	4,552,700.00	4,904,030.00	5,575,440.00	5,763,087.00
% of Sales (US)	58%	57%	60%	61%	60%	61%	59%	57%	55%	53%
Net Sales in US	\$ 2,509,026.64	\$ 2,664,422.82	\$ 2,809,020.00	\$ 2,899,940.00	\$ 2,852,395.20	\$ 2,741,645.00	\$ 2,686,093.00	\$ 2,795,297.10	\$ 3,066,492.00	\$ 3,054,436.11

Net sales in the US for each year from 2010- 2019 for Levi's given by financial statements.

Table 3: H&M Net Sales by Quarter

H&M	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Q1	\$ 217,200	\$ 255,960	\$ 335,640	\$ 361,200	\$ 413,640	\$ 650,640	\$ 765,240	\$ 814,800	\$ 683,880	\$ 783,840
Q2	\$ 274,080	\$ 275,640	\$ 386,880	\$ 396,120	\$ 483,360	\$ 764,520	\$ 770,760	\$ 842,040	\$ 680,760	\$ 880,320
Q3	\$ 275,040	\$ 285,840	\$ 381,960	\$ 413,280	\$ 540,000	\$ 787,800	\$ 813,600	\$ 863,760	\$ 780,360	\$ 987,840
Q4	\$ 303,360	\$ 345,480	\$ 401,520	\$ 470,400	\$ 636,360	\$ 813,240	\$ 875,280	\$ 816,240	\$ 830,760	\$ 945,120

Net sales in the US for each quarter from 2010- 2019 for H&M, given by quarterly financial statements.

Table 4: Levi's Net Sales by Quarter

Levi's	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Q1	\$ 150,200.04	\$ 173,559.46	\$ 194,193.38	\$ 208,221.91	\$ 268,905.29	\$ 251,457.24	\$ 257,523.77	\$ 253,524.27	\$ 267,295.75	\$ 301,235.00
Q2	\$ 143,669.60	\$ 166,327.82	\$ 178,657.91	\$ 191,564.16	\$ 257,700.90	\$ 251,457.24	\$ 246,327.08	\$ 253,524.27	\$ 245,021.11	\$ 277,136.20
Q3	\$ 163,260.91	\$ 180,791.11	\$ 186,425.64	\$ 199,893.04	\$ 268,905.29	\$ 273,323.08	\$ 291,113.82	\$ 299,619.59	\$ 278,433.08	\$ 301,235.00
Q4	\$ 195,913.10	\$ 202,486.04	\$ 217,496.58	\$ 233,208.54	\$ 324,927.22	\$ 317,054.78	\$ 324,703.88	\$ 345,714.92	\$ 322,982.37	\$ 325,333.80

Net sales in the US for each quarter from 2010- 2019 for Levi's, given by quarterly financial statements.

Table 5: Press Releases

Company	Title	Date Released	Quarter Impacted
H&M	Sustainable Fashion at H&M Spring 2010	March 2010	Q2 2010
H&M	Sustainability Update about the Factory Collapse in Cambodia	May 2013	Q2 2013
H&M	Regarding the Recent Media Reports about Angora	November 2013	Q4 2013
H&M	H&M Among the Most Sustainable Companies	January 2016	Q1 2016
H&M	H&M CEO Receives Sustainability Award	October 2016	Q4 2016

H&M	H&M's Conscious Collection Launches Worldwide	April 2019	Q3 2019
Levi's	8 Bottles, 1 Jean- The Levi's Brand Introduces the Waste<Less Denim Collection	October 2012	Q4 2012
Levi's	Levi Strauss & Co. Unveils First-of-Its Kind Design Process to Sustainability Thought Leaders and Pioneers at New Innovation Lab	November 2013	Q4 2013
Levi's	Levi's Reaches 1 Billion Liters of Water Saved Through Sustainability Initiatives	March 2015	Q2 2015
Levi's	Levi's Expands Recycling Initiative to all US Stores	July 2018	Q3 2018
Levi's	Levi's Leads Industry with New Climate Action Strategy	July 2018	Q3 2018
Levi's	Levi's and Hohenstein Collaborate to Bring Safer Chemicals to the Apparel Industry	November 2019	Q4 2019

Press releases used to conduct comparison to financial data.

Table 6: H&M Net Sales Percent Change from Quarter to Quarter

H&M	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Q1- Q2	26.19%	7.69%	15.27%	9.67%	16.86%	17.50%	0.72%	3.34%	-0.46%	12.31%
Q2- Q3	0.35%	3.70%	-1.27%	4.33%	11.72%	3.05%	5.56%	2.58%	14.63%	12.21%
Q3- Q4	10.30%	20.86%	5.12%	13.82%	17.84%	3.23%	7.58%	-5.50%	6.46%	-4.32%
Q4- Q1	-16%	-3%	-10%	-12%	2%	-6%	-7%	-16%	-6%	

Percent change of net sales from Q1- Q2, Q2- Q3, Q3- Q4, and Q4- Q1 for H&M. Highlighted boxes are the quarters that sustainability related press releases were published by H&M.

Table 7: Levi's Net Sales Percent Change from Quarter to Quarter

Levi's	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Q1- Q2	-4.35%	-4.17%	-8.00%	-8.00%	-4.17%	0.00%	-4.35%	0.00%	-8.33%	-8.00%
Q2- Q3	13.64%	8.70%	4.35%	4.35%	4.35%	8.70%	18.18%	18.18%	13.64%	8.70%
Q3- Q4	20.00%	12.00%	16.67%	16.67%	20.83%	16.00%	11.54%	15.38%	16.00%	8.00%
Q4- Q1	-11.41%	-4.10%	-4.26%	15.31%	-22.61%	-18.78%	-21.92%	-22.68%	-6.73%	

Percent change of net sales from Q1- Q2, Q2- Q3, Q3- Q4, and Q4- Q1 for Levi's. Highlighted boxes are the quarters that sustainability related press releases were published by Levi's.

Table 8: H&M Average Percent Change Between Quarters

H&M	Average Percent Change	Average Percent Change of Quarters with PR
Q1- Q2	10.91%	16.05%
Q2- Q3	5.69%	
Q3- Q4	7.54%	10.70%
Q4- Q1	-8.11%	-5.90%

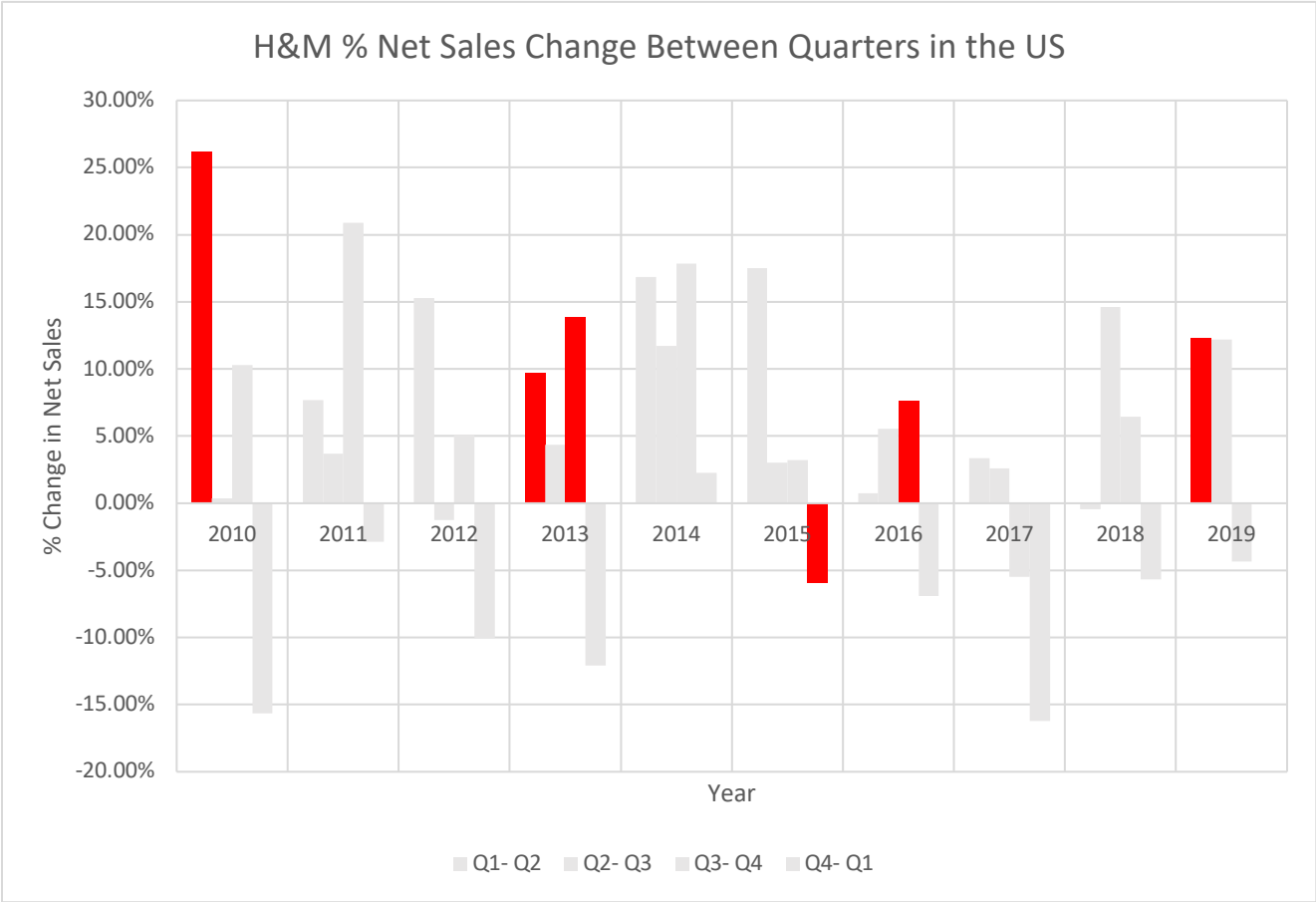
The averages of all of the Q1-Q2, Q2-Q3, Q3-Q4, and Q4-Q1 percent changes and the averages of the percent changes of years with sustainability related press releases for H&M.

Table 9: Levi’s Average Percent Change Between Quarters

Levi's	Average Percent Change	Average Percent Change of quarters with PR
Q1- Q2	-4.94%	0.00%
Q2- Q3	10.28%	13.64%
Q3- Q4	15.31%	13.78%
Q4- Q1	-10.80%	

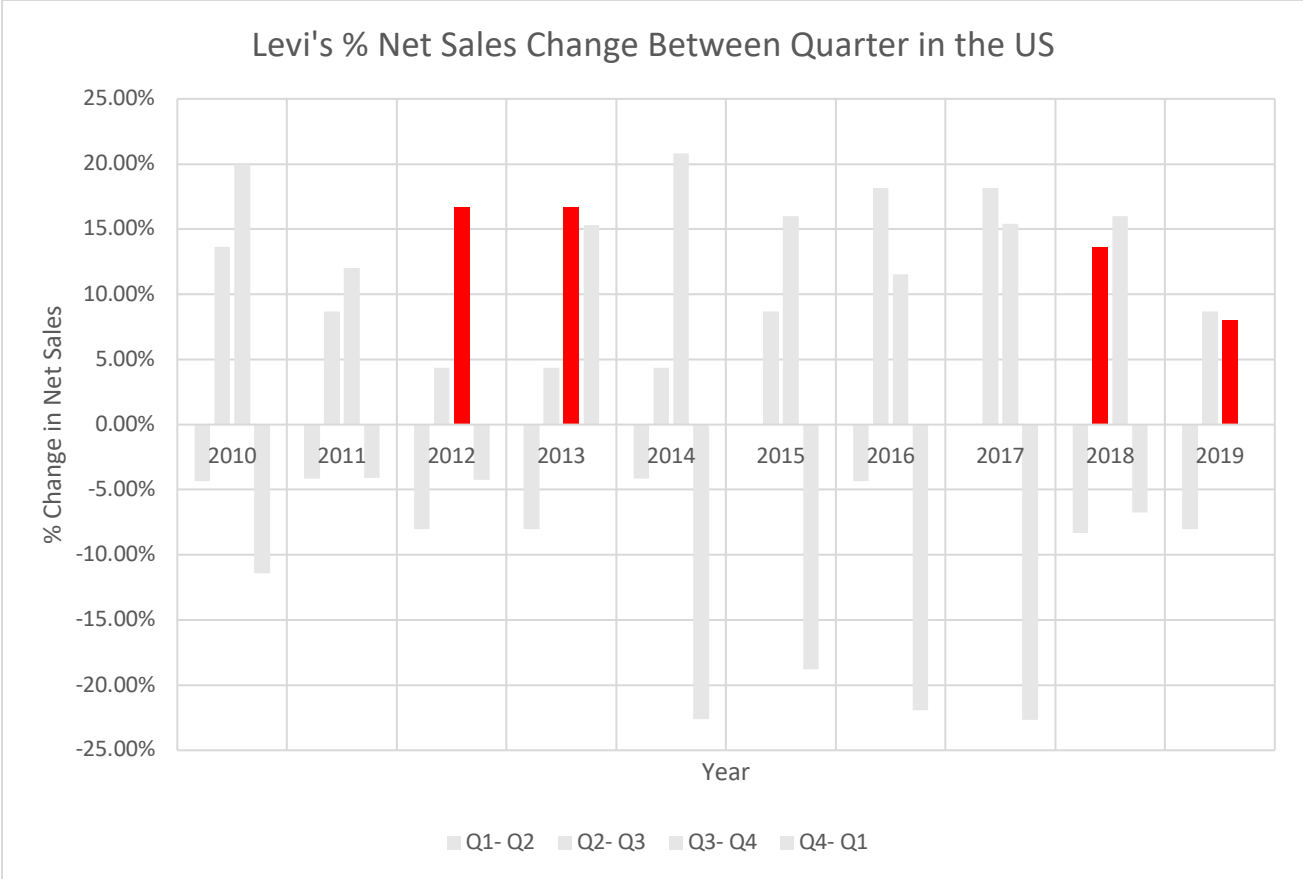
The averages of all of the Q1-Q2, Q2-Q3, Q3-Q4, and Q4-Q1 percent changes and the averages of the percent changes of years with sustainability related press releases for Levi’s.

Figure 10: H&M Net Sales Change Between Quarters



Graph highlighting the quarters that sustainability related press releases were published and the percent change of revenue that H&M realized the quarter of the release. The quarters with sustainability related press releases are in red.

Figure 11: Levi’s % Net Sales Change Between Quarter in the US



Graph highlighting the quarters that sustainability related press releases were published and the percent change of revenue that Levi’s realized the quarter of the release. The quarters with sustainability related press releases are in red.