



Accounting for a
Sustainable Future™

APPAREL, ACCESSORIES & FOOTWEAR

Research Brief

Sustainable Industry Classification System™ (SICS™) #CN0501
Research Briefing Prepared by the
Sustainability Accounting Standards Board®
September 2015

APPAREL, ACCESSORIES & FOOTWEAR

Research Brief

SASB's Industry Brief provides evidence for the disclosure topics in the Apparel, Accessories & Footwear industry. The brief opens with a summary of the industry, including relevant legislative and regulatory trends and sustainability risks and opportunities. Following this, evidence for each disclosure topic (in the categories of Environment, Social Capital, Human Capital, Business Model and Innovation, and Leadership and Governance) is presented. SASB's Industry Brief can be used to understand the data underlying SASB Sustainability Accounting Standards. For accounting metrics and disclosure guidance, please see SASB's Sustainability Accounting Standards. For information about the legal basis for SASB and SASB's standards development process, please see the Conceptual Framework.

SASB identifies the minimum set of disclosure topics likely to constitute material information for companies within a given industry. However, the final determination of materiality is the onus of the company.

Related Documents

- [Apparel, Accessories & Footwear Sustainability Accounting Standards](#)
- [Industry Working Group Participants](#)
- [SASB Conceptual Framework](#)

INDUSTRY LEAD

Nashat Moin

CONTRIBUTORS

Andrew Collins

Arturo Rodriguez

Henrik Cotran

Jean Rogers

Bryan Esterly

Evan Tylenda

Eric Kane

Quinn Underriner

Jerome Lavigne-Delville

Gabriella Vozza

Himani Phadke

SASB, Sustainability Accounting Standards Board, the SASB logo, SICs, Sustainable Industry Classification System, Accounting for a Sustainable Future, and Materiality Map are trademarks and service marks of the Sustainability Accounting Standards Board.

Table of Contents

- [Introduction](#) 1
- [Industry Summary](#) 1
- [Legislative and Regulatory Trends in the Apparel, Accessories & Footwear Industry](#) 3
- [Sustainability-Related Risks and Opportunities](#) 6
- [Social Capital](#) 7
 - [Management of Chemicals in Products](#) 7
- [Leadership and Governance](#) 10
 - [Raw Materials Sourcing & Innovation](#) 11
 - [Labor Conditions in the Supply Chain](#) 14
 - [Environmental Impacts in the Supply Chain](#) 17
- [Appendix](#)
 - [Representative Companies : Appendix I](#) 22
 - [Evidence for Sustainability Disclosure Topics : Appendix IIA](#) 23
 - [Evidence of Financial Impact for Sustainability Disclosure : Appendix IIB](#) 24
 - [Sustainability Accounting Metrics : Appendix III](#) 25
 - [Analysis of SEC Disclosures : Appendix IV](#) 26
- [References](#)

SUSTAINABILITY DISCLOSURE TOPICS

SOCIAL CAPITAL

- Management of Chemicals in Products

LEADERSHIP AND GOVERNANCE

- Raw Materials Sourcing & Innovation
- Labor Conditions in the Supply Chain
- Environmental Impacts in the Supply Chain

INTRODUCTION

The Apparel, Accessories & Footwear industry encompasses some of the global economy's most recognizable and valuable brands. These companies have a tradition of innovation and have continually succeeded in developing new products to establish trends, meet consumer demands, and capture new markets.

However, current and emerging sustainability issues, including labor conditions and environmental impacts in the supply chain and concerns over the use hazardous chemicals, have created a new set of opportunities and challenges for the industry. Further, a growing focus on the impact of climate change and resource scarcity on the industry's key inputs, including cotton, has driven the need for innovation. As consumers, stakeholders, and regulators continue to place increased emphasis on company performance on these issues, they will continue to have more pronounced value impacts.

Management (or mismanagement) of certain sustainability issues, therefore, has the potential

¹ Industry composition is based on the mapping of the Sustainable Industry Classification System (SICS™) to the Bloomberg Industry

to affect company valuation through impacts on profits, assets, liabilities, and cost of capital.

Investors would obtain a more holistic and comparable view of performance with Apparel, Accessories & Footwear companies reporting metrics on the material sustainability risks and opportunities that could affect value in the near and long term in their regulatory filings. This would include both positive and negative externalities, and the non-financial forms of capital that the industry relies on for value creation.

Specifically, performance on the following sustainability issues will drive competitiveness within the Apparel, Accessories & Footwear industry:

- Managing the use of harmful chemicals in products;
- Addressing raw materials sourcing risks through innovation and supplier engagement;
- Ensuring fair labor conditions in the supply chain; and
- Reducing the environmental impacts of the supply chain.

INDUSTRY SUMMARY

The Apparel, Accessories & Footwear Industry includes companies involved in the design, manufacturing, wholesaling, and retailing of various products, including men's, women's, and children's clothing, handbags, jewelry, watches, and footwear.¹

In 2014, the industry had global revenues of more than \$1.1 trillion, with apparel accounting for the largest percentage, followed by footwear and

Classification System (BICS). A list of representative companies appears in Appendix I.

accessories.¹ Apparel, Accessories & Footwear companies operate globally, and many are headquartered and listed outside the U.S. Companies listed in the U.S. that are representative of the industry's different business segments include Nike, VF Corporation, Signet Jewelers, the TJX Companies, and the Gap Inc. These companies had combined revenues of more than \$93 billion in 2014 and relied heavily on sales outside the U.S.² For example, in fiscal year (FY) 2014, Nike generated 56 percent of its total revenue outside North America. The regions that accounted for the highest percentage of this revenue were Western Europe, emerging markets, and Greater China, with 18, 14, and 9 percent of total revenue, respectively.³

Although the U.S. remains the largest single market for many Apparel, Accessories & Footwear companies, products are largely manufactured and imported from outside the U.S. According to the American Apparel and Footwear Association (AAFA), more than 97 percent of apparel and 98 percent of footwear sold in the U.S. is made internationally, mainly in China.⁴ Chinese imports currently account for about 8 out of every 10 pairs of shoes sold in the U.S.⁵ In 2014, Adidas Group worked with 340 independent manufacturing partners, of which 83 percent were located in Asia (including 27 percent in China), 9 percent in the Americas, and 7 percent in Europe.⁶

Apparel, Accessories & Footwear companies are therefore typically not vertically integrated into the manufacturing of their products. Outsourcing to manufacturing vendors in emerging markets allows companies to capture lower labor costs, improve the scale of production, and focus on design, wholesaling, marketing, and retail activities.⁷

Although a majority of the industry's products are manufactured in Asia, there has been a recent increase in "reshoring" production in the U.S. Between 2011 and 2012, import penetration fell by 0.2 percent for apparel and 0.1 percent for footwear.⁸ The growth in U.S. manufacturing is demonstrated by the construction of 23 new textile plants in the U.S. between 2011 and 2013, and estimates suggest that 200,000 garment manufacturing jobs could return to the country over the next several years.⁹ Improvements in U.S. technology, combined with increasing wages and challenges in the overseas supply chain, are making the U.S. more competitive in the textile manufacturing industry and driving its growth.¹⁰

Many of the Apparel, Accessories & Footwear companies sell their products to retailers through wholesaling operations and directly to consumers through their own retail or e-commerce outlets. For example, in FY 2014, Ralph Lauren Corporation generated 52 percent of its revenue from its integrated retail channel, 46 percent from wholesale, and 2 percent from licensing.¹¹ Conversely, some Apparel, Accessories & Footwear companies generate the majority of their revenue through directly owned retail spaces. The Gap, for example, generates revenue almost exclusively through its 3,709 branded, company-owned and franchised stores.¹²

The main financial drivers in the industry include consumer confidence, disposable income, and supply-chain costs, which include, labor, transportation costs, and raw materials. For each segment of the industry, raw materials account for the most significant portion of costs. In the apparel segment, key inputs, including cotton, fabrics, and yarns, account for 55.2 percent of revenue.¹³ Materials such as rubber, plastic compounds, foam, leather, and canvas account for 60 percent of the footwear segment's revenue.¹⁴ For the accessories segment, the cost

of precious metals and stones, including platinum, gold, and diamonds, represents 55 percent of revenue.¹⁵ The industry's reliance on key materials inputs and outsourced manufacturing makes it particularly susceptible to fluctuations in pricing and wages overseas.

In 2014, the industry's average operating margin was 8.6 percent.¹⁶ Margins have risen steadily in recent years, partially as a result of the removal of deep discounting practices following the recession.¹⁷ Industry margins are heavily dependent on the cost of material inputs. For example, the apparel segment uses roughly 60 percent of the world's cotton supply and is therefore susceptible to fluctuations in pricing.¹⁸ In 2011, cotton prices increased to 150-year highs, as flooding in cotton-producing countries such as China, Pakistan, and Australia destroyed supplies¹⁹, forcing major apparel companies to increase prices or face tighter margins.²⁰ Cotton prices have decreased since, hitting a five-year low in 2014, largely due to increased supplies of and weakened global demand for cotton.²¹

Given that the global economy is expected to recover, and cotton prices are expected to decline, the industry may experience opportunities for both top- and bottom-line improvements. Additionally, as consumers gain confidence in the economy and have more disposable income, they are increasingly likely to purchase higher-end clothing sold at higher price points, driving apparel industry growth and margins.²²

The industry lifecycle for Apparel, Accessories & Footwear wholesaling and retailing is in the mature stages where companies generally compete on brand image, product innovation, quality, and price, with some emphasis on distribution and purchasing convenience.²³ Competition within the industry is typically fragmented, with companies competing for

market share within certain segments, including sportswear, casual wear, and business attire. In addition, companies compete to capture rapidly changing consumer trends. The industry has a seasonal component, with sales peaking during the holiday season, near the end of the calendar year.²⁴

Traditional brick-and-mortar apparel retailers face growing threats and opportunities to integrate online shopping, as consumers increasingly look for convenience and cheaper prices in fashion.²⁵ Many large, traditional retailers are trying to increase their exposure to online opportunities and integrate the online experience with their traditional stores. For example, the Gap Inc., one of the largest U.S. apparel retailers, is implementing in-store pickup programs for customers who order online, as well as growing its online collections.²⁶ The company's online sales grew to \$2.5 billion in 2014 from \$2.3 billion in 2013 and \$1.9 billion in 2012.²⁷

Financial analysis of the Apparel, Accessories & Footwear industry focuses on sales volume, operating margins, and raw material costs. Analysts also consider currency exchange rates, economic conditions, and consumer trends.²⁸ As sustainability issues, including supply-chain management, product safety, and sourcing risks, continue to increase in importance, their impact on these value drivers will likely increase.

LEGISLATIVE AND REGULATORY TRENDS IN THE APPAREL, ACCESSORIES & FOOTWEAR INDUSTRY

Regulations in the U.S. and abroad represent the formal boundaries of companies' operations, and are often designed to address the social and environmental externalities that businesses can create. Beyond formal regulation, industry

practices and self-regulatory efforts act as quasi-regulation and also form part of the social contract between business and society. In this section, SASB provides a brief summary of key regulations and legislative efforts related to this industry, focusing on social and environmental factors. SASB also describes self-regulatory efforts on the part of the industry, which could serve to pre-empt further regulation.¹¹

The majority of legislative and regulatory risks and opportunities for the industry lie outside the U.S., in the industry's supply chain, where manufacturers face increasing scrutiny for labor practices and environmental impacts. To a lesser extent, U.S.- and European-listed Apparel, Accessories & Footwear companies face some domestic regulation regarding the presence of chemicals in their products and their supply chains.

In 2008, the U.S. government signed the Consumer Product Safety Improvement Act (CPSIA) into law, requiring new documentation and testing for harmful substances, including lead and phthalates in consumer products. The act placed new safety-testing requirements on apparel, shoe, accessories, and jewelry manufacturers. Companies are subsequently required to provide a General Conformity Certificate to certify that a product complies with all safety rules established under the CPSIA. Companies that fail to comply are subject to fines, imprisonment of their executives, and product recalls. In 2011, President Barack Obama signed a new law that gave government agencies greater authority over consumer product safety laws such as the CPSIA, as well as their enforcement.²⁹ Additionally, Washington, California, Maine, and other states are introducing or have introduced their own chemical safety standards, which are

typically more stringent than federal standards, adding to the complexity of product safety compliance.³⁰

The E.U. has also implemented legislation aimed at restricting the use of certain chemicals in consumer products. The Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) legislation established an evolving list of restricted or banned chemicals. It also places a "burden of proof" on companies that sell and market products in the E.U. to determine the environmental and human health risks from hazardous chemicals used in products and to label consumer products, including apparel, accordingly. These regulations do not absolve companies that import their products from outside the covered region.³¹

In 2009, the European Commission added dimethyl fumarate (DMF), a chemical used widely in leather furniture and shoes, to the REACH list of banned substances. Products containing this chemical cannot be sold in the E.U., and products that were already on the market had to be recalled immediately.³² Following this legislation, the European Commission recalled shoes from France, Spain, Poland, and Finland in 2009.³³ Continued enforcement of this ban, and the addition of other chemicals to the REACH list could present risks to the Apparel, Accessories & Footwear industry.

Companies are facing greater regulatory scrutiny related to their supply chains. In response to growing concern from consumers and regulators about slavery and human trafficking in corporate supply chains, California passed the California Transparency in Supply Chains Act in 2010. The law, which went into effect in 2012, requires retailers and manufacturing companies with

¹¹ This section does not purport to contain a comprehensive review of all regulations related to this industry but is intended to

highlight some ways in which regulatory trends are impacting the industry.

annual global revenues of \$100 million or more to report on their specific actions to eliminate slavery and human trafficking in their supply chain. The required disclosure is intended to provide consumers with a better understanding of which companies are managing their supply chains responsibly. The Department of Labor estimates that the law will impact roughly 3,200 companies headquartered in California or doing business in the state, including many from the Apparel, Accessories & Footwear industry.³⁴

In 2012, the U.S. Securities and Exchange Commission (SEC) issued final rules established under the Dodd-Frank Wall Street Reform and Consumer Protection Act requiring companies that use tantalum, tin, gold, or tungsten (the production of which could fuel armed conflict) in their products to report whether these minerals were sourced from the Democratic Republic of Congo (DRC) or adjoining countries. Companies, including many engaged in the jewelry aspect of the Apparel, Accessories & Footwear industry, are required to publicly disclose their use of “conflict minerals” if they are “necessary to the functionality or production of a product” that the company manufactures or contracts to be manufactured.³⁵ Companies began filing annual Forms SD in June 2014. Also in 2014, the U.S. Court of Appeals for the District of Columbia Circuit ruled that a provision of the law requiring companies to state on their websites that specific products are not “DRC conflict free” violates the First Amendment of the Constitution. The Court upheld the laws other reporting requirements.³⁶

Companies in this industry have traditionally outsourced manufacturing to countries with lower costs of labor and production and less stringent environmental and social regulations and enforcement.³⁷ However, recent examples of poor labor standards and environmental degradation within supply chain operations have led to

increased stakeholder scrutiny, more stringent legislation, and efforts within the industry to improve self-regulation.

For example, in 2008, China amended its water pollution law in response to a growing water pollution crisis that threatened the country’s social and economic development. The law includes provisions that create tougher fines and penalties for pollution violators, improve public participation in the issue, and strengthen discharge standards.³⁸

In response to the April 2013 collapse of the multilevel factory Rana Plaza in Bangladesh that killed more than 1,100 textile workers, the federal government of Bangladesh raised the minimum wage by 77 percent, and the country’s Textile Ministry began inspecting and closing down factories that violated safety and working standards.³⁹ The industry may face growing cost pressures from foreign countries’ minimum-wage hikes aimed at addressing worker injustice.⁴⁰

The potential for reputational risks has also led much of the Apparel, Accessories & Footwear industry to self-regulate. Projects and organizations like the Detox Catwalk, the Sustainable Apparel Coalition, and the Responsible Jewellery Council were formed to help identify best practices and improve monitoring and performance standards for issues such as chemical use, environmental compliance, and social and labor rights. Such initiatives have the potential to drive improvements in the industry’s supply chain and are important as companies face growing pressure from outside stakeholders to respond to key environmental and social issues.

Following the Rana Plaza incident, many nongovernment organizations (NGOs) have been formed in an attempt to help the industry self-regulate and go beyond government-established

standards. The Accord on Fire and Building Safety in Bangladesh is a legally binding agreement between international labor unions, corporations, countries, and NGOs to set safety protocols. The Accord states that “where safety issues are identified, retailers commit to ensuring that repairs are carried out, that sufficient funds are made available to do so, and that workers at these factories continue to be paid a salary.”⁴¹ Wal-Mart Stores and the Gap have also set up a voluntary safety standards organization known as the Alliance for Bangladesh Worker Safety, through a \$42 million fund to improve factories’ access to capital for safety upgrades.⁴²

SUSTAINABILITY-RELATED RISKS AND OPPORTUNITIES

Industry drivers and recent regulations suggest that traditional value drivers will continue to impact financial performance. However, intangible assets such as social, human, and environmental capitals, company leadership and governance, and the company’s ability to innovate to address these issues are likely to increasingly contribute to financial and business value.

Broad industry trends and characteristics are driving the importance of sustainability performance in the Apparel, Accessories & Footwear industry:

- **Chemical use in products:** Apparel, Accessories & Footwear companies face increased regulatory and consumer scrutiny for the use of certain chemicals in products, given these chemicals’ potential to harm human health, combined with the greater awareness of and continued development in the scientific knowledge of chemical hazards. The ability to respond to these regulations, as well as be proactive and reduce or eliminate

substances of concern, will help companies maintain brand value and reduce the costs of compliance.

- **Material sourcing constraints:** The industry is highly reliant on natural fibers and materials such as cotton that are susceptible to shifts in availability and pricing due to weather patterns and demand for competing resources. Input price volatility and supply constraints are likely to increase with climate change and increasing water scarcity. At the same time, production of these raw materials is often associated with environmental externalities that can, in turn, exacerbate impacts on the supply chain from environmental factors. Addressing materials-sourcing constraints and the associated environmental externalities through innovation and farmer engagement is crucial to minimizing sourcing risks that affect the industry’s production output and costs.
- **Outsourced manufacturing in emerging markets:** Companies in the industry have extensive and geographically distributed manufacturing supply chains. Larger companies have buying power that can influence supplier operations. In this context, management of the labor conditions and environmental impacts of the manufacturing supply chain is essential to maintaining reputation, reducing regulatory and purchase costs, and limiting community opposition.

As described above, the regulatory and legislative environment surrounding the Apparel, Accessories & Footwear industry emphasizes the importance of sustainability management and performance. Specifically, recent trends suggest a regulatory emphasis on labor standards and materials

sourcing, which will serve to align the interests of society with those of investors.

The following section provides a brief description of each sustainability issue that is likely to have material financial implications for companies in the Apparel, Accessories & Footwear industry. This includes an explanation of how the issue could impact valuation and evidence of actual financial impact. Further information on the nature of the value impact, based on SASB's research and analysis, is provided in Appendix IIA and IIB.

Appendix IIA also provides a summary of the evidence of investor interest in the issues. This is based on a systematic analysis of companies' 10-K and 20-F filings, shareholder resolutions, and other public documents, which highlights the frequency with which each topic is discussed in these documents. The evidence of interest is also based on the results of consultation with experts participating in an industry working group (IWG) convened by SASB. The IWG results represent the perspective of a balanced group of stakeholders, including corporations, investors or market participants, and public interest intermediaries.

The industry-specific sustainability disclosure topics and metrics identified in this brief are the result of a year-long standards development process, which takes into account the aforementioned evidence of interest, evidence of financial impact discussed in detail in this brief, inputs from a 90-day public comment period, and additional inputs from conversations with industry or issue experts.

A summary of the recommended disclosure framework and accounting metrics appears in Appendix III. The complete SASB standards for the industry, including technical protocols, can be downloaded from www.sasb.org. Finally, Appendix IV provides an analysis of the quality of

current disclosure on these issues in SEC filings by the leading companies in the industry.

SOCIAL CAPITAL

Social capital relates to the perceived role of business in society, or the expectation of business contribution to society in return for its license to operate. It addresses the management of relationships with key outside stakeholders, such as customers, local communities, the public, and the government.

The manufacturing of Apparel, Accessories & Footwear products can involve chemicals that may be hazardous to human health. Regulators and stakeholders continue to address concerns relating to the presence of these chemicals in finished products, which can pose a significant hazard, given that consumers wear these items every day. Companies in this industry can work to manage and in some cases eliminate substances of concern through innovative design and partnerships with manufacturing vendors. These efforts may improve the industry's social license to operate and limit costs of compliance with evolving product safety laws.

Management of Chemicals in Products

The introduction of the CPSIA in the U.S. and the REACH legislation in the E.U. demonstrates increasing regulatory and stakeholder concern and evolving scientific understanding surrounding the use of harmful or potentially harmful substances in consumer products, including apparel, accessories, and footwear.

The industry is widely trusted to follow existing regulations and ensure the safety of its products. However, finished apparel and footwear products have been found to contain traces of chemicals

that have been banned or regulated, including phthalates, nonylphenol ethoxylates (NPEs), perfluorinated compounds (PFCs), and antimony. Depending on the chemical, the amount present in a product, and the type of exposure that consumers face, specific substances can be carcinogenic and can disrupt hormone activity in humans and other organisms.⁴³ The presence of hazardous chemicals, which can be introduced by design or as a result of poor oversight in supply chains, has the potential to negatively impact the health of consumers and to impact the communities in which apparel and footwear are produced (discussed under the issue of Environmental Impacts in the Supply Chain, below).

The Apparel, Accessories & Footwear industry is exposed to developing regulation surrounding the use of specific chemicals and product safety. As a result, companies in this industry must work at both the design and the manufacturing phases to manage the use of chemicals of concern and develop safer alternatives, while eliminating those that have been banned. Given the industry's reliance on outsourced manufacturing, this requires proactive partnerships with suppliers.

Failure to manage this issue may generate additional regulatory oversight and impact a company's social license to operate. In addition, the presence of harmful chemicals in products can lead to recalls, litigation, and reputational damage. In managing this issue, companies must balance the hazard posed by certain chemicals, some of which are important to the functionality or quality of a product, with the risk that consumers face in using these products.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Description of processes to maintain compliance with restricted substances regulations; and
- Description of processes to assess and manage risks associated with chemicals in products.

Evidence

Specific chemicals can be necessary for the function of products. For example, certain fluorochemicals, which have been identified as "likely carcinogenic," are commonly used in water repellents that are applied to fabrics. Companies in the industry have responded to an E.U. ban on perfluorooctane sulfonate (PFOS), replacing it with perfluorooctanoic acid (PFOA), while continuing to try to develop safer alternatives. This demonstrates how companies can respond to bans on chemicals, including lead, cadmium, phthalates, and DMF, through innovation and design. Evolving regulations in the U.S. and E.U., two of the industry's biggest markets, demonstrate the importance of this issue and the impact it can have on brand value.

As discussed earlier, CPSIA testing and documentation rules require apparel, footwear, accessories, and jewelry manufacturers to ensure that their consumer products do not contain unsafe levels of harmful chemicals such as lead and phthalates.⁴⁴ Further, the act establishes fines from \$8,000 to \$100,000 per violation for companies that fail to report a product hazard.⁴⁵ Similarly, in California, Proposition 65 requires companies to disclose to consumers when their products contain a traceable amount of any of the nearly 900 chemicals identified as potentially harmful by the Office of Environmental Health Hazard Assessment. This places responsibility on both manufacturers and importers to ensure that they are not selling harmful products.⁴⁶ Such required disclosures may also raise customer

concerns and reduce demand for a company's products that contain such chemicals.

In the E.U., the REACH legislation places a "burden of proof" on companies that sell and market products in the region to determine the environmental and human health risks of chemicals in consumer products.⁴⁷ As a result, companies that sell products with unsafe levels of restricted substances or with banned substances are likely to lose market share.

A 2012 toxicology study covering more than 20 branded apparel companies found that all the companies had some level of hazardous chemicals in their fashion lines, while one large apparel company had hazardous chemicals in more than 88 percent of its tested products.⁴⁸ In response to this study, Greenpeace secured commitments from 18 international Apparel, Accessories & Footwear companies, including Nike, Adidas, Puma, H&M, and Levi's, to eliminate the use and release of hazardous chemicals from their supply chains and products.⁴⁹ A follow-up study in 2014 found children's clothing and footwear from 12 companies, including some that had committed to changing their practices, contained chemicals such as phthalates, NPEs, and PFCs.⁵⁰

Similarly, in 2012, a study by the Australian Council of Textile and Fashion Industries found that 25 percent of the shoes it tested contained the chemical dimethyl fumarate (DMF), known for causing reproductive harm and banned from footwear sold in the E.U.⁵¹ DMF is covered under E.U. REACH regulations and is listed on the EPA's Extremely Hazardous Substances list. Legislation passed in the E.U. in 2009 required products containing DMF to be recalled immediately, and in the same year the European Commission recalled footwear containing DMF in France, Spain, Poland, and Finland.⁵² However, a 2014 study confirmed the presence of the toxic chemical

above regulatory limits in a number of footwear products that were imported and sold in the region.⁵³

In 2010, more than 40 retailers and handbag makers faced a \$1.7 million litigation settlement over the presence of lead in handbags, a case that pressured the industry to set lead-concentration limits in footwear, jewelry, bags, and belts.⁵⁴

In response to existing safety regulations, Ralph Lauren reports in its FY2014 Form 10-K, "Any failure to comply with such requirements could result in significant penalties and require us to recall products, which could have a material adverse effect on our business or operating results."

In its FY2014 Annual Report, Adidas says that it has "specified clear standards for the use of restricted substances that follow the strictest local regulations and best practice standards for consumer care and safety. These standards are mandatory for all business partners and are updated regularly based on findings in our ongoing dialogue with scientific organizations." In addition, the company has partnered with Bluesign Technologies to implement its chemical-data management system, which is intended to help suppliers to select best-in-class chemicals.⁵⁵

VF Corporation includes responsible chemical management in its supply chain as a key element of its Sustainability and Responsibility programs, mentioned in its FY2015 Form 10-K.⁵⁶ In 2013, the company—in conjunction with third-party stakeholders, including the Natural Resources Defense Council—developed CHEM-IQ, a five-step process that provides information on chemical selection for VF and its suppliers. Through this process, VF tests chemical formulations for the presence of roughly 400 hazardous chemicals, and it works with suppliers to move toward alternatives if any are present above a certain

limit. The company reports that CHEM-IQ has enabled it to remove 68 tons of nonpreferred chemicals from its supply chain since 2013, and it plans to have the system in place at all tier-one factories in 2015.⁵⁷

Value Impact

Apparel, Accessories & Footwear companies that account for the use of hazardous and potentially hazardous chemicals in their products will be better positioned to maintain market share.

Research and development (R&D) expenditures, as well as collaboration with manufacturing and third-party partners to develop innovative chemical management systems and alternatives to hazardous chemicals, could lead to new market opportunities.

As consumer safety laws relating to chemical usage become increasingly stringent and comprehensive, a chronic failure to address the presence of chemical hazards or risks in industry products may invite a further regulatory burden on the industry and tarnish a company's brand reputation. This can increase the costs of compliance and harm long-term sales potential. Product recalls due to safety risks or related lawsuits could affect the selling, general, and administrative (SG&A) expenses of companies or create contingent liabilities.

The probability and magnitude of impacts from the issue are therefore likely to increase in the future, as scientific understanding, consumer awareness, and regulations related to chemical hazards and risks evolve.

A description of the management systems in place to maintain compliance with restricted substances regulations and to assess chemical risks will demonstrate which companies are better positioned to avoid fines and recalls. Further, this

disclosure will allow investors to understand which companies are likely to avoid the negative publicity and reputational damage that can occur from the use of harmful substances.

LEADERSHIP AND GOVERNANCE

As applied to sustainability, governance involves the management of issues that are inherent to the business model or common practice in the industry and are in potential conflict with the interest of broader stakeholder groups (government, community, customers, and employees). They therefore create a potential liability, or worse, a limitation or removal of license to operate. This includes regulatory compliance, lobbying, and political contributions. It also includes risk management, safety management, supply chain and resource management, conflict of interest, anti-competitive behavior, and corruption and bribery.

The Apparel, Accessories & Footwear industry relies on outsourcing the majority of its product manufacturing to vendors in emerging markets. This industry characteristic can lead to high levels of social and environmental externalities in its supply chain, particularly in developing countries where protective regulation is limited.

The industry also utilizes large amounts of cotton, precious metals, materials derived from animals, and other natural fibers as key inputs for production. This exposes the industry to risk associated with climate change and resource scarcity, which can shift the global supply and create possible disruptions. To mitigate their exposure to the supply and price volatility of these materials, companies are expressing leadership through business-model changes and innovations such as farmer engagement and fiber diversification.

Poor working conditions, environmental damage, and resource constraints have led to consumer, stakeholder, and government scrutiny of the supply chains of companies in the industry. This is driving the industry to self-regulate and show leadership in addressing these issues. In particular, companies in this industry have the purchasing power to work with suppliers to influence practices, and ensure improved performance.

Raw Materials Sourcing & Innovation

The Apparel, Accessories & Footwear industry relies on numerous raw materials as key inputs for finished products. Sustainability concerns related to climate change, water scarcity, land use, resource scarcity, and conflict in the supply chain are increasingly shaping the industry's ability to source materials, including cotton, leather, wool, rubber, and precious metals. The ability of companies to manage potential materials shortages, supply disruptions, price volatility, and reputational risks is made more difficult by the fact that they source materials from geographically diverse regions through supply chains that often lack transparency. Further, the type of risk faced for different materials can require different solutions, ranging from engaging with suppliers to enhancing transparency and developing innovative alternatives.

Given the diversity of materials sourced in the industry, companies must tailor their approaches to specific materials and regions. For example, the apparel industry, which uses 60 percent of the world's cotton supply, can engage with farmers to improve water management and crop yield, while working to develop innovative alternative fabrics.⁵⁸ The accessories industry, which uses 80 percent of the world's gold supply for jewelry, can work to improve transparency across its supply

chain to help manage social risks related to gold mining and related reputational impacts.⁵⁹

Companies are increasingly recognizing the environmental and social risks associated with materials sourcing and are developing innovative partnerships, alternative materials, and certification standards. Those that are most proactive are likely to reduce their exposure to price volatility and potential supply disruptions while also improving their brand reputation and developing new market opportunities.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Top five raw materials used in products, by weight; and
- Percentage of raw materials third-party certified to an environmental or social sustainability standard, by standard.

Evidence

Raw materials purchases are a significant industry expense. The supply of key inputs is being increasingly impacted by sustainability factors, including climate change, resource scarcity, and social impacts. Supply shocks can create input-price volatility and affect the industry's production, while sustainability trends creating long-term supply constraints could result in higher raw materials costs over time.

For the apparel segment, raw materials, including cotton, represent 40 to 61 percent of the total cost to make a garment, which demonstrates the impact that key inputs can have on existing cost structures.⁶⁰ Over the past five years, cotton prices have experienced high levels of volatility. During an eight-month period in 2010, global cotton prices rose from \$0.78 a pound to more than

\$2.27 a pound. This was a record 150-year high not seen since the American Civil War, and largely the result of high demand and constrained supply due to historic weather events in China and Pakistan.⁶¹ During those eight months, China and Pakistan were the world's first- and fourth-largest producers of cotton.⁶² A number of apparel companies had to increase prices to offset the rising costs. This presented a significant risk to apparel companies, particularly discount brands, which compete mainly on price.⁶³

According to the World Resources Institute, 57 percent of cotton is grown in areas with high to extremely high levels of water stress.⁶⁴ Furthermore, given that it takes roughly 20,000 liters of water to produce one kilogram of cotton, the crop is susceptible to shifting weather patterns and droughts, while also contributing to increased water scarcity.⁶⁵ As extreme weather events and droughts become more intense and/or more frequent because of climate change, the supply of cotton will become increasingly vulnerable.

In its 2011–2012 Corporate Social Responsibility Report, the Gap states, “Both droughts and floods have increasingly interrupted the global cotton supply, causing volatility in commodity markets with serious implications for apparel supply chains and our business. In addition, increasing water shortages and/or restrictions on water consumption could affect our ability to operate in certain regions.”⁶⁶

Companies in the industry, including Hanesbrands⁶⁷, Nike⁶⁸, Perry Ellis, and Aeropostale⁶⁹ have recognized their risk exposure to volatile cotton prices in their Form 10-K filings. For example, in its FY2014 Form 10-K, Perry Ellis states that “raw materials are subject to price volatility caused by weather, supply conditions,

government regulations, energy costs, economic climate and other unpredictable factors.”⁷⁰

In its FY2013 Form 10-K, Hanesbrands provided further transparency into its exposure to shifting cotton prices through a sensitivity analysis. The company concluded that an increase of \$0.01 per pound in cotton prices would influence the cost of sales by \$3 million at 2013 production levels.⁷¹

Companies throughout the industry are addressing the cotton-sourcing risk through strategic initiatives. Adidas, Levi Strauss, Nike, VF Corporation, and others are supporting programs such as the Better Cotton Initiative, which aims to “create long-term change . . . by helping farmers to grow cotton in a way that reduces stress on the local environment and improves the livelihoods and welfare of farming communities.”⁷²

In 2015, Adidas announced that it surpassed its target and sourced 30 percent of all its cotton as Better Cotton in 2014. The company is working to source 100 percent of its cotton as “sustainable cotton” by 2018.⁷³

VF Corporation is working to train roughly 400 Chinese farmers to growing new cotton plants that use less water.⁷⁴ After bad weather events affected its cotton supply and thus its bottom line, VF has also been exploring new alternative materials in an effort to reduce its exposure to cotton-sourcing risks. The company has been increasing its use of polyester fiber, including a new fiber made from 100 percent recycled plastic material known as Repreve. Creating this new material uses significantly less water and energy, but it is also currently more expensive—a cost the company is not passing on to customers in order to drive attraction for Repreve. VF hopes to reduce costs for the material through scale, while simultaneously reducing its climate change risk exposure.⁷⁵

Companies such as Levi Strauss⁷⁶, Quiksilver⁷⁷, and Perry Ellis are also using recycled plastic fiber in their products to reduce their exposure to supply risks. In its 2012–2013 Corporate Social Responsibility Report, Nike stated that “within every sustainability challenge also lies a business opportunity. For example, to better manage constrained resources, we develop and use more recycled and more sustainable materials, and leaner manufacturing processes.”⁷⁸

Companies are also working to address the environmental impacts of cotton through the use of organic cotton in new products. Producing organic cotton uses fewer pesticides and can reduce the overall environmental impacts.⁷⁹ Companies are continually exploring organic cotton’s uses, by blending it with regular cotton or launching new 100 percent organic product lines.⁸⁰ In 2009, global sales of organic cotton textile products hit \$4.3 billion, growing by more than 35 percent from 2008.⁸¹ Although this remains a small portion of industry sales, it represents a growth opportunity.

Companies in the accessories segment of the industry are facing increasing pressure to address the social impacts of the supply of minerals and precious metals. Specifically, companies must address concern from consumers and regulators that diamonds and precious metals and minerals are used to fund armed conflict in certain regions. Companies are required to comply with the Dodd-Frank disclosures on conflict minerals and are increasing their efforts to ensure transparency through new certification processes.

Compliance with the conflict minerals provision of the Dodd-Frank Act is likely to be costly. The SEC estimates that it will cost affected companies a total of \$200 million each year to comply.⁸² This cost will be spread across roughly 6,000 companies from multiple industries.⁸³

Tiffany & Co. reports in its FY2015 Form 10-K filing, “Management believes that it is not possible in most purchasing scenarios to distinguish conflict diamonds from diamonds produced in other regions once they have been polished. Therefore, concerned participants in the diamond trade, including the Company and nongovernment organizations, seek to exclude “conflict” or “blood” diamonds, which represent a small fraction of the world’s supply, from legitimate trade through an international system of certification and legislation known as the Kimberley Process Certification Scheme.”⁸⁴

Tiffany & Co. states in its 2014 Sustainability Report that it purchases diamonds only from countries that are full participants in the Kimberley Process Certification Scheme.⁸⁵ This scheme was developed to eliminate the flow of conflict diamonds by requiring that countries monitor the import and export of rough diamonds and provide documentation identifying the country of origin.⁸⁶

Overall, by creating a more sustainable product mix, companies in the industry may be able to better attract the growing “lifestyle of health and sustainability” market segment and charge a premium. According to Accenture, this segment represents a \$500-billion opportunity for the entire retail industry, as customers have shown their willingness to pay a premium for sustainable products.⁸⁷

Value Impact

The impacts of climate change, water scarcity, environmental degradation, and other sustainability factors on the production of raw materials used in this industry can lead to operating risks for companies. These risks can manifest in the form of acute, high-magnitude supply shortages, resulting in disruptions to production or a high degree of input-price

volatility, and can lead to higher costs of capital. Companies could also face a higher cost structure over time. This could, in turn, affect margins or constrain revenue growth if costs are passed on to consumers.

Companies can undertake R&D expenditures to develop and use alternative materials in their products to reduce these impacts on their cost structures and risk profiles. Implementing supply-chain transparency and engagement measures to mitigate risks could result in higher SG&A expenses; however, companies seen to be proactive in monitoring and reducing environmental and social externalities related to the raw materials used in their products could improve brand value and may be able to charge price premiums that improve revenues.

The probability and magnitude of these impacts are likely to increase in the medium to long term because of the impacts of climate change and increasing resource scarcity.

Disclosure on key raw materials provides insight into where risks and costs might be concentrated. Companies that are reliant on specific raw materials may be more likely to be exposed to price volatility and potential supply disruptions associated with environmental and social concerns. Further, reporting on the percentage of raw materials that are certified to environmental and on social standards will allow investors to understand how companies are managing their sourcing practices and ensuring resiliency.

Labor Conditions in the Supply Chain

The fair treatment of workers and the protection of worker rights in the Apparel, Accessories & Footwear industry's supply chain is of growing concern among consumers, regulators, and

leading companies. Although companies continue to improve performance on this issue, the industry's reliance on a multi-tiered system of suppliers, subcontractors, labor recruitment firms, and part-time workers makes it difficult to manage. Critical aspects of this issue include employee health and safety, fair pay, child labor, and forced labor.

Roughly 99 percent⁸⁸ of apparel and footwear and 98 percent⁸⁹ of jewelry sold in the U.S. is manufactured outside the country, typically by independent suppliers. Companies in the Apparel, Accessories & Footwear industry typically contract with manufacturers in countries with the lowest direct costs of manufacturing. As a result, the industry's products are typically manufactured in countries that have limited regulations or enforcement protecting workers. This makes it important to address the widely prevalent labor issues related to product manufacturing in order to reduce reputational risks and impacts on short- and long-term costs and sales.⁹⁰

Such impacts can arise from increasing regulation and its enforcement in response to high-profile safety or labor incidents, production disruptions due to strikes and other labor-related work stoppages, or a shift in demand away from companies associated with such incidents.

Companies with strong supply-chain standards, monitoring, and engagement with suppliers to address labor concerns may therefore be better positioned to protect shareholder value over the long term.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Percentage of tier 1 suppliers and suppliers beyond tier 1 that have been

audited to a labor code of conduct, percentage conducted by a third-party auditor;

- Priority non-conformance rate and associated corrective action rate for suppliers' labor code of conduct audits; and
- Discussion of greatest labor and environmental, health, and safety risks in the supply chain.

Evidence

The Apparel, Accessories & Footwear industry continues to face challenges associated with labor conditions within its supply chain. This issue is of particular concern given the industry's reliance on suppliers in emerging markets, and is made more complicated by the use of subcontractors, licensees, labor recruitment firms, and part-time workers. Apparel, Accessories & Footwear companies are therefore exposed to negative social externalities, including exploitation of labor, forced and child labor, and poor safety standards. These issues continue to garner attention from stakeholders, consumers, and regulators as a result of several high-profile examples of labor abuses and increased transparency into supply chains.

In Bangladesh, where workers are paid an estimated \$0.24 per hour, compared with China's \$1.26 minimum wage, there has been a significant increase in textile factory growth, with exports doubling from 2006 to 2012.⁹¹ According to estimates from the International Labor Rights Forum, more than 1,800 Bangladesh textile workers have died between 2005 and 2013 because of poor safety standards and laws.⁹² This number includes the more than 1,100 workers who died when the Rana Plaza factory collapsed. In the aftermath of this tragedy, the Bangladesh government raised worker wages by 77 percent

and began inspecting and closing down facilities that did not meet safety standards.⁹³

Textile and garment factories in Bangladesh and other countries have also been found to use child labor, contributing to a global challenge. The International Labour Organization (ILO) estimates that 170 million children are engaged in "work for which the child is either too young—work done below the required minimum age—or work which, because of its detrimental nature or conditions, is altogether considered unacceptable for children and is prohibited."⁹⁴ Industrial activity, which includes textile and garment manufacturing, is believed to account for more than 7 percent of all child labor.⁹⁵

Working hours have also been identified as a significant concern for apparel, accessories, and footwear manufacturers. A 2015 report by Human Rights Watch found that "94 percent of factories monitored by the ILO's Better Factories Cambodia between May 2013 and April 2014 violated exceptional overtime regulations."⁹⁶ Examples of violations included overtime exceeding the 12-hour weekly limit and retaliation against workers who chose not to work overtime.

In response to the scope and scale of labor issues within the Apparel, Accessories & Footwear industry's supply chain, companies have begun to recognize the importance of this issue and the impact it can have on operations and reputational value. As a result, numerous companies in the industry report on the value implications of maintaining strong labor standards in their supply chains.

Nike, the 18th most valuable global brand, according to *Forbes*, recognizes the impact of supply-chain issues on brand value and reputation as a key risk.⁹⁷ The company reports in its FY2015 Form 10-K, "Failure to maintain our reputation and brand image could negatively impact our

business,”⁹⁸ adding that the potential “failure of our contractors or our licensees’ contractors to comply with our code of conduct, local laws, and other standards could harm our business [where] significant or continuing noncompliance with such standards and laws by one or more contractors could harm our reputation or result in a product recall and, as a result, could have an adverse effect on our sales and financial condition.”⁹⁹

PVH Corporation reports in its FY2014 Form 10-K, “If any of these manufacturers (or licensees) violates labor, environmental, building and fire safety, or other laws or implements labor, manufacturing or other business practices that are generally regarded as unethical in the United States, the shipment of finished products to us could be interrupted, orders could be cancelled and relationships could be terminated. In addition, we could be the focus of adverse publicity and our reputation could be damaged. This could be more adverse if multiple manufacturers engaged in these types of activities. Any of these events could have a material adverse effect on our revenue and, consequently, our results of operations.”¹⁰⁰

As the PVH Corporation disclosure suggests, reputational impacts from labor problems in the supply chain can affect demand for products. For example, in 2011, Cornell University cut contracts with Adidas after the company failed to properly pay workers in an Indonesian factory.¹⁰¹ Additionally, in 2014, Cornell cut ties with VF Corporation, for deals estimated to be worth \$4 million, after the company failed to address worker safety issues in Bangladesh.¹⁰²

Recognition of the reputational damage associated with disasters such as Rana Plaza has led some companies to end or limit production in Bangladesh.¹⁰³ Other companies such as Wal-Mart Stores and the Gap have attempted to improve

working conditions in Bangladesh facilities by setting up a voluntary safety-standards organization known as the Alliance for Bangladesh Worker Safety. Through a \$42 million fund, the organization hopes to improve factories’ access to capital for safety upgrades.¹⁰⁴

In addition, companies including PVH and Adidas signed the Accord on Fire and Building Safety in Bangladesh. The accord established a five-year legally binding agreement between companies, retailers, and trade unions to build a safe and healthy “Bangladeshi Ready Made Garment Industry.”¹⁰⁵ Further, the agreement provides for an independent inspection program, disclosure of factory inspection reports, democratically elected health and safety committees in all factories, and training and complaints mechanisms for workers. The components of the agreement are funded in part by its signatories, and estimates suggest that fixing safety problems could cost an average of \$500,000 per factory.¹⁰⁶

The exploitation of workers in the supply chain, poor working conditions, and low wages may also lead to worker strikes, which present reputational and supply disruption risks for Apparel, Accessories & Footwear companies. In their Form 10-K filings, many large companies in the industry, including the Gap¹⁰⁷ and Michael Kors¹⁰⁸, recognize the risk of supply disruptions for various reasons, including worker strikes in global operations. Express Inc. cites “labor strikes and work stoppages or boycotts” as events that “could increase the cost or reduce the supply of apparel available to [it] and adversely affect [its] business, financial condition, or results of operations.”¹⁰⁹ Nike experienced such stoppages in 2013 and faced weeks of supply disruptions and added costs due to worker strikes over low wages in Vietnam and Cambodia.¹¹⁰

As stakeholders, consumers, and regulators continue to scrutinize company performance on this issue, firms are working to improve supply-chain labor standards and disclose information on worker rights and the safety risks they face within their manufacturing supply chain. For example, Nike, a company that faced substantial criticism over labor practices in its supply chain in the 1990s, is widely held to have made significant progress in addressing this issue and rebuilding its brand reputation.¹¹¹ In 1999, the company helped to found the Fair Labor Association, and in 2005 it became the first in the industry to publish a complete list of the factories that it contracts with. Nike currently audits and provides rankings for more than 785 contract factory locations on labor issues, including minimum age requirements, compensation practices, fire safety management, and worker hours.¹¹² Although the company continues to face challenges in its supply chain, its recognition of the importance of this issue and its focus on improving performance has contributed to a corporate turnaround.¹¹³

Value Impact

Acute, high-magnitude incidents related to poor labor conditions in the supply chain, including safety incidents or worker strikes, have the potential to create operational risks that could affect companies' cost of capital. Such incidents could also curtail supply or increase costs in the short term because of production disruptions.

Over the medium to long term, damage to brand value and reputation for companies unable to effectively manage key labor issues within their supply chain will likely affect market share and revenue growth. Furthermore, increasingly stringent regulation in emerging markets in response to poor labor conditions, as well as company actions to address labor conditions in their supply chain could increase labor and operating costs for companies manufacturing in

such countries. However, ultimately these actions could lead to more stability in the supply chain.

Improved disclosure on the percentage of suppliers that have been audited for labor practices will demonstrate which companies are better positioned to reduce the risk of direct costs and reputational harm. Rates of nonconformance and corrective actions provide insight into performance of suppliers and can indicate a lower probability of high-magnitude labor issues in the supply chain. A description of key labor conditions and risks, and steps taken to manage these risks, further illustrates which companies are effectively addressing these concerns.

Environmental Impacts in the Supply Chain

The Apparel, Accessories & Footwear industry's supply chain contributes to significant environmental externalities, including water consumption and pollution and air pollution. Water pollution results from the discharge of chemicals during dyeing and tanning processes, while air pollution stems from the industry's inefficient consumption of energy. These impacts have the potential to damage a company's reputation and to affect cost structures over time. Examples of improved efficiencies and resource use demonstrate ample opportunities for enhanced performance in this area.

The scale of this issue has historically been intensified by the fact that the industry relies on manufacturing partners in emerging markets, where environmental regulations and oversight are limited. However, enhanced scrutiny on the part of stakeholders and consumers, coupled with the development of more stringent regulation in certain regions, has led companies throughout the industry to work with suppliers to reduce their environmental impact.

Apparel, Accessories & Footwear companies that leverage their market power to work with suppliers to improve operational efficiencies and resource consumption and limit pollution will be able to mitigate costs associated with increased resource scarcity and regulation. Further, those companies that engage with suppliers through monitoring, auditing, and strict standards will be better positioned to protect shareholder value over the long term.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Percentage of tier 1 supplier facilities and supplier facilities beyond tier 1 with wastewater discharge meeting or exceeding legal requirements; and
- Percentage of tier 1 suppliers and suppliers beyond tier 1 who have completed the Sustainable Apparel Coalition's Higg Index Facility Module assessment or equivalent environmental data collection.

Evidence

The Apparel, Accessories & Footwear industry contributes to significant environmental externalities by consuming and discharging large quantities of water and by using inefficient energy sources. These impacts stem primarily from suppliers' manufacturing operations, and are intensified by the fact that these facilities are located in regions with limited environmental regulations or enforcement.

A report by the Natural Resources Defense Council found that textile dyeing and finishing mills in China used as much as 200 tons of water for every ton of textiles produced, which is considerably more than mills in most other

developing countries. This demonstrates how the supply chain contributes to and is vulnerable to water scarcity. Further, the report notes that steam used in these operations is often generated in inefficient coal-fired boilers.¹¹⁴

Furthermore, the World Bank estimates that 17 to 20 percent of China's water pollution comes from textile dyeing and treatment. The textile industry releases more than 70 toxic chemicals into waterways, 30 of which cannot be removed. Largely due to these chemical releases, water pollution is responsible for more than 100,000 deaths in China annually, according to the World Health Organization.¹¹⁵

Local communities and ecosystems in Bangladesh have also been harmed by pollution from the country's textile industry. Toxic wastewater has been found to threaten and interfere with local farming and fishing operations. While some textile factories have water treatment plants, decisions not to run them, for cost savings, often go unpunished because of the limited regulation and oversight.¹¹⁶

Besides textiles, the accessories and footwear segments also can contribute to environmental and health impacts. Leather tanning is responsible for significant environmental pollution. The process typically involves chromium (III) salts, which are used to stabilize and harden the leather. Typically, the tanning of one ton of hide results in 20 to 80 cubic meters of wastewater, containing an estimated 250 milligrams per liter of chromium, which is dangerous to animal and human health. A majority of the industry's tanning occurs in China, India, and Bangladesh, where lack of regulation and oversight has allowed for untreated wastewater to be discharged from tanneries into waterways.¹¹⁷ Chromium pollution has been linked to respiratory problems, birth defects, and cancer.¹¹⁸

Textile manufacturing is also a significant source of energy consumption in countries like China, where the textile industry accounts for 4 percent of total manufacturing energy usage.¹¹⁹ Typically, overseas suppliers run inefficient production facilities, as their technology and processes are outdated, and they lack the resources necessary to improve performance.¹²⁰ Energy production in such countries is heavily dependent on fossil fuels, which leads to environmental impacts such as local air pollution and greenhouse gas emissions.

Energy costs can run between 5 to 12 percent of a product's total costs, depending on the country. In 2003 in China, energy costs accounted for 8 percent of the total cost of a product, while labor costs represented 2 percent. In India, the textile industry is the third-largest energy consumer, behind the chemical and engineering sectors. Energy costs represent as much as 12 percent of the total cost of a garment, compared with only 2 percent for labor.¹²¹ The Indian textile industry has an estimated energy savings potential of 23 percent.¹²²

To protect their reputations and mitigate environmental regulatory risks, companies are beginning to address their supply-chain operations and influence their suppliers to reduce their water and hazardous chemical footprint. As discussed in the Regulatory Trends section, the Chinese government has been facing criticism over its lack of water pollution control. In 2008, the country amended its water pollution laws to avoid an economic and social crisis. These new laws include provisions that create tougher fines and penalties for pollution violators, improve public participation with the issue, and strengthen discharge standards.¹²³ Between 2008 and 2013, the number of wastewater violations issued to textile facilities in China increased from 302 to 1,497; and in 2015, the government made pollution a criminal act.¹²⁴

This new legislation highlights the risk to the supply chain of Apparel, Accessories & Footwear companies and their need to work with suppliers to reduce their environmental impacts, particularly as scrutiny over waste and pollution increases in emerging markets. Several companies have responded with new environmental initiatives.

Levi's is developing a manufacturing process that uses 100 percent recycled water in Chinese factories. The project is still in its testing phase, but the company hopes to expand the process across its global supply chain.¹²⁵ The Gap implemented a number of water initiatives in its supply chain, including a water-risk assessment program, a mill-engagement program, and a goal of having zero hazardous chemical discharge by 2020. Through these initiatives, the company hopes to identify and follow best practices to improve the environmental performance of its supply chain.¹²⁶ These initiatives can help companies maintain their reputations, while enabling them to avoid potential environmental regulation and the associated costs in their supply chains. Apparel industry research analysts recognize that companies' efforts to address the environmental impacts of products influence customer-purchasing decisions.¹²⁷

Besides engaging with existing suppliers to lower their impacts, companies can also seek suppliers with high standards of pollution and resource management to lower their risks. In 2012, Esquel Group, a supplier to Ralph Lauren and other companies, invested more than \$7 million on a system that converts some of the 30,000 tons of wastewater at its Gaoming, China, facility into drinkable water that is recycled into the dyeing process. The company indicated that this new treatment system made it more attractive to apparel brands.¹²⁸

Companies are also increasingly acknowledging the risks that the environmental performance of their supply chain presents to the business in SEC filings, in addition to the labor risks discussed in the previous disclosure topic. In its FY2014 Form 10-K, Ralph Lauren states, “While we require our suppliers to operate in compliance with all applicable laws and our operating guidelines which promote ethical and socially responsible business practices, any violation of labor, environmental, health, and safety or other laws, or any divergence by an independent supplier’s labor practices from generally accepted industry standards, could damage our reputation, disrupt our sourcing capabilities, and increase the cost of doing business, adversely affecting our results of operations.”¹²⁹

The potential for reputational damage was demonstrated in 2011 when PVH joined the Zero Discharge of Hazardous Chemicals (ZDHC) initiative in response to a report by Greenpeace that detailed industrial water pollution in China. The members of ZDHC developed a list of 11 restricted chemicals and have established a goal to “remove harmful substances from textile production by 2020.”¹³⁰

Companies also face the potential for shareholder action relating to environmental performance. In 2014, shareholders approached VF Corporation with a resolution for the company to address water risks in its supply chain, which can pose threats to the company, including “higher costs due to water shortages, rising energy prices, and increasingly stringent water regulations [or] reputational risks created when communities are harmed by supplier water practices.” The resolution has since been withdrawn as the company continues an open discussion about its water risks.¹³¹

In addition to the risks associated with water pollution, companies are increasingly working to improve energy efficiency in their supply chains, recognizing the costs associated with rising energy prices and potential regulations.

In 2011, Adidas Group began working with its suppliers to improve their overall energy efficiency through energy audits and monitoring programs.¹³² Such efforts by companies in the industry can help reduce suppliers’ costs of manufacturing apparel, accessories, and footwear. Assuming cost savings are passed on to Apparel, Accessories & Footwear companies, they may enjoy higher margins as a result. Companies may also benefit from an improved brand reputation.

Organizations including the Sustainable Apparel Coalition (SAC) have partnered with various stakeholders in the apparel and footwear industry to address the environmental and social impacts of the industry’s supply chain. Through a consolidated effort, the SAC developed the Higg Index Facility Module to assess “environmental sustainability performance and drive behavior for improvement.” The tool is designed to help standardize how companies evaluate and disclose their environmental and social performance throughout their value chain by identifying key metrics for facilities, the brand, and products.¹³³ Issue areas covered by the Index include: water use, wastewater, and energy use and greenhouse gas emissions.

Value Impact

Apparel, Accessories & Footwear companies that manage the environmental impacts of their supply chain are likely to protect their cost of revenue and reputational value over the medium to long term.

Lax environmental standards in emerging markets have previously helped with low-cost production. However, as regulators, local communities, and consumers place increased emphasis on the environmental impact of products, and as water scarcity and energy costs increase, companies are facing pressure to work with suppliers to develop programs to improve efficiencies and limit pollution. These practices will likely result in lower risks of fines, production stoppages, and litigation for suppliers related to their environmental impacts, as well as lower energy cost risks. This can lead to cost savings that can be captured by companies in the industry, helping Apparel, Accessories & Footwear companies to lower their cost structure over time.

Companies in the industry that are proactive in addressing environmental impacts in the supply chain will likely also benefit from positive brand association with customers. This can influence their ability to capture market share.

The probability and magnitude of these impacts could increase in the medium to long term as emerging markets expand their environmental regulations and enforcement.

Disclosure on the percentage of suppliers that have wastewater discharge that meets or exceeds legal requirements will demonstrate which companies are more likely to be impacted by fines levied against suppliers and potential reputational damage. Further, reporting on the percentage of suppliers that have completed the SAC's Higg Index Facility Module will help identify which companies are committed to improving the environmental performance of their suppliers and are subsequently positioned to benefit from indirect reductions in costs.

APPENDIX I

FIVE REPRESENTATIVE APPAREL, ACCESSORIES & FOOTWEAR COMPANIES^{III}

COMPANY NAME (TICKER SYMBOL)
Nike Inc. (NKE)
VF Corp. (VFC)
Signet Jewelers Limited (SIG)
The TJX Companies, Inc. (TJX)
Gap Inc. (GPS)

^{III} This list includes five companies representative of the Apparel, Accessories & Footwear industry and its activities. This includes only companies for which the Apparel, Accessories & Footwear industry is the primary industry, that are U.S.-listed but are not primarily traded over the counter, and for which at least 20 percent of revenue is generated by activities in this industry, according to the latest information available on Bloomberg Professional Services. Retrieved on June 30, 2015.

APPENDIX IIA: Evidence for Sustainability Disclosure Topics

Sustainability Disclosure Topics	EVIDENCE OF INTEREST				EVIDENCE OF FINANCIAL IMPACT				FORWARD-LOOKING IMPACT		
	HM (1-100)	IWGs		EI	Revenue & Cost	Asset & Liabilities	Cost of Capital	EFI	Probability & Magnitude	Externalities	FLI
		%	Priority								
Management of Chemicals in Products	63*	96	2t	High	•	•		Medium	•		Yes
Raw Materials Sourcing & Innovation	27	96	2t	Medium	•	•	•	High	•		Yes
Labor Conditions in the Supply Chain	48	100	1	High	•	•	•	High			No
Environmental Impacts in the Supply Chain	43	100	3	High	•	•		Medium	•	•	Yes

HM: Heat Map, a score out of 100 indicating the relative importance of the topic among SASB’s initial list of 43 generic sustainability issues. Asterisks indicate “top issues.” The score is based on the frequency of relevant keywords in documents (i.e., 10-Ks, 20-Fs, shareholder resolutions, legal news, news articles, and corporate sustainability reports) that are available on the Bloomberg terminal for the industry’s publicly listed companies. Issues for which keyword frequency is in the top quartile are “top issues.”

IWGs: SASB Industry Working Groups

%: The percentage of IWG participants that found the disclosure topic likely to constitute material information for companies in the industry. (-) denotes that the issue was added after the IWG was convened.

Priority: Average ranking of the issue in terms of importance. 1 denotes the most important issue. (-) denotes that the issue was added after the IWG was convened.

EI: Evidence of Interest, a subjective assessment based on quantitative and qualitative findings.

EFI: Evidence of Financial Impact, a subjective assessment based on quantitative and qualitative findings.

FLI: Forward Looking Impact, a subjective assessment on the presence of a material forward-looking impact.

APPENDIX IIB: Evidence of Financial Impact for Sustainability Disclosure Topics

Evidence of Financial Impact	REVENUE & EXPENSES							ASSETS & LIABILITIES				RISK PROFILE	
	Revenue			Operating Expenses		Non-operating Expenses		Assets		Liabilities		Cost of Capital	Industry Divestment Risk
	Market Share	New Markets	Pricing Power	Cost of Revenue	R&D	CapEx	Extra-ordinary Expenses	Tangible Assets	Intangible Assets	Contingent Liabilities & Provisions	Pension & Other Liabilities		
Management of Chemicals in Products	•				•		•		•	•			
Raw Materials Sourcing & Innovation	•	•	•	•	•				•			•	
Labor Conditions in the Supply Chain	•			•					•			•	
Environmental Impacts in the Supply Chain	•			•					•				

■ MEDIUM IMPACT

■ HIGH IMPACT

APPENDIX III: Sustainability Accounting Metrics | Apparel, Accessories & Footwear

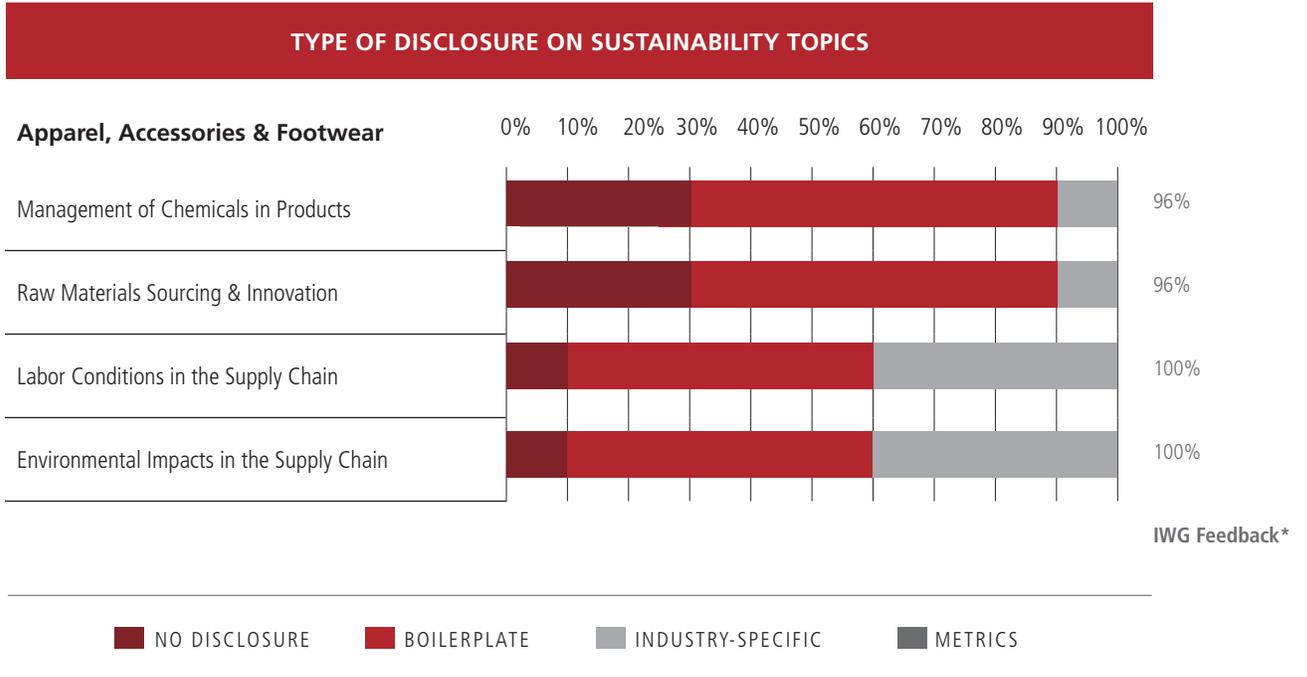
TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Management of Chemicals in Products	Description of processes to maintain compliance with restricted substances regulations	Discussion and Analysis	n/a	CN0501-01
	Description of processes to assess and manage risks associated with chemicals in products	Discussion and Analysis	n/a	CN0501-02
Raw Material Sourcing & Innovation	Top five raw materials used in products, by weight*	Quantitative	Metric tons (t)	CN0501-03
	Percentage of raw materials third-party certified to an environmental or social sustainability standard, by standard	Quantitative	Percentage (%) by weight	CN0501-04
Labor Conditions in the Supply Chain	Percentage of (1) tier 1 suppliers and (2) suppliers beyond tier 1 that have been audited to a labor code of conduct, percentage conducted by a third-party auditor	Quantitative	Percentage (%)	CN0501-05
	Priority non-conformance rate and associated corrective action rate for suppliers' labor code of conduct audits	Quantitative	Rate	CN0501-06
	Discussion of greatest (1) labor and (2) environmental, health, and safety risks in the supply chain	Discussion and Analysis	n/a	CN0501-07
Environmental Impacts in the Supply Chain	Percentage of (1) tier 1 supplier facilities (2) supplier facilities beyond tier 1 with wastewater discharge meeting or exceeding legal requirements**	Quantitative	Percentage (%)	CN0501-08
	Percentage of (1) tier 1 suppliers and (2) suppliers beyond tier 1 who have completed the Sustainable Apparel Coalition's Higg Index Facility Module assessment or equivalent environmental data collection	Quantitative	Percentage (%)	CN0501-09

* Note to **CN0501-03**—Disclosure shall include a discussion of environmental and social risks associated with sourcing each of the top five raw materials used in products.

** Note to **CN0501-08**—Disclosure shall include a description of the risk related to wastewater discharge and the wastewater treatment and management method(s) used implemented in response to events.

APPENDIX IV: Analysis of SEC Disclosures | Apparel, Accessories & Footwear

The following graph demonstrates an aggregate assessment of how representative U.S.-listed Apparel, Accessories & Footwear companies are currently reporting on sustainability topics in their SEC annual filings.



*Percentage of IWG participants that agreed topic was likely to constitute material information for companies in the industry.

REFERENCES

- ¹ The data represents global revenues of companies listed on global exchanges and traded over-the-counter (OTC) from the Apparel, Accessories, and Footwear industry, using Levels 3 and 4 of the Bloomberg Industry Classification System.
- ² Author's calculation based on data from Bloomberg Professional service, accessed June 30, 2015 using Equity Screen (EQS) for U.S.-listed companies and those traded primarily over-the-counter (OTC) that generate at least 20 percent of revenue from their Apparel, Accessories, and Footwear segment and for which Apparel, Accessories, and Footwear is a primary SICs industry.
- ³ Nike, FY2014 Form 10-K for the Period Ending May 31, 2015 (filed July 23, 2015), p. 27.
- ⁴ "AAFA Release ApparelStats 2013 and ShoeStats 2013 Reports," American Apparel & Footwear Association, January 5, 2014, accessed August 21, 2015, <https://www.wewear.org/aafa-releases-apparelstats-2013-and-shoestats-2013-reports/>.
- ⁵ Ibid.
- ⁶ Adidas, FY2014 Annual Report (filed March 5, 2015), p. 70.
- ⁷ Kenneth Hamlett, "Reasons for Outsourcing in a Manufacturing Industry," *Small Business Chronicle*, accessed September 4, 2014, <http://smallbusiness.chron.com/reasons-outsourcing-manufacturing-industry-1292.html>.
- ⁸ "AAFA Release ApparelStats 2013 and ShoeState 2013 Reports," American Apparel & Footwear Association, January 5, 2014, accessed August 21, 2015, <https://www.wewear.org/aafa-releases-apparelstats-2013-and-shoestats-2013-reports/>.
- ⁹ Shan Li, Tiffany Hsu, and Andrea Chang, "American Apparel, Other Try to Profit From Domestic Production," *Los Angeles Times*, August 10, 2014, accessed August 21, 2015, <http://www.latimes.com/business/la-fi-american-apparel-made-in-usa-20140810-story.html>.
- ¹⁰ Brian Padden, "US Textile Industry Grows With More Technology and Fewer Workers," *Voice of America*, December 19, 2013, accessed October 10, 2014, <http://www.voanews.com/content/us-textile-industry-grows-with-more-technology-and-fewer-workers/1814128.html>.
- ¹¹ Ralph Lauren Corporation, FY2014 Form 10-K for the Period Ending March 28, 2015 (filed May 15, 2015), p. 27.
- ¹² Gap Inc., FY2014 Form 10-K for the Period Ending January 31, 2015 (filed March 23, 2015), p. 21.
- ¹³ IBISWorld, *Industry Report 31522: Men's & Boys' Apparel Manufacturing in the U.S.*, p. 23.
- ¹⁴ IBISWorld, *Industry Report 31621: Shoe & Footwear Manufacturing in the U.S.*, p. 19.
- ¹⁵ IBISWorld, *Industry Report 33991: Jewelry Manufacturing in the U.S.*, p. 21.
- ¹⁶ Author's calculation based on data from Bloomberg Professional service, accessed on June 30, 2015 using EQS screen for U.S. listed companies (including those traded primarily OTC) and generating at least 20 percent of revenue from Apparel, Accessories, and Footwear segment.
- ¹⁷ IBISWorld, *Industry Report 44814: Family Clothing Stores in the U.S.*, p. 19.
- ¹⁸ "Cotton Properties and Products," Cotton Australia, accessed October 10, 2014, <http://cottonaustralia.com.au/cotton-library/fact-sheets/cotton-fact-file-cotton-properties-and-products>.
- ¹⁹ Garry White, "Cotton Price Causes 'Panic Buying' as Nears 150-Year High," *The Telegraph*, February 4, 2011, accessed September 4, 2014, <http://www.telegraph.co.uk/finance/markets/8301886/Cotton-price-causes-panic-buying-as-nears-150-year-high.html>.
- ²⁰ Elizabeth Holmes and Rachel Dodes, "Unable to Stretch Further, Apparel Makers Raise Prices," *The Wall Street Journal*, November 4, 2010, accessed September 4, 2014, <http://online.wsj.com/news/articles/SB10001424052702304879604575582673135103404>.
- ²¹ Alexandra Wexler, "Cotton Price Unravels as Supplies Rise," *The Wall Street Journal*, July 27, 2014, accessed September 4, 2014, <http://www.wsj.com/articles/cotton-price-unravels-as-supplies-rise-1406484472>.
- ²² IBISWorld, *Industry Report 44814: Family Clothing Stores in the U.S.*, p. 6.
- ²³ IBISWorld, *Industry Report 42434: Footwear Wholesaling in the U.S.*, p. 12.
- ²⁴ Gap Inc., FY2013 Form 10-K for the Period Ending February 1, 2014 (filed March 24, 2014), p. 2.
- ²⁵ IBISWorld, *Industry Report 44814: Family Clothing Stores in the U.S.*, p. 5.
- ²⁶ Thad Rueter, "Gap Closes the Gap Between E-Commerce and Stores," *Internet Retailer*, April 17, 2014, accessed September 4, 2014, <http://www.internetretailer.com/2014/04/17/gap-closes-gap-between-e-commerce-and-stores>.
- ²⁷ Gap Inc., FY2014 Form 10-K for the Period Ending January 31, 2015 (filed March 23, 2015), p. 66.
- ²⁸ From SASB's internal review of sell side research.
- ²⁹ "Consumer Product Safety Improvement Act (CPSIA)," American Apparel & Footwear Association, accessed September 18, 2014, <https://www.wewear.org/aafa-on-the-issues/category/?CategoryId=49>.

-
- ³⁰ "Key State Chemical Management Issues," American Apparel & Footwear Association, accessed September 18, 2014, <https://www.wewear.org/aafa-on-the-issues/category/?CategoryId=116>.
- ³¹ "Understanding REACH," European Chemicals Agency, accessed September 18, 2014, <http://echa.europa.eu/regulations/reach/understanding-reach>.
- ³² "Consumers: EU to Ban Dimethylfumarate (DMF) in Consumer Products, Such As Sofas and Shoes," European Commission, January 29, 2009, accessed September 18, 2014, http://europa.eu/rapid/press-release_IP-09-190_en.htm.
- ³³ Natalie O'Brien, "Toxic Chemical Found in School Shoes," *The Sydney Morning Herald*, May 20, 2012, accessed October 10, 2014, <http://www.smh.com.au/national/health/toxic-chemical-found-in-school-shoes-20120519-1yxik.html>.
- ³⁴ "California Transparency in Supply Chains Act," United States Department of Labor, accessed August 15, 2015, <http://www.dol.gov/ilab/child-forced-labor/California-Transparency-in-Supply-Chains-Act.htm>.
- ³⁵ "SEC Adopts Rule for Disclosing Use of Conflict Minerals," U.S. Securities and Exchange Commission, August 22, 2012, accessed August 9, 2015, <http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171484002>.
- ³⁶ Keith Higgins, "Statement on the Effect of the Recent Court of Appeals Decision on the Conflict Minerals Rule," U.S. Securities and Exchange Commission, April 29, 2014, accessed August 7, 2015, <http://www.sec.gov/News/PublicStmt/Detail/PublicStmt/1370541681994>.
- ³⁷ Lori Zimmer, "Chinese Textile Polluters Disregard Environmental Regulations, Says Report," *Ecouterre*, April 20, 2012, accessed September 19, 2014, <http://www.ecouterre.com/chinese-textile-polluters-regularly-violate-environmental-regulations-says-report/>.
- ³⁸ Jingyun Li and Jingjing Liu, "Quest for Clean Water: China's Newly Amended Water Pollution Control Law," Wilson Center, July 7, 2011, accessed October 10, 2014, <http://www.wilsoncenter.org/publication/quest-for-clean-water-chinas-newly-amended-water-pollution-control-law>.
- ³⁹ Arun Devnath, "Bangladesh Raises Minimum Wage for Garment Workers After Unrest," *Bloomberg*, November 14, 2013, accessed September 19, 2014, <http://www.bloomberg.com/news/2013-11-13/bangladesh-garment-factories-to-stay-shut-amid-worker-protests.html>.
- ⁴⁰ Katy Barnato, "China Labor Cost Rise to Boost Rivals in Asia," *CNBC*, accessed September 19, 2014, <http://www.cnbc.com/id/100387910>.
- ⁴¹ "Welcome to the Accord," Accord on Fire and Building Safety in Bangladesh, accessed September 19, 2014, <http://bangladeshaccord.org/>.
- ⁴² Lindsey Rupp, "Wal-Mart to Gap Group Starts \$42 Million Bangladesh Fund," *Bloomberg*, July 10, 2013, accessed September 19, 2014, <http://www.bloomberg.com/news/2013-07-10/wal-mart-to-gap-group-starts-42-million-bangladesh-fund.html>.
- ⁴³ Sonya Diehn, "Toxic Chemicals in Children's Clothes, Explained," *Deutsche Welle*, January 16, 2014, accessed September 10, 2014, <http://www.dw.de/toxic-chemicals-in-childrens-clothes-explained/a-17366181>.
- ⁴⁴ "Consumer Product Safety Improvement Act (CPSIA)," American Apparel & Footwear Association, accessed September 18, 2014, <https://www.wewear.org/aafa-on-the-issues/category/?CategoryId=49>.
- ⁴⁵ "CPSC Approves Final Rule on Civil Penalty Factors," United States Consumer Product Safety Commission, March 16, 2010, accessed August 11, 2015, <http://www.cpsc.gov/en/Newsroom/News-Releases/2010/CPSC-Approves-Final-Rule-on-Civil-Penalty-Factors/>.
- ⁴⁶ Louann Spirito, "The Effect of Proposition 65 on the Apparel and Accessories Industry," SGS Consumer Testing Services, accessed October 17, 2014, http://www.sgs.com/~media/Global/Documents/White_Papers/sgs-consumer-products-testing-prop-65-sl-whitepaper-en-12.ashx.
- ⁴⁷ "Understanding REACH," European Chemicals Agency, accessed September 18, 2014, <http://echa.europa.eu/regulations/reach/understanding-reach>.
- ⁴⁸ "Toxic Chemicals in Clothing Make All of Us Fashion Victims," *The Business of Fashion*, November 20, 2010, accessed September 9, 2014, <http://www.businessoffashion.com/2012/11/op-ed-toxic-chemicals-in-clothing-make-all-of-us-fashion-victims.html>.
- ⁴⁹ "About," Greenpeace, accessed August 13, 2015, <http://www.greenpeace.org/international/en/campaigns/detox/fashion/about/>.
- ⁵⁰ Ibid.
- ⁵¹ Natalie O'Brien, "Toxic Chemical Found in School Shoes," *The Sydney Morning Herald*, May 20, 2012, accessed October 10, 2014, <http://www.smh.com.au/national/health/toxic-chemical-found-in-school-shoes-20120519-1yxik.html>.
- ⁵² Ibid.

-
- ⁵³ Madeline Cobbing and Kirsten Brodde, "A Red Card for Sportswear Brands: Hazardous chemicals found in World Cup merchandise," Greenpeace, May 2014, accessed August 2, 2015, https://www.greenpeace.de/sites/www.greenpeace.de/files/detox_2014_11_englisch.pdf.
- ⁵⁴ Louann Spirito, "The Effect of Proposition 65 on the Apparel and Accessories Industry," SGS Consumer Testing Services, accessed October 17, 2014, [http://www.sgs.com/~media/Global/Documents/White Papers/sgs-consumer-products-testing-prop-65-sl-whitepaper-en-12.ashx](http://www.sgs.com/~media/Global/Documents/White%20Papers/sgs-consumer-products-testing-prop-65-sl-whitepaper-en-12.ashx).
- ⁵⁵ Adidas, FY2014 Annual Report (filed March 5, 2015), p. 94.
- ⁵⁶ VF Corporation, FY2015 Form 10-K for the Period Ending January 3, 2015 (filed March 3, 2015), p. 10.
- ⁵⁷ "Reducing Harmful Chemicals in Our Supply Chain," VF Corporation, accessed August 9, 2015, <http://sustainability.vfc.com/products/design-and-development/responsible-chemistry/>.
- ⁵⁸ "Cotton Properties and Products," Cotton Australia, accessed October 10, 2014, <http://cottonaustralia.com.au/cotton-library/fact-sheets/cotton-fact-file-cotton-properties-and-products>.
- ⁵⁹ "Conflict Minerals and the Democratic Republic of Congo," BSR, May 2010, accessed August 22, 2015, http://www.bsr.org/reports/BSR_Conflict_Minerals_and_the_DRC.pdf, p. 8.
- ⁶⁰ Ali Hasanbeigi, "Energy-Efficiency Improvement Opportunities for the Textile Industry," Berkeley National Laboratory, September, 2010, accessed August 9, 2015, http://www.energystar.gov/sites/default/files/buildings/tools/EE_Guidebook_for_Textile_industry.pdf.
- ⁶¹ Edward Faubert, "After Roller-Coaster 2010 & 2011, Cotton's Newfound Surplus Weighs On Prices," *Hard Assets Investor*, April 26, 2012, accessed September 12, 2014, <http://www.hardassetsinvestor.com/features/3665-after-roller-coaster-2010-a-2011-cottons-newfound-surplus-weighs-on-prices.html>.
- ⁶² Justin Doom, "Top Five Cotton Producers, Exporters, Users in 2010-2011," *Bloomberg*, August 19, 2011, accessed October 13, 2014, <http://www.bloomberg.com/news/2011-08-19/top-five-cotton-producers-exporters-users-in-2010-2011-table-.html>.
- ⁶³ Adam Cancryn and Carolyn Cui, "Flashback to 1870 as Cotton Hits Peak," *The Wall Street Journal*, October 16, 2010, accessed September 12, 2014, <http://online.wsj.com/articles/SB10001424052748704300604575554210569885910>.
- ⁶⁴ "Agricultural Exposure to Water Stress," World Resource Institute, accessed September 12, 2014, <http://www.wri.org/applications/maps/agriculturemap/#x=69.13&y=38.25&l=5&v=home&d=cotton>.
- ⁶⁵ "Overview," World Wildlife Fund, accessed September 10, 2015, <http://www.worldwildlife.org/industries/cotton>.
- ⁶⁶ "Water," Gap Inc., accessed October 13, 2014, <http://www.gapinc.com/content/csr/html/environment/water.html>.
- ⁶⁷ Hanesbrands Inc., FY2013 Form 10-K for the Period Ending December 28, 2013 (filed February 6, 2014), p. 45.
- ⁶⁸ Nike Inc., FY2014 Form 10-K for the Period Ending May 31, 2014 (filed July 25, 2014), p. 8.
- ⁶⁹ Aeropostale, FY2014 Form 10-K for the Period Ending February 1, 2014 (filed April 4, 2014), p.11.
- ⁷⁰ Perry Ellis International, FY2014 Form 10-K for the Period Ending February 1, 2014 (filed April 15, 2014), p.22.
- ⁷¹ Hanesbrands Inc., FY2013 Form 10-K for the Period Ending December 28, 2013 (filed February 6, 2014), p. 45.
- ⁷² "About Better Cotton - Better Cotton Initiative," Better Cotton Initiative, accessed September 12, 2014, <http://bettercotton.org/about-better-cotton/>.
- ⁷³ "Adidas Group Exceeds 2014 Better Cotton Target," Adidas, February 24, 2015, accessed August 14, 2015, <http://www.adidas-group.com/en/media/news-archive/sustainability-news/2015/adidas-group-exceeds-2014-better-cotton-target/>.
- ⁷⁴ Yuki Noguchi, "Driven By Climate Change, Cotton Buyers Look For Alternatives," *NPR*, 27 August, 2014, accessed September 10, 2014, <http://www.npr.org/2014/08/27/343187440/driven-by-climate-change-cotton-buyers-look-for-alternatives>.
- ⁷⁵ Ibid.
- ⁷⁶ Susan Berfield, "Levi's Goes Green With Waste," *Bloomberg Business*, October 18, 2012, accessed September 14, 2014, <http://www.bloomberg.com/bw/articles/2012-10-18/levis-goes-green-with-waste-less-jeans>.
- ⁷⁷ David Rees, "Quiksilver, Inc. Commits Further To Sustainability," *Financials Trend*, August 14, 2014, accessed September 11, 2014, <http://www.financialtrend.com/quiksilver-inc-nysezqk-commits-further-to-sustainability-20504.html>.
- ⁷⁸ Nike Inc, 2012 / 2013 Corporate Sustainability Report, p. 13.
- ⁷⁹ "Organic Cotton Facts," *Organic Trade Association*, June 2010, accessed September 11, 2014, http://www.ota.com/organic/mt/organic_cotton.html.
- ⁸⁰ "H&M, C&A, Nike Top Organic Cotton Users," *Environmental Leader*, November 9, 2012, accessed September 11, 2014, <http://www.environmentalleader.com/2012/11/09/hm-ca-nike-top-organic-cotton-users/>.

-
- ⁸¹ "Organic Cotton Facts," *Organic Trade Association*, June 2010, accessed September 11, 2014, http://www.ota.com/organic/mt/organic_cotton.html.
- ⁸² Jim Low, "Dodd-Frank and the Conflict Minerals Rule," KPMG, 2012, accessed January 11, 2015, http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/dod_d-frank-series/Documents/dodd-frank-and-conflict-minerals-rule-q4.pdf.
- ⁸³ Ibid.
- ⁸⁴ Tiffany & Co. FY2015 Form 10-K for the Period Ending January 31, 2015 (filed March 20, 2015), p. 10.
- ⁸⁵ Tiffany, 2014 Sustainability Report, p. 17.
- ⁸⁶ "About," Kimberley Process, accessed September 5, 2015, <http://www.kimberleyprocess.com/en/about>.
- ⁸⁷ "Sustainable Energy for All: Opportunities for the Retail Industry," Accenture & United Nations Global Compact, October 02, 2012, accessed September 8, 2014, <http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture-Sustainable-Energy-All-Opportunities-Retail-Industry.pdf>, p. 8.
- ⁸⁸ "AAFA Release ApparelStats 2013 and ShoeStats 2013 Reports," American Apparel & Footwear Association, January 5, 2014, accessed August 21, 2015, <https://www.wewear.org/aafa-releases-apparelstats-2013-and-shoestats-2013-reports/>.
- ⁸⁹ IBISWorld, *Industry Report 33991: Jewelry Manufacturing in the U.S.*, p. 8.
- ⁹⁰ Daniel Richet, "Learning from Bangladesh: Product Sourcing in Low-Cost Countries," Enlight Research, July 18, 2013, accessed September 16, 2014, <http://www.enlightresearch.com/insights/2013/7/18/learning-from-bangladesh-product-sourcing-in-low-cost-countr.html>.
- ⁹¹ Shelly Banjo, "Inside Nike's Struggle to Balance Cost and Worker Safety in Bangladesh," *The Wall Street Journal*, April 21, 2014, accessed September 16, 2014, http://online.wsj.com/news/article_email/SB10001424052702303873604579493502231397942-1MyQjAxMTA0MDIwMjEyNDIyWj?cb=logged0.077389320358634.
- ⁹² Daniel Richet, "Learning from Bangladesh: Product Sourcing in Low-Cost Countries," Enlight Research, July 18, 2013, accessed September 16, 2014, <http://www.enlightresearch.com/insights/2013/7/18/learning-from-bangladesh-product-sourcing-in-low-cost-countr.html>.
- ⁹³ Arun Devnath, "Bangladesh Raises Minimum Wage for Garment Workers After Unrest," *Bloomberg*, November 14, 2013, accessed September 19, 2014, <http://www.bloomberg.com/news/2013-11-13/bangladesh-garment-factories-to-stay-shut-amid-worker-protests.html>.
- ⁹⁴ "Making Progress Against Child Labour: Global Estimates and Trends 2000-2012," International Labour Organization, accessed August 25, 2015, http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---ipecc/documents/publication/wcms_221513.pdf, p. 9.
- ⁹⁵ Ibid, p. 8.
- ⁹⁶ "Work Faster or Get Out: Labor Rights Abuses in Cambodia's Garment Industry," Human Rights Watch, accessed August 2, 2015, http://www.hrw.org/sites/default/files/reports/cambodia0315_brochure_web.pdf, p. 8.
- ⁹⁷ "The World's Most Valuable Brands," *Forbes*, May 13, 2015, accessed August 3, 2015, <http://www.forbes.com/powerful-brands/list>.
- ⁹⁸ Nike, FY2015 Form 10-K for the Period Ending May 31, 2015 (filed July 23, 2015), p. 6.
- ⁹⁹ Ibid, p. 10.
- ¹⁰⁰ PVH Corp. FY2014 Form 10-K for the Period Ending February 2, 2014 (filed April 3, 2014), p. 22.
- ¹⁰¹ Scott Douglas, "Cornell Drops Adidas Licensing Over Labor Issue," *Runners World*, September 18, 2014, accessed September 16, 2014, <http://www.runnersworld.com/running-apparel/cornell-drops-adidas-licensing-over-labor-issue>.
- ¹⁰² Natalie Kitroeff, "Colleges Cut Ties With Apparel Maker Over Worker Safety," *Bloomberg Business Week*, October 20, 2014, accessed October 20, 2014, <http://www.businessweek.com/articles/2014-10-20/students-push-cornell-to-end-vf-corp-deals-over-labor-practices>.
- ¹⁰³ Adam Kanzer, "Disney's Decision to Leave Bangladesh Was Appropriate," *The New York Times*, May 2, 2013, accessed September 16, 2014, <http://www.nytimes.com/roomfordebate/2013/05/02/when-does-corporate-responsibility-mean-abandoning-ship/disneys-decision-to-leave-bangladesh-was-appropriate>.
- ¹⁰⁴ Lindsey Rupp, "Wal-Mart to Gap Group Starts \$42 Million Bangladesh Fund," *Bloomberg*, July 10, 2013, accessed September 19, 2014, <http://www.bloomberg.com/news/2013-07-10/wal-mart-to-gap-group-starts-42-million-bangladesh-fund.html>.
- ¹⁰⁵ "About," Accord on Fire and Building Safety in Bangladesh, accessed September 19, 2014, <http://bangladeshaccord.org/about/>.

-
- ¹⁰⁶ Steven Greenhouse, "U.S. Retailers See Big Risk in Safety Plan for Factories in Bangladesh," *The New York Times*, May 22, 2013, accessed August 1, 2015, <http://www.nytimes.com/2013/05/23/business/legal-experts-debate-us-retailers-risks-of-signing-bangladesh-accord.html>.
- ¹⁰⁷ Gap Inc. FY2014 Form 10-K for the Period Ending February 1, 2014 (filed March, 24, 2014), p. 7.
- ¹⁰⁸ Michael Kors, FY2014 Form 10-K for the Period Ending March 29, 2014 (filed May 28, 2014), p. 16.
- ¹⁰⁹ Express Inc., FY2014 Form 10-K for the Period Ending February 1, 2014 (filed April 1, 2014), p. 14.
- ¹¹⁰ Prak Chan Thul, "Thousands of Workers Protest at Cambodia Factory That Makes Nike Clothing," NBC News, May 29, 2014, accessed September 16, 2014, <http://worldnews.nbcnews.com/news/2013/05/29/18584179-thousands-of-workers-protest-at-cambodia-factory-that-makes-nike-clothing?lite?ocid=twitter>.
- ¹¹¹ Max Nisen, "How Nike Solved Its Sweatshop Problem," *Business Insider*, May 9, 2013, accessed August 17, 2015, <http://www.businessinsider.com/how-nike-solved-its-sweatshop-problem-2013-5>.
- ¹¹² "Labor," Nike, accessed August 11, 2015, <http://www.nikeresponsibility.com/report/content/chapter/labor>.
- ¹¹³ Max Nisen, "How Nike Solved Its Sweatshop Problem," *Business Insider*, May 9, 2013, accessed August 17, 2015, <http://www.businessinsider.com/how-nike-solved-its-sweatshop-problem-2013-5>.
- ¹¹⁴ Linda Greer, Susan Keane, Cindy Lin, James Meinert, *NRDC's 10 Best Practices for Textile Mills to Save Money and Reduce Pollution: A Practical Guide for Responsible Sourcing*, National Resources Defense Council, July 2013, accessed September 21, 2015, <http://www.nrdc.org/international/cleanbydesign/files/responsible-sourcing-guide.pdf>, p. 7.
- ¹¹⁵ "The Environmental Cost of Clothes," China Water Risk, April 18, 2011, accessed September 16, 2014, <http://chinawaterrisk.org/resources/analysis-reviews/the-environmental-cost-of-clothes/>.
- ¹¹⁶ Jim Yardley, "Bangladesh Pollution, Told in Colors and Smells," *The New York Times*, July 14, 2013, accessed August 8, 2015, <http://www.nytimes.com/2013/07/15/world/asia/bangladesh-pollution-told-in-colors-and-smells.html>.
- ¹¹⁷ Andrew Tarantola, "How Leather Is Slowly Killing the People and Places That Make It," *Gizmodo*, June 3, 2014, accessed September 4, 2015, <http://gizmodo.com/how-leather-is-slowly-killing-the-people-and-places-tha-1572678618>.
- ¹¹⁸ Ibid.
- ¹¹⁹ Ali Hasanbeigi, "Energy-Efficiency Improvement Opportunities for the Textile Industry," Berkeley National Laboratory, September, 2010, accessed August 9, 2015, http://www.energystar.gov/sites/default/files/buildings/tools/EE_Guidebook_for_Textile_industry.pdf, p. 7.
- ¹²⁰ Ibid, p. 13.
- ¹²¹ Ibid, p. 13.
- ¹²² "Energy Efficiency in Textile Industry," ABB, accessed September 18, 2014, [http://www05.abb.com/global/scot/scot311.nsf/veritydisplay/93f473f8d592e49948257c6a003fc837/\\$file/ABB_Energy_Efficiency_portfolio_in_Textile.pdf](http://www05.abb.com/global/scot/scot311.nsf/veritydisplay/93f473f8d592e49948257c6a003fc837/$file/ABB_Energy_Efficiency_portfolio_in_Textile.pdf), p. 3.
- ¹²³ Jingyun Li and Jingjing Liu, "Quest for Clean Water: China's Newly Amended Water Pollution Control Law," Wilson Center, July 7, 2011, accessed October 10, 2014, <http://www.wilsoncenter.org/publication/quest-for-clean-water-chinas-newly-amended-water-pollution-control-law>.
- ¹²⁴ Kathy Chu, "Chinese Apparel Makers Face Pressure to Reduce Water Pollution," *The Wall Street Journal*, June 2, 2015, accessed August 19, 2015, <http://www.wsj.com/articles/chinese-apparel-makers-face-pressure-to-reduce-water-pollution-1433301390>.
- ¹²⁵ "Production Process Uses 100% Recycled Water," Environmental Leader, February 20, 2014, accessed September 17, 2014, <http://www.environmentalleader.com/2014/02/20/process-uses-100-recycled-water/>.
- ¹²⁶ Gap Inc, 2013 Corporate Sustainability Report, p. 82.
- ¹²⁷ Peter Van Der Warf, "H&M takes the lead in water management," H&M, October 16, 2013, accessed September 17, 2014, <http://www.robeco.com/en/professionals/insights/sustainability-investing/insights/2013/hm-takes-the-lead-in-water-management.jsp>.
- ¹²⁸ Kathy Chu, "Chinese Apparel Makers Face Pressure to Reduce Water Pollution," *The Wall Street Journal*, June 2, 2015, accessed August 19, 2015, <http://www.wsj.com/articles/chinese-apparel-makers-face-pressure-to-reduce-water-pollution-1433301390>.
- ¹²⁹ Ralph Lauren Corporation, FY2014 Form 10-K for the Period Ending March 28, 2015 (filed May 15, 2015), p. 18.
- ¹³⁰ Jan Lee, "The Apparel Industry's Answer to Global Water Shortages," TriplePundit, March 12, 2015, accessed August 22, 2015, <http://www.triplepundit.com/special/sustainable-fashion-2014/apparel-industrys-answer-global-water-shortages/>.
- ¹³¹ "VF Corporation Water Report 2014," Ceres, accessed September 17, 2014, <http://www.ceres.org/investor-network/resolutions/vf-corporation-water-report-2014>.

¹³² Linda Hardesty, "Adidas Trains Suppliers in Energy Efficiency," *Energy Manager Today*, September 04, 2014, accessed September 17, 2014, <http://www.energymanagertoday.com/adidas-trains-suppliers-in-energy-efficiency-095040/>.

¹³³ "Overview," Sustainable Apparel Coalition, accessed September 17, 2014, <http://www.apparelcoalition.org/higgindex/>.

SUSTAINABILITY ACCOUNTING STANDARDS BOARD®

1045 Sansome Street, Suite 450

San Francisco, CA 94111

415.830.9220

info@sasb.org

www.sasb.org

ISBN#: 978-1-940504-62-9

The content made available in this publication is copyrighted by the Sustainability Accounting Standards Board. All rights reserved. You agree to only use the content made available to you for non-commercial, informational or scholarly use within the organization you indicated you represent to keep intact all copyright and other proprietary notices related to the content. The content made available to you may not be further disseminated, distributed, republished or reproduced, in any form or in any way, outside your organization without the prior written permission of the Sustainability Accounting Standards Board. To request permission, please contact us at info@sasb.org.