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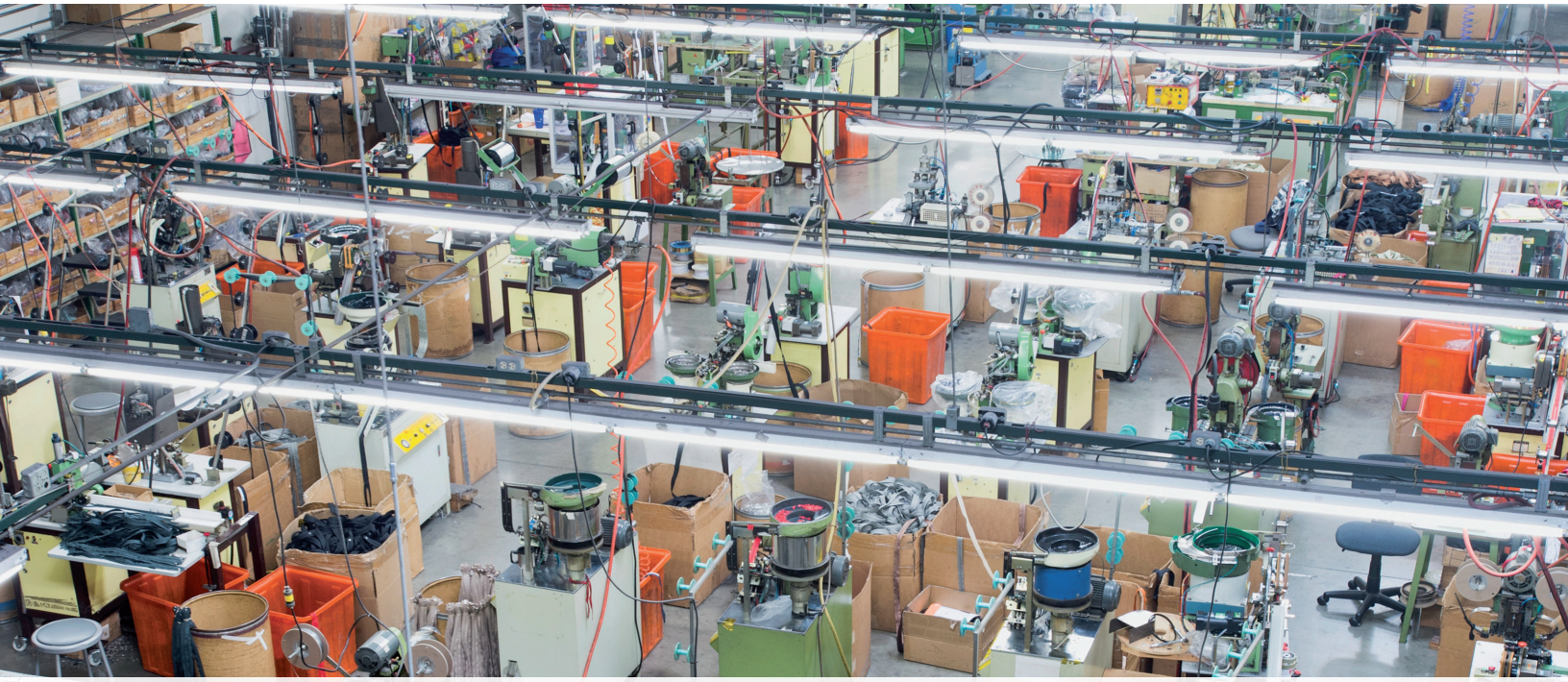
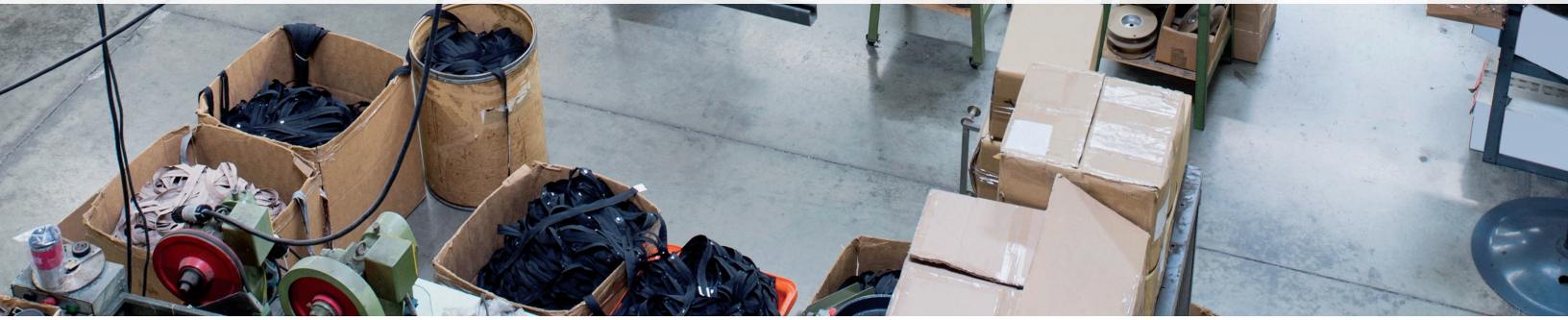


SUSTAINABILITY & RESOURCE PRODUCTIVITY

Style that's sustainable: A new fast-fashion formula



Stylish, affordable clothing has been a hit with shoppers. Now companies are trying to reduce its social and environmental costs.

Nathalie Remy, Eveline Speelman, and Steven Swartz

The early 21st century has been good to the apparel industry. Thanks to falling costs, streamlined operations, and rising consumer spending, clothing production doubled from 2000 to 2014, and the number of garments purchased each year by the average consumer increased by 60 percent. Fast fashion has been a particularly hot segment and a source of enviable growth for some clothing companies. By compressing production cycles and turning out up-to-the-minute designs, these businesses have enabled shoppers not only to expand their wardrobes but also to refresh them quickly. Across nearly every apparel category, consumers keep clothing items about half as long as they did 15 years ago. Some estimates suggest that consumers treat the lowest-priced garments as nearly disposable, discarding them after just seven or eight wears.

The fact remains, however, that innovation in the way clothes are made has not kept pace with the acceleration of how they are designed and marketed. Fast fashion is now a large, sophisticated business fed by a fragmented and relatively low-tech production system. This system has outsize environmental effects: making clothes typically requires using a lot of water and chemicals and emitting significant amounts of greenhouse gases. Reports also continue to emerge about clothing-factory workers being underpaid and exposed to unsafe—even deadly—workplace conditions, particularly when handling materials like cotton and leather that require extensive processing. Without improvements in how clothing is made, these issues will grow proportionally as more clothes are produced.

So far, sales increases suggest that most shoppers either overlook or tolerate the social and environmental costs of fast fashion. But some companies aren't waiting for a consumer backlash. They have begun to remedy the largely unseen impact of the fast-fashion business. In this article, we consider how apparel businesses can resolve challenges in two major segments of their value chain: the heavy resource demands and difficult labor issues in the production process, and the excessive waste associated with disposing of unfashionable or worn-out garments.

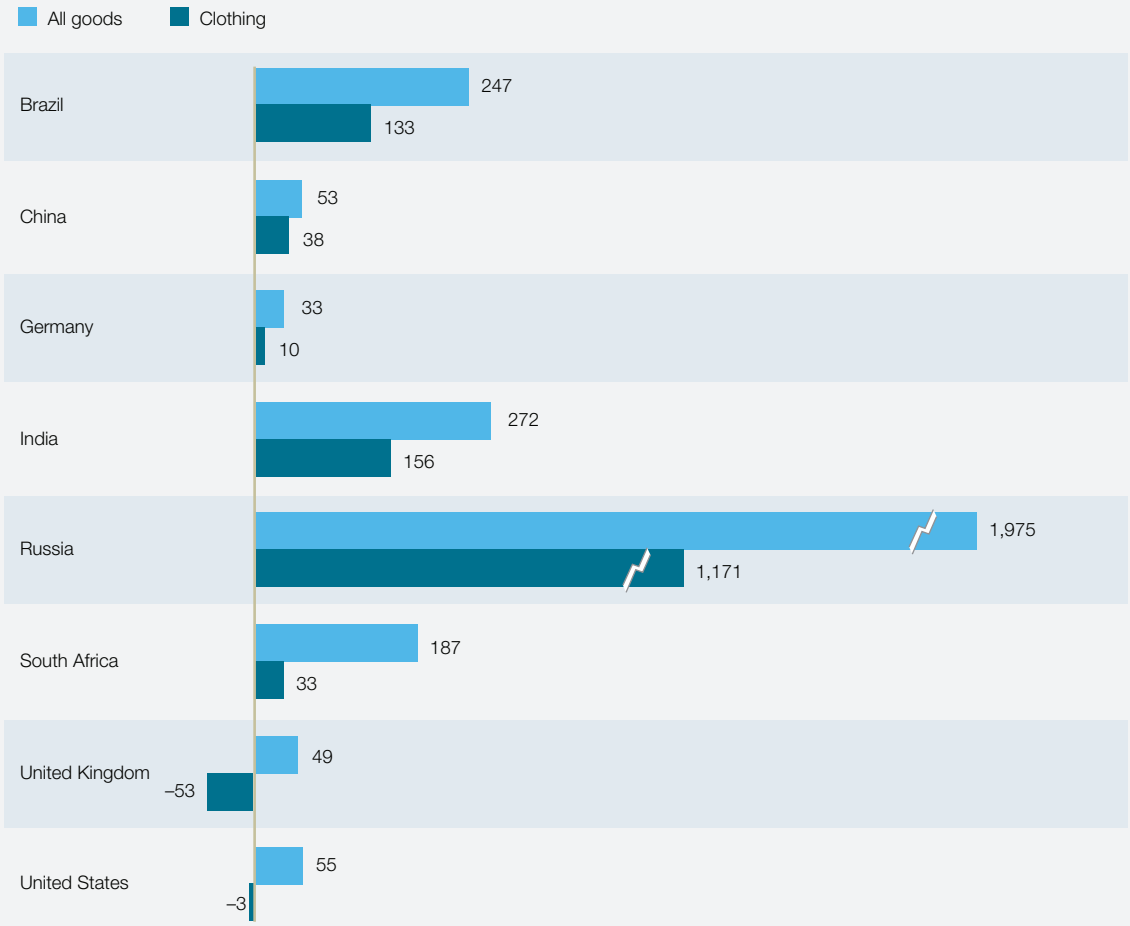
Fast fashion, serious consequences

Apparel sales have risen dramatically in recent years, thanks to several trends that appear likely to continue. Businesses have aggressively cut costs and streamlined their supply chains. This has caused the price of clothing to fall relative to the prices of other consumer goods (Exhibit 1). Shorter lead times for production have also allowed clothing makers to introduce new lines more frequently. Zara offers 24 new clothing collections each year; H&M offers 12 to 16 and refreshes them weekly. Among all European apparel companies, the average number

Exhibit 1

The slow rise in clothing prices, compared with other consumer goods, has made clothing more affordable.

Change in consumer prices, 1995–2014, %



Source: Euromonitor; McKinsey analysis

of clothing collections has more than doubled, from two a year in 2000 to about five a year in 2011.

Shoppers have responded to lower prices and greater variety by buying more items of clothing. The number of garments produced annually has doubled since 2000 and exceeded 100 billion for the first time in 2014: nearly 14 items of clothing for every person on earth. While sales growth has been robust around the world, emerging economies have seen especially large rises in clothing sales, as more people in them have joined the middle class. In five large developing countries—Brazil, China, India, Mexico, and Russia—apparel sales grew eight times faster than in Canada, Germany, the United Kingdom, and the United States.

Even after this increase, the average developing-country resident purchases a fraction of the clothing that his or her developed-world counterpart buys each year. Overall clothing sales could rise significantly if developing-country consumers choose to buy more clothing as their purchasing power increases. We estimate that if 80 percent of the population of emerging economies were to achieve the same clothing-consumption levels as the Western world by 2025, and the apparel industry does not become more environmentally efficient, then the environmental footprint of the apparel industry will become much larger (Exhibit 2).

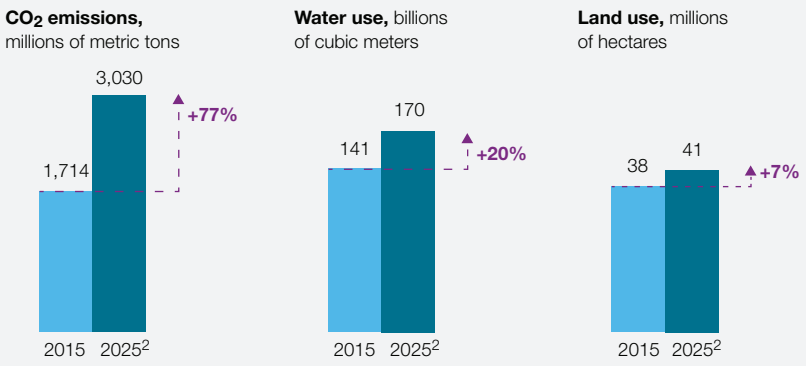
So far, clothing companies have been unable to match their sales gains with commensurate improvements in environmental and social performance. Cotton, accounting for about 30 percent of all textile fiber consumption, is usually grown using a lot of water, pesticides, and fertilizer. Since countries with large fabric- and apparel-making industries rely mainly on fossil fuels for energy production, we estimate that making 1 kilogram of fabric generates an average of 23 kilograms of greenhouse gases.

In addition, many clothing companies face problems with labor conditions throughout their supply chains, including child labor, low wages, and health and safety hazards. Rooting out these problems will require businesses to measure sustainability performance across the entire supply chain, set goals for improvements, help suppliers to reduce their impact, and hold suppliers accountable if they don't.

Exhibit 2

As consumer spending increases, especially in emerging economies, the clothing industry's environmental impact could expand greatly.

Increases in environmental impact if 80% of emerging markets achieve Western per capita consumption levels[1]



[1]Rest of world maintains its current levels of per capita consumption.
[2]Estimated.

Source: World Bank; McKinsey analysis

The sustainability impact of clothing continues to mount after consumers leave the store with newly purchased apparel. Washing and drying 1 kilogram of clothing over its entire life cycle, using typical methods, creates 11 kilograms of greenhouse gases, according to our estimates—an amount that companies could reduce by altering fabrics and clothing designs. The postpurchase choices that consumers make, such as whether to wash clothes in cold, warm, or hot water, also make a big difference.

When it comes to disposing of clothing, current technologies cannot reliably turn unwanted apparel into fibers that could be used to make new goods. Recycling methods such as shredding or chemical digestion work poorly. And there are not markets large enough to absorb the volume of material that would come from recycling clothes. As a result, nearly three-fifths of all clothing produced ends up in incinerators or landfills within years of being made. Germany outperforms most countries by collecting almost three-quarters of all used clothing, reusing half and recycling one-quarter. Elsewhere, collection rates are far lower: 15 percent in the United States, 12 percent in Japan, and 10 percent in China.

A sustainable design for the fast-fashion value chain

Mitigating the sustainability impact of the fast-fashion business will likely require action across the industry. Some apparel companies have formed coalitions to tackle environmental and social challenges together, which helps to accelerate change and to mitigate the risks of working on these challenges alone. For example, 22 apparel brands belong to a coalition called Zero Discharge of Hazardous Chemicals to improve and expand the use of nontoxic, sustainable chemistry in the textile and footwear supply chain. The Better Cotton Initiative involves more than 50 retailers and brands and nearly 700 suppliers in setting standards for environmental, social, and economic responsibility in cotton production.

A few apparel businesses have begun tackling sustainability challenges on their own. H&M and Levi's have each partnered with I:CO to collect clothing and footwear for reuse and recycling. I:CO provides collection bins, sorts the items so anything wearable can be sold, and recycles what is left. Patagonia not only collects used clothing in its stores and through the mail but also offers repair services so its customers can extend the lives of their garments. And retail chain C&A, recognizing the environmental effects of cotton farming, has launched an effort to purchase only organic cotton by 2020.

We see additional steps that companies can take to remove some of the social and environmental risks that are commonly part of the fast-fashion model:

- Develop standards and practices for designing garments that can be easily reused or recycled. The Sustainable Apparel Coalition has created an index for measuring the full life-cycle impact of clothing and footwear products.
- Invest in the development of new fibers that will lower the environmental effects of production and garment making. In 2016, the Walmart Foundation awarded grants of nearly $3 million to five US universities to support research on improving the sustainability and efficiency of textile manufacturing.
- Encourage consumers to care for their clothes in low-impact ways. Washing garments in hot or warm water and drying at high heat or for longer than needed uses a lot of energy. Clothing makers and retailers can help steer consumers toward clothing-care practices that have a smaller environmental toll and keep garments in good shape for longer.

- Support the development of mechanical- and chemical-recycling technologies. The fibers produced by mechanical recycling, for example, are shorter and lower in quality than virgin fibers and therefore less useful to apparel makers. Chemical recycling could improve on this as the technology advances.

- Establish higher labor and environmental standards for suppliers and set up mechanisms to make supply chains more transparent. For example, the software company EVRYTHNG and packaging maker Avery Dennison have together launched an effort to tag clothing so consumers can trace how individual items were produced all along the supply chain.

- Provide suppliers with guidance and resources for meeting new labor and environmental standards and hold them accountable for performance shortfalls. Walmart, for example, has made a public commitment that by 2017, 70 percent or more of the products it sources directly from suppliers will come from factories with energy-management plans. The company offers its suppliers software tools to help them find opportunities for using energy and other resources more efficiently.

Global demand for clothing looks set to increase significantly over the coming decade, as millions of people in developing countries enter the middle class and spend more on apparel. While this presents a tremendous opportunity for fashion companies, it may be a risky one for companies that choose not to grapple with the social and environmental risks of low-cost, resource-hungry production processes.

Those risks could become even more pressing over time: as the millennial generation gains purchasing power, their high expectations that businesses will operate in a sustainable manner could have a big influence on shopping trends. Production methods that are more sustainable may cost slightly more, but they can also spur innovation and protect businesses from supply-chain shocks and reputation risks, resulting in greater resilience and profitability. ■

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