ESG INDUSTRY LANDSCAPE REPORT

Apparel & Fashion: Environmental and Human Rights Concerns Abound, but Risk-Adjusted Upside Looks Attractive

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Environmental and Human Rights Concerns Abound, but Companies Managing With Alternative Sourcing

Modern Slavery Remains a Critical Challenge to Navigate for Apparel Manufacturers

Forced labor is estimated to take place in 25% of the world's 75 cotton-producing countries, highlighting it as a critical supply chain risk for clothing producers. Most recently, the treatment of the Uyghur population in China's Xinjiang region has faced scrutiny for alleged human rights violations. This area produces some 20% of the world's cotton in an average year, but new regulation in the U.S. (the Uyghur Forced Labor Prevention Act) could lead to additional investment and higher costs for companies seeking alternative sourcing—not to mention the potential that these actions could put the firms' revenue in China itself at risk.

Supply chain human rights risks are the most commonly noted material ESG issues facing the 36 companies in our apparel, luxury, footwear, and relevant retail coverage, according to Sustainalytics. And within this set of companies, 25 have faced a controversy related to human rights or labor relations, with six involved in an event with a category level of 3 (out of 5).

Supply Chain Issues Grab Headlines, but Environmental, Business Ethics, and Human Capital Concerns Are Also Frequent

The fashion industry is one of the world's largest industrial polluters, accounting for 10% of annual global carbon emissions—more than all international flights and maritime shipping combined. Rising sales of cheaper fast fashion in particular is a challenge, given the resulting increasing share of synthetic fibers like polyester. While these fibers have less impact on water and land than grown materials like cotton, they emit more greenhouse gasses. In response to this environmental risk, fast fashion firms have altered product design and manufacturing to increase use of recycled fibers and build sustainable supply bases. But these initiatives risk increasing costs, which may need to be shared with suppliers or borne by consumers. As such, we view companies with intangible asset-driven economic moats as best positioned.

Outside of fast fashion, luxury apparel companies in general face relatively low ESG risk, with nearly every firm in our coverage assigned a Low ESG Risk Rating by Sustainalytics (only Burberry garners a different category: Negligible). But a shift in the marketplace to sell a greater amount of product online, particularly through resale channels such as Poshmark or The RealReal, introduces new risk exposure. As companies enter the resale market, the issue of ensuring that intellectual property is upheld and counterfeit fare doesn't proliferate becomes an increased concern, particularly for luxury firms that stock premium products to differentiate themselves from other apparel items.

And human capital remains a critical issue facing the apparel industry, as retailers deal with labor-intensive operations and luxury manufacturers rely upon a team of skilled artisans. Nonetheless, the apparel and luxury goods companies we cover boast an average gender diversity ratio (that is, women as a percentage of management versus total female workforce participation) of 0.80, far surpassing the global average we observe of 0.48, suggesting lower risk of outsized turnover, all else equal.

Key Takeaways

- Apparel manufacturers face *environmental risks*, given the substantial carbon footprint, water usage, and emissions waste of clothing construction, and the rising use of polyester materials. Efforts to substitute alternative or recyclable fibers could offset this risk, but at a cost. We view companies with intangible asset-driven economic moats as best placed to share this pain with suppliers.

- Labor issues such as *human rights and modern slavery* continue to plague the fashion industry, despite heightened focus on the practice in recent years. Beyond ongoing risks from managing low wages, union pressure, and employee health issues, new U.S. and European regulation aims to severely punish firms that don't have full transparency over their supply chains, increasing the importance of audits and monitoring.

- *Business ethics* concerns around the proliferation of counterfeit goods sold through online retail channels—including resale options such as Poshmark and The RealReal, which are growing in popularity—represent a key risk that both manufacturers and sellers are increasing investments to manage.

- *Human capital* management is a critical component of the operating model for an apparel manufacturer and any associated retail store network. Broadline apparel manufacturers and retailers must typically deal with relatively high labor intensity, while luxury goods makers face labor skill risks from their highly capable (and often highly paid) artisan staff.

- There are several undervalued stocks within the fashion space, across the entire spectrum of mainline, luxury, and retail apparel companies. Some of our top picks include narrow-moat Hanesbrands, wide-moat Richemont, and no-moat Gap.

Apparel Manufacturing: Environmental Footprint Poses Substantial, but Manageable, Risk for Fast Fashion

Apparel's Environmental Footprint Is a Rising Problem, Particularly as Fast Fashion Continues to Grow

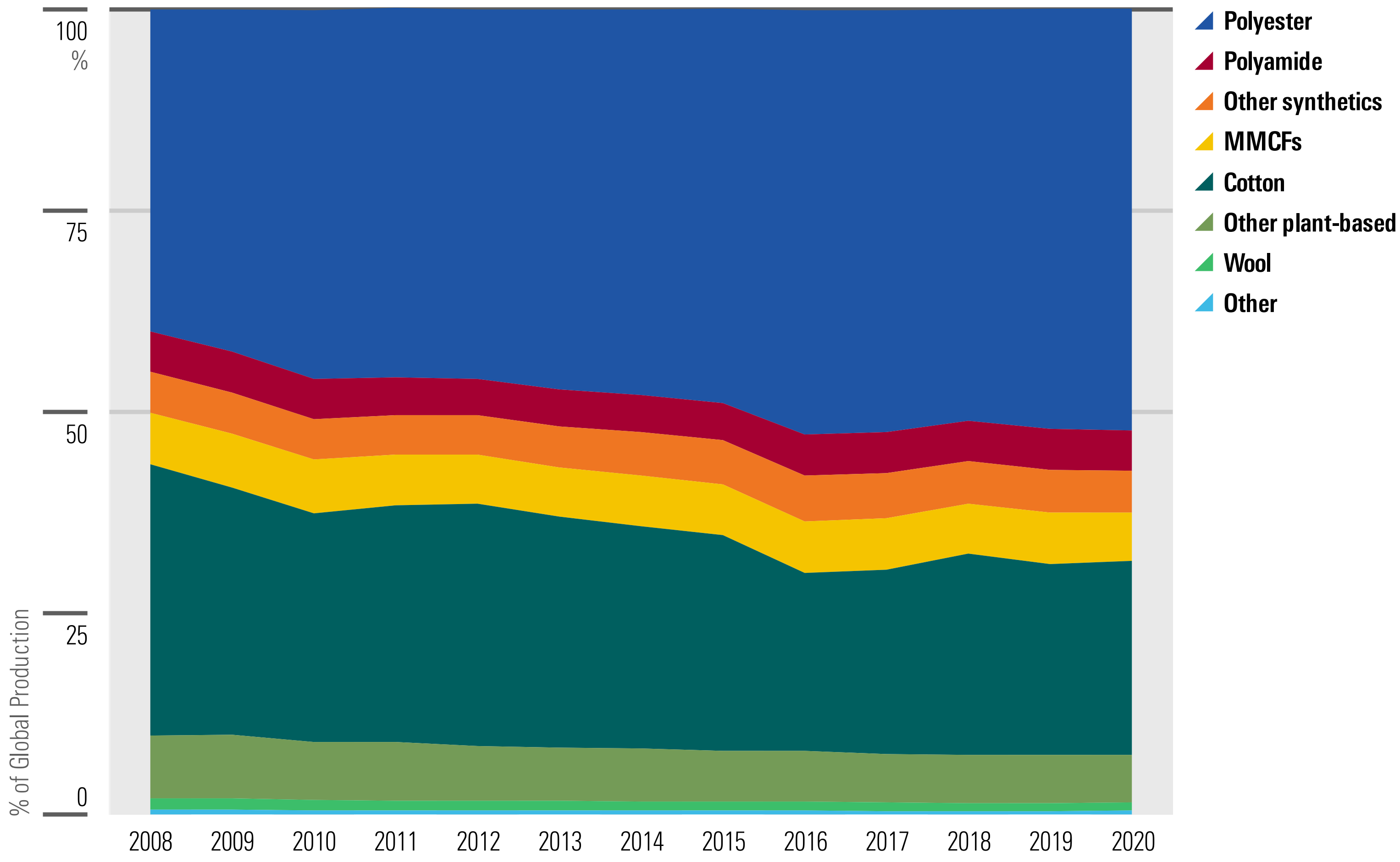
The fashion industry is one of the world's largest industrial polluters, accounting for 10% of annual global carbon emissions—more than all international flights and maritime shipping combined. And the industry is a heavy user of water. Around 20% of wastewater worldwide comes from fabric dyeing and treatment, while textiles contribute 35% (190,000 metric tons) of microplastic pollution in the oceans.

Rising sales of cheaper fast fashion in particular are a challenge. As this chart shows, the trend has led to an increasing share of synthetic fibers like polyester, polyamide, and other manmade cellulosic fibers ,or MMCFs, as a portion of total global production, which has grown at about 3% annually.

While these fibers need less water and land than grown materials like cotton, they emit more greenhouse gasses. A polyester shirt has a more than 25% greater carbon footprint than a cotton shirt (12.1 pounds versus 9.5 pounds), for instance.

And waste is also an issue; per the U.S. EPA, about 85% of the clothing Americans consume is sent to landfills as solid waste to be buried or burned as energy. This amounts to nearly 70 pounds of clothing waste per American per year.

Polyester and Other Manmade Fibers Taking Share From Cotton



Source: USDA, Textile Exchange Preferred Fiber and Materials Market Report 2021, Morningstar.Data as of July 1, 2021.

Governmental Regulation and Shift in Consumer Preferences Are Risks to Apparel Manufacturers

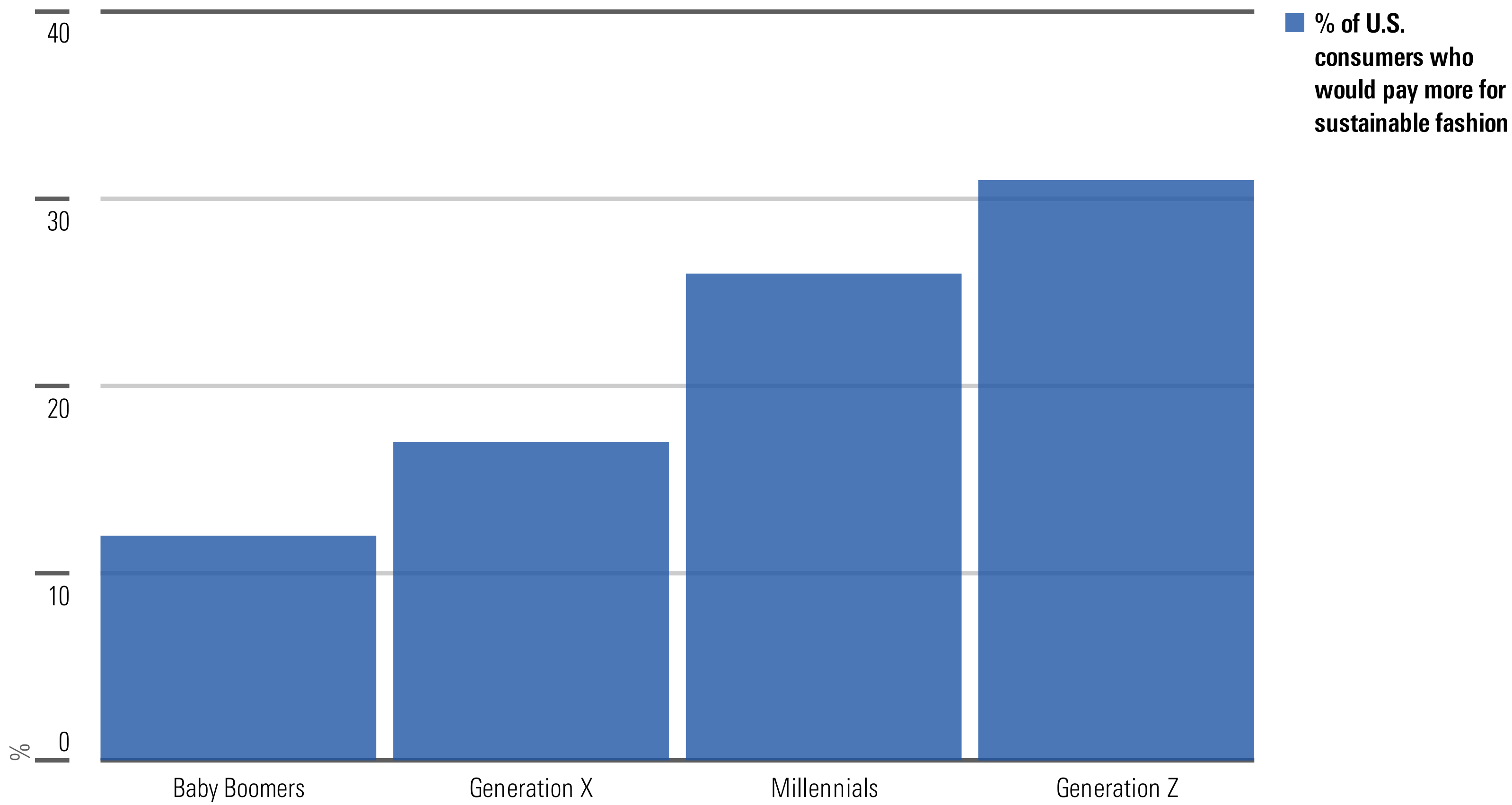
Given their environmental footprint, fast fashion manufacturers face risk from government regulation, potential taxes, and consumer backlash, which could negatively impact financial performance.

For example, the European Union has proposed new rules and regulations related to the industry. These include requirements for increased durability, a focus on reducing microplastic release during the washing of garments, labeling related to the sustainability and recyclability of clothing, and a ban on the destruction of unsold apparel.

Similarly, the U.K. proposed in 2019 a tax of 1 pence per garment sold; while this was ultimately struck down, the country has since proposed new rules on plastic packaging related to apparel, which could similarly lead to rising costs for clothing sellers.

And shifting consumer preference could lead to changes in the apparel market over time. As the chart on the right shows, younger consumers say they're more willing to pay up for greater sustainability in their clothing—albeit still a minority of shoppers overall.

A Minority of U.S. Consumers Are Willing to Pay More for Sustainable Fashion Although Younger Consumers Are More Open to This Option



Source: McKinsey, "The State of Fashion 2020."

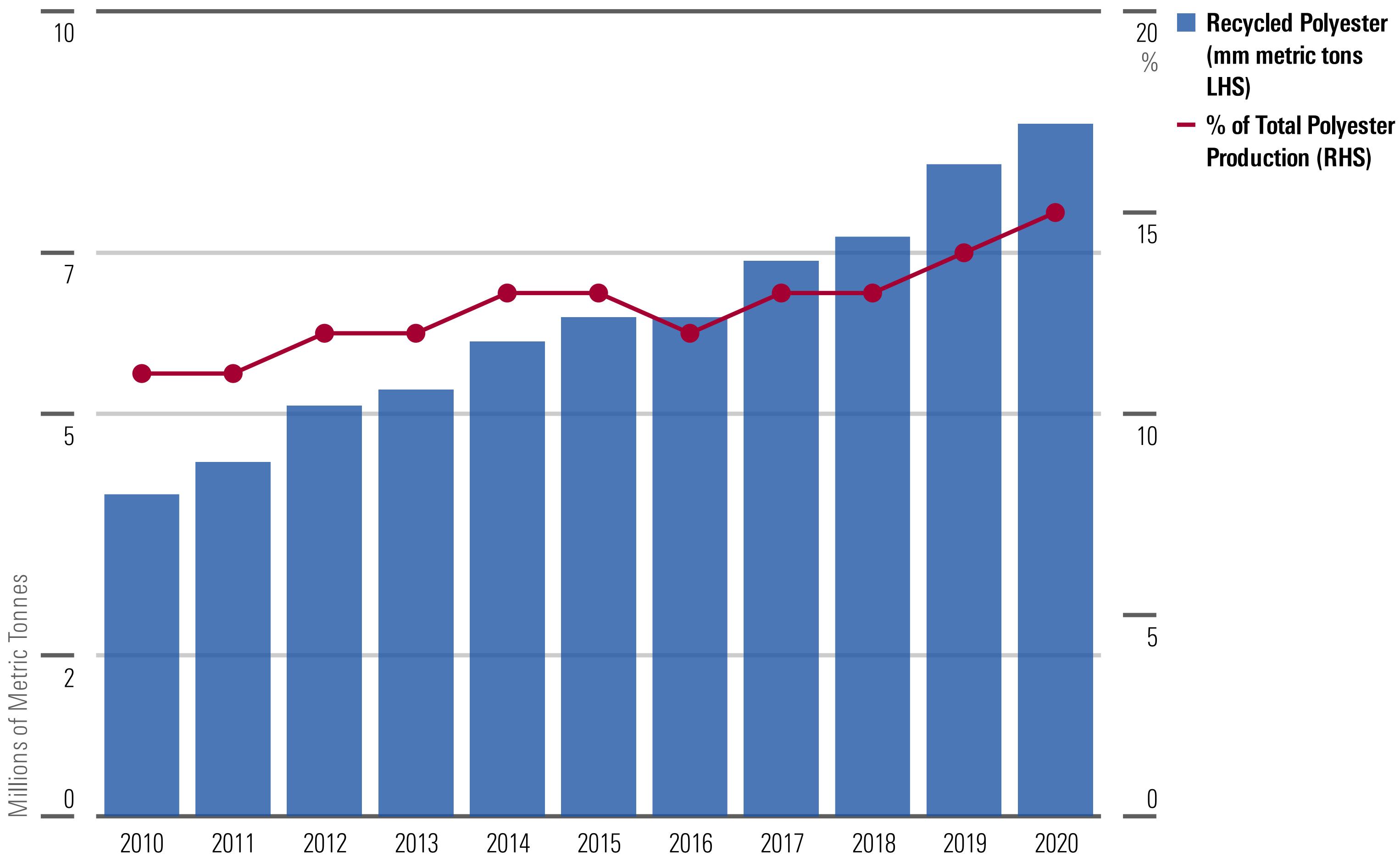
Companies Are Responding by Altering Manufacturing and Supply Bases, but These Efforts Could Boost Costs

In response to environmental risk, fast fashion firms have altered product design and manufacturing to increase use of recycled fibers and build sustainable supply bases. As shown in the chart to the right, recycled polyester—made from PET plastic bottles—has risen to 15% of total polyester production from 11% in 2010. And the market share of total "preferred" fibers (which also includes the production of fairtrade and organic cotton, sustainability-certified manmade cellulosic fibers, and other recycled products) sat at roughly 19% in 2020, per Textile Exchange.

Further company-led efforts are likely to push these shares upward in the future. Fast fashion leaders have outlined targets for 2025, including H&M's goal to use 30% recycled materials across its lineup (from 18% in 2021) and 100% of its products to be designed in a circular manner, while competitor Inditex aims to use 100% recycled or sustainable polyester/linen and has [partnered with sustainable suppliers].

While admirable, these initiatives risk increasing costs. Per a 2019 McKinsey survey of purchasing managers, two thirds of respondents estimated sourcing costs could increase in the low-single-digit percentage range. And a follow-up 2021 study showed that these shifts could exacerbate already challenging supply chain conditions.

Recycled Polyester a Rising Contributor to Total Production



Source: Textile Exchange. Data as of July 1, 2021.

Apparel Manufacturers With Economic Moats Are Best Placed to Share Pain With Suppliers

While we anticipate rising supply and distribution costs as a result of circular economy investments, we don't expect customers to bear the full brunt of increased costs. Even though consumers are increasingly concerned about the industry's environmental impact, it's important to keep this in context; most are still usually unwilling to pay for sustainable products.

Instead, we expect bigger, brand-advantaged players to share some of the increased sustainable sourcing costs with their suppliers. As evidence, the 2019 McKinsey study noted that while companies sourcing more than $1 billion are concerned about costs—some 21% of responding purchasing managers cited it as the primary major hurdle—a much larger 75% of respondents saw availability of material as a bigger challenge. And in 2021, 42% of respondents noted that they planned to share in investments with their suppliers.

In our view, companies with brand-led intangible asset economic moats, resulting pricing power, and potential volume leverage are best placed to share pain with their suppliers to weather this risk. This consists of about two thirds of our relevant apparel coverage, including several wide-moat names outside the fast fashion arena such as Richemont, Hermes, LVMH, and Nike.

Company	Economic Moat
Adidas (ETR: ADS)	Narrow
Burberry Group (LON: BRBY)	Narrow
Compagnie Financière Richemont (SWX: CFR)	Wide
Hanesbrands (NYS: HBI)	Narrow
Hermes International (PAR: RMS)	Wide
Hugo Boss (ETR: BOSS)	Narrow
Industria de Diseño Textil (MAD: ITX)	Narrow
Kering (PAR: KER)	Narrow
Lululemon Athletica (NAS: LULU)	Narrow
LVMH Moët Hennessy Louis Vuitton (PAR: MC)	Wide
Moncler (MIL: MONC)	Narrow
Nike (NYS: NKE)	Wide
Prada (HKG: 01913)	Narrow
Ralph Lauren Corporation (NYS: RL)	Narrow
Swatch Group (SWX: UHR)	Narrow
Tapestry (NYS: TPR)	Narrow
VF Corporation (NYS: VFC)	Narrow

Source: Morningstar. Data as of June 15, 2022.

Apparel Manufacturing and Footwear: Modern Slavery Leading to New Regulation

Despite Myriad Headlines in Recent Years, Modern Slavery Remains a Challenge in Apparel

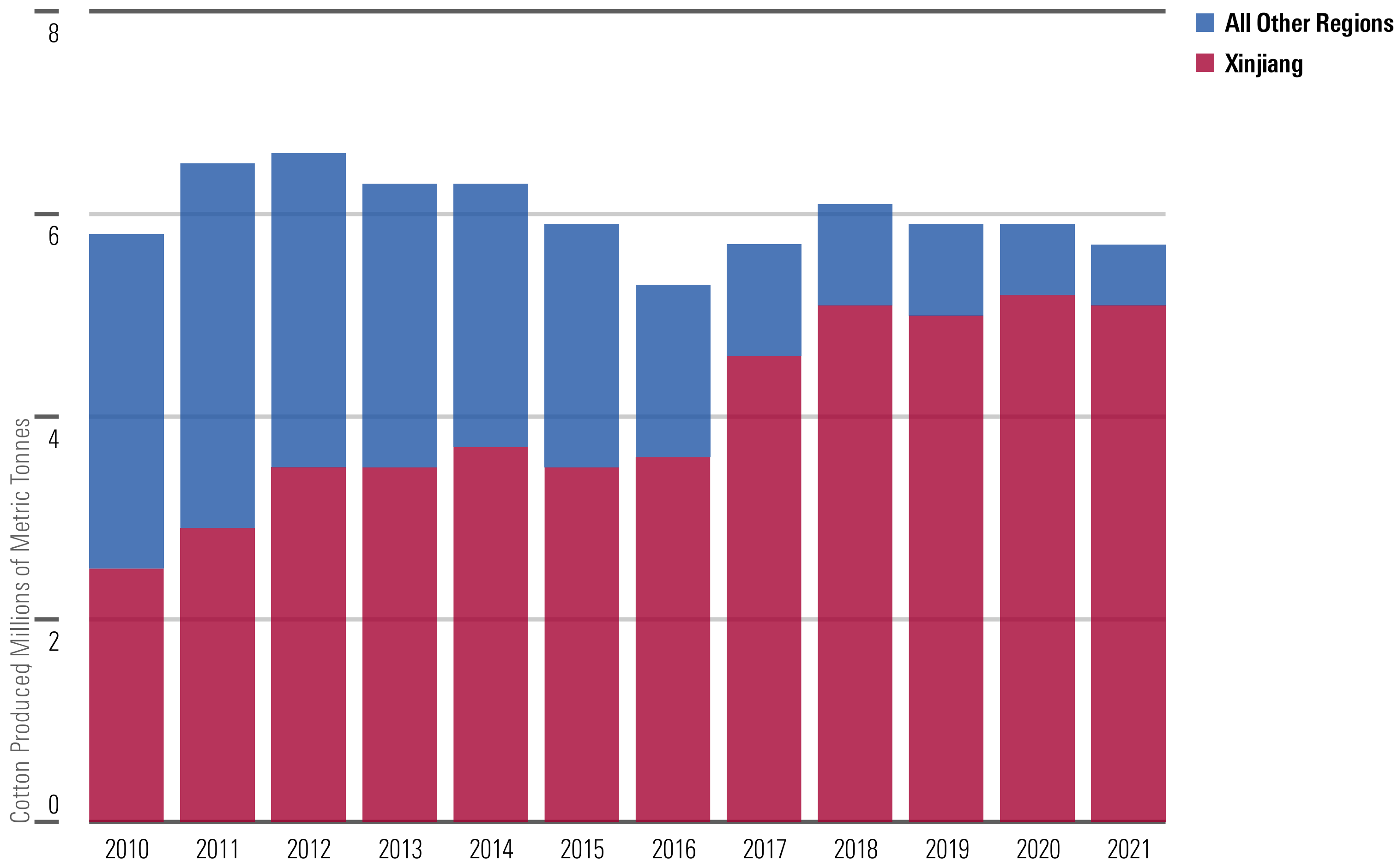
Often garnering headlines, the social issue of human rights is also the most material risk facing apparel companies, according to Sustainalytics. This primarily relates to supply chain challenges rather than company-owned facilities, but the potential risk is typically borne by the firms whose brands are affixed to a label.

Issues such as low wages and modern slavery have impacted areas including Haiti and Bangladesh but recently have been most prominent in the Xinjiang region of China, where reports concerning the local Uyghur population have increased focus on clothing supply chains.

While China is no longer the top producing cotton country, it's still responsible for some 25% of global production, with more than 80% of this cotton now stemming from Xinjiang. And the contribution rises above direct cotton growing; cotton and yarn produced in Xinjiang are used in other key garment-producing countries such as Cambodia and Vietnam. Overall, roughly 16% of cotton clothes on store shelves in the U.S. had fiber from Xinjiang.

It's important to note that labor issues aren't isolated to developing economies. Recent concerns have arisen in Leicester, U.K., related to underpayment and poor conditions for suppliers to apparel brand Boohoo.

China's Cotton Production Not Growing, but Xinjiang Now the Vast Majority



Source: China National Bureau of Statistics.Data as of June 15, 2022.

New Regulation Seeks to Reduce Human Rights Violations in the U.S. and Europe

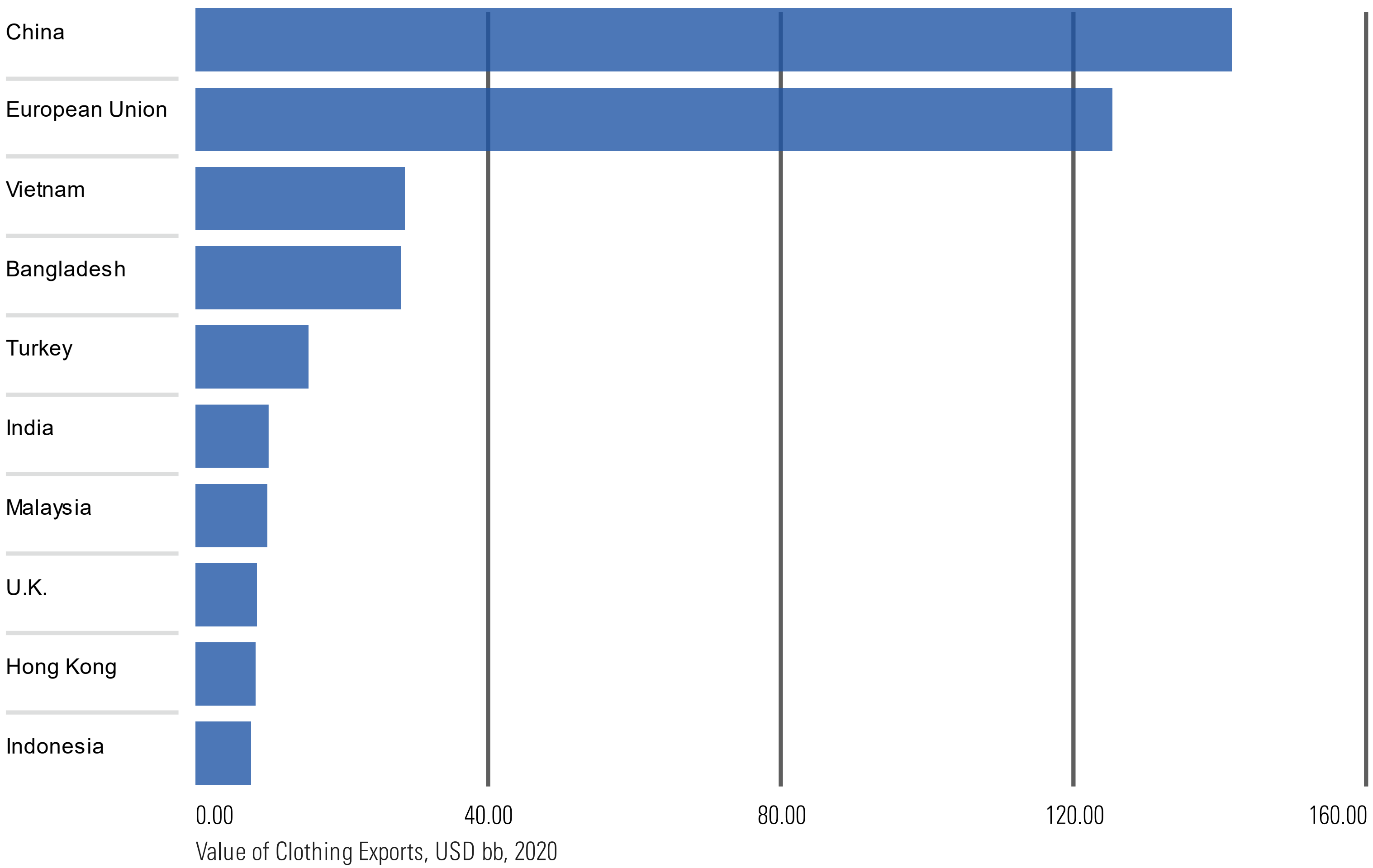
We've seen recent regulatory pressure to deal with ongoing human rights issues, which could increase companies' costs or negatively impact revenue.

In June 2022, the Uyghur Forced Labor Prevention Act came into effect in the U.S. Under this rule, any imports from Xinjiang will be presumed to have been made with forced labor unless the responsible company can provide clear and compelling contrary evidence. Similarly, the European Commission is set to propose in September 2022 an instrument to combat forced labor in the EU.

In response, companies like H&M, Nike, and Burberry plan to end their direct Xinjiang sourcing. But this could lead to upfront investment, higher costs, and shipment delays.

In addition, these moves have put the companies' revenue in China itself at risk. According to the South China Morning Post, some Chinese consumers launched a boycott in early 2021 of international brands that committed to reducing their Xinjiang sourcing, and H&M saw a 25% decline in its Chinese sales from 2020 to 2021. Historically, these types of issues have been addressed by companies apologizing and changing their behavior, but in this case, a public apology to appease Chinese consumers may create controversies with consumers elsewhere.

China Remains the World's Leading Clothing Exporter



Source: World Trade Organization. Data as of August 4, 2021.

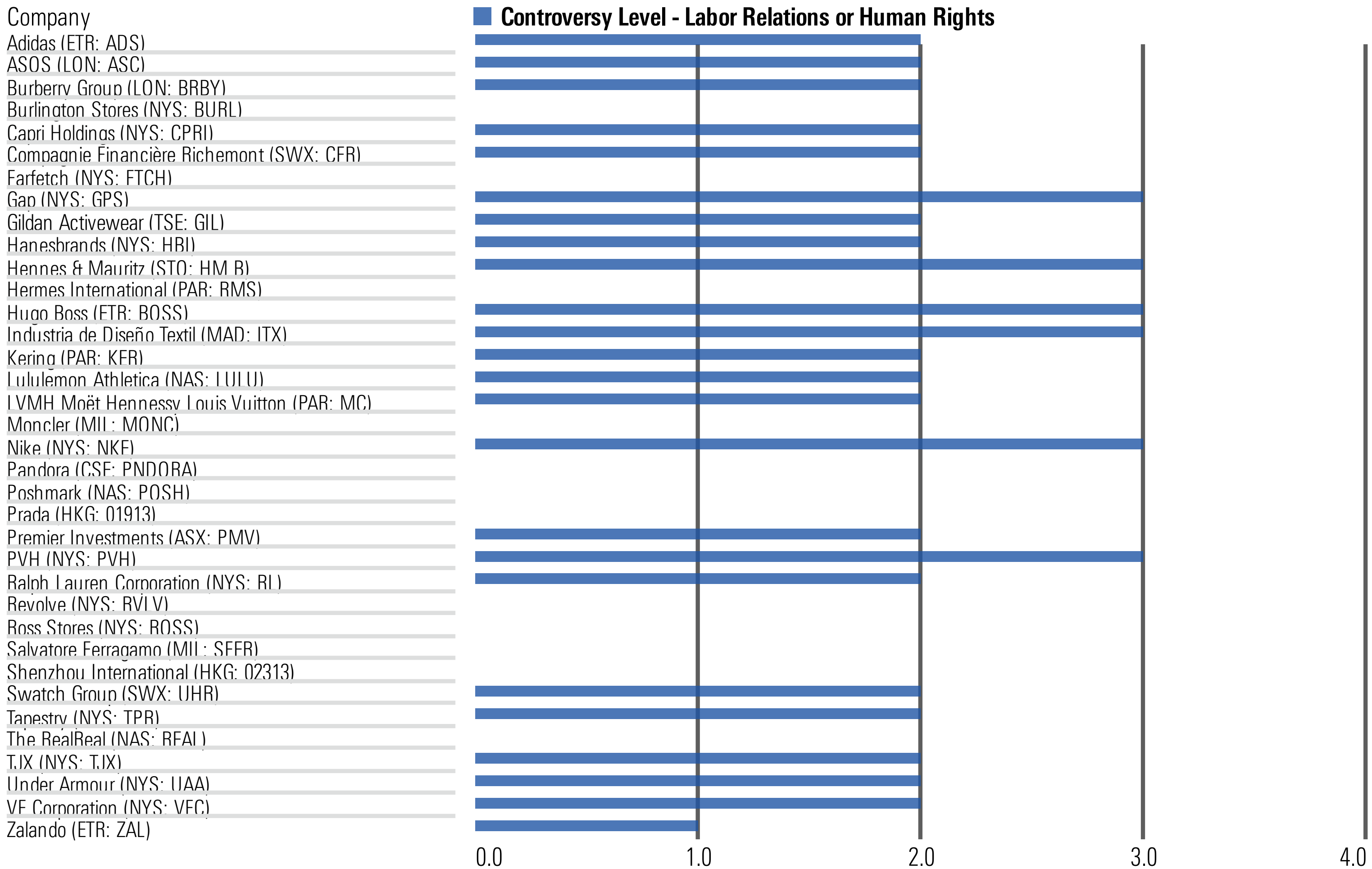
Companies Increasingly Auditing and Managing Their Supply Chains, but Controversy Remains

While human rights issues remain a major risk, active engagement with companies seems to be driving some change. Sustainalytics, for instance, engages with a handful of apparel companies to measure six key performance indicators relating to governance and reporting, responsible purchasing practices, wages and income, stakeholder engagement, worker impact, and auditing and grievance mechanisms. Against this backdrop, the average management score has risen to 14.8 from a 2021 benchmark of 14.0. However, there's still a large runway for further gains; the maximum score is 54.0.

Per Sustainalytics, audits are the main tool used by companies to monitor their sites or supply chains. But audits alone can fail to reveal a full or true picture of working conditions, leading to concerns that companies are still not detecting modern slavery violations.

Highlighting this concern, of the 36 companies in our apparel, luxury, footwear, and retail coverage, 25 have faced a controversy related to human rights, with six involved in an event with a category level of 3 (out of 5, with 5 denoting those that have the most severe impact to stakeholders). Although we anticipate companies can manage these risks over the long term, we expect short-term volatility in costs and supplier relations to remain.

Most Apparel and Luxury Companies Under Coverage Face Some Level of Human Rights or Labor Controversy



Source: Sustainalytics. Data as of June 15, 2022.

Luxury Goods: Rising Resale Channel Presents Increasing Risk of Counterfeits

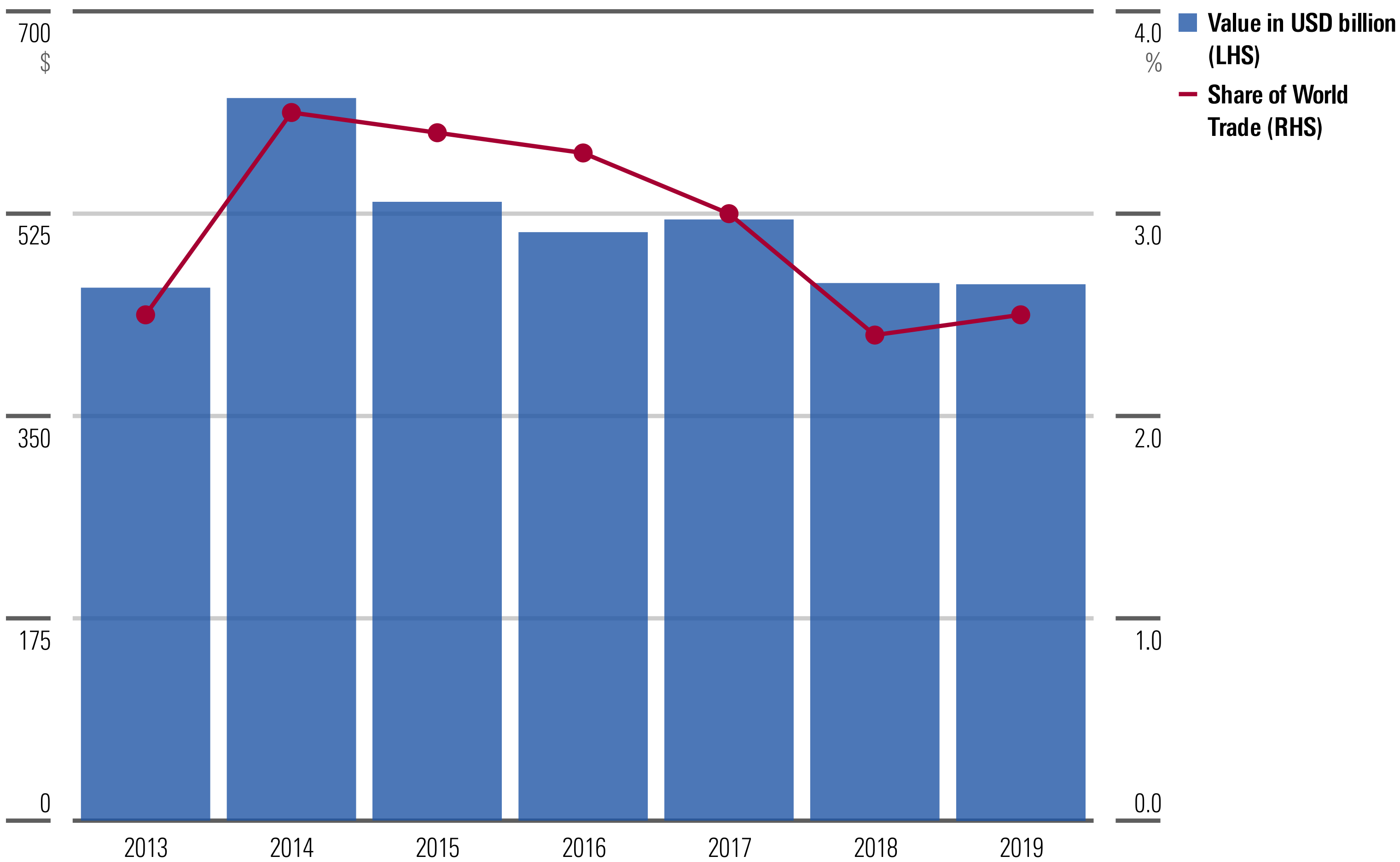
Growth of Online Resale Could Increase the Ongoing Threat of Counterfeit Goods

Luxury apparel companies in general face relatively low ESG risk, with nearly every firm in our coverage assigned a Low ESG Risk Rating (only Burberry garners a different category—Negligible).

But a shift in the marketplace to sell a greater amount of product online, including through resale channels such as Poshmark or The RealReal, could heighten risk exposure. As companies enter the resale market, the issue of ensuring that intellectual property is upheld and counterfeit fare doesn't proliferate becomes an increased concern, particularly for luxury firms that stock premium products to differentiate themselves from other apparel items.

While certainly not a new issue, fake products—particularly in China—remain a nuisance for luxury players. According to the Organisation for Economic Co-operation and Development, or OECD, the trade of counterfeit and pirated goods amounted to 2.5% of world trade in 2019 and 5.8% of illicit goods were imported to the EU in 2019—figures that had declined in recent years but picked up again in 2019.

Counterfeit and Pirated Goods Remain Sizable Portion of Global GDP



Source: OECD. Data as of June 22, 2021.

Luxury, Footwear, and Apparel Manufacturers Responding to Counterfeit Risk Through Novel Technology

Within the OECD's data, footwear, clothing, and handbags together made up the majority of seized import value in 2019—not surprising given these products' ethereal sales prices and lofty gross margins.

As the share of the resale market continues to increase (we expect a 9.2% CAGR through 2031, surpassing our forecast for 2.9% annual growth for the overall retail apparel industry), we expect to see an increase in IP controversies, which could potentially lead to a decrease in brand trust by consumers.

In response, companies such as LVMH, Prada, and Richemont are turning to blockchain technology to authenticate products, RFID tagging to track counterfeits, and legal action. Similarly, online marketplaces, like The RealReal and Poshmark, are also investing in their own in-house authentication services. These efforts are necessary to stave off brand reputation damage and keep anti-counterfeit litigation expenses under control.

However, a large portion of counterfeits are intentionally purchased—some 60% in the U.K.—likely in lieu of authentic mid-priced luxury items. As such, while all luxury companies aim to eliminate consumer-damaging fraud, middle-tier firms may be the most exposed to the issue.

Apparel, Luxury, and Footwear Are the Majority of Seized Counterfeit Goods

Category	%
Footwear	25.00
Clothing, knitted or crocheted	18.00
Articles of leather; handbags	14.00
Electrical machinery and electronics	9.00
Perfumery and cosmetics	9.00
Toys and games	7.00
Watches	7.00
Jewellery	4.00
Optical; photographic; medical apparatus	3.00
Vehicles	2.00
Clothing and accessories, not knitted or crocheted	2.00

Source: OECD. Data as of June 6, 2022.

Apparel Manufacturing and Apparel Retail: Human Capital Management Critical, but Gender Diversity Is Strong

Apparel and Luxury Goods Manufacturers Face Relatively Limited Human Capital Risk

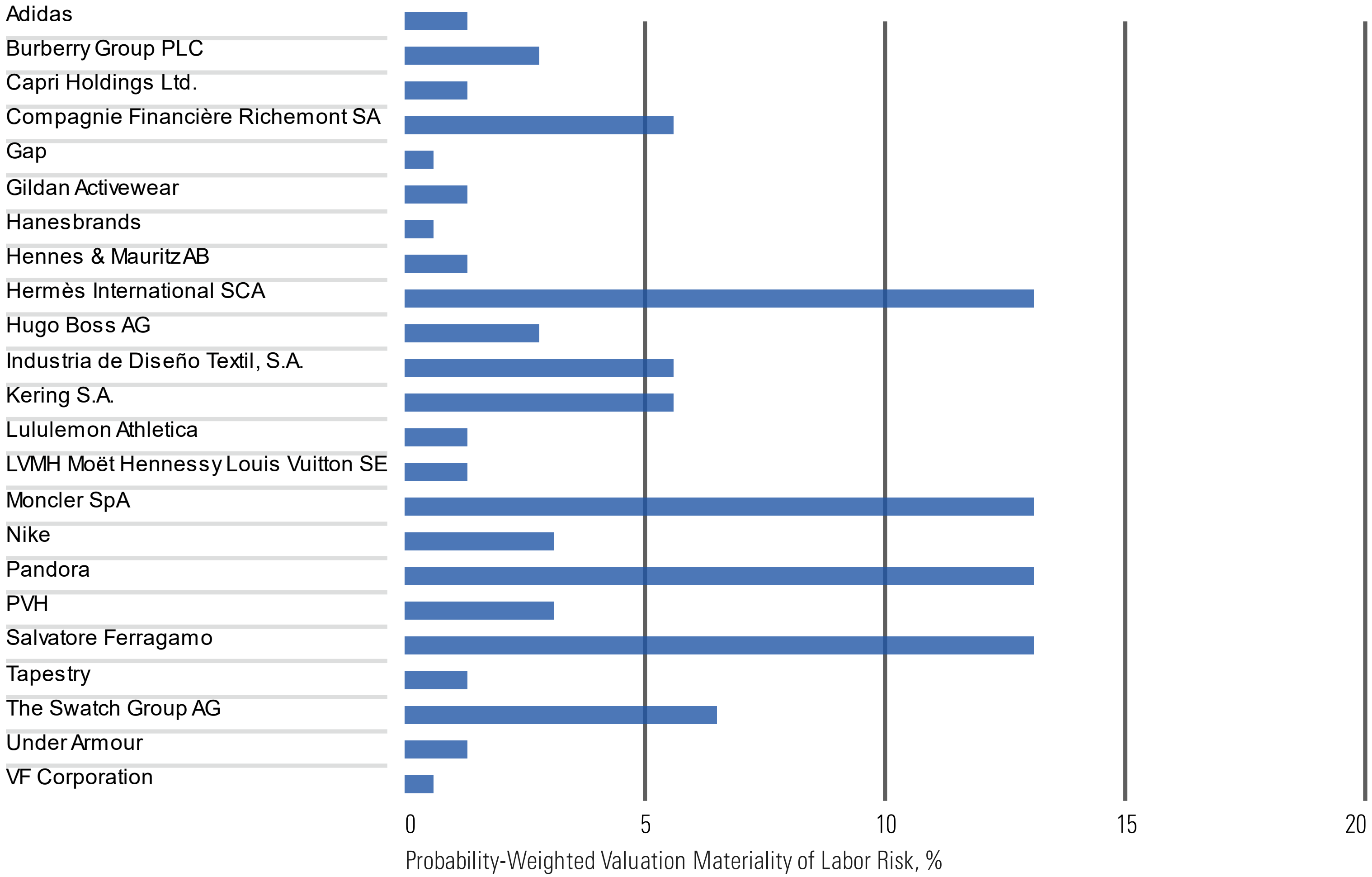
Labor management is a critical component of the operating model for an apparel manufacturer, and any associated retail store network. To measure the risk that human capital poses to an industry, we outlined four key drivers in an October 2021 paper: labor intensity, the required skill of employees, the propensity for strikes, and gender diversity, particularly within management ranks.

Using this guide, broadline apparel retailers that we cover—particularly H&M and Inditex—feature a high degree of labor intensity, offset by relatively low levels of required labor skill, by our estimates.

Luxury clothing manufacturers face a similar human capital risk—equally garnering a risk exposure of 4 from Sustainalytics—but for different reasons. These companies are typically more reliant upon skilled artisans and employees rather than a sheer number of retail workers.

Nonetheless, we don't estimate substantial challenges to stem from human capital risks in these companies' base operations. While we estimate a range of probabilities and associated materiality related to labor relations, several of the firms outsource much of their production, which leads to lower probability-weighted valuation materiality.

We See Relatively Low Levels of Valuation Risk From Apparel Firms' Human Capital Risk



Source: Morningstar. Data as of June 20, 2022.

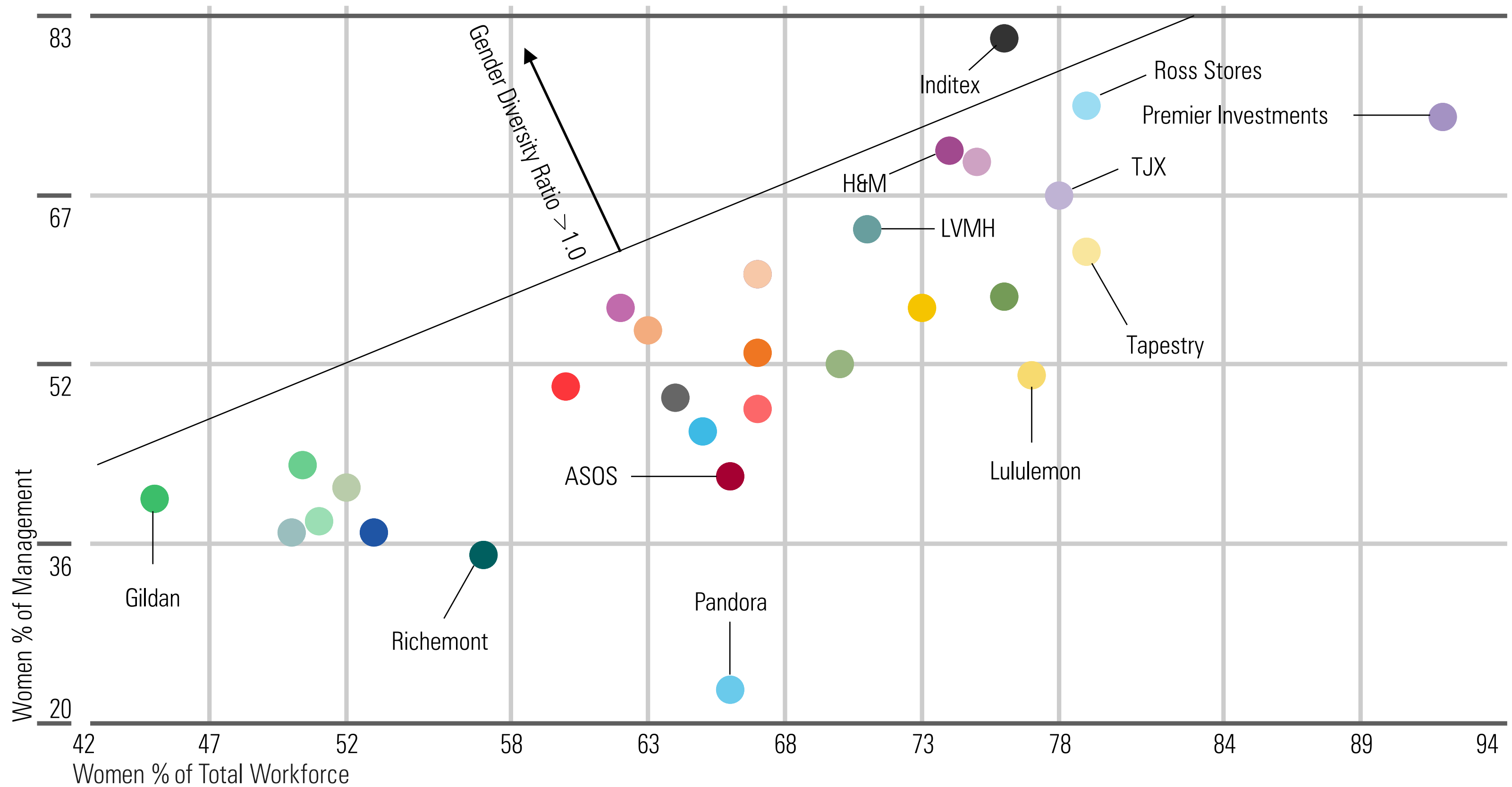
Human Capital—Diversity, Equity, and Inclusion Focus a Critical Lens

Beyond base-level labor intensity and skill, another important consideration in measuring human capital risk is gender diversity.

We observe that gender diversity correlates with lower employee turnover, but not in isolation. Instead, we find that the ratio of females as a portion of management to total female workforce participation is a critical test; it's not enough to hire a diverse employee base, it's also necessary to ensure upward mobility. We refer to this metric as the "gender diversity ratio."

Within the relevant 30 apparel and luxury goods companies we cover (that is, excluding online retailers), we find that most have a lesser percentage of female representation in management than in the overall workforce, with an average gender diversity ratio of 0.80. Nonetheless, this ratio far surpasses the global average we observe of 0.48, and many individual companies report strong gender diversity ratios, including Inditex (the only firm in this cohort with a gender diversity ratio greater than 1.0), H&M, and LVMH. We believe this will lead to lower risk of outsized turnover, all else equal.

Nearly All Apparel and Luxury Manufacturers Have Less Women in Management Than Their Total Workforce



Source: Company filings, Morningstar. Data as of June 15, 2022.

Stock Picks

We See Undervalued Opportunities in Mainline, Luxury, and Apparel Retail

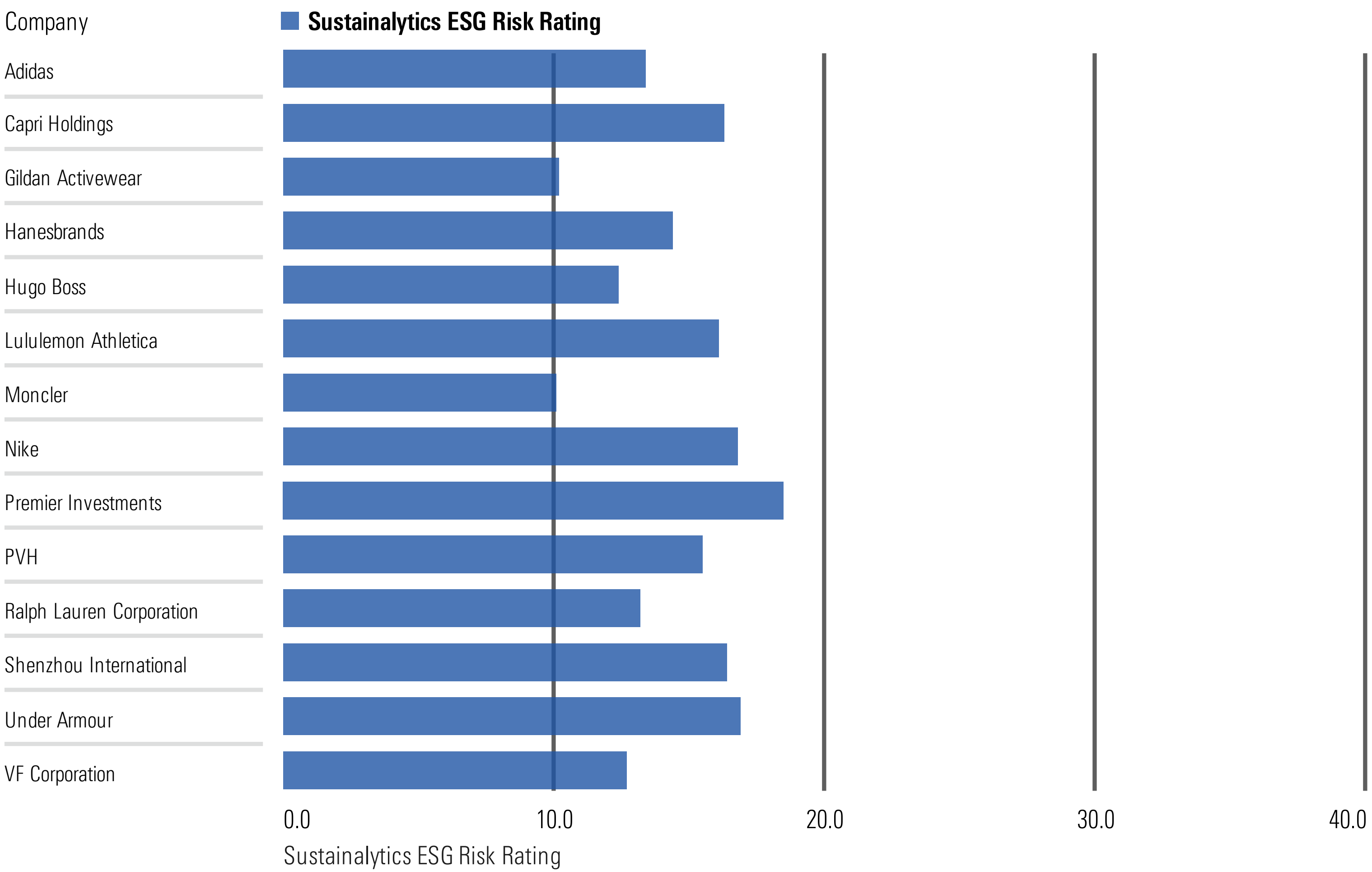
Company & Ticker	Economic Moat	Sustainalytics ESG Risk Rating		Fair Value	Price	P/FV	Uncertainty	Morningstar Rating	Commentary
Compagnie Financière Richemont CFR	Wide	Low	CHF	123.00	102.80	0.84	High	★★★★	The recent share price pullback presents an interesting opportunity to build a position in this high-quality company. We expect ongoing strength of the group's jewelry brands and structural growth in demand, driven by—among other factors—growth in branded jewelry versus unbranded alternatives.
Gap GPS	None	Low	USD	26.00	8.77	0.34	High	★★★★★	Still recovering from the effects of the pandemic, we believe Gap is poised for a turnaround as its plan to invest in its brands, e-commerce, and supply chain comes to fruition. We believe Old Navy's brand, profitability, and low-price, off-mall model are particularly underappreciated.
Hanesbrands HBI	Narrow	Low	USD	26.00	10.49	0.40	Medium	★★★★★	We think the market has been overly focused on short-term issues, such as the pandemic and supply chain challenges, and is underestimating the popularity of Champion, the company's improved mix shift, and its free cash flow generation.
Industria de Diseño Textil (Inditex) ITX	Narrow	Low	EUR	32.00	21.91	0.68	Medium	★★★★	Inditex benefits from an economic moat because of its intangible assets and cost advantages as a result of its scale and fast supply chain. With its low-single-digit penetration rate of global apparel sales, we believe Inditex is well positioned to capture market share from weaker players, and the company was proactive and ahead of most peers in transitioning business online.
Nike NKE	Wide	Low	USD	133.00	103.25	0.78	Medium	★★★★	Wide-moat Nike's powerful brand and digital strategy position it well despite some short-term issues. Importantly, while the firm tends to be a lightning rod for controversy due to its high visibility, and the company has faced financial ramifications from labor issues in China, we don't believe the ESG risks that affect Nike will have a material long-term impact on its investment prospects.
Shenzhou International 02313	Narrow	Low	HKD	171.00	93.30	0.55	Medium	★★★★★	We have a strong conviction in Shenzhou's ability to continue serving as the dominant supplier for global apparel giants. The firm is well positioned for growth, thanks to the combination of its strong R&D capabilities and entrenched relationships with leading brands like Adidas and Nike.
The RealReal REAL	None	Medium	USD	13.30	2.61	0.20	High	★★★★★	The RealReal is the largest luxury resale platform in the U.S., generating $1.5 billion in 2021 gross merchandise volume and addressing a niche that had previously been serviced by inefficient upscale boutiques and local pawn shops. We view the company as well positioned to capture more than its fair share of industry growth, as we consider the firm's first-mover advantage and the lack of a domestic pure play competitor.

Source: Morningstar. Data as of June 29, 2022.

Appendix

Apparel Manufacturers Generally Assigned Low ESG Risk Ratings

Apparel Firms Face Relatively Low ESG Risk



Source: Sustainalytics. Data as of June 15, 2022.

- Despite some differences among each name, ESG risk is rated Low for all apparel manufacturers. The threshold for a Medium ESG Risk Rating is a score above 20.0.

- Human capital and supply chain human rights are the most common material ESG issues, or MEIs, while E&S impact of products and services—related to the environmental footprint of clothing manufacturing—is another key issue.

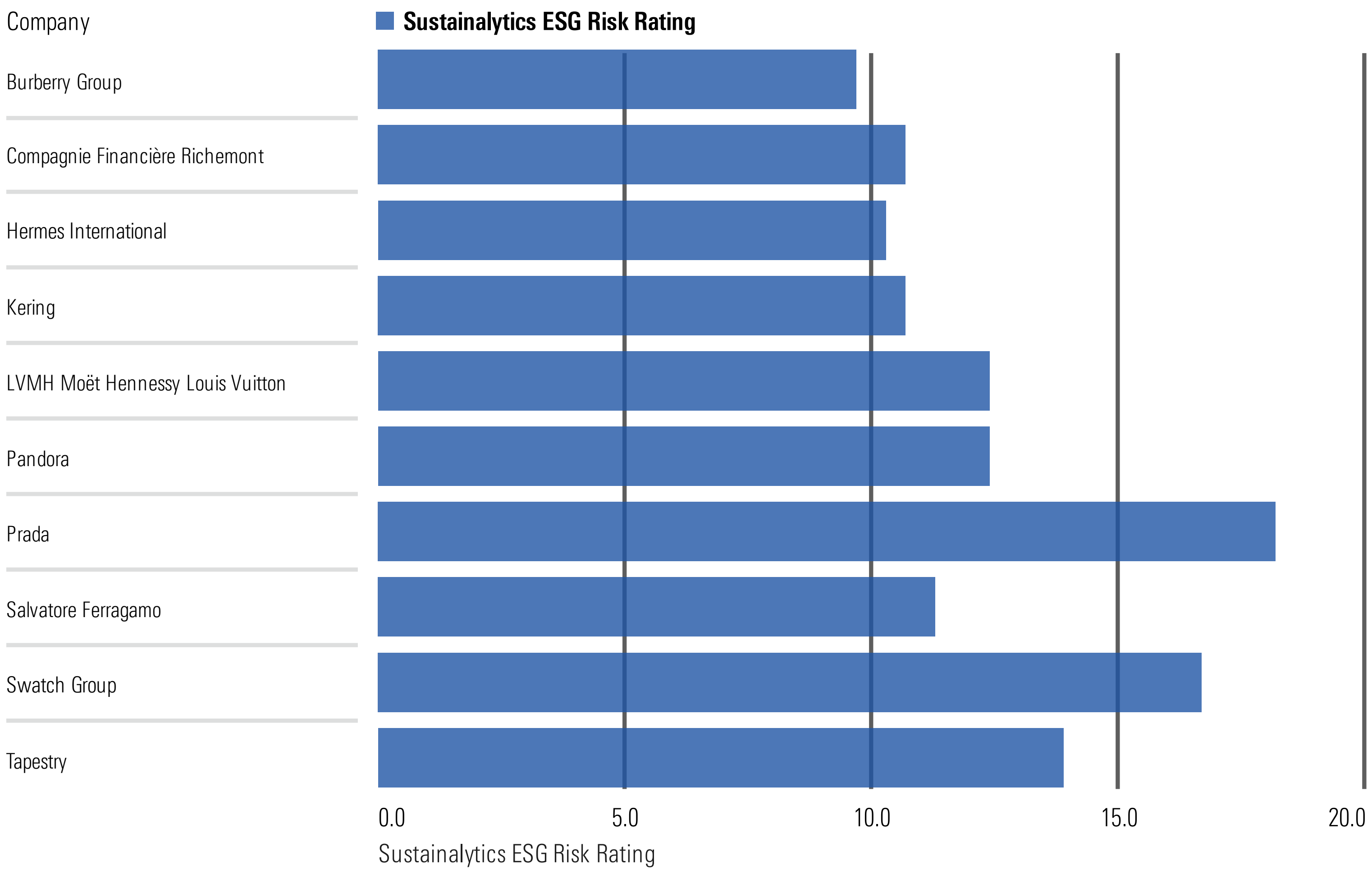
- Under Armour and Australia's Premier Investments are still assigned Low ESG Risk Ratings, but face slightly higher total ESG risk stemming from non-GRI compliant disclosures, limiting their management classification to Average.

- Gildan and Moncler garner the lowest ESG risk scores among this group, owing to strong management of primary issues and transparent disclosures.

SUSTAINALYTICS ESG RISK RATINGS

Luxury Goods Makers Also Face Relatively Low ESG Risk

Luxury Manufacturers Face Low Levels of ESG Risk Overall

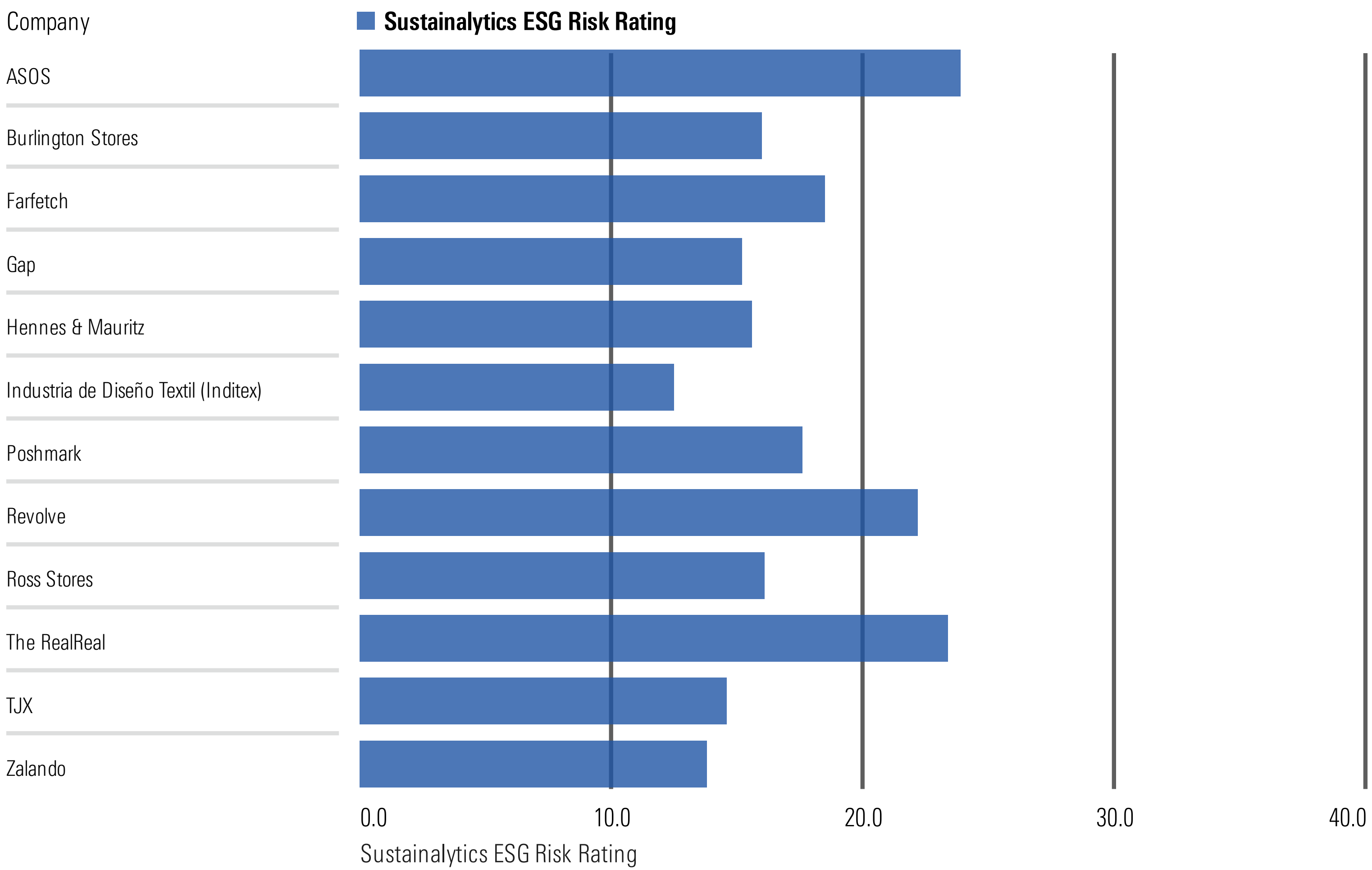


Source: Sustainalytics. Data as of June 15, 2022.

- Similar to mainline apparel manufacturers, luxury goods makers face relatively low ESG risk.
- The material ESG issue of human capital is the most commonly cited risk, alongside human rights and E&S impact of products and services.
- Burberry is assigned a Negligible ESG Risk Rating. This is a result of strong management of its primary ESG issues, and explicitly linking management pay to ESG performance targets.

Apparel Retailers — Particularly Those Online — Face Slightly Higher ESG Risk

Apparel Retailers Garner Slightly Higher ESG Risk Ratings Than Manufacturers

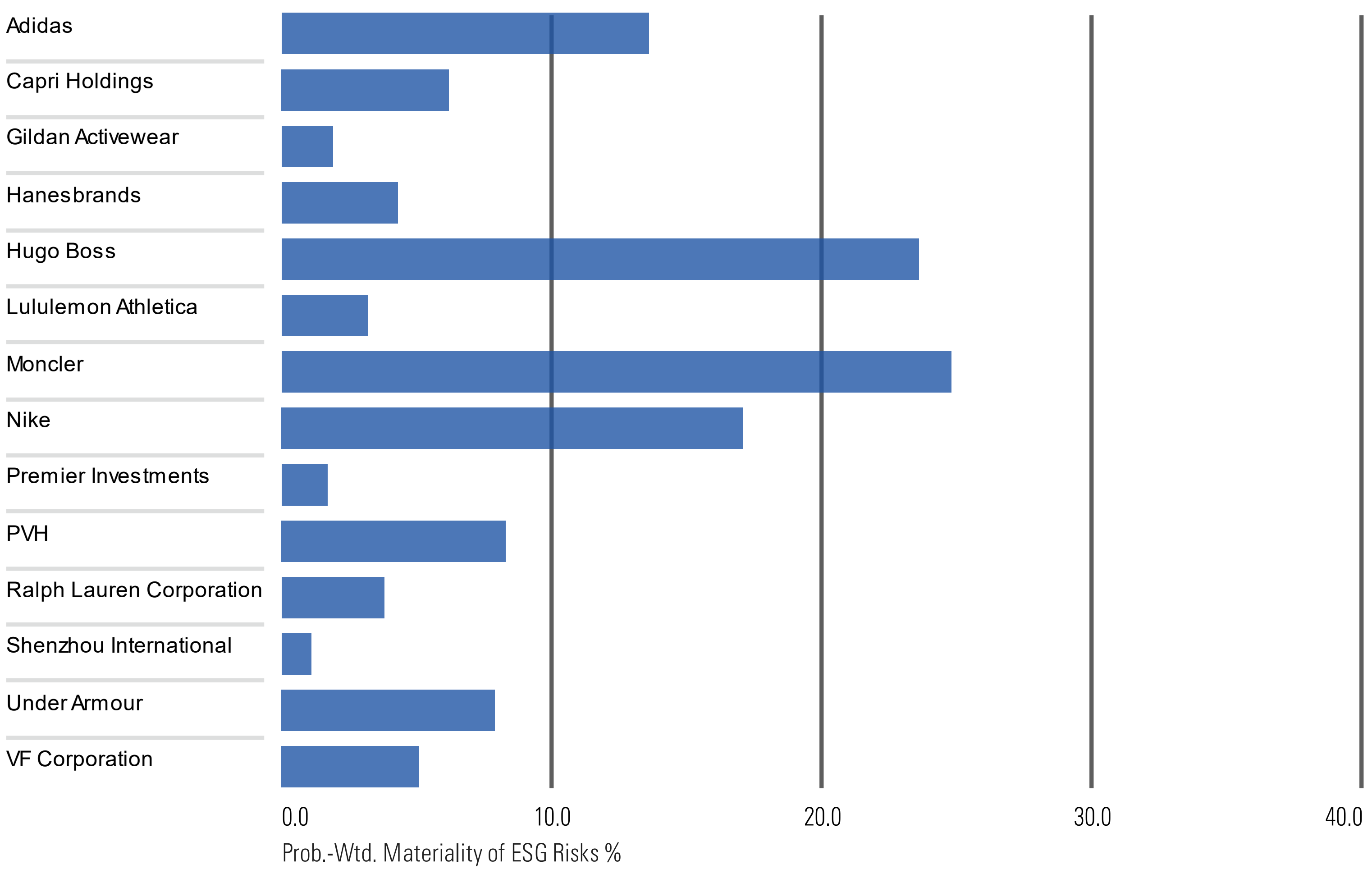


Source: Sustainalytics. Data as of June 15, 2022.

- Revolve, ASOS, and The RealReal all face Medium ESG risk, compared with low ratings for remaining clothing retailers, given slightly higher exposure to key issues compared with peers.
- For fast fashion players, and other dual apparel manufacturers and retailers, human rights issues in the supply chain and human capital are the most pertinent risks, though the E&S impact is again a focal point.
- Leading firm Inditex faces the lowest ESG risk in this cohort, stemming from strong management of key risks and corporate governance overall.

Some Differences for the Probability and Materiality of ESG Risks for Apparel Manufacturers

Our Equity Analysts Estimate Different Potential Valuation Impacts Across the Apparel Landscape



Source: Morningstar. Data as of June 15, 2022.

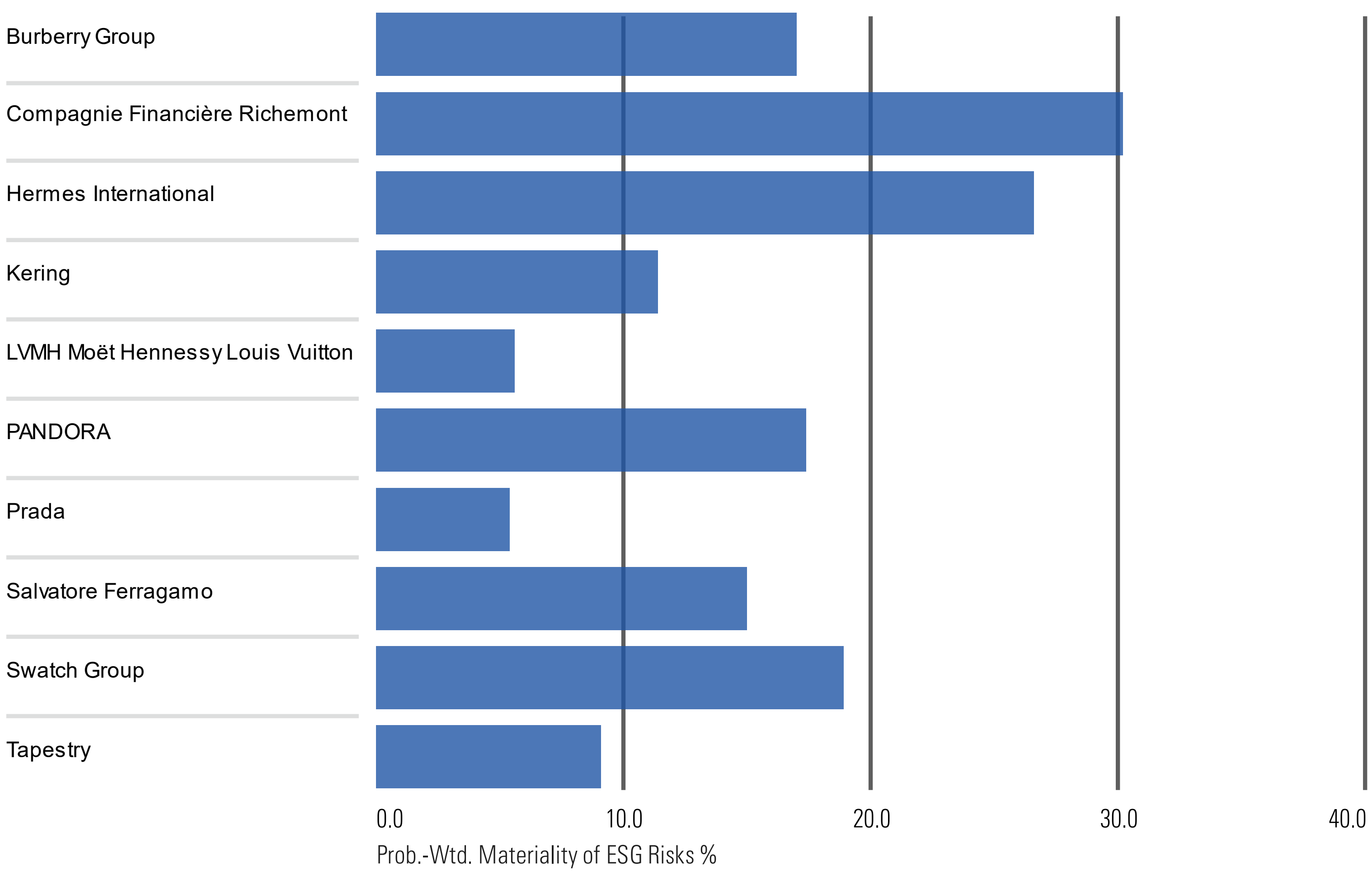
- Our equity analysts' estimated probability-weighted materiality of ESG risks differs among apparel manufacturers. (For more details on how these figures are calculated, please see our December 2020 special report Equity Research ESG Risk Integration—Initial Takeaways, which outlines the average cumulative probability-weighted valuation materiality of ESG risks per company at 10.8%.)

- Hugo Boss and Moncler face the highest risk, given their near-luxury status leading to potential concerns from taxation and anti-competitive concerns, and reliance upon labor craftsmanship and brand ambassadors.

- Our analysts see higher risks in footwear makers Nike and Adidas as well, owing to myriad concerns around labor relations and supply chain human rights practices. In particular, Adidas has become entangled in a forced labor controversy in China that has caused a consumer backlash in the country, leading to lost market share in 2021. While we anticipate the impact will be short-lived, any lasting effects could be damaging, as China is the fastest-growing sportswear market in the world.

Luxury Firms See a Dispersion of Estimated Valuation Impacts From ESG Risks

Luxury Manufacturers Also Face a Wide Range of Potential Valuation-Related ESG Risks



Source: Morningstar. Data as of June 15, 2022.

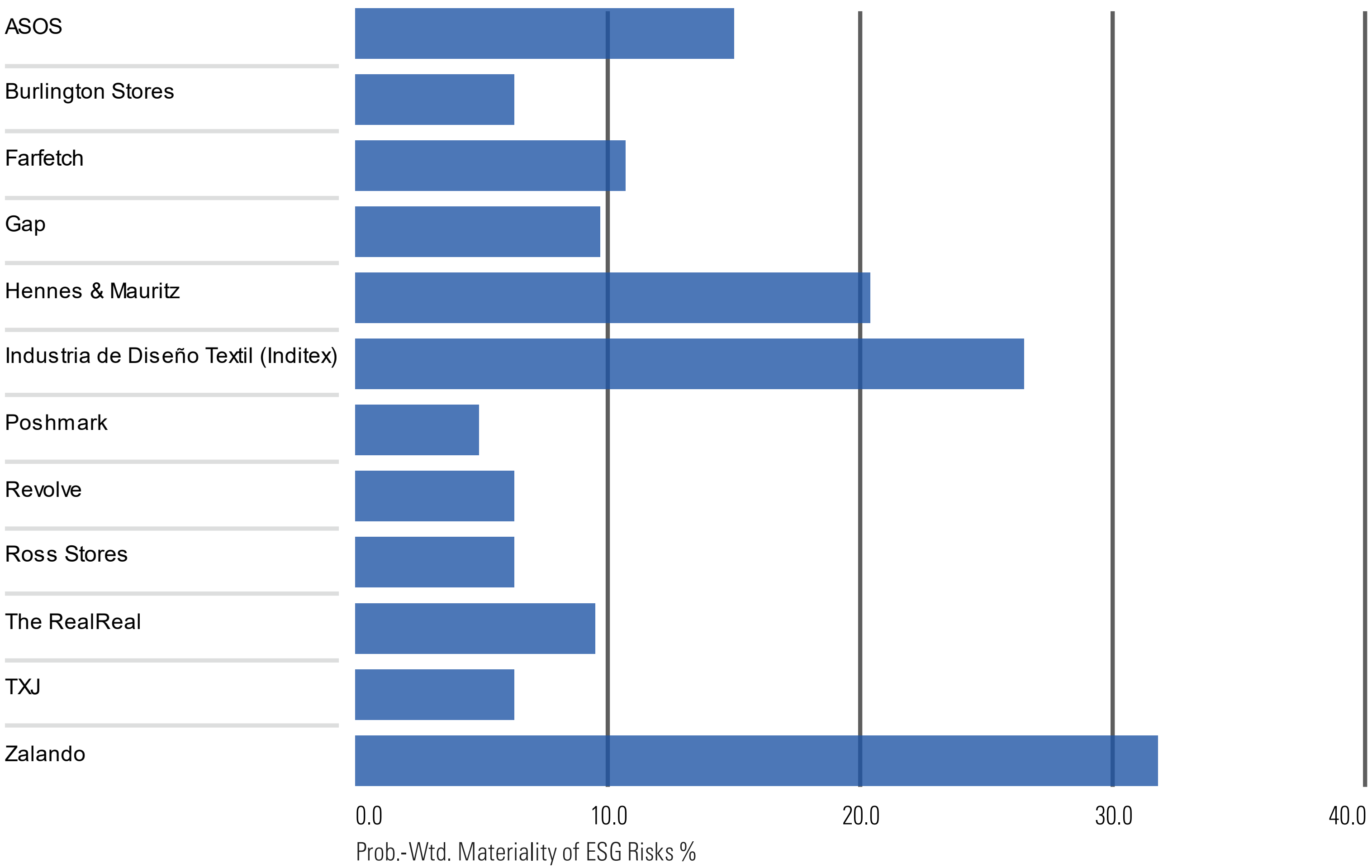
- Our equity research team sees a wide range of potential probability-weighted ESG risk outcomes for luxury goods makers, owing to each company's varying use of higher-risk raw materials (such as diamonds) and the contribution of other business lines that face lower risk, such as LVMH's diversified offerings.

- Richemont faces the highest amount of cumulative risk, per our analysts' estimates. This is a result of the firm's reliance on artisan workers for its luxury watches and jewelry, as well as sourcing raw materials—including diamonds—that are frequently linked to human rights violations. The firm's lack of disclosure surrounding its suppliers' locations also weighs on our estimated probability-weighted risk materiality.

- Conversely, while Swatch's watch manufacturing also requires artisan know-how, its business is less raw-materials intensive (its Harry Winston brand uses diamonds but is only around 8% of revenue). And fellow jewelry maker Pandora does not use any natural diamonds and is shifting toward fully recycled silver, which limits sourcing controversies.

Our Analysts' Assessment of ESG Risks in Apparel Retail Suggests Limited Risk, With Some Exceptions

Our Equity Analysts See Relatively Limited ESG Risk Materiality in Apparel Retailers



Source: Morningstar. Data as of June 15, 2022.

- We see generally limited ESG risk materiality across the apparel space, albeit with pockets of concern.
- Fast fashion players H&M and Inditex are on the high end of this range, owing to environmental concerns alongside additional risks from data privacy and security.
- Zalando faces the greatest ESG risk materiality among this group, stemming from its need for highly skilled IT staff to maintain proper data management, logistics, and web development.

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