

## SUSTAINABLE BUSINESS MODELS IN THE FASHION INDUSTRY: BETWEEN INNOVATION AND SOCIAL RESPONSIBILITY

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**Abstract:** Sustainability, the circular economy, and sustainable development are terms that have become increasingly prevalent in recent years, used by policymakers, the business environment, and individual consumers alike, due to the impact of these concerns on the more efficient use of resources, quality of life, and the benefits they bring to humanity both in the short and long term. Sustainability in the fashion industry has become an increasingly discussed topic in contemporary times, as consumers grow more aware of the environmental impact of clothing and of the responsibility to protect nature and limited resources. The objective of this paper is to investigate the extent to which sustainability reporting by key actors in the fashion industry reflects the genuine integration of sustainable development principles into their business strategies. The research is guided by the following research question: to what extent do sustainability practices and communication indicate an authentic transition toward a responsible business model, or, conversely, reproduce forms of superficial sustainability primarily oriented toward reputation management? The paper adopts a qualitative, theoretical–empirical approach, based on a comparative analysis of official sustainability reports published by selected companies in the fashion industry. This analysis is supported by a conceptual framework integrating academic literature on sustainability, corporate social responsibility, greenwashing, and international reporting standards. The methodology consists of a content analysis aimed at identifying and comparing the core elements of sustainability discourse within each company, with particular emphasis on the coherence of objectives, transparency of indicators, alignment with global initiatives (such as the SDGs or GRI), and the depth of implemented measures. The case study highlights similarities in the language used and the general commitments declared, while also revealing significant differences in terms of clarity, applicability, and the actual impact of these initiatives. The research findings provide a critical perspective on how companies use sustainability reporting both as a strategic tool and as a means of legitimization in the eyes of consumers and investors. The conclusions suggest the need for stricter reporting standards and independent monitoring of progress, while also emphasizing the importance of consumers' critical literacy in evaluating the sustainability commitments promoted by fashion industry brands.

**Keywords:** Sustainability; Fashion Industry; Financial and Social Responsibility; Financial Reporting; Sustainable Business

**JEL Classification:** L67; F14; Q01; M00

## 1. Introduction

In a world with limited natural resources and increasing pressure on ecosystems, the adoption of a circular economic model and sustainable private, public, and organizational behaviors has become an urgent necessity.

Every sector of the national and global economy contributes, to varying degrees, to economic growth; however, industries differ significantly in their levels of resource consumption and waste generation. The textile and fashion industry occupies a leading position in terms of resource use (materials, energy, and water) and waste generation, both during the production phase and in the pre-consumption and post-consumption stages (Shamsuzzaman et al., 2025; Niinimäki et al., 2020). Historically characterized by a linear “take–make–dispose” model, the industry exerts intensified pressure on natural resources and is responsible for a significant share of global greenhouse gas emissions, water pollution, and textile waste generation.

Within this disruptive context, the integration of the United Nations Sustainable Development Goals (SDGs) and Environmental, Social, and Governance (ESG) criteria has become not only an ethical requirement but also a new framework for corporate legitimacy. This paper positions itself at the intersection of strategic management and corporate social responsibility, examining how key market actors—segmented by business models (Luxury, Mass Market, Fast Fashion, and Ultra-Fast Fashion)—respond to sustainability challenges.

Sustainability in the fashion industry has become an increasingly prominent concept in public discourse. However, sustainability in this sector extends beyond circular economy practices, recycling, eco-design, and the use of environmentally friendly materials. It also involves changes in consumer behavior, shifts in perceptions regarding environmental responsibility, and the development of broader environmental awareness. Education, behavioral psychology, innovation, and social responsibility play a crucial role in driving this paradigm shift.

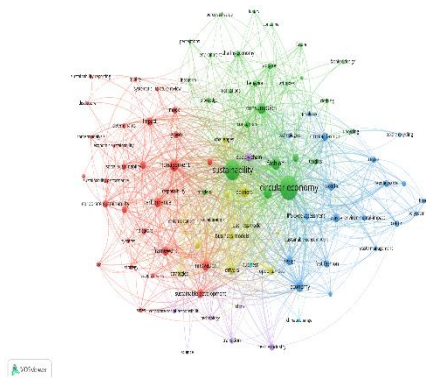
The environmental impact of the textile and fashion industry is well documented in both statistical research and academic literature (Gazzola et al., 2020; Gupta et al., 2022; Shamsuzzaman et al., 2023). Annually, over 100–150 billion garments are produced worldwide, consuming approximately 93 billion cubic meters of water, generating around 1.2 billion tons of CO<sub>2</sub> emissions, and releasing an estimated 500,000 tons of fibers and microplastics into the oceans. Of the total volume of clothing produced globally, approximately 92 million tons of textile waste accumulate at various stages of the product life cycle. Only 15–20% of this waste is collected for recycling or reuse, while nearly 80% ends up in landfills or is incinerated, resulting in energy and raw material losses and contributing to an increased carbon footprint.

## 2. Literature review

The review of the specialized literature must address several objectives, including the evaluation of existing academic research within the chosen field of study, the synthesis of identified information, critical analysis, and the structured organization of the collected sources. As a first step, a preliminary analysis was conducted using the Web of Science (WoS) database, focusing on the keywords relevant to this study. To narrow the search to the domains of interest, the WoS query included keywords

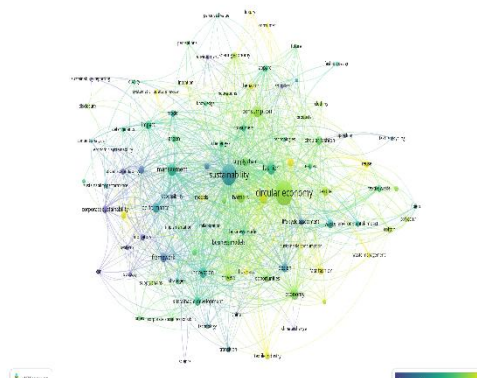
associated with sustainability in the fashion industry. Based on the objective of evaluating the literature indexed in the Web of Science database, the search using keywords such as sustainability, circular economy, social responsibility, and the fashion industry resulted in the identification of over 393,000 sources. Of these, more than 304,500 were journal articles, with 177,702 classified as open-access publications.

Regarding the year of publication, WoS data indicate a sharp increase in academic interest in this topic. In 2010, 6,919 publications were recorded; by 2015, this number had doubled. In 2020, the number of publications exceeded 29,000. After 2020, interest in sustainability within the fashion industry intensified significantly, reaching 41,514 published titles in 2023 and 55,369 in 2024. In the first four months of 2025 alone, more than 24,000 publications addressing this topic were already recorded. Using VOSviewer, the map of keyword co-occurrence reveals several distinct clusters. Keyword associations are grouped by color, with each color representing a dominant term. The most frequently researched terms appear as central nodes, indicating that the majority of articles focus on keywords such as circular economy, sustainability, management, performance, and innovation.



**Figure 1.** Keyword co-occurrence network on sustainability in the fashion industry (VOSviewer cluster visualization)

Source: Author's own elaboration based on Web of Science data, processed using VOSviewer



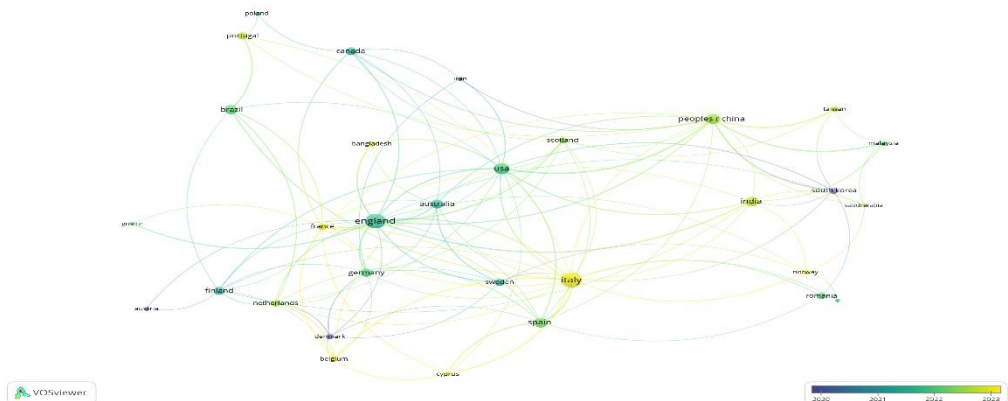
**Figure 2.** Temporal evolution of keywords on sustainability in the fashion industry (VOSviewer overlay visualization)

Source: Author's own elaboration based on Web of Science data, processed using VOSviewer

From a cluster perspective, the most clearly defined area is represented by the green cluster, with circular economy and sustainability as dominant nodes and associated terms such as environment, behavior, challenges, consumption, and future. A second strongly delineated cluster centers around management, with associated keywords including performance, innovation, sustainable development, and responsibility. The analysis also shows strong interconnections between keyword

clusters; the stronger the relationship between groups, the more prominent the connecting lines. In terms of terminology usage over time, the literature shows a clear evolution: early studies primarily employed the concept of reuse within the fashion industry, followed by the consolidation of the circular economy framework, and more recently, the widespread adoption of the broader concept of sustainability (Figure 2).

An analysis of authors by country of origin shows that during the 2020–2021 period, the largest number of authors came from the United Kingdom, the United States, Germany, Canada, Brazil, and Australia. In more recent years, a noticeable increase in the number of authors addressing this topic can be observed in countries such as Italy, China, Spain, and India. The following figure also indicates that Romania is increasingly represented by researchers concerned with sustainability and the circular economy, despite the fact that Romanian legislation did not mandate the preparation of sustainability reports for economic entities during the analyzed period. This reporting obligation will only come into force starting with the 2025 financial year. Nevertheless, economic entities were allowed and encouraged to voluntarily disclose information regarding environmental protection activities, social responsibility, and sustainability.



**Figure 3.** International collaboration network of authors in sustainability and circular economy research within the fashion industry (VOSviewer overlay visualization  
Source: Author's own elaboration based on Web of Science data, processed using VOSviewer

The question therefore arises as to why there is such a high level of interest in circular economy and sustainability within the fashion industry. The answer lies in the fact that, as previously mentioned, the fashion industry makes a substantial contribution to global warming and environmental degradation through chemical pollution and CO<sub>2</sub> emissions (Pal & Gander, 2018; Niinimäki et al., 2020; Turker & Altuntas, 2014; Papasolomou et al., 2023). While early research highlighted a perceived incompatibility between competitiveness and sustainability objectives (Almeida et al., 2017), more recent studies increasingly examine and confirm the existence of a positive relationship between these two goals (Ikram et al., 2019; Ishara & Mekara, 2023).

The concept of sustainability refers to the ability of human activities to be carried out without depleting resources or harming the environment, thereby preserving the capacity of future generations to meet their own needs. The World Conference on the Environment held in Rio de Janeiro in 1994 placed particular emphasis on this concept, highlighting the need to balance economic growth, environmental protection, and the identification of alternative resources.

Within this context, it is essential to analyze the extent to which entities and decision-makers in the fashion industry strive to achieve a balance between economic growth and sustainability, circular economy principles, innovation, and sustainable development (Giannetti et al., 2023; Zhang et al., 2021; Oncioiu et al., 2018; Iuraș et al., 2024; Ostermann et al., 2021; Huynh, 2022; Coscieme et al., 2024), as well as the harmonious integration of the three core dimensions of sustainability: economic, environmental, and social (Rossi et al., 2020, Almeida et al 2017). The literature also emphasizes the strong connection between sustainability and corporate social responsibility in the context of Industry 4.0 (Bogdan et al., 2025; Thorisdottir & Johannsdottir, 2020; Battaglia et al., 2014; Chan et al., 2020; Nguyen et al., 2021).

In academic literature, sustainability is sometimes conflated with resilience and sustainable development; however, it is widely acknowledged that these concepts are closely interconnected. Resilience can be viewed as a component of sustainability, sustainability as a component of resilience, or resilience and sustainability as distinct but complementary objectives (Marchese et al., 2018; Giannetti B. et al., 2023; Mathew & Spinelli, 2025). Sustainable development represents a broader concept encompassing economic, social, and environmental sustainability (Ishara & Mekara, 2023; Dainelli et al., 2024).

Furthermore, several authors address the role of eco-innovation in the fashion industry and its impact on improving firms' economic performance (Hojnik et al., 2018; Dainelli et al., 2024; Mac Lennan et al., 2023; Rahaman, 2025; Bogdan et al., 2025).

### **3. Research Methodology**

Starting from the importance attributed by all economic actors to the Sustainable Development Goals (SDGs) and ESG reporting, this study seeks to examine whether entities in the fashion industry pay attention to these objectives, how they have integrated them into their activities, and whether—and to what extent—they emphasize reporting based on the three pillars of Environmental, Social, and Governance.

While it is widely acknowledged that major luxury and premium fashion brands place greater emphasis on these aspects, this research aims to analyze the extent to which entities operating in the sportswear, retail, fast fashion, and even ultra-fast fashion segments align with the Sustainable Development Goals and how these objectives are incorporated into their business models.

The present research adopts a mixed qualitative–quantitative and analytical approach, with the objective of evaluating the foundation upon which societal trust is built regarding the commitment of global fashion industry entities to the

Sustainable Development Goals, as well as assessing the maturity level of their sustainability strategies.

This study employs a research design based on comparative content analysis. The primary methodological objective is to move beyond the simple aggregation of reported data by establishing a strategic evaluation and analytical framework that enables a critical classification of how fashion corporations integrate Sustainable Development Goals into their sustainability reports and align sustainability objectives with their operational models.

The methodology was structured into three main stages: the selection and collection of the document sample, the systematic coding of content based on the SDGs, and thematic synthesis combined with the application of a critical analytical framework.

The study sample consists of 16 major brands and/or corporate groups within the fashion industry. These entities were selected based on their global representativeness (United States, Europe, Asia), global relevance, market volume, involvement in social and environmental issues, and diversity of business models. The sample was subsequently grouped into three strategic segments: Luxury/Premium, Mass Market, and Fast Fashion–Ultra-Fast Fashion.

**Table 1.** Fashion Industry Entities Analyzed

| <i>No.</i> | <i>Company / Group</i> | <i>Segment</i>    | <i>Source Document Used</i>                             |
|------------|------------------------|-------------------|---------------------------------------------------------|
| 1.         | Hugo Boss              | Luxury/Premium    | HUGO-BOSS-Sustainability-Report-2023.pdf                |
| 2.         | LVMH Group             | Luxury            | LVMH Moët Hennessy Louis Vuitton 2023...pdf             |
| 3.         | Hermes                 | Luxury            | HERMES 2023_csr_extract_en_mel.pdf                      |
| 4.         | Capri Holdings         | Luxury            | <a href="#">Dec-12 2024 Capri.pdf</a>                   |
| 5.         | Marc&Jacobs            | Luxury/Premium    | MARC JACOBS-esg-disclosures-update_pdf                  |
| 6.         | Zimmermann             | Luxury            | Zimmermann_Sustainability_Report_2024.pdf               |
| 7.         | Ralph Lauren           | Premium/Lifestyle | Ralph Lauren-2023-GCSReport.pdf                         |
| 8.         | Li-Ning                | Sportswear        | LI-NING csr_report_2023 LI-NING China.pdf               |
| 9.         | Bosideng               | Sportswear        | Bosideng 300340-e_her24070002_e_bosideng_esg_ar24...pdf |

|     |                 |                            |                                                            |
|-----|-----------------|----------------------------|------------------------------------------------------------|
| 10. | Marks & Spencer | Mass Market/Retail General | Mark&Spencer sustainability-report-2023.pdf                |
| 11. | H&M Group       | Fast Fashion               | HM-Group-Annual-and-Sustainability-Report-2023.pdf         |
| 12. | C&A             | Fast Fashion               | c&a raport sustenabilitate.pdf                             |
| 13. | GAP Inc.        | Fast Fashion               | GAP 2023-gap-inc-esg-report.pdf                            |
| 14. | Inditex         | Fast Fashion               | Inditex Sustainabilityreport2023.pdf Inditex               |
| 15. | Uniqlo          | Fast Fashion               | Uniqlo sustainability report 2023 Japonia.pdf              |
| 16. | Shein           | Ultra Fast Fashion         | SHEIN-2023-Sustainability-and-Social-Impact-Report.pdf.pdf |

Source: Authors' analysis based on official Sustainability, ESG, CSR, and Annual Reports published by the analyzed companies (2023–2024)

The primary data source consisted of Corporate Sustainability Reports, Integrated Annual Reports, and ESG Strategic Plans published by the entities included in the sample. Data extraction focused on the most recent available reporting cycles, with particular emphasis on information corresponding to the 2023 fiscal year.

All strategies and objectives identified in the analyzed reports were systematically coded into a comparative matrix, using each of the 17 Sustainable Development Goals (SDGs) as the unit of analysis. A binary coding system (Presence/Absence) was applied, complemented by a qualitative description of the reported actions.

The credibility of the findings was ensured through the exclusive use of publicly available corporate documents (official reports), thereby guaranteeing that the extracted data reflect the entities' publicly stated commitments. Reliability was ensured by applying a standardized coding framework based on the 17 SDGs across the entire sample, thus reducing subjectivity in data interpretation.

The analysis of sustainability performance (ESG – Environmental, Social, Governance) among companies in the fashion and retail sector reveals significant divergence in how these entities manage their environmental and social impacts.

To quantify the maturity level of sustainability strategies, an ordinal ESG performance assessment scale (Environmental, Social, Governance) was applied.

The scale ranged from 1 to 5, where:

- Score 1 indicates the complete absence of ESG policies (high reputational risk);
- Score 2 indicates low transparency and fragmented reporting;
- Score 3 indicates moderate engagement and limited actions;
- Score 4 indicates solid policies with certain shortcomings;
- Score 5 indicates full strategic integration and compliance with global sustainability standards.

#### 4. Discussion and Analysis of Results

The empirical data are presented in the Sustainability Matrix (Table 2), interpreting the distribution of the analyzed entities' commitments to the SDGs based on market segment.

**Table 2.** Sustainability Matrix of Adopted SDGs

| No  | Company        | SDG Number |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |
|-----|----------------|------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
|     |                | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 1.  | Hugo Boss      | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 2.  | LVMH Group     | A          | A | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | A  | P  |
| 3.  | Hermes         | A          | A | A | P | A | P | P | A | A | P  | P  | P  | P  | A  | P  | A  | P  |
| 4.  | Capri Holdings | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 5.  | Marc&Jacobs    | A          | A | P | A | P | P | P | A | P | P  | P  | A  | P  | P  | P  | A  | A  |
| 6.  | Zimmermann     | A          | A | P | A | P | P | A | P | P | P  | A  | P  | A  | P  | P  | A  | P  |
| 7.  | Ralph Lauren   | P          | A | P | P | P | A | P | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 8.  | Li-Ning        | P          | P | P | P | P | P | P | P | P | P  | P  | P  | P  | A  | P  | P  | P  |
| 9.  | Bosideng       | P          | A | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  |
| 10. | Marks&Spencer  | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 11. | H&M Group      | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 12. | C&A            | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 13. | GAP Inc.       | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 14. | Inditex        | P          | A | P | P | P | A | A | P | A | P  | A  | P  | P  | A  | A  | A  | P  |
| 15. | Uniqlo         | P          | P | P | P | P | P | P | P | P | P  | P  | P  | P  | P  | P  | P  | P  |
| 16. | Shein          | A          | A | A | A | P | P | P | P | A | A  | A  | P  | P  | A  | P  | A  | P  |

Source: Authors' own processing based on data extracted from sustainability reports

##### 4.1. Analysis of Convergences in Relation to the SDGs

The analysis of the Sustainability Matrix highlights a set of SDGs that have reached the status of quasi-mandatory standards across all market segments, indicating what

can be described as the baseline of corporate legitimacy—the foundation upon which public trust in companies is built.

SDG 8 – Decent Work and Economic Growth and SDG 3 – Good Health and Well-being are almost universally addressed. Out of the 16 companies analyzed, 15 report engagement with SDG 8, while 13 address SDG 3, reflecting a uniform focus on occupational health and well-being. This convergence suggests that supply chain risk management and basic ethical standards are no longer competitive differentiators, but minimum requirements for global operations. The implementation of SDG 8 is frequently carried out through collaboration with the Fair Labor Association, which aims to promote labor rights and improve working conditions in global supply chains based on international labor standards. This indicates the existence of a multi-stakeholder partnership involving companies, civil society organizations (NGOs), and academic institutions working together to address complex social issues within supply chains.

Addressed by 15 companies, SDG 17 – Partnerships for the Goals underscores the importance of industry-wide collaboration, particularly through initiatives such as Zero Discharge of Hazardous Chemicals (ZDHC). The primary objective of this initiative is to eliminate hazardous chemicals from the global fashion supply chain and to promote safer and more sustainable chemical management in order to achieve complex sustainability goals. This finding suggests that competing brands are capable of cooperating to address systemic environmental challenges that exceed the individual capacity of any single company.

Conversely, the Sustainability Matrix reveals the existence of so-called “gap SDGs”—goals that do not align with the direct business logic of most companies and are therefore treated as external vulnerabilities or addressed primarily through philanthropic actions. These gap SDGs provide strong evidence of the relative nature of corporate responsibility toward the SDGs. SDG 2 – Zero Hunger is addressed by only two companies (Uniqlo and Li-Ning), confirming that direct humanitarian goals tend to be subordinated to indirect efforts (such as wage increases under SDG 8) or charitable initiatives. Another gap SDG is Life Below Water (SDG 14), addressed by only five companies (Bosideng, LVMH Group, Marc Jacobs, Uniqlo, and Zimmermann). The lack of engagement by the remaining 11 companies indicates that microplastic pollution and ocean management are not yet fully integrated as material risks within many corporate strategies, often being treated as secondary effects of SDG 6 (Clean Water) or SDG 12 (Responsible Consumption and Packaging). SDG 1 – No Poverty represents another gap objective, addressed by only six companies. Although closely linked to SDG 8, most companies do not explicitly declare it as a primary strategic objective.

It is also important to note the interdependencies among certain Sustainable Development Goals. Although SDG 4 – Quality Education is adopted by 13 of the 16 analyzed companies, indicating a focus on skills development and highly qualified human capital, only five companies explicitly recognize a critical interdependence between two seemingly distinct goals: Education (SDG 4) and Life on Land – Biodiversity (SDG 15). This does not imply a conflict between the two objectives; rather, they represent the two essential ends of the leverage required for genuine paradigm change. By committing to SDG 15, companies acknowledge what must be protected—nature and natural capital—while linking it to SDG 4 highlights what must

be transformed: cognitive systems, mindsets, and knowledge structures. Together, these dimensions point toward the ultimate objective of a healthy planet and a responsible society.

#### 4.2. Analysis of Sustainability Performance

ESG criteria (Environmental, Social, Governance) represent an integrated framework used to assess corporate sustainability and systemic risks. They reflect how organizations manage their environmental impact, social relationships, and governance practices. With regard to sustainability performance (ESG), the situation is presented in Table 3.

**Table 3.** ESG Performance

| No. | Company        | Environmental | Social | Governance | Overall Score |
|-----|----------------|---------------|--------|------------|---------------|
| 1.  | Hugo Boss      | 5             | 5      | 5          | 5             |
| 2.  | LVMH Group     | 3             | 3      | 3          | 3             |
| 3.  | Hermes         | 4             | 3      | 4          | 3,7           |
| 4.  | Capri Holdings | 3             | 3      | 3          | 3             |
| 5.  | Marc&Jacobs    | 2             | 2      | 2          | 2             |
| 6.  | Zimmermann     | 2             | 2      | 2          | 2             |
| 7.  | Ralph Lauren   | 4             | 4      | 4          | 4             |
| 8.  | Li-Ning        | 2             | 2      | 2          | 2             |
| 9.  | Bosideng       | 4             | 3      | 4          | 3,7           |
| 10. | Marks&Spencer  | 3             | 3      | 3          | 3             |
| 11. | H&M Group      | 4             | 4      | 4          | 4             |
| 12. | C&A            | 3             | 3      | 3          | 3             |
| 13. | GAP Inc.       | 4             | 4      | 4          | 4             |
| 14. | Inditex        | 3             | 3      | 3          | 3             |
| 15. | Uniqlo         | 3             | 3      | 3          | 3             |
| 16. | Shein          | 2             | 2      | 2          | 2             |

Source: Authors' own assessment based on data extracted from corporate Sustainability, ESG, and Integrated Annual Reports

The analysis of sustainability performance (ESG – Environmental, Social, Governance) among companies in the fashion sector reveals significant divergence in how these entities manage their environmental and societal impacts. The overall ESG score, assessed on a scale from 1 to 5, ranges from an exemplary level of 5.0 to a concerning minimum of 2.0. This disparity highlights the importance of heterogeneity in the adoption and implementation of sustainability strategies.

A benchmark performer within the sample is Hugo Boss, which achieves the maximum score of 5.0 across all three pillars (Environmental, Social, and Governance). This performance suggests a robust and mature integration of sustainability principles throughout its operations, establishing a reference point for other companies. Additionally, within the top performance tier, companies such as Ralph Lauren, Gap Inc., H&M, Bosideng, and Hermès demonstrate solid

performance, with overall scores of 4.0 and approximately 3.7, indicating strong commitments and partially successful implementation.

At the opposite end of the spectrum, several companies face elevated ESG risks, recording overall scores of 2.0. These include Li-Ning, Marc Jacobs, and Zimmermann. Such low scores signal critical deficiencies, particularly with respect to the Social and Governance pillars. For instance, Shein records a score of only 2.0 in both the Environmental and Social dimensions, highlighting potential issues related to supply chain transparency and labor conditions.

A pillar-specific comparison reveals the following patterns:

- Social pillar (S): Significant vulnerability is observed across multiple companies, with scores of 2.0 recorded by Shein, Li-Ning, and Zimmermann. This indicates the need for stronger efforts in protecting workers' rights, ensuring occupational health and safety, and improving ethical workforce management.
- Environmental pillar (E): Despite the presence of leaders such as Hugo Boss (score of 5.0), the average environmental performance is negatively affected by companies including Li-Ning, Marc Jacobs, Zimmermann, and Shein, all of which score 2.0. This suggests that operational environmental impacts—such as emissions, pollution, and resource consumption—remain major challenges.
- Governance pillar (G): Governance scores vary across the sample; however, companies such as Marc Jacobs, Li-Ning, Zimmermann, and Shein, which score 2.0, may require improvements in areas related to ethics, reporting transparency, and managerial structures.

## 5. Conclusions

This study examined the sustainability performance (SDGs and ESG) of companies operating in the fashion sector, demonstrating that commitment to responsibility is defined by a heterogeneous strategic divergence that goes beyond mere regulatory compliance. The analysis confirms that sustainability represents a fragmented landscape, dominated by a triple dichotomy shaped by business model characteristics.

Overall, the findings indicate that the transition toward a sustainable model in the fashion industry is far from uniform. The notable performance of companies such as Uniqlo and Li-Ning in terms of adopting a large number of Sustainable Development Goals (17 and 16, respectively), alongside relatively modest ESG scores (3 and 2, respectively), demonstrates that the mere presence of an SDG does not indicate the quality or effectiveness of its integration into a company's core strategy. While many SDGs are formally addressed, the disclosed information is often incomplete, unaudited, difficult to verify, or superficially implemented, with limited integration into core operations and strategic decision-making processes—reflecting a lack of systemic rigor. The true leader is therefore not the company that “checks” the largest number of SDGs, but the one that moves beyond passive compliance toward relative responsibility and aligns its objectives in pursuit of absolute social responsibility.

The analysis of sustainability maturity confirms that high-quality ESG practices are achievable, while low ESG scores highlight critical areas where increased investment and stronger regulation are required to align the industry with the Sustainable Development Goals.

The ESG findings generate important implications for both management and regulation. Companies positioned in the lower performance tier must prioritize deficiencies related to Governance (G) and Social (S) dimensions, which cannot be offset by cosmetic improvements in Environmental performance. Reporting transparency and ethical workforce management are essential for long-term stability and legitimacy.

At the same time, regulatory institutions and investors should not rely exclusively on relative improvements—such as reductions in emission intensity—but should instead demand evidence of absolute social responsibility, namely the decoupling of value creation from physical environmental impact. Benchmark models such as Hugo Boss (ESG score of 5.0) demonstrate that top-tier ESG performance is compatible with economic success, thereby establishing a replicable model for the wider industry.

This study contributes to the existing literature in several key ways: a. Validation of ESG Performance Heterogeneity: Global ESG scores ranging from 5.0 (Hugo Boss) to 2.0 (Li-Ning, Marc Jacobs, Zimmermann, Shein) confirm the absence of a single industry-wide standard and highlight substantial disparities in ESG maturity. Hugo Boss, with an exemplary score of 5.0 across all three pillars, establishes a benchmark that demonstrates the feasibility of robust ESG integration. b. Identification of Systemic Vulnerabilities: Pillar-level analysis confirms that the Social (S) and Governance (G) dimensions represent critical vulnerabilities for high-risk companies (scores of 2.0 for Li-Ning, Shein, Zimmermann, and Marc Jacobs). This suggests insufficient focus on ethical workforce management and supply chain transparency—areas essential to sectoral legitimacy.

In conclusion, the sustainable future of the fashion industry depends on companies' ability to move from reactive risk management toward deep strategic integration, aligning SDGs and ESG excellence with their core business models.

Promoting a more just, equitable, and sustainable future for all countries and populations depends on cleaner and more responsible production and sustainable development. By pursuing these objectives, it is possible to improve both present conditions and long-term prospects for current and future generations.

The limitations of this study stem from the fact that the analysis of sustainable development indicators and ESG practices was conducted for a single reporting year, without assessing year-to-year dynamics. Additionally, sustainability practices were examined for a limited number of companies.

Future research directions include a longitudinal analysis of how mandatory sustainability legislation will reshape the distribution of SDGs within the Sustainability Matrix, as well as an empirical evaluation of the relationship between sustainability performance, financial performance, and market-based financial indicators.

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