Regulation of the fashion supply chains and the sustainability–growth balance

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Abstract

Purpose – The sustainability of global production chains is at the centre of discussion in the past few years. One of the most polluting sectors is the fashion industry. Fashion brands often decline responsibility, and continue misleading or exaggerated communication. This study aims to provide a comprehensive evaluation of regulation in the fashion industry and show practices of fashion firms.

Design/methodology/approach – Based on documentary analysis and literature review, the article describes current civil, supranational and governmental policies aiming to enhance the three dimensions of sustainability. Connecting these to the high-growth firm theory, the authors present a case study of a rising Hungarian fashion star based on press, sustainability and balance-sheet report analysis and personal interviews.

Findings – The article highlights some problematic areas of sustainability and greenwashing and describes the different levels and targeted areas of regulation. From the entrepreneurial perspective, the difficult balancing among growth and sustainability is analyzed and illustrated by the detailed case study. The authors provide regulatory suggestions (including the creation of a supranational monitoring agency).

Practical implications – Even if the authors doubt that global fashion chains can be sustainable, they offer both managerial and policy suggestions to reach the highest level of sustainability.

Social implications – The suggested measures can contribute to the more sustainable practices and fraud reduction in the fashion industry.

Originality/value – To the best of the authors' knowledge, the economic-regulatory approach used in this study to sustainable fashion industry is new, such as the presentation of the practices of a high-growth firm with a sustainable image.

Keywords Sustainability, Fashion industry, Greenwashing, High-growth firms

Paper type Conceptual paper

1. Introduction

Sustainability has become a crucial issue in the past decade. How this applies to global supply chains is at the center of discussion, because in most sectors, production is completely globalized. According to the widely used concept, sustainability has three dimensions: economic, environmental and social. Measuring sustainability can be complex, making it critical to identify key performance indicators when a large set of sustainable supply chain performance measures are used (Bai and Sarkis, 2014). The implementation

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and control of sustainability among the suppliers is a rather difficult task of supply chain management. Eslami *et al.* (2019) provide a systematic literature review on the three pillars of sustainability and find that the one related to the environment is the most important.

In this article, we claim that the fashion industry cannot be entirely sustainable. Sustainability has numerous unmonitored aspects, the supply chain is opaque and its current growth level inhibits its goal to become greener (Indvik, 2020). Our article examines the current policies in three areas: firm-level actions, the industry-stakeholder or NGO initiatives and governmental legislation. We contrast green claims with actual practices, which we explore through a case study, and offer both managerial and policy suggestions in support of sustainability.

Two research questions guide our work. We are curious about the heterogeneity of national legislations and regulatory frameworks. Thus, first, we ask to what extent do regulatory initiatives have common features in different countries? Are there principles that they share? We then turn to the level of the firm and discuss the economic pillar of sustainability.

We examine how new and small fashion firms perform in the industry, which we explore through the case study of the rapidly growing Hungarian company, Nanushka. This relates to our second research question: can a small dynamic fashion firm create and maintain sustainable practices? Thus, we base our research on the connection of the literature on sustainability and its regulation with the literature on high-growth firms (HGFs) and we illustrate the growth–sustainability balance with a case study. Literature on corporate growth does not often discuss sustainability, so we contribute to this gap.

We apply documentary analysis and the case study approach in our work. The article is structured as follows. We examine the fashion industry's characteristics and its connection to sustainability and greenwashing in Section 2. In Section 3, we present the current sustainability policies at the mentioned three levels (firm, stakeholder and national ones). In Section 4, we present some findings of the HGFs' literature and, in Section 5, the example of the chosen Hungarian high-growth fashion firm is described. Section 6 features a discussion where we evaluate our findings and convey our conclusions (Section 7) through which we provide suggestions for better regulation and managerial approaches and policy. Finally, the limitations of our article and some future research directions are mentioned.

2. Fashion industry – pollution and sustainability, greenwashing

There is a large literature on the fashion industry's greenhouse gas and CO_2 emissions, water consumption, microfiber pollution, textile waste and waste management problems (Niinimäki *et al.*, 2020; Peleg Mizrachi and Tal, 2022). The exponentially increasing consumption of low-cost products and the question of customer responsibility have also been discussed. Experts call for a fundamental change within the industry (Suraci, 2021).

Fashion brands are "manufacturers without factories" and the garment industry is a good example of the buyer-driven supply chain. The physical production of goods is separated from design and marketing, where retailers and marketers would otherwise have the most power (Gereffi, 2013). Fashion brands work with independent suppliers (based on short-term contracts) to produce apparel. A country's stronger regulation can easily cause fashion enterprises to move production to another place with more permissive rules (or with less stringent enforcement). Employment in the garment industry has been rapidly expanded since the 1990s in developing countries because of the significant growth driven by quotas allowing for higher exports. In this article, we emphasize the importance of proper regulation all along the supply chain and we suggest measures to its implementation.

The scientific literature does not have a single concept for sustainable fashion, as discourses are driven by different ideologies, processes and characteristics (Kozlowski *et al.*, 2018; Suraci (2021). In the social sciences, sustainable fashion is often described as an alternative to fast fashion (Clark, 2008). It should be mentioned that sustainable fashion can even be inherently controversial: buying clothes from sustainable materials contradicts the broader objective of reducing purchases of new products. Buying from local designers can conflict with buying second-hand clothes. A common aim is, however, to create an alternative to the fast fashion industry and reduce the environmental and social impact of the fashion industry (Peleg Mizrachi and Tal, 2022).

2.1 Misinformation and emphasis

The fashion industry's sustainability receives ample attention and the environmental impact of certain materials used is widely discussed. We claim that the over- and underrepresentation of some aspects of sustainable fashion can also lead to the loss of focus and greenwashing. Textile chemist expert Kutasi (2021) emphasizes that the environmental impact of the garment and textile industry tends to be the target of numerous environmental movements and media discourses. Such coverage is often based on unfounded claims regarding the unsustainability of certain materials. He denotes that the environmentally friendly processes and technologies used within production phases are underrepresented in the mainstream discussion of sustainable fashion. He claims that the environmental impacts of several products and processes are often merged in media coverages with the textile industry [1], garment industry (the assembly of the apparel) and agriculture (the cultivation of cotton) often falsely confounded.

Cline and Lanfranchi, (2021) also explored the widespread misinformation around water consumption for cotton, which changes with climate, accessible rainfall, soil type, irrigation system, etc., leading to a huge difference between cotton producer countries. Water intensity can range from 0 to 13,696 liters used per kilogram of fibers (ICAC, 2021). Cline and Lanfranchi (2021) warned that it is very easy to misinterpret and take data out of context. Moreover, factors such oversimplification, erratic copying and irresponsible framing further support the diffusion of misinformation (OECD, 2022). Fashion brands can also use misinformation to encourage customers to switch products that allow them to grow their market share. The outcome is an erosion of trust between the consumer and the fashion label.

The luxury industry becomes less attention but it is also affected by sustainability concerns. An investigative report documents that distressed labor conditions, the lack of contracts and any insurance also appear within luxury brands' informal supply chains, while they also tend to employ low-paid workers in Europe and maintain questionable labor practices in the global south (Paton and Lazazzera, 2020).

2.2 Backlashes of control and audition

Peleg Mizrachi and Tal (2022) argue for a comprehensive economic and political strategy to control fashion chains and thereby address all stages of production, encouraging the formation of new business models. They describe four main areas of policy: control, incentives, education and certification. Regarding control and certification, more and more initiatives emerged that "guarantee" ethics in global fashion supply chains. Third parties are responsible for monitoring working conditions and compliance with codes of conducts in far-flung locations. Inspections are often done too quickly and superfluously (Clifford and Greenhouse, 2013). Kelly *et al.* (2019) provide extensive proof about the failure and interest of corporate-controlled audit industry and business-driven social compliance initiatives (auditing firms), which often collaborate with well-known fashion brands. Our case study also illustrates the mentioned problems of auditing and we propose a possible solution.

2.3 Brand reputation and greenwashing

The now dominant social media landscape and the increased activity of NGOs, customers and fashion brands offer a real-time connection between social media users and brands. Watchdog NGOs can easily mobilize users who can instantly give negative feedback and a tsunami of comments via online platforms and social media messages.

Brand reputation and value are crucial for the firms, and this can lead to the use of symbolic and ineffective codes of conduct, so-called "greenwashing." Greenwashing involves selective disclosure of information, positive communication about poor environmental performance and symbolic changes (Yang *et al.*, 2020). We accept Delmas and Burbano's (2011. p. 66) definition that greenwashing is "the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service." The main motivation of greenwashing is to attract green consumers and provide an environmentally friendly reputation amongst competitors. Furthermore, environmentally conscious consumers are willing to pay a relatively high green premium if a company is focusing on the advantages of the green products (Okada and Mais, 2010, p. 223). Companies, generally, do not have an interest to disclose their environmentally destructive activities, but rather maintain profitable practices by establishing a sustainable image. Some do not necessarily produce more sustainably than others, but they lead the customer to believe so. According to Changing Markets Foundation (2021), many companies claim that their products are recyclable, despite the lack of available technology. The main consequence of greenwashing is the loss of confidence among consumers, investors and civil organizations (Yang *et al.*, 2020). Kurpierz and Smith (2020) emphasized that greenwashing is a specific form of fraud and difficult to combat as the reward for successful greenwashing is significantly higher than the cost of being caught (Kurpierz and Smith, 2020, p. 1087).

Terra Choice (2010) identified seven categories of greenwashing ("seven sins") that are widely used:

(1) Hidden trade-off: a product is perceived as "green" because this is based on a narrow set of attributes.
(2) No proof: the environmental claim is unsubstantiated.
(3) Vagueness: a claim that is vague or ambiguous.
(4) Worshiping false labels: the company uses words or images that give the impression of a third-party endorsement where no endorsement exists (fake labels).
(5) Irrelevance: irrelevant claims are used.
(6) Lesser of two evils: using descriptions for a product professing a green attribute when the overall product is commonly regarded as environmentally unfriendly (organic cigarettes).
(7) Fibbing: unauthorized use of stamps, symbols and labels.

Berrone (2016) adds five firm-level sins to this list:

(1) Dirty business: unsustainable core business, but promoting sustainable practices that are not representative of its general activities.
(2) Ad bluster: exaggerate achievements or advertisement programs that are not related to the main sustainability concern.
(3) Political spin: influencing policymakers against environmentally friendly laws and regulations.
(4) "It is the law, stupid!": proclaiming sustainability accomplishments or commitments that are already required by existing regulations.

(5) Fuzzy reporting: making corporate sustainability reports that are essentially meaningless.

We apply this greenwashing framework list in our case study and point out the importance of managerial mentality. Blome *et al.* (2017) find that ethical leadership is negatively associated with greenwashing while obedience to authority is positively related. This means that there is less greenwashing where managers are respective of ethical and sustainable production, contrary to those firms where only regulation pressures managers.

3. Main policy steps toward a more sustainable fashion industry

The fashion industry is underregulated (Sustainable Fashion Hard Talk, 2022): the lack of industry-targeted regulation is because of the fragmented, opaque supply chain presented in the previous chapter. Every production phase has different sustainability-related issues, making legislation challenging. Few regulations target the industry's environmentally destructive practices (Suraci, 2021), despite influential bodies, such as the European Union or the United Nations, acknowledging the need to move toward sustainability.

Rising media awareness and sustainable fashion-focused NGOs counter this by influencing legislation and calling for action. There are many agencies, collectives and initiatives that have taken on the task of setting standards, but enforcement is lacking (Lauren, 2019).

As the relevant literature emphasizes the importance of regulation, we provide an overview on that. We identified three levels of policies. First, there is a growing number of fashion brands which introduced their own sustainability policies as voluntary commitments based on available guidelines. The second group of policies is established and facilitated by international organizations, NGOs, environmental groups and industry stakeholders. Third, there is a growing number of national or regional policies and laws, which target fashion companies' unsustainable practices and operations.

3.1 Enterprise-based policies

The fashion brands outsource their production to independent suppliers and improving working conditions is not necessarily their fundamental interest. Garment factories are often contracted by multiple fashion brands at the same time. The fashion industry is a notorious example of instigating a "race to the bottom": countries and fashion factories within a country's borders compete to secure orders. Working together with independent suppliers only with short-term contracts and switching to another supplier as the product range of the brand changes are the natural characteristics of fashion production. These contradict to real commitments (and change) for improving working conditions and any response to environmental concerns, but intense competition offers an easy way to circumvent the matter by simply moving production elsewhere.

In response to social pressure, many fashion brands have introduced codes of conduct that requires their suppliers to typically comply with International Labour Organization (ILO) conventions. These are not necessarily enforced stringently because fashion suppliers also outsource (parts of) their production (Barret and Baumann-Pauly, 2018). The corporate code of conduct does not apply to the factories where products are made. Edwards *et al.* (2019) claim that not just production, but decisions regarding wages for fashion workers are also outsourced to third parties. Fashion brands escape direct responsibility and there are no sanctions for non-compliance. Despite the proliferation of high-profile sustainability initiatives from brands, voluntary commitments or codes of conduct create little accountability and fail to drive transformative change (Deeley, 2021).

During the past 20 years, many enterprises have started to measure and report their environmental and social impact in their publicly available sustainability reports. Tucker (2021) emphasizes that the impact of the reporting movement has been oversold, because measurement is often nonstandard, incomplete, imprecise and misleading. Additionally, sustainability reports offer a form of distraction, while companies tend to conceal which standards they follow and how they track sustainability metrics, and there is little indication which bodies verified the claims they make (see our case study in Section 6).

Fashion Revolution's so-called Transparency Index reviews and ranks the world's 250 largest fashion brands and retailers according to the information they provide about their sustainability and operations. The lack of transparency is reflected in that only 47% of the examined brands disclose their manufacturing facilities (Fashion Revolution, 2021).

3.2 Stakeholder-initiated policies

The disaster of Rana Plaza in Bangladesh [2] in 2013 led to the proliferation of NGOs and, campaigns, dedicated to sustainable fashion, while increasing the activity of existing entities [3]. The major impact of this is the birth of the Accord on Building and Fire Safety in Bangladesh, a landmark fire and safety agreement that is legally binding and outlines a complaint mechanism to reduce the risk of future workplace tragedies (Table 1). Its successor, the International Accord for Health and Safety in the Textile and Garment Industry, became effective in August 2021 and is in-effect for 26 months (Paton, 2021).

One of the first joint initiatives among fashion industry leaders and "high politics" is the 2019 Fashion Pact (see later), while many criticized the pact (Zwieglinska, 2020) and had concern that stakeholder-initiated policies will not bring significant changes in the current industry practices.

The fashion industry has seen a proliferation of certification schemes and sustainability labels. As the Changing Markets Foundation (2022) highlights, the existence of sustainability initiatives in the fashion industry also enables greenwashing on a remarkable scale. Voluntary sustainability initiatives serve as smokescreens and create the illusion of action. Sustainability policies of the fashion industry were generally characterized by commitments of non-state actors; now we can witness a growing trend of national policies and legally binding regulations.

3.3 Initiatives from international organizations

Regarding working conditions, states that joined the United Nations signed the Universal Declaration of Human Rights (in the area of civil, political, social and cultural rights). This bans forced labor, ensures a right for free choice, decent pay and protection against unemployment. The ILO also developed recommendations and the OECD adopted a Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector in 2017 to support more sustainable and fair practices.

While forced labor is prohibited in every UN Member States and company code of conducts also discourage it, the Walk Free Foundation (2018) states that clothing products still carry a very high risk of forced labor.

In 2009, the Sustainable Apparel Coalition (SAC) was formed to establish a framework for worldwide sustainable apparel production. It created the Higg Index by which companies self-assess environmental and social sustainability throughout their supply chains. This offers a benchmark but was criticized as it relies on averages and ignores local specificities in production and some warned against using the Higg Index as a benchmark in EU and US legislation (Tabuchi, 2022). An alliance of major fashion brands and the SAC announced that they will suspend the use of the Higg Index in June 2022 in response to the

Table 1. Stakeholder initiated policies and international organizations' steps

Date	Name	Purpose	Signatories	Targeted pillar of sustainability	Critic/weakness
2009	Sustainable Apparel Coalition	Development of the Higg Index, reduction of environmental impact, promotion of social justice	Fashion brands, retailers, service providers, manufacturers, academics, affiliates, associations, governments and NGOs	Environmental, social	Higg Index was criticized for working with outdated, biased data (founded by the synthetics industry); industry-wide applicability was questioned
2011	Detox my Fashion (initiative by Greenpeace)	Reduction and elimination of toxic chemicals during the production process	Fashion brands, retailers and suppliers	Environmental	Voluntary commitments (legally non-binding, no sanctions in the case of non-compliance)
2013 (signed)	Accord on Building and Fire Safety in Bangladesh (from 2021: International Accord for Health and Safety in the Textile and Garment Industry	Ensure safe working environment in the Bangladeshi garment industry, establishment of independent inspection program, public disclosures, commitments for funding, training programs	Fashion brands, retailers, trade unions	Social	Expiration, lack of enforcement and sanctions
2017	Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector (OECD)	Supports more sustainable and fair practices, addresses child labor, forced labor, workers' wages and collective bargaining agreements	Ratified by OECD member states	Social	Lack of implementation and enforcement
2018	Fashion Industry Charter for Climate Action	Achieve net-zero emissions by 2050	Fashion brands, retailers, suppliers and	Environmental	Voluntariness (legally non-binding)

(*continued*)

Table 1.

Date	Name	Purpose	Signatories	Targeted pillar of sustainability	Critic/weakness
			supporting organizations		
2019	The Fashion Pact	Stopping global warming, restoring biodiversity and protecting the oceans	Fashion brands, suppliers, distributors	Environmental	Lack of mapping supply chains, missing key elements (working with communities on regulation), lack of immediate change, lack of specific, quantifiable targets
2019	The United Nations Alliance for Sustainable Fashion	Contribution to the Sustainable Development Goals through coordinated action in the fashion sector	United Nations agencies and allied organizations	Environmental, social	Weakness can be a failure in accelerating change
2021	International Accord for Health and Safety in the Textile and Garment Industry (former Bangladesh Accord)	Legally binding commitments to workplace safety in Bangladesh and promises to expand the program to other countries	Textile retailers and the global trade union	Social	Expiration, lack of enforcement and sanctions
2022	European Fashion Alliance	Advocating for an accelerating the transition of European fashion toward a more sustainable, innovative, inclusive and creative future, experience exchange, providing communication platform, policy advocacy	International fashion and textile organizations, councils and institutions	Environmental, social, economic	Weakness can be a failure in accelerating change

(continued)

Date	Name	Purpose	Signatories	Targeted pillar of sustainability	Critic/weakness
2022	Common Framework for Responsible Purchasing Practices (developed by MSI Working Group on Purchasing Practices)	Creating a new balance in buyer–supplier relations, improving purchasing practice through five principles (integration and reporting, equal partnership, collaborative production planning, fair payment terms and sustainable costing)	Group of fashion brands, retailers and purchasing companies	Social	Voluntariness, failure of improving working conditions and promoting responsible practices
2022 (unveiled by December)	Reporting rules for the fashion and textile industry by the International Sustainability Standards Board	Creation of a global baseline of guidance how to disclose their environmental and social impacts	Not known (companies and organizations are targeted)	Environmental and social	Voluntariness

Source: Own elaboration

Table 1.

Norwegian Consumer Authority's warning (Britten, 2022). SAC has also developed the "Common Framework for Responsible Purchasing Practices" framework (Wright, 2022).

In 2019, the United Nations launched The United Nations Alliance for Sustainable Fashion to contribute to the Sustainable Development Goals through coordinated action in the sector.

There are several initiatives that target chemicals used by the textile industry. REACH [4] is the European Union regulation applicable to the manufacture and import of chemical substances. It has been in force in all EU Member States (and Iceland, Lichtenstein and Norway) since June 2007. It applies to processes and products such as toys, garments and furniture. The REACH regulation places the burden of proof on companies. Through the Greenpeace's Detox my Fashion campaign, since July 2011, the organization has secured commitments from international brands, retailers and suppliers to eliminate hazardous chemicals. Greenpeace Germany (2021) highlighted that the campaign has raised awareness toward the hazards of the PFAS [5] and later five EU Members [6] proposed to regulate the chemicals along the EU. In 2016, Greenpeace Indonesia with community groups won a lawsuit against the government's decision to continue issuing wastewater discharge permits and the judge used the precautionary principle to prevent further destruction (Birry, 2016). A report emphasizes the importance of regulation over company commitments (Greenpeace Germany, 2021). After more than a decade of campaigning, Greenpeace announced that it will "pause" its detox campaign with the conclusion that significant progress has been made, but there are still challenging chemical groups to substitute (Chemical Watch, 2020).

The latest stakeholder initiative and voluntary body in the field is the European Fashion Alliance, established in 2022 and uniting 25 European fashion institutions to promote a sustainable European fashion ecosystem (Wright, 2022) and to help companies apply the regulations.

3.4 National legislations

The unsustainable practices of the industry have raised the attention of national policymakers as well. In Table 2, we summarized the current legislations and their target fields along the three pillars of sustainability. In Europe and the USA, governments are considering new regulations that could transform the industry (Deeley, 2021). Enforcement of these depends on political willingness, authorities' capacities and levels of corruption.

3.4.1 USA. In December 2021, a new law, the Uyghur Forced Labor Prevention Act, was signed by President Biden that imposes an import ban on goods ""mined, produced or manufactured wholly or in part with forced labor" from China's Xinjiang Uyghur Autonomous Region. The import ban took effect on June 21, 2022 and will remain in force for eight years or until the US president certifies that China has ended human rights abuses in Xinjiang (Arandia *et al.*, 2022). The region produces 85% of China's cotton (20% of global supply); every fifth garment can be potentially linked to forced labor from the region. The measures affect the global supply chains of well-known fashion brands as well (NISP, 2020).

In August 2021, CA legislation passed the Garment Worker Protection Act. As Farra (2021) reports, the new law makes California the first state in the USA to set hourly wage requirements for garment workers. It will also prohibit piecework (when workers are paid per garment often for less than \$3 per hour payment), and it will penalize both manufacturers and brands for wage theft and illegal pay practices.

In January 2020, a New York state coalition proposed the Fashion Sustainability and Social Accountability Act (The Fashion Act), affecting all fashion companies that do any business (also just selling their products) in New York and generate more than \$100m in revenues. The proposed bill calls on brands to focus on high social and environmental risk

Table 2. Current legislations toward the fashion industry's sustainability

Country	Date	Target	Type of legislation	Targeted pillar of sustainability
United Kingdom	1 January 2022 (effect)	Greenwashing	Command and control	– (not environmental, social or economic dimension)
The Netherlands	1 January 2021	Greenwashing	Command and control	–
The Netherlands	2022	Circular economy	Incentive	Environmental
France	1 January 2022 (effect)	Anti-waste and circular economy, extended producer responsibility, require producers, importers and distributors to reuse, redistribute or recycle their unsold inventory and prohibits the destruction	Command and control	Environmental
Germany	1 January 2023 (effect)	Supply chain due diligence	Command and control	Environmental, social
European Union	2022 (proposed)	Due diligence	Command and control	Environmental, social
European Union	2025	Post-consumer textile waste collection	Command and control	Environmental
European Union	March 2022 (Commission adoption)	Eco-design requirements, digital product passport, prohibition of the destruction of unsold goods, extended producer responsibility, reduction of microplastic pollution, textile waste management	Incentive and command and control	Environmental
United States of America	21 June 2022 (effect)	Uyghur forced labor prevention	Command and control	Social
Unites States of America (California State)	August 2021 (passed by State Legislature)	Garment worker protection, due diligence	Command and control	Social
United States of America (New York State)	January 2022 (proposed)	Corporate sustainability and accountability; requirement of map at least 50% of their supply chains, disclose impacts such as greenhouse gas emissions, water footprint and chemical use	Command and control	Environmental, social
United States of America	May 2022 (proposed)	Establishment of a nationwide garment industry registry, brand liability, workers' rights, reshoring manufacturing	Incentive and command and control	Social

Source: Own elaboration

areas and report the total volumes of materials they produce. Fashion companies would also be required to set and meet science-based targets for their greenhouse gas emissions, amongst others. The firms also need to disclose median wages and how they operate more transparently (Cernansky, 2022a) and have 12 months to comply with the mapping requirement and 18 months to comply with impact disclosure requirements. If noncomplying, they can be fined up to 2% of annual revenues of $450m or more and listed by the New York Attorney General (Kraver, 2022).

The recently introduced Fashioning Accountability and Building Real Institutional Change Act (The FABRIC Act) takes effect at the federal level and protects workers' rights, while incentivizing reshoring. The bill requires employers to pay the federal minimum wage (and eliminates piece-rate pay), while focusing on the accountability of brand (Cernansky, 2022b). It also offers a 30% tax credit and introduces a fund for reshored manufacturing, making the production of American fashion brands more transparent.

3.4.2 Greener fashion industry in the European Union. While the problems are similar among American and European fashion companies regarding sustainability of the industry, legislations differ. Almost all EU Member States have set national minimum wages that apply to workers in the fashion industry [7].

The incineration of unsold stock is, unfortunately, a common practice in the fashion industry. The British heritage luxury brand, Burberry, made the headlines in 2017 by incinerating clothing worth £28.6m (BBC, 2018). The scandal triggered British policymakers and the UK parliamentary committee advised the government to ban the burning or dumping of unsold stock if it can be reused or recycled. The British government rejected most of the Committee's recommendations in 2019 but identified textile waste as a priority area to address its Resources and Waste Strategy. Reports of poor working conditions in the UK (Leicester garment factories) suggest that there has been little improvement since the Committee's report, which recommended regular audits and engagement with worker unions (Environmental Audit Committee, 2019).

The fashion industry became one of the main targets of consumer protection law in the UK, as the Competition and Markets Authority began to scrutinize green claims in 2020. It warned companies over greenwashing (Butler, 2022). The reduction of greenwashing is also one of the key priorities of the Dutch Authority for Consumer and Markets, which can impose an administrative fine of up to €900,000 or 1% of the gross turnover (van der Dussen and Nieuwmeyer, 2021).

Both mass-market fashion companies and luxury brands destroy unsold merchandise to avoid selling it at a discount or paying for storage, or to avoid cross-border costs in some cases and benefit of the drawback of certain duties in others (The Fashion Law, 2022). Unlike the British, the French government banned designer and luxury clothing companies from destroying unsold items under a wide-ranging anti-waste law in force since January 2022, but loopholes remain. Fashion brands can destroy their unsold inventory outside of France's borders and neither donation nor recycling seems to be a solution for overproduction, as there is no available, industrial-scale option to recycle fashion products. In Italy, brands that destroy unsold products can claim tax credits (Cernansky, 2022a). By 2025, all Member States of the European Union will need to have systems in place to collect and separate textiles. However, there is still no viable solution to recycle used fashion products.

Germany ranks second in terms of both the number of companies and total sales revenue based on the comparison of the 175 largest fashion brands, while it is also one of the EU's largest clothing producers and largest markets for fashion products (Oxford Economics, 2021). Germany has adopted a Supply Chain Due Diligence Act in 2021, taking effect on January 1, 2023. It applies to Germany-based companies employing 3,000 or more people through 2023, but its scope will expand to those with 1,000 or more employees from 2024. The law requires mandatory reporting on compliance, imposes penalties and civil liability for non-compliance, while victims of human rights abuses would be entitled to file damage claims with German courts.

The Netherlands has introduced the so-called Green Deal on Circular Denim, the "Denim Deal" in 2020. It provides support to map and find the required finance for investments; explores ways to remove legislative obstacles to the export of textile waste; enables post-consumer recycled (PCR) fibers derived from waste to be used in denim production; and also facilitates the agreements on standards and certification about the PCR content of new denim (Government of The Netherlands, 2020).

The European Commission published the proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 at the end of February (European Commission, 2022). Euractiv.com leaks show that the proposed directive would apply to only 1% of European companies and only targets the "big players" with more than 500 employees and a net worldwide turnover of €150m. The directive will oblige member states to adopt or adapt their own corporate due diligence rules ànd oblige companies to identify, prevent and mitigate human rights and environmental abuses in their value chain (Ammann and Ellena, 2022). In its current form, the Directive runs the risk that large companies will form subsidiaries to avoid regulation. Furthermore, EU companies are exempt from civil liability claims, if EU companies secured contractual assurances from their business partners that they complied with relevant codes of conduct (Ammann and Ellena, 2022). The due diligence proposal is welcomed by several industry stakeholders, but it is also criticized because of using benchmarking averages (Credible Data Webinar, 2022).

The European Commission introduced the EU strategy for sustainable and circular textiles at the end of March 2022 (European Commission, 2022). Just like the American FABRIC Act, the ambitious strategy is a mix of legislative acts and voluntary initiatives, but misses important social elements of sustainability. It remains an open question how the proposed changes will be translated into concrete action and how Member States will adopt (and enforce) measures.

The overview above shows how heterogenous the aims and measures of the different countries and levels of regulatory policy can be. Even the European Union lacks a common system. Regulation mostly targets the environmental and social pillars of sustainability. The third, economic pillar, would entail the prosperity and profit making of the companies, creation of economic value in a sustainable way. Cost optimization, investment, innovation, increase of revenues and growth are basic elements of enterprise development (Eslami *et al.*, 2019), leading us to turn our attention to HGFs and their relation to sustainability.

4. High-growth firms and sustainability

Economic policy and literature have long been intrigued by the so-called HGFs and their employment creation. Scholars have analyzed and debated the definition and factors influencing high growth of small and medium-sized enterprises that fall into this category (Grover Goswami *et al.*, 2019; Komlósi and Szerb, 2016). Newly established and especially rapidly growing firms are called "gazelles" and they differ based on industry and firm size, and thus their comparison is difficult (Henrekson and Johansson, 2010). According to the generally accepted Eurostat/OECD recommendation, HGFs are firms with at least ten employees in the year of their launch and annual employment or revenue growth rate exceeding 20% during a three-year period (Eurostat-OECD, 2007, p. 61). The growth of a firm can be organic, acquired (via acquisitions) or hybrid (both). Organic growth seems to be more common among small firms and acquisitions among large ones (Daunfeldt *et al.*, 2015).

The connection between high growth and sustainability at the company level has not been researched in-depth. Labella-Fernández *et al.* (2021) analyzed the effects of firms' growth on sustainable product innovation and found a positive connection, if there are no managerial skill barriers. Bérard and Saleilles (2016) show that growth creates tension: it allows a firm to improve its social and environmental impact, but core sustainability values might be only partially conserved, and growth might threaten these. Sustainability principles can strongly diverge from the growth-oriented principles widely expected of firms (Parrish, 2010). As Ócsai (2021) points out, changing a perspective driven by a profit principle to sustainability is a huge challenge. It requires a fundamentally different strategic attitude from managers, while there are important external barriers as well, such as shareholders' demand for short-term returns.

Sustainable entrepreneurship has a large literature (Munoz and Cohen, 2017). Shepherd and Patzelt (2011, p. 142) define sustainable entrepreneurship as:

> [. . .] focused on the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society.

The main aim of the sustainable enterprises is to preserve and strengthen the quality of human and natural resources over the longest possible time. They harmonize their objectives, seeking satisfactory results in multiple fields simultaneously (Ócsai, 2021). Sustainable entrepreneurs mostly lead and create their firms based on their personal values. A sustainable company is oriented toward both entrepreneurial growth and sustainable development (DiVito and Bohnsack, 2017; Parrish, 2010).

Growth is essential for profit and investing in sustainability. High growth, accompanied by a more complex production chain with more suppliers, however, can reduce transparency and control, retaining sustainability. Being sustainable and good economic performance do not generally correlate. Castro *et al.* (2020) suggest that the relationship between financial performance and sustainable development is neutral. Meanwhile, Westerhof and Chu Ying Shuen (2022) show that the relation between growth and sustainability forms two groups. Growth is driven by sustainability for those that have sustainability at the core, while sustainability is driven by growth for those with a product at their core. In the case of the latter, their product is not fundamentally sustainable, entailing that the more those companies grow, the more they spend to become sustainable. Connecting profit and sustainability, Varenova *et al.* (2020) claimed that companies with higher capitalization are more likely to be socially responsible.

The three pillars of sustainability are seen as a baseline for a firm, but these receive less attention when compared to growth (Munoz and Cohen, 2017) and entrepreneurs have different approaches when prioritizing between them. The findings of Fischer *et al.* (2020) based on case studies reveal that entrepreneurs' prioritization of the sustainability pillars changes depending on stakeholder involvement and external expectations. Sustainable entrepreneurs often change the prioritization of their goals under increasing financial pressure. It is challenging for sustainable entrepreneurs to balance the three pillars of sustainable value creation, while navigating the diverse interests of stakeholders.

Certain studies explicitly deal with the fashion industry. De Brito *et al.* (2008) identified two groups of fashion firms based on their attitudes toward sustainability. The first one adheres to external pressure but blames others for sustainability-related issues. The second group strives for improvement, responds creatively to the problems and internalizes responsibilities related to sustainability. DiVito and Bohnsack (2017) collected data about the entrepreneurial orientation and sustainability trade-offs the second group has to make. They assess 24 fashion firms and derive three types of sustainability decision-making: singular (prioritizing one dimension of sustainability above the others), flexible (focusing on trade-offs between two dimensions) and holistic (recognizing the interdependencies and balancing the benefits and impacts equally among the three pillars).

5. Astronomical rise of a Hungarian fashion company

Central European countries are members of the European Union and ranked as middle-high income economies, but still, from certain aspects, they are transition countries. Hungary, for example, after the first transition from a communist political and economic regime to a liberal market economy, has undergone a second transition toward illiberal autocracy and crony capitalism with centralized state control in the past decade. Being a transition country implies certain cultural and mentality differences in entrepreneurship and crony capitalism enables the success of certain companies, as our case study also shows.

Nanushka is a Hungarian fashion firm featured on Financial Times' list of the 1,000 fastest growing firms in Europe between 2020 and 2022, ranking 406th, 68th and 157th, respectively [8]. This dynamic growth led us to select Nanushka as our case and explore its sustainability practices.

We read its publicly available reports and documentation as well as the balance sheet reports published by the Hungarian company registry as of 2012. We also undertook a media analysis by searching for the term "Nanushka" between 2018 (starting date of the growing importance of sustainability in their communication) and the end of June 2022. We scanned Hungarian and foreign-language online media outlets via Google. We conducted a content analysis of the published articles and paired contents with keywords and phrases. As a final element of triangulation, we conducted three semi-structured interviews with sector insiders and former suppliers of Nanushka. We also relied on data from our earlier interview made with the owners of the firm in 2017.

Nanushka is an impressive economic success story. The company was founded in 2005 by Szandra Sándor. The brand represents luxury fashion and exports its products from the onset of its operations. Internationalization is a key quality of the company, ranging from sourcing materials through manufacturing to sales. It grew at a small stable rate in its first five years. The increased capital needs necessitated investors, so in 2012, PortfoLion (a large Hungarian venture capital firm) invested US$1.6m using EU-funds [9] to acquire a 46% stake in the company. Subsequently, management changed several times but had little experience in the fashion industry. Internal organizational, pricing problems emerged, orders declined, pushing the company to the brink of bankruptcy in 2015–16 (Szanyi-Gyenes, 2021). PortfoLion withdrew in 2016, but another venture capital firm, GB Partners-Exim, invested in the same year. It gradually raised capital and acquired a 71% share in the company [10]. GB Partners is a firm with close ties to the Hungarian government and its owner is a friend of the Head of Cabinet of the Prime Minister (Szopkó, 2022). Szandra Sándor's fiancé (now husband) became the new CEO and co-owner of Nanushka. Under his leadership, a new strategy for online sales was developed and the production cycle was redesigned. The CEO points out:

> We started working with selected, locally specialized agencies and showrooms that represent the brand in certain territories and markets. We began to rebuild the wholesale business because this is the most obvious channel for growth in terms of volume, brand awareness, and revenue. Then, we started building a proper branding and communications department with a global network of PR agencies in markets where we saw the biggest opportunities to grow the brand. Before

> 2016, we had very limited data that we could use to make decisions on the online presence of Nanushka and social media. But what we did see is that we had lots of opportunities in the United States [11].

Despite the pandemic, the company's net sales revenues grew in 2020 by 15% mainly because of online sales [12], a large portion of which originated from the USA. Earnings before taxes, however, were negative in 2020 and the company received financial help through the government's pandemic support program. Nanushka's CEO established Vanguards holding group and investment platform together with GB Partners' owner, that sought to buy other start-up fashion firms [13]. In 2022–23, a new store is planned to open in Miami and another in Shanghai, which shows the aims to further increase a global presence. Nanushka has four new collections and 1,400 new products per year [14].

Data shown in Table 3 are based on the company's balance sheets and indicates the company's export-based high growth rate (except for the bad year of 2016 and the pandemic year of 2020). In 2021, 94.5% of the net sales revenues stemmed from exports, 34% of the exports targeted the EU and 66% was directed to non-EU regions (mainly the USA). The high price level of products does not attract a substantial number of customers in Hungary. The number of employees also began to take off in the past three years, leading Nanushka to become a medium-sized company from micro-enterprise [15]. Based on this metric, the company met the criteria of Eurostat-OECD (2017) for HGFs between 2019 and 2021.

Growth is a major aim and something the CEO is proud of:

> If there is no Covid we could have grown much more [. . .] Even thus we increased by 7%, meanwhile the sector fell by an average 35%. We aim to reach a revenue of 50 million euros in 2022 [. . .]. There is no sense in local thinking. Hungarian market is important, but fashion entrepreneurs should have global ambitions [16].

Perhaps, this is why Nanushka does not have a Hungarian language website, only an English version. The intensity of global competition was also highlighted by the CEO:

> [. . .] good products are just only a very small part of success [. . .] the market is fearfully competitive, brand new rivals are popping up every day from the whole world and with a huge dominance (Interview with the owners 2017).

Year	Turnover growth, (%)	Export sales growth	No. of employees	Ehite collar empl. no.	Empl growth, (%)
2012			9	n.a	
2013	276.2	313.41	17	n.a	88.9
2014	58.9	78.26	19	n.a	11.8
2015	27.4	17.34	20	n.a	5.3
2016	−33.6	−40.56	21	11	5.0
2017	132	176.81	21	12	0
2018	241	306.96	20	8	−4.8
2019	154	162.43	28	11	40.0
2020	12.70	14.38	41	20	46.4
2021	158.5	182.6	101	71	146.3

Source: Own calculations, based on balance sheet data of Nanushka from the Hungarian electronic company register (e-beszamolo.gov.hu)

Table 3. Turnover and employment growth at Nanushka 2021–2021

A significant attractive feature of Nanushka is being green, sustainable and circular. The company strongly uses social media (first of all Instagram) and influencers to attract consumers [17]. They also use vegan leather in their collection and strongly emphasize their environmental concern in their communications and interviews. On their homepage, vegan leather is advertised (recently named as OKOBOR alt-leather) [18]. As Davis (2020) shows, plastic-based vegan leather can be more harmful to the environment (because of hundreds of years of waste degradation) than vegetable-tanned real leather (made from by-products of the meat industry). Even if polyurethan can be recycled in the future, Nanushka's vegan clothes are made of other synthetic materials too: polyester and acetate. Polyester generates plastic microparts during each wash, released in the wastewater and then into the oceans. Polyester cannot be infinitely recycled, and the recycling process is itself energy-intensive [19].

Press information we gathered on the company proves the strong focus in its communication on sustainability and environmental friendliness, which owners mention in almost all of their interviews. Not only do they mention their use of organic materials, but accession to certain organizations and donations made to environmental projects as well. The Hungarian-language online articles are either female and/or fashion websites' celebrity endorsement-types of articles [20] and press releases about the brand's latest collection, or articles that emphasize the "success story," "further expansion," "dynamic growth" qualities of the company and were published on economic/business sites, which often had reportedly close ties to the Hungarian government. Several Hungarian and international articles celebrated the brand's announcement in March 2022 that it will leave the Russian market amid the war, conveying its solidarity with Ukraine. As there was no documentation or reporting on Nanushka having a significant market in Russia, we can consider this as mainly a crowd-pleasing communication gesture without any meaningful financial sacrifice. The international outlets also published several interviews with the brand's founder, Szandra Sándor, which mention the importance of social media marketing in the company's success and emphasize its sustainability commitments. These underscore the "sustainable," "ethical" and "vegan" nature of the brand. Some articles are connected to Nanushka's retailers, such as Farfetch.com and Zalando. PR and the use of social media occupy a significant place in Nanushka's marketing and budget. (The cost of acquired services were higher than material costs in 2021 and 24% of the acquired services were marketing and 42% were expert fees.) [21]

For a number of years, sustainability has been thickly underlined in Nanushka's communication, which leads us to question whether it is greenwashing its activities. Apart from the already mentioned "sins" of greenwashing, there are ten further signs especially in corporate communication (Horiuchi *et al.*, 2009):

(1) fluffy language: words with no clear meaning ("eco-friendly");

(2) green product vs dirty company (such as efficient lightbulbs made in a factory that pollutes rivers);

(3) suggestive pictures that indicate a green impact;

(4) irrelevant claims: emphasizing one tiny green attribute when everything else is not green;

(5) best in class: declaring to be slightly greener than the rest, even if the rest are terrible;

(6) just not credible: "greening" a dangerous product does not make it safe;

(7) jargon, gobbledygook: information that only experts and scientists can understand;
(8) imaginary friends: constructed certifications, labels as if made by third parties;
(9) no proof, no evidence; and
(10) outright lying, fabricated claims or data.

We apply these communication signs (C1-10) and the "12 sins" framework already mentioned in Section 2.3 (S1-12) to analyze publicly available press information, existing sustainability reports and homepage of Nanushka. Table 4 summarizes the signs of greenwashing we found, and some of them are detailed below.

The company has made formal steps toward sustainability by joining organizations, signing commitments and reporting on its activities. In 2018, Nanushka joined the "Make Fashion Circular" program created by the Ellen MacArthur Foundation, aiming to reduce waste by promoting renting, repairing and reusing. A team of Nanushka participated in the Foundation's workshop in Milan. The Ellen MacArthur Foundation was examined by the Changing Markets Foundation (2022), which concluded that their members' commitments are voluntary and unenforceable, their independence is questionable (through corporate partnership funding and cross-partnerships with several initiatives), signatories are not ranked or called out and their partners' reports do not carry any verification (Changing Markets Foundation, 2022).

Nanushka has a social employment project since 2019 in an economically backward village, with a small community of women producing ceramic items and buttons. Since 2020, they have a "Design for Life" mentorship program, paid internship for black, Asian or ethnic minority young fashion talents (Nanushka, 2020, p. 19). At the beginning of 2021, several Hungarian online portals communicated that Nanushka prepared its first sustainability report with Deloitte based on 2019 activities. This was soon followed by a second report in 2020 [22]. It is in 2020 that Nanushka prepared a Code of Conduct and Supplier Manual too, which can be found on the website together with their commitments (Canopy and UN Fashion Charter).

Nanushka produces its garments globally. Its Tier 1 countries (garment assembly) are in China (17% of volume) followed by more closely located suppliers, such as Portugal, Italy and Serbia. It has 14 Tier 2 countries which manufacture, five of which are in Asia. Tier 3–4 countries (raw material production and processing) are in Asia (Nanushka, 2020, p. 15). Nanushka admits that they know only 10%–14% of their Tier 3–4 suppliers, reflecting the general difficulty in controlling foreign production. These facts contradict their communicated aim to ensure transparency (C6): "Our goal is to achieve full transparency and traceability of our supply chain to ensure that our social and environmental values are upheld." In Nanushka (2020, p. 7), it is written that "besides employment and manufacturing 71% of our products in Hungary, [Nanushka had a positive impact on local communities] [. . .].," which seems too high of a percentage considering other data and how they arrived at this number is not explained. According to their webpage, 62.8% of their production (35 suppliers) were based in Hungary in 2021. None of them are publicly listed. We conducted informal background interviews with local fashion industry insiders and one of them claimed the 35 Hungarian suppliers are unrealistic and "that number must contain companies specialized in packaging and even the retail of threads" [23]. The interviewee suggested that the brand works together with a lower number of garment production suppliers and has conducted outward processing and the re-importation of products. Szandra Sándor has noted that the existing capacity of local, Hungarian garment

Table 4. Greenwashing signs at Nanushka

Greenwashing	Traced at Nanushka
GW "Sins"	
1. Hidden trade-off	Vegan leather – no harm to animals, but plastic
2. No proof	Greenhouse gas emission calculations are largely based on estimations
3. Vagueness	Vague quantities, sentences in the company's reports and webpage
4. Worshiping false labels	(not found)
5. Irrelevance	A selective waste collection system in the office building, providing team members with reusable cups and lunchboxes
6. Lesser of 2 evils	Vegan leather
7. Fibbing	–
8. Dirty business	–
9. Ad bluster	Spending on sustainability, environmental, charity activities that are not the core ones
10. Political spin	–
11 it's the law	Refers to the fulfillment of REACH, which is obligatory in Europe
12 Fuzzy reporting	There is only one sustainability report per year (in 2019 and 2020) but the content is "pumped up"
GW Communication	
1. Fluffy language	Nanushka "empowers employees and supply chain partners to make conscious and responsible choices in their everyday professional and personal lives" (Sourcing policy)
2. Green product vs dirty company	–
3. Suggestive pictures	Sustainability reports illustrated with nice pictures of nature
4. Irrelevant claims	"We strongly encourage suppliers"
5. Best in class	"More than half of the base material is sustainable, which is rare even among the leading luxury stores. Our market share increased because of the sustainability image – that others do not have"
6. Just not credible	Goal of transparency is in contradiction with the growing no. of faraway suppliers
7. Jargon	Abbreviations without explanation: "Leather suppliers are encouraged to collaborate with existing traceability systems such as ICEC, LWG Traceability or CSCB," "Nanushka welcomes the use of recycled leather that is GRS certified." "Full compliance with Nanushka's PRSL and MRSL"
8. Imaginary friends	–
9. No proof, no evidence	"Nanushka prefers," "Whenever possible," "wherever possible" (Sourcing policy)
10. Outright lying	–

Source: Own elaboration

manufacturing companies limit their growth: "(. . .) professionals are getting older and there is no new generation [of garment workers in Hungary], as everybody wants to be fashion designer nowadays, but at the same time there is not enough tailor and sample maker" (Interview with the owners, 2017).

As the Nanushka (2020) describes, Nanushka's greenhouse gas emissions are calculated "across all business touchpoints for the first time in the brand's history, building on measured, estimated and Life Cycle Assessment data." A large part, 76%–73%, of the Tier 1–2 supplier data are estimates and all of the Tier 3–4 data are assessments based on products' life cycles. Considering this, the credibility of the indices and measurements is not high (S2). The company has stated its efforts to better understand their supply chain, but as they grow larger and larger, this seems to be even more difficult.

Nanushka's suppliers (those with which they are directly in touch) have to follow the 35-page Supplier Manual (sourcing policy). Here, for each material (cotton, silk, wool, etc.), we often find the same sentences:

> [. . .] suppliers shall use water and energy responsibly and efficiently at all stages (S3) and suppliers shall reduce chemical inputs and the use of hazardous chemicals shall be limited at all stages – at a minimum in line with REACH (S11).

As we mentioned, REACH is obligatory anyway for those who produce or sell in Europe. There are often vague quantities, sentences in the company's reports and webpage (S3):

> "Many of our wool-derived products are certified with the Responsible Wool Standard." "Some of our wool-derived products are GOTS-certified." "Most of our leather comes from tanneries certified to the Leather Working Group's standards."

The Code of Conduct refers to the working conditions and the Sustainability Report of 2019 declares that "We're building a clear, robust supply chain that provides jobs with fair wages." In the social media, however, we found negative comments on the company's non-payment of workers and it ignoring employees claims until they threaten to take legal action [24]. On the Glassdoor website – where employees evaluate jobs – the opinion on Nanushka is mixed; in 2020–2021, there are very good opinions articulated in few words and very bad opinions expanded in long sentences. The latter complain about horrible HR, not paying business partners and suppliers on time or at all, while management maintains a luxurious lifestyle, is unprofessional, opaque in their activities, careless and in favor of Hungarians [25].

We gathered similar information from interviews with Nanushka's Hungarian suppliers, who noted that remuneration was low and delayed.

> They don't pay, or they don't pay in time, or they pay less than formerly agreed. They don't pay for overtime. Suppliers do not see anything from their growth. Wages at suppliers who are working for Nanushka do not even reach the national economy's level [26].

A high fluctuation in workers and the trend of decreasing domestic suppliers also hint at such problems; thus, the credibility of commitments is questioned here too (C6).

We contacted two garment production companies who admitted that they worked for Nanushka in Hungary and we conducted semi-structured interviews with them. Their feedback from the brand is mixed: one of them did not have any negative experience with Nanushka regarding payments (although they "heard different things from other who faced several problems of paying little, not or delayed payment"). It revealed, however, that the brand severed a "gentleman's agreement" according to which the supplier prepared sample collections for the brand, but later did not get a production order [27]. Despite this experience, the interviewee said that they would work for Nanushka again. Another former supplier of Nanushka had an opposing opinion, as they "would rather shut down business completely than working for them again and cannot tell any good things about them" [28]. The owner of the company also emphasized that Nanushka offered unrealistic prices for the garments – way below "industry average" – and denied to pay for unscheduled downtime [29]. Moreover, it denied to sign any contract and formal agreement of work, while in some cases, the supplier had to manage the acquisition of raw materials even if this was the responsibility of the brand. "They have never monitored or checked anything [regarding working circumstances, guaranteed minimum wages, certifications or green practices of the supplier], we never experienced sustainability in any form [while working for Nanushka]" [30]. Based on the interviews, Nanushka does not enforce its own Code of Conduct and several requirements are not necessarily met by its suppliers. (If this is the situation in its home country, the situation is unlikely to improve in geographically distant areas.)

Bad experiences between fashion brands and garment production companies are not "Nanushka-specific." Delayed or inadequate payment after completed orders is quite general in the industry. Suppliers often feel obliged to accept orders below a fair price without any contract as "there are always another company, who accept the order that way as well." The lack of contract between stakeholders also limits legal options. The second interviewee we cited took note of the significance of illegal employment among Hungarian garment production companies:

> I know cases hen five people are employed officially, but the company gives work to 50 people. That way, the firm can accept orders at a minimum price but cannot complain anywhere if we are not paid at the end of the day.

In 2020, Nanushka planted 4,800 oak trees in Northern Hungary to compensate for the aviation emission of its personnel in 2019. To compensate for these emissions in 2020, Nanushka purchased carbon credits from Indonesia. The company also donated to civil organizations in gastronomy, the Roma community and child health, which were well placed but not related to its core sustainability activities (S9).

In the two sustainability reports, we also found well-intentioned but somewhat irrelevant (negligible) claims (C6, S5) such as having introduced a selective waste collection system in the office building as well as providing team members with reusable cups and lunchboxes.

6. Discussion

In the first part of our article, we provided a map of regulatory initiatives at three levels of the fashion industry. To answer our first research question, we found that national policies are different in their targets and methods. There is no common ground at the regional (EU) level either, because of the opt-out of certain countries. Meanwhile, civil organizations' initiatives are non-binding, similarly to the enterprise level actions which are taken voluntarily.

As for the company is the basic element in the fashion industry, we turned to the economic dimension of sustainability where revenue and growth are important elements. It can be supposed that HGFs can be even more sustainable than average ones, because of their high revenue. Therefore, we elaborated a case study.

We chose the case of Nanushka, because it is a well-known firm with sustainable image in the fashion industry and a HGF. Its growth had been organic, although recently, with the creation of Vanguards holding and its acquisitions, the owners seem to be moving toward acquired growth. It is not only the CEO's ambition to grow, but it is also in the interest of the state-financed capital fund that invested in the company. These ties lead Nanushka to fit into the Hungarian system of crony capitalism, as it is closely tied to the government.

Creating a sustainable image was a tool to achieve growth. The spectacular increase (mainly since 2018) of the company's revenues and profit coincides with the strengthening of its sustainability image and green communication, targeting responsible consumers. Similarly to other global fashion companies, greenwashing is a part of its marketing.

Nanushka has made steps toward sustainability in the past years, but behind the façade of a success story, there are fewer persuasive practices and their firm-level policies fail to reflect transparency and sustainability. The company's sustainability reports are validated by a renowned auditor company (this is an often-followed practice as we showed it in Section 3.2) and they enjoy full governmental support. The decreasing share of domestic supply, sourcing from far Asian countries and the high use of non-degradable materials contradict the principle of sustainability.

Based on our research, we can conclude that Nanushka belongs to a group of firms where sustainability is mostly an external pressure (de Brito *et al.*, 2008), which it is able to exploit. The product is at the core of the company's development (Westerhof and Chu Ying Shuen, 2022) and it merely spends to maintain an image of sustainability (saving Indonesian forest, planting trees, etc.). Sustainability for Nanushka is a tool to sell more products and the result of increasing revenues. Sustainability helps growth and growth supports sustainability-related spending.

These areas tend to fall outside its core activities, suggesting that a global fashion chain cannot be sustainable. High global growth contradicts the principle of sustainability. Profit could be invested in creating sustainable supply chain that can be overseen with its own raw material production, instead of opening more stores in the world, buying carbon credits and making donations. Being smaller can be more sustainable than building an international empire. There are examples of really small, but sustainable local firms even in Hungary (Ócsai, 2021).

Managerial mentality is a key issue in this growth–sustainability balance and regulation's effect is limited. State policy, however, can restrict, ban or punish certain activities, thus enforcing more sustainable practices. This can increase the tendency to greenwash as we referred to in Section 2.3. Lastly, the lobby power of companies closely aligned with the state can mitigate or hinder the effectiveness of such measures – this is especially true in crony capitalist regimes as is the case in Hungary.

7. Conclusions, policy suggestions and managerial implications

We doubt that completely sustainable global supply chains can be achieved in the fashion industry. Despite this, all efforts should be taken to reach the highest level of sustainability possible. Being environmental-friendly is a basic element of company-images today and its communication can bring new customers, can build confidence and raise profit. However, misleading or exaggerated communication has been a usual practice of fashion brands in developed and transition countries as we illustrated it with our case study. It is often difficult for customers to trace greenwashing, especially if it is surrounded by "green noise." Civil organizations, however, oversee this phenomenon and hold companies accountable.

National and international rules and certificates exist in the fashion industry, but their effectiveness is questionable. Therefore, we suggest to consider further policies.

Policies should refer to *transparency and supply chain accountability*. Monitoring the entire supply chain and executing due diligence should be compulsory. Companies should know and list their subcontractors involved at every level of their supply chain, down to the last spinning mills.

Companies are not in an easy position to verify and audit, so they can often only rely on third-party auditors and initiatives. These auditors frequently faced backlash and corruption-related issues, while failing to serve the interest of workers' rights in developing and emerging countries in favor of fashion brands' interests. We propose the *establishment of a supranational monitoring agency* that would also give technical support, rigorously and independently supervise existing third-party entities and focus on gaps (unmonitored aspects of sustainability, underreported countries and operational levels). The committee or committees of this agency could consist of 5–10 members from different countries elected for three years, reducing the risk of corruption. The monitoring agency can also offer an open-access platform, where supervised, reviewed, reliable information, papers, research conclusions and advisory help are available regarding fashion and sustainability.

Certain definitions should be regulated precisely, like that of leather. The lack of exact definitions can yield misleading statements on labels. Terms such as "vegan leather" can be confusing for customers and pave the way for greenwashing.

Currently, manufacturers and retailers must indicate the composition of raw materials (for example, 95% cotton and 5% elastane), but this does not have to show whether this is of organic origin, for example. It is a widespread practice within the industry that brands label their products as made from "organic" cotton, even if its organic content is the smaller portion or only reflects a few percentages. We suggest extending current legislation and making it a *requirement that the exact percentage of different types of cotton* is stated to forego greenwashing opportunities.

There are more than a hundred different certifications for the sustainability of textile products. The proliferation of weak certification and labeling schemes in the sector should be *regulated*. Apart from that, mandatory and ambitious *eco-design measures* could be introduced.

Textile *recycling and textile waste collection* as well as separation should be initiated and supported by incentives. The proper collection and waste management can reduce the reliance on virgin PET bottles for recycled content, among others.

To finance these measures, *fashion firms should pay a compulsory eco-tax* independent of their efforts to pursue sustainable practices. The rules and rate of the eco-tax could be established by the supranational agency proposed above. At the same time, *incentives and controlled grant possibilities* should be made available to support sustainability efforts, for example, for those who want to increase local production, establish or improve their own manufacturing sites and apply new technologies.

For fashion company managers, we recommend four main lines of action. First, the communication of the company should be clear, relevant and reliable. Vague, contradictory statements and commonplaces should be avoided, and all data should be verified. This builds trust with consumers that yield rewards in the longer term.

Second, ethical, fair treatment of all employees and suppliers, including on-time and fair payment should be secured. Social aspects (equity, inclusivity, empowerment, accessibility) are often overlooked, but the unfair treatment of workers cannot remain hidden in today's world of the internet.

Third, shortening the supply chain, reducing the number of faraway suppliers can be useful, because it improves the visibility and monitoring of partners.

Fourth, being fair and permissive with the company is better than pretending to be the best. Do not target aims that cannot be achieved and do not communicate untrue success.

8. Limitations and future research directions

As numerous national policies have not been accepted and implemented through legislation, we face the limitation of only analyzing proposals. This way, we cannot exclude that their content, scope and target will change because of corporate lobbying.

Another limitation of our study is that we do not analyze consumer behavior. One possible future research direction is the examination of how consumer trust, namely, fashion brands' environmental and human and labor rights problems, affects companies' economic performance. Our preliminary assumption is that companies will not move toward more sustainable practices without sufficient costs paired with non-action. Another possible future direction of research is the lobby power of fashion companies in the different capitalist systems.

Notes

1. It is responsible for making the raw materials and covers several fields – just to mention the two main parts: synthetic and natural materials.
2. On 24 April 2013, the collapse of the Rana Plaza building in Dhaka, which housed five garment factories, killed more than 1,100 people and injured more than 2,500.
3. To mention the most significant ones: Human Rights Watch, Amnesty International, Business & Human Rights Resource Centre, Centre for Research on Multinational Corporations, Worker Rights Consortium, Fashion Revolution, Clean Clothes Campaign, Labour behind the Label and Remake.
4. The REACH is an acronym for the registration, evaluation and authorization of chemicals.
5. The widely used chemicals, the polyfluoroalkyl substances (PFAs), are considered to cause cancer and thyroid disease.
6. Denmark, Germany, the Netherlands, Norway and Sweden.
7. According to Eurostat in January 2022, six EU Member States do not have national minimum wages: Denmark, Italy, Cyprus, Austria, Finland and Sweden.
8. www.ft.com/ft1000-2022
9. In the "Jeremie" venture capital program for Hungary, a subsidy of €422m was allocated to 28 fund manager private investors in 2009. The EU covered 70% of the investment given to start-ups. In 2015, the European Commission found that a large share of the Jeremie money landed in government-close circles (Szabó, 2017).
10. www.bet.hu/Kibocsatok/bet50/2020/bet50-vallalatok/nanushka-international-zrt
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15. It should be noted here that in the fashion industry, hidden employment is usual (outsourcing work or employing people only for short time).
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20. Online articles that emphasize only the fact that a certain, well-known celebrity had worn a garment from a certain brand. These articles do not discuss the fact that the celebrity "has chosen" a garment or wearing it is based on contracts with the celebrity's styling agency who is responsible for "dressing up" the celebrity.
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26. Based on a Hungarian anonym light industry source.
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28. Based on a former, Hungarian anonym garment production supplier of Nanushka 2.
29. Downtime is the time when the production is stopped. Our interviewee referred to a situation when companies (workers) cannot actually work and continue the completion of orders, because of the mistake of the employer or client (for example, missing elements for garment production), during the agreed period of production and reserved capacity of the production company, that is critical in peak periods. In that case, the client should pay 100% of the formerly agreed amount of money based on our interview.
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