

“Just Do It” – but responsibly

An analysis of the environmental and social aspects of the apparel, textile and luxury goods industry

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Summary

The apparel and textile industry is one of the industries most affected by globalisation. Most production has been outsourced to suppliers in low-cost emerging countries. NGOs have been criticising poor working conditions in supplier factories of the large clothing and sports goods companies and retailers since the early 1990s. Since sustainable investment is based on the principle that environmental and social risks are economically relevant, this report assesses how the apparel, textile and luxury goods industry has dealt with these issues. Investors should care about the issues mentioned above not only for ethical reasons but also from a purely financial point of view. The "sweatshop" allegations demonstrated the substantial financial risks that companies face from negative publicity, since their brand names are vulnerable to reputation risks. Conversely, by ensuring consistent ethical supply chain management or promoting ethical product labels, companies can create attractive brands with strong market potential.

After a decade of "sweatshop" allegations, leading companies have established ethical codes for suppliers, as well as supplier audits and factory visits to monitor compliance with the codes. Some have also started a more cooperative approach by giving suppliers longer-term support in organising work processes in order to improve labour conditions. The most critical country with a poor record of human and labour rights is China, which is at the same time the largest textile producer worldwide. A few international clothing companies have worked with suppliers in China to establish basic process of collective bargaining, which is practically restricted by the Chinese authorities. The industry has also considerable environmental impacts which are most severe at the "start" of the supply chain. Dyeing, tanning and leather processing produce hazardous effluents and use hazardous chemicals. Many companies are working on the reduction of emissions and the development of alternative substances. Chemicals used in garments may cause health risks if worn. Some effluent solvents are harmful to workers' health. With growing consumer interest in organic products, demand for eco-labelled clothing products is increasing. Also a few leading companies have started offering organic product lines.

The sustainability analysis of the largest companies in the industry shows that especially those which have been most criticised by NGOs are now among the most advanced companies in managing their supply chains in a socially responsible manner. Among the companies with the highest sustainability rating are Adidas, ranked top, followed by Puma, Nike and Timberland. Puma, Nike and Timberland are developing environmentally friendly product lines. In general, the sustainability performance of luxury goods companies is ranked lower than that of the clothing and sports goods companies. To a large extent this is due to the fact that they are less exposed to these risks. Swatch, the top ranked luxury goods company, integrates environmental and social assessments into its global risk management system.

Introduction

The apparel, textile and luxury goods industry is one of the industries most affected by globalisation. Major clothing companies have outsourced production to contract manufacturers since the early 1980s¹, while they focus on design and marketing. To seek further cost reductions, shifting production facilities from industrialised countries to developing countries is a trend in the industry. Some companies have been criticised by human rights groups, trade unions and other NGOs because of poor working conditions (low wages, inadequate occupational health and safety), the violation of human and labour rights (freedom of association), as well as unethical business practices (corruption, collaborating with regressive regimes) that are rife in these countries.

"Watch that ball – it could have been made in a prison".

In 1998, the German sports goods manufacturer Adidas-Salomon (Adidas) was targeted by Chinese dissidents accusing the company of using prison labour to produce World Cup footballs².



Source: BBC Online Network, 14 January 1999: Adidas investigates prison labour allegations

The industry is therefore exposed to significant social risks. These risks cannot be overlooked by companies and investors, as they can quickly transform into financial risks, such as consumer boycotts or damage to brand reputation.

This report gives an overview of the assessment of the industry and its major listed companies from a Socially Responsible Investment (SRI) perspective. One of the major questions of interest is which companies are best positioned to deal with the industry-specific risks and should thus be favoured by SRI investors.

¹ Richard M. Locke (2002): The Promise and Perils of Globalization – the case of Nike.

² BBC Online Network, 14 January 1999: Adidas investigates prison labour allegations; <http://news.bbc.co.uk/1/hi/world/124522.stm>

Industry description

The apparel, textile and luxury goods industry comprises two distinct sub-segments: the manufacturers of textiles, clothing (including shoes and leather-wear) and sports goods; and the manufacturers of accessories and luxury goods (watches, jewellery, handbags, perfumes, etc.). Some companies also offer alcoholic beverages and tobacco goods in their product range. The apparel, textile and luxury goods industry accounts for 0.6% of the total market capitalisation of the MSCI World Index³.

This report examines the world's fifteen largest apparel, textile and luxury goods companies and a handful of other important industry players (Burberry, Christian Dior, Timberland). They represent different countries (Europe, USA and Asia).

Fifteen largest apparel, textile and luxury goods companies				
Company	Country	Sales 2004 (USD bn)	Employees (2004)	Market cap. (USD bn)
LVMH	France	15.1	57'000	44.0
Richemont	Switzerland	4.5	15'000	23.3
Nike	USA	13.7	26'000	16.5
Coach	USA	1.3	4'000	13.2
Luxottica	Italy	3.9	23'000	11.4
Adidas-Salomon	Germany	7.8	17'000	10.3
Hermes Internat.	France	1.6	6'000	9.6
VF Corp	USA	6.1	53'000	6.2
Puma	Germany	1.8	4'000	5.1
Yue Yuen	Hong Kong	2.7	252'000	4.8
Swatch Group	Switzerland	3.2	21'000	4.2
Liz Claiborne	USA	4.6	15'000	3.7
Jones Apparel	USA	4.6	17'000	3.7
Bulgari	Italy	1.0	2'000	3.4
Onward Kashiwama	Japan	2.6	15'000	3.0

Market capitalisation status: 24th of January 2006

³ The Morgan Stanley Capital International World Index, 24 January 2006.

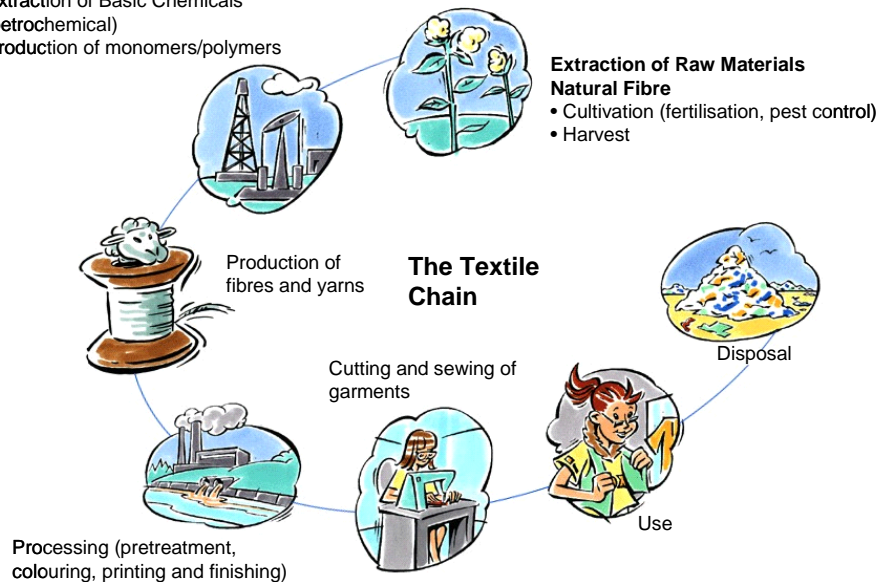
Sustainability issues

The sustainability analysis performed on apparel, textile and luxury goods companies by Bank Sarasin covers aspects such as the implementation of environmental management systems, the development of emissions and resource consumption, working conditions, stakeholder dialogue, business ethics, relationships with suppliers and corporate governance. Appendix 1 contains an overview and description of the methodology used.

The industry's sustainability rating is "average". The industry-specific environmental and social impacts are concentrated in the area of the supply chain ("pre-production"). They stretch from the production of raw materials (e.g. cotton farming, synthetic fibres), to the processing of raw materials (e.g. tanneries, spinning mills), weaving mills, and dyeing and sewing works.

Production of Synthetic Fibre

- Extraction of Basic Chemicals (petrochemical)
- Production of monomers/polymers



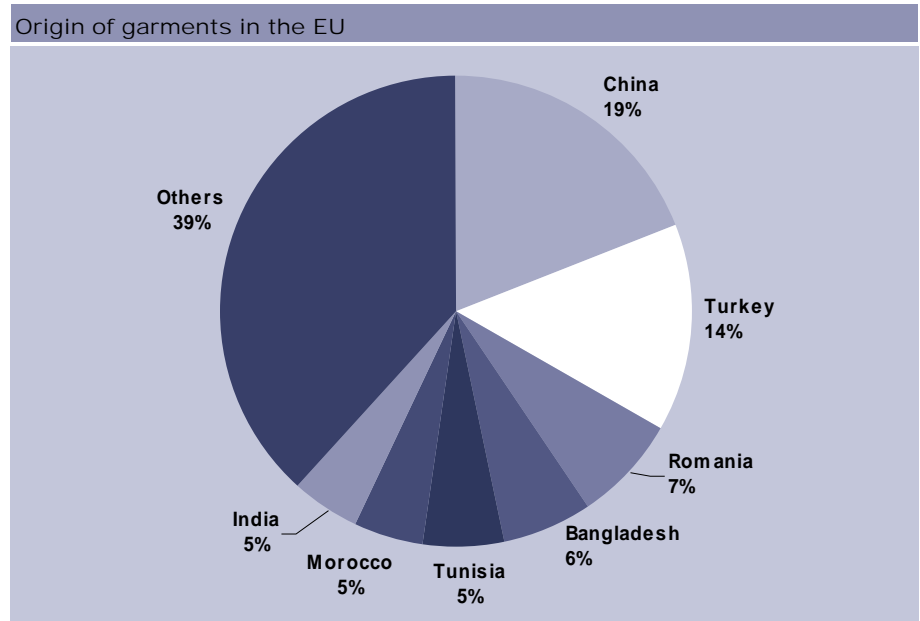
Source: www.agendakids.muc.kobis.de

The textile production processes are labour intensive

The production processes are labour intensive, partly because they cannot be automated for technical reasons. In the EU, the average labour intensity of the footwear industry is about 40% higher than the average of the manufacturing industry⁴. In order to increase cost competitiveness, more and more of the major apparel companies in industrialised countries focus on design and marketing, and outsource production to contract manufacturers in emerging economies with low labour costs (Asia, Eastern Europe). For example, the German sports goods and footwear company Adidas outsources nearly all its product manufacturing to

⁴ The European Union (2005): Economic and Competitiveness Analysis of the Footwear Sector in the EU25; <http://europa.eu.int>

843 suppliers worldwide, 60% of which are located in Asia⁵. China is the main supplier, accounting for 19% of the total textile imports into the EU in 2004⁶.



Source: European Communities (2004): The Textile Industry in the EU

Low-cost countries have higher environmental and social risks

This "globalisation of supply chains" is associated with specific environmental and social risks. The reason is that environmental and social standards and practices in many emerging countries, where the products and raw materials are produced, are comparatively poor. Cotton farmers exposed to high doses of pesticides, polluted rivers near leather tanneries, child labour, excessive overtime and low wages in clothing factories are among the issues that are increasingly being raised by concerned consumers. The key sustainability issues in the industry are summarised in the following table:

Key sustainability issues for the apparel, textile and luxury goods industry	
Topics	Description
Working conditions in the supply chain	Low wages, inadequate occupational health and safety, excessive working hours
Production in "critical" countries	Freedom of association, job security in industrialised countries, corruption
Environmental issues in the supply chain	Chemical use in textile processing and manufacturing (air emissions, wastewater)
Product safety and quality	Toxic substances in products, health risks for workers

Source: Bank Sarasin

Luxury goods companies are much less exposed to these risks

It must be said that luxury goods companies are much less exposed to these risks than clothing and sports goods companies, since they usually keep production in-house, while manufacture in emerging countries is relatively limited.

⁵ Adidas-Salomon, Social and Environmental Report 2004: p. 11

⁶ European Communities (2004): The Textile Industry in the EU.

Working Conditions in the Supply Chain

The "sweatshop" allegations in the 1990s

Poor working conditions in the supply chain (low wages, excessive working hours, inadequate occupational health and safety conditions) have been criticised, especially in the case of the clothing and sports goods companies. These companies have been attacked by human rights groups, trade unions and other NGOs since the 1990s. The "Boycott Nike" campaign is just one example.

"Sweatshop" allegations against Nike started in 1991 when the Economist reported on working conditions in Nike factories in Indonesia. In 1997, the case attracted a lot of publicity when a story appeared on the front page of the New York Times about labour conditions in Nike factories in Vietnam, where workers were being exposed to carcinogens at 177 times safe levels, and were being paid just USD 10 for a 65-hour work week, which was far longer than the local law allowed⁷.



Companies have slowly responded and improved...

In the mid-1990s, companies started to react and initiated "superficial" reforms such as setting up ethical codes, and coalitions (e.g. the Fair Labour Association) aimed at monitoring and improving labour conditions in supplier factories. After a decade, leading companies have established comprehensive ethical codes for suppliers, requiring compliance with the Core International Labour Organisation's Conventions⁸. Regular audits of working conditions are conducted at factories of key contract manufacturers. However, the effectiveness of pure supplier monitoring programs in improving labour condition was found to be unsatisfactory (fraud).

Ethical Trading Initiative (ETI)⁹: ETI is a voluntary initiative of a number of British retailers and consumer goods companies, NGOs and trade unions, in partnership with the UK government, to promote good practice in supply chains, based on a common ETI Base Code. China has been one of the focal points of ETI's activities, which included providing information for their members about the challenges in China, and conducting pilot projects to implement the ETI Base Code. The current ETI China Project is an engagement programme aimed at improving health and safety conditions by installing elected health and safety committees in supplier factories. In a second phase of the project, ETI plans to promote the installation of independent worker committees, based upon the experiences with the health and safety committees.

Encouraged by ethically minded retailers, some leading companies have started more cooperative capacity-building programmes (training, dialogue with workers,

⁷ Organic Consumers Association, April 2002: Nike's Green Washing Sweatshop Labor; www.organicconsumers.org/clothes/nikesweatshop.cfm

⁸ The Core International Labour Organisation's Conventions: no forced labour, child labour, freedom of association, right to collective bargaining, and no discrimination.

⁹ Ethical Trading Initiative (2003): Report on the ETI Biennial Conference 2003 – key challenges in ethical trade.



supporting supplier factories in achieving higher labour standards). However, one key conflict of interest remains for suppliers: cost and time pressure versus high ethical standards. To resolve this conflict, some companies give equal powers to both their general procurement department and corporate social responsibility department.

Production in "critical" countries

Cheap, but costs more in the longer run

Poor working conditions in the supply chain are exacerbated if production facilities are located in "critical" countries with poor records in human rights, political rights and labour rights. Apart from "sweatshop" allegations, companies are exposed to the risk of labour rights violation (e.g. restrictions against trade unions) and unethical business practices (corruption, collaborating with repressive regimes). The most important country of concern in this respect is China.

China is the most critical country

China is the largest textile exporter in the world, accounting for 16% of global textile exports, followed by India (4%). One quarter of all Chinese earnings from textile exports are owned by foreign companies and the rest by local Chinese companies, the majority of them subcontracted to foreign brands. Under Chinese law, independent trade unions are prohibited. All unions must be organised under the umbrella of the All China Federation of Trade Unions (ACFTU), which is controlled by the Communist Party. Neither the Chinese Constitution nor Chinese law provides for the right to strike¹⁰. Companies producing in China are therefore the object of concerns and calls for restrictions on trading with China by NGOs, consumers and politicians.

Some companies attempt to improve labour rights by legal means

The possibility for companies to improve labour rights in their supply chain is limited in this repressive environment. However, some companies have initiated projects which show the available room for action. Under Chinese law, in principle, collective bargaining and democratic election of trade union members are allowed. In 2002, the sports goods manufacturer Reebok initiated a project to establish democratically elected workers' committees in Chinese footwear factories of suppliers. Before organising elections, Reebok carried out seminars for factory workers about labour rights under the Chinese trade union law and explained the process to elect worker representatives. Over 94% of workers participated in the election, which was observed by a Hong Kong-based NGO to make sure it was fair and independent. As a result of the election, many ACFTU-endorsed officials lost their seats.¹¹

Relocation, outsourcing, demise of the local industry...

Another source of conflict associated with the shift of production to low-cost countries is the knock-on effect of job losses, especially in industrialised countries. In the EU, the footwear industry lost around 160,000 jobs (accounting for 4% of the workforce per year) between 1995 and 2003. France lost 55% of the workforce in the textile industry and the U.K. 73%. The footwear market has grown 20% between 1995 and 2003, while production has declined more than

¹⁰ Au Loong-Yu (2005): THE POST MFA ERA AND THE RISE OF CHINA; <http://www.amrc.org.hk/5604.htm>

¹¹ Association for Sustainable and Responsible Investment in Asia (ASrIA) (2002): Labour Standards in China, the Business and Investment Challenge.



... and finally, backlash: trade restrictions

36% and imports have increased by 50%¹². These developments have resulted in trade restrictions to protect the domestic textile industry and jobs. Up to 2005, the EU had imposed quotas on the import of textiles, clothing and footwear under the global Multi-Fibre Agreement (MFA) since 1994.

Companies with supplier production sites in the export countries covered by these trade restrictions are directly affected. They are exposed to the risk of supply interruption. This was clearly shown by the recent developments after the expiration of the MFA in 2005. The lifting of the import quota resulted in a steep increase in textile imports, especially from China. In mid-2005, the EU reacted by temporarily stopping imports from China, putting a number of textile retailers and manufacturers in trouble. In June 2005 a new agreement to limit imports of certain textile products from China was reached.

Textile Trouble



Source: The Economist, 1 September 2005: Textile Trouble

Nevertheless, luxury goods and watches always shine

Some of the industry's sub-segments, such as luxury goods or watches, generally keep production in-house, since their brand value depends on traditional craftsmanship in home countries. For example, luxury leather shoes mark up between the EU export price and the EU import price is close to 200%¹³.

Luxury Goods Sector: "A brand (of luxury products) is a set of associations in the mind of the consumer and one of these is the country of origin. Regional associations with old European craftsmanship. General knowledge of leatherwork, design and other crafts found in Europe cannot be exported. Most workers are second- or third-generation leatherworkers. Workers must have the European bourgeois culture in their blood and also the culture of how to make those things. Shifting to low-cost areas only to increase gross margins will destroy the equity of the brand"¹⁴.

¹² The European Union (2005): Economic and Competitiveness Analysis of the Footwear Sector in the EU25; <http://europa.eu.int>

¹³ Ibid.

¹⁴ The Financial Times, 3 December 2003: The Last Sector Where Made in Europe Matters – back-street bonanza for the counterfeiters the low labour..., by Jo Johnson, Fred Kapner and Richard McGregor.



Environmental issues in the supply chain

Environmental concerns are concentrated in the upper stream of the supply chain

The industry's environmental impacts are most severe at the "start" of the supply chain. The growing of cotton, for example, generally requires heavy use of agrochemicals and water. Cotton is the second most pesticide-laden crop in the world after coffee and before tobacco¹⁵. Cotton accounts for almost 25% of all pesticides used in agriculture, even though the area of production is less than 3% of the world's arable land¹⁶. Also cotton accounted for more than half of the irrigated agricultural land in the world. Cotton production requires between 1% and 6% of total global freshwater withdrawal per year¹⁷. Some apparel and textile companies are developing programmes that either use 100% organically grown cotton, or blend small percentage of organic cotton with conventional cotton in their products.

Nike and organic cotton: Nike¹⁸ is one of the largest purchasers of organic cotton in the world. In 2004, 22% of its apparel cotton materials and 47% of cotton garments contained at least 5% of organic cotton (representing double the 1999 figure). The 100% certified organic cotton line "Nike Organics" was launched in 2002. In 2005, the volume of 100% organic cotton garments was significantly increased to one million units (10,000 units in 2002). Nike is planning to integrate a minimum of 5% certified organic cotton into all cotton containing apparel materials by 2010.

The global production of organic cotton has increased nearly four times in the last decade¹⁹. With growing consumer interest in organically grown products, demand for eco-labels is also increasing.

Dyeing, tanning and leather processing works produce large quantities of effluent (air emissions, wastewater) and use environmentally harmful chemicals such as acids, tanning agents containing heavy metals, dyes and solvents. In countries and regions with less stringent emission standards and insufficient wastewater treatment infrastructure, this results in water pollution. Another issue is the use of solvents, for example, in adhesives for manufacturing of leather products. Many companies are working on the reduction of volatile organic compounds (VOCs) in production by investing in technology to upgrade processing lines, and developing alternative substances (e.g. solvent-free adhesives).

Product safety and quality

Chemicals in products
... health risks?

The use of chemicals in the different steps of the textile and leather production chains (e.g. dyes used to colour the fabrics, leather tanning agents, textile finishing resins) may cause health risks. Public awareness of the potential risks has been increasing in the past decade. Consumer product tests (e.g. the German

¹⁵ Organic Cotton Exchange, 2005; www.organicexchange.org

¹⁶ Helvetas, 2005; www.helvetas.ch

¹⁷ World Wide Fund for Nature (WWF) (1999): The Impact of Cotton on Freshwater Resources and Ecosystems.

¹⁸ Nike, Corporate Responsibility Report, FY2004.

¹⁹ WWF, 2006; www.panda.org, Helvetas, 2006; www.helvetas.ch



Improper handling of chemicals
in production poses health risks
for workers

"Ökotest" magazine²⁰) have published repeated warnings about substances used in garments that can cause allergies, skin rashes and even cancer. In Germany, for example, the Textile Working Group which was established in 1992 at the Federal Health Office (Bundesgesundheitsamt) carried out a study about health risks for consumers by wearing textiles. According to the study²¹, there is no systemic toxic risk, however, there is a risk of allergic contact dermatitis. Synthetic Azo dyes are frequently used in textiles, some of which may be carcinogenic. In many industrialised countries, certain Azo dyes are banned. However, these dyestuffs are still present in a number of imported textiles.

Health and safety risks on the textile processing and manufacturing sites are reported more often. Solvents are frequently used in textiles, clothing and leather factories (e.g. adhesives, primers, paints, cleaners). They evaporate and some of them are harmful to health. Workers may also be exposed to other hazardous chemicals used in the production process. For example, tanners may be exposed to chemicals used as biocides such as chromium or PCP (pentachlorophenol), which are possible allergens and carcinogens²². Studies of leather tannery workers in Sweden and Italy found cancer risks are between 20% and 50% higher than average²³. Moving to the upper stream of the supply chain, studies of human impact from pesticides used for cotton farming have estimated that as many as 20,000 people are killed and three million are poisoned every year²⁴.

Environmentally friendly product improvements of Timberland: Timberland is developing environmentally friendly product lines. In 2004, Timberland introduced the Earthwatch boots (40% less energy in the tanning process, contains a 30% recycled rubber outsole, and a 30% recycled thermoplastic PVC-free midsole). In 2005, the main environmental focus was on dyeing materials (wool, natural crepe, rubber, leather) with natural dyestuffs, while in 2006 the focus has shifted to recycled and sustainable material use²⁵.

²⁰ Ökotest; <http://www.oekotest.de>

²¹ Bundesinstitut für gesundheitlichen Verbraucherschutz und Veterinärmedizin (2002): Textile Garments; http://www.bfr.bund.de/cm/230/textiles_e_aug_2002.pdf

²² Business for Social Responsibility (2002): Restricted Substances in Apparel Products: implementation resources.

²³ People for the Ethical Treatment of Animals (PETA), 2006; www.cowsarecool.com/environment.asp

²⁴ WWF, 2005; www.panda.org

²⁵ Timberland, 2004 Corporate Social Responsibility Report.

Financially relevant risks and opportunities

Social and environmental risks are linked to financials

Allegations against Nike or Adidas for using child labour or "sweatshop" labour not only affect the ethical reputation of these companies – they also represent substantial financial risks. This is why investors should care about these issues not only for ethical reasons, but also from a purely financial point of view.



Source: The Economist, 25 February 1999: Sweatshop Wars

On the other hand, there are also opportunities. For example, the markets for ethical product labels (e.g. "Fair Trade", "bio") are booming and manufacturers with high social and environmental standards are reaping the benefits.

The following table summarises the most important financial risks and opportunities associated with the different social and environmental impacts of the apparel, textile and luxury good industry.

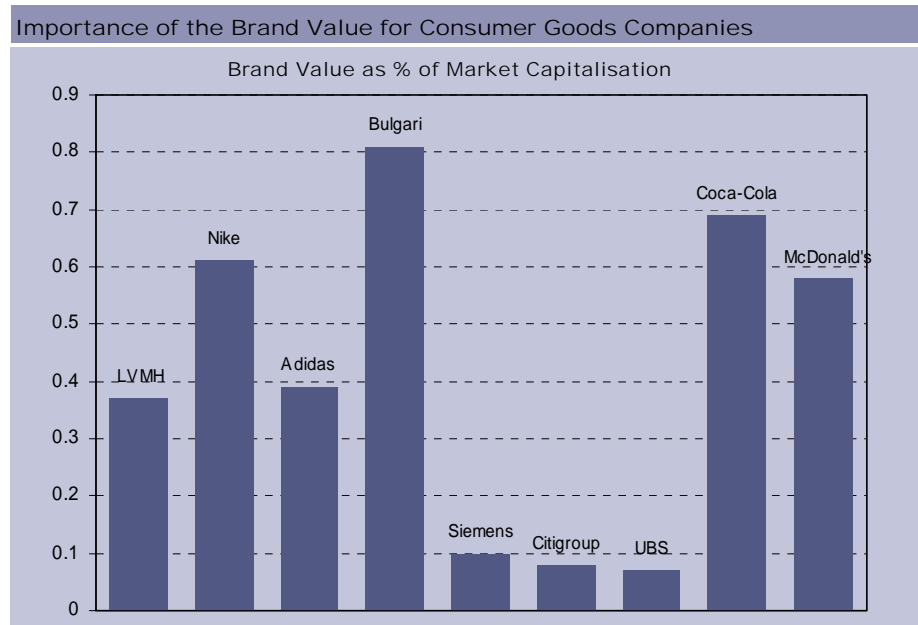
Financial risks and opportunities associated with sustainability issues		
Sustainability issues	Risks	Opportunities
Working conditions in the supply chain	<ul style="list-style-type: none"> • Damage to the brand's reputation (consumer boycotts) • Shortcomings in product quality and delivery capacity 	<ul style="list-style-type: none"> • Stable supply conditions and enhanced reputation thanks to "holistic" supply chain management (consideration of working conditions, collaboration with NGOs) • Potential to boost earnings and reputation by specialising in "socially responsible" brands (label products) or high-quality products (production in home country)
Production in "critical" countries	<ul style="list-style-type: none"> • Damage to the brand's reputation (consumer boycotts) • Supply bottlenecks due to political or regulatory limitations (trading restrictions, corruption, etc.) 	<ul style="list-style-type: none"> • Stable supply conditions and enhanced reputation thanks to "holistic" supply chain management (involvement in international initiatives and local communities) • Potential to boost earnings by specialising in high-quality products or diverse product mix (production in home country)
Product quality and safety standards	<ul style="list-style-type: none"> • Product liability cases • Damage to the brand's reputation (e.g. in consumer tests) • Legal restrictions (e.g. ban of critical substances) 	<ul style="list-style-type: none"> • Avoiding product safety problems by proactively replacing critical substances • Potential to boost earnings and reputation by specialising in "environmentally responsible" brands (label products)

Source: Bank Sarasin



Working conditions in the supply chain

As the example of the sports goods companies has demonstrated, poor labour conditions in supplier factories can result in public criticism and NGO attacks. This is of utmost financial relevance for the companies, as this negative publicity poses a direct threat to the reputation of the product brand. Especially in the consumer goods industries, the brand is a key component of market success and hence the enterprise value. The brand value of well-known consumer goods companies (Nike, Adidas, Coca-Cola, McDonald's) contributes between 40% and more than 70% to the enterprise value (see chart below). This shows the significant downside risk for investors in case of negative publicity for these companies – quite different from banks or capital goods companies, where the brand value is much less important.



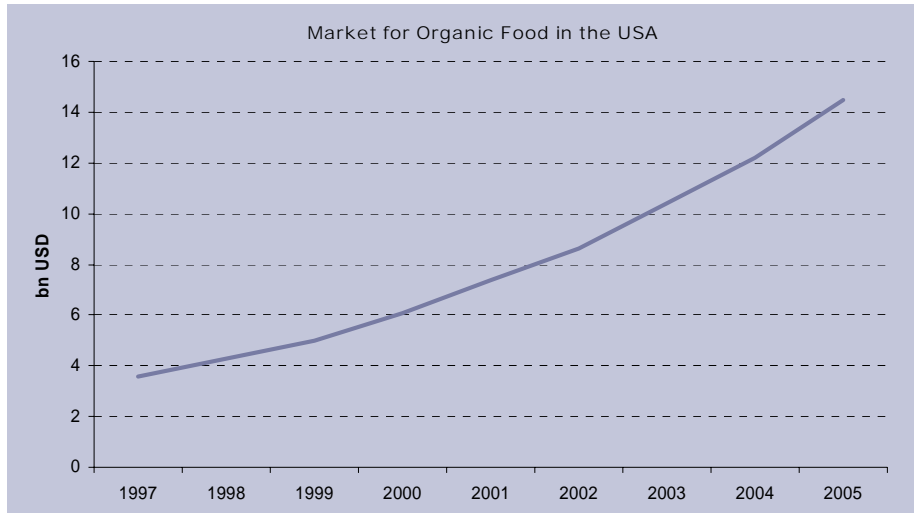
Source: Bank Sarasin, based upon figures from Business Week²⁶ and Morgan Stanley²⁷

The opportunity exists for companies with consistent ethical supply chain standards and monitoring systems or those focussing on ethical product labels ("Fair Trade") to build attractive brands with strong market potential. Most companies in the clothing and sports goods industry have now established ethical supply chain standards and monitoring systems with extensive supplier audits and factory visits.

²⁶ BusinessWeek online, 2006, Top 100 Global Brands Scoreboard; <http://bwnt.businessweek.com/brand/2005>

²⁷ The Morgan Stanley Capital International World Index, 24 January 2006.

Growth of the markets for ethical product labels – the case of organic food



Source: Organic Trade Association (USA)

Poor working conditions in the supply chain can also result in operational risks such as product quality problems and supply bottlenecks. Poor health and safety standards and excessive overtime can result in increased occupational accident rates, high employee turnover and insufficient product quality. Experience in China, the most important production country for textiles and clothing, has shown that improving labour conditions can have a positive impact on productivity and hence the financial bottom line (see Box).

Higher productivity through reduction in overtime in Chinese factories: The Impactt Overtime Project²⁸ was a 3-year joint pilot project started in 2001 of 11 purchasing companies and their local partners to examine if productivity can be improved without compromising labour standards. Impactt encouraged them to use more positive approaches such as offering incentives and benefits. In addition, a productivity consultancy (e.g. assessing production methods, recommendations for improvement) was organised for the factory managers and Impactt promoted communication workshops for factory workers, allowing them to raise issues. Finally although the factories did not achieve consistent compliance with Chinese law, productivity was improved at least 25%, and by 190% at the most. Wages rose without sacrificing productivity, even though workers work less.

Some of the big brand manufacturers have now started to engage with their suppliers in order to make best use of such "win-win situations", rather than just setting up teams to monitor supplier factories. This co-operative approach promises to give companies a competitive advantage in the form of more consistent product quality and conditions of supply.

Production in "critical" countries

Poor labour conditions in supplier factories are, to a large extent, linked to increasing production in "critical" countries. These countries not only have low social standards and human rights violations but also present political risks. This can result in trade restrictions in particular, such as those imposed in 2005 on textile imports from China. Companies having established a "socially responsible supply chain management" can minimise such risks, partly through active social engagement and the establishment of a good reputation in these countries.

²⁸ ASrIA, CIS, Impactt (2005): An SRI Perspective on the Impactt Overtime Project.



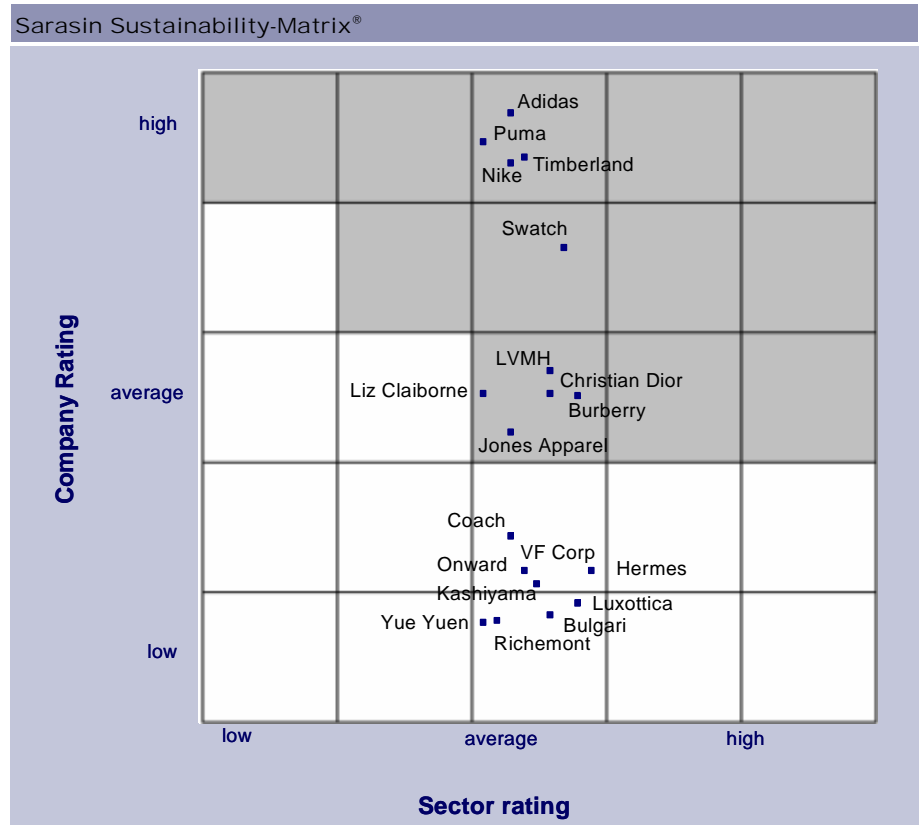
In addition, a business strategy that is consistently geared towards quality products or to a very diverse product range is a more sustainable approach to these country risks, as it is based on know-how, innovation and efficient logistics instead of cheap labour costs, and therefore totally avoids the relocation of production to critical countries. This strategy applies for most producers of luxury goods in the industry.

Product quality and safety standards

Product tests performed by consumer protection bodies regularly report on hazardous substances found in textiles. If genuine health risks are detected, it can have far-reaching financial consequences for the company in question, whether through compensation claims (which are growing all the time) or legal bans. Apart from this, the test results alone can negatively affect the reputation of a product brand. Companies can reduce these risks by being proactive in finding substitutes for critical substances. A more consistent strategy based on externally certified product labels (eco-labels such as the European Eco-label) can help companies to tap into additional markets in the area of ethically motivated consumption.

Results of the company evaluation

The evaluation of the companies' environmental and social performance is based on a proprietary valuation methodology developed by Bank Sarasin. A detailed description of the methodology and its application to the apparel, textile and luxury goods industry is provided in Appendix 1.



Source: Bank Sarasin

* Only the companies positioned in the shaded area qualify for Sarasin sustainability funds. Institutional mandates can choose their own preference and definition of investment and invest in any companies within the universe.

The results shown in the Sarasin Sustainability-Matrix®:

The "sweatshop" companies are no longer sweating

Among the companies with a "high" sustainability rating are those which have been targeted by human rights groups and NGOs for "sweatshop labour": Adidas, Puma, Nike and Timberland. Their exposure to environmental and social risks is still high. However, all of them have established minimum labour standards for their supply chain and devote considerable human resources to regularly monitoring compliance with these standards. All of the clothing and sports goods companies with a "high" sustainability rating have also taken measures to reduce environmental impact. The use of problematic substances such as PVC is being phased out. Puma, Nike and Timberland are developing environmentally friendly product lines such as certified "organic" cotton products. Adidas, ranked top, is less active in "organic" cotton products, but the company



has the most advanced environmental and labour standards and practices throughout the whole supply chain.

Luxury goods companies shine
less bright

Many luxury goods companies do not address environmental and social issues in a comprehensive way and some hardly report on the relevant issues. This is mainly because most luxury goods companies keep production in-house. Swatch, the leader among them, integrates environmental issues into its global risk management system as part of its quality management. LVMH has achieved a significant reduction in air emissions in the past years. Burberry and Christian Dior have environmental management systems in place, but no specific information on concrete environmental programmes (e.g. efforts to reduce/substitute chemicals). None of the luxury goods companies are attempting to explore the ethical product market.

Opportunities for socially
responsible investors exist

In conclusion, the good news from a SRI point of view is that the leading companies that used to be in the headlines for "unethical" business practices have now established leadership not only in the conventional business field but also in the area of corporate social responsibility, and qualify for being invested in SRI funds. This positive development is mainly due to the pressure from NGOs and consumers, and to some extent from SRI investors as well.

Appendix 1

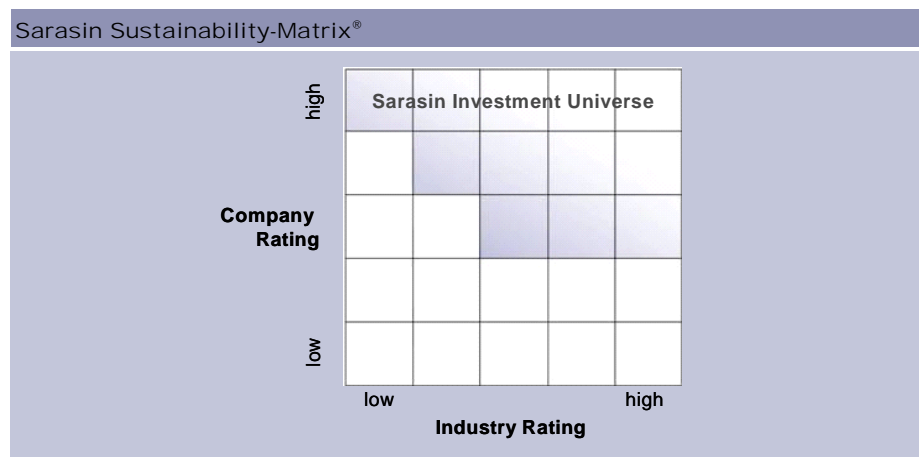
Sustainability analysis methodology

Matrix combines industry and company rating

Our environmental and social analysis of companies is based on a proprietary valuation method developed by Bank Sarasin. It incorporates two dimensions which are combined in the Sarasin Sustainability Matrix®:

- ◆ **Industry rating:** Comparative assessment of industries using selected environmental and social criteria,
- ◆ **Company rating:** Comparative environmental and social analysis of companies within their industry.

Only the companies positioned in the Sarasin investment universe (shaded) qualify for Sarasin sustainability funds.



Source: Bank Sarasin

Main criteria for the industry rating

The industry rating is an aggregated assessment of the extent to which an industry creates environmental and social risks. We examine a total of four risk categories:

- Consumption of resources: Use of natural resources (especially fossil fuels and water)
- Emissions: Emission of air pollutants and creation of waste
- Internal conflict potential: Influence on employment and work conditions (health & safety, salaries, labour rights)
- External conflict potential: Impacts on society as a whole, especially harmful and ethically controversial production methods and products, political lobbying and exercising of financial power, corruption and business ethics, activity in countries with low social standards (globalisation).

The industry risk exposure is derived from the characteristic product spectrum of an industry. We take the entire life cycle of products into account here, from the production of raw materials to the manufacture, use and eventual disposal of the product. Our industry rating focuses on the risks, as already explained. We do not take into account the positive contribution an industry makes to sustainable development (e.g. through its products).

Environmental and social risks of the apparel, textile and luxury goods industry			
Phase in the product life cycle			
Risks:	Pre-production	Production	Use & Disposal
Consumption of resources	●●●	●	
Emissions	●●●	●	
Internal conflict potential	●●●	●●	
External conflict potential	●●	●●	●●

Source: Bank Sarasin

Overall industry rating

The industry’s sustainability rating is “average”. The industry’s environmental and social risks are concentrated in the area of supply chains (“pre-production”). To keep costs low, production facilities tend to be outsourced to countries where working conditions are poor (low wages, inadequate occupational health and safety, excessive working hours). Chemical use in textile processing and manufacturing produce large amounts of air emissions and wastewater, which are harmful not only to the environment but also to human beings (consumers, factory workers). Some of the industry’s sub-segments, such as luxury goods, are generally less exposed to the environmental and social risks mentioned above, since they keep production in house.

Main criteria for the company rating

When rating individual companies, we look at how they deal with industry-specific environmental and social risks and how they exploit the associated opportunities. The main criteria are identical for all industries. They are compared with the industry average in the company’s environmental and social profile and then aggregated into an overall rating. The weighting of the main criteria and the selection of the subcriteria are industry-specific.

The following table contains an overview of the criteria and weightings used for the apparel, textile and luxury good industry.

Sample criteria and weights for the environmental rating of apparel, textile and luxury goods companies			
	Main criteria	Weight	Key indicators
Environmental profile 50%	Strategy & Management	20%	Integration into business strategy and organisational structure, planning and control processes, quality of reporting
	Pre-production	40%	Environmental requirements for suppliers and contract manufacturers
	Production	20%	Reduction of energy consumption, air and water emissions, reduction and substitution of hazardous substances, material efficiency and waste management
	Products & Services	20%	Phase-out of hazardous substances, logistical optimisation, environmentally friendly packaging

Source: Bank Sarasin

Sample criteria and weights for the social rating of apparel, textile and consumer goods companies			
	Main criteria	Weight	Key indicators
Social profile 50%	Strategy & Management	20%	Integration into business strategy and organisational structure, planning and control processes, quality of reporting
	Government. & General public	15%	Production sites in “critical” countries, contribution to social programmes, public criticism due to unethical business conduct, involvement in critical businesses (e.g. alcohol)
	Investors	5%	Composition of the board of directors, voting rights, quality of financial reporting
	Suppliers	30%	Requirements for working conditions, monitoring system for compliance
	Employees	10%	Health & safety, working conditions, redundancies
	Clients	15%	Product quality and safety, ethical marketing practices
	Competitors	5%	Hostile takeovers, price fixing, patent disputes

Source: Bank Sarasin

Controversial activities

Certain business activities which are not deemed to be compatible with sustainable development (e.g. armaments, nuclear energy, tobacco, pornography) can lead to the exclusion of companies from the Sarasin sustainable investment universe. An Advisory Council makes this selection for our retail funds. In case of the apparel, textile and luxury goods industry, no exclusion criteria are applicable. However, production of alcohol products is considered controversial.

Information sources

The company rating is based on the company’s own details, a worldwide press search and information from independent institutions. We do not use standardised questionnaires.

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Publications

Solar Energy 2005	Solar Energy - Silicon supply bottleneck at odds with booming demand. Matthias Fawer, November 2005
Pharmaceuticals	Always read the label – An analysis of the social and environmental aspects of the pharmaceutical industry. Andreas Holzer, October 2005
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Country Sovereign Bonds	Emerging Country Sovereign Bonds: A Sustainable Investment? Michaela Collins, June 2005
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China	"Made in China" - Is this a Sustainable Label? Makiko Ashida/Eckhard Plinke, September 2004
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Forestry	Are the founders of sustainability true to their roots? An overview of the forestry and paper industry. Christoph Butz/Catrina Vaterlaus-Rieder, July 2000

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