

Do responsible companies offer better product quality?

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Abstract

The article examines whether companies that trade responsibly by taking social and ecological aspects of their business activities into consideration manufacture and market goods which are superior to other products. The study results show that the company's quality of Corporate Social Responsibility (CSR) does not represent a reliable measure for the quality of consumer goods. This is valid in any case in the sense that the consumer cannot expect that a socio-ecologically conscientious management will necessarily go with higher product quality. Admittedly, the data sets examined do indicate a positive correlation. The likelihood that firms which are concerned about the socio-ecological level of their production provide markets with better products is significantly higher than the likelihood that quality products are manufactured under socio-ecologically incompatible production conditions. How this result should be interpreted and what conclusions to draw from it will be discussed in detail. In particular, the special role of product-related CSR tests will be considered.

1. Introduction

Increased public interest in a discussion about corporate social responsibility (CSR) has led to the fact that corporate policies based on ethical principles are standard practice today for nationally and internationally active companies. In this context, it is frequently stated that a responsible way of dealing with socio-ecological production conditions results in an improvement in product quality. For example, Doug Cahn, the former Director for Human Rights at Reebok, emphasized, "There's a correlation between factories producing good quality products and those with good working conditions" (quoted in Click 1996).

When companies refer to this intuitively plausible relationship, one may feel that they are pursuing ulterior motives. Marketers seem to believe that consumers who receive CSR information about a manufacturing company assume a positive dependency relationship between socio-ecological production conditions and the quality of the end products. And this conjecture is not completely unfounded, as it is known that consumers do not base their quality evaluations solely on real experi-

ences with the products. In many cases, consumers trust quality signals, such as price or brand (e.g. Haas 1998, 84).

With regard to this, the question must be posed of to what extent product quality is actually influenced by companies' quality of CSR. If there is little or no objective relationship, consumers should be protected from the mistaken belief that responsible companies provide the markets with better products than less responsible companies. If, on the other hand, it should emerge that there is at least a moderately positive correlation, then customers would have an additional selection criterion available when looking for high-quality products. In case of a high correlation, however, the level of CSR would even act as an indicator of the quality of consumer goods (Imkamp 2005, 218, Imkamp/Beck 2008, 61).

In order to firstly evaluate the specific extent to which product-related CSR information could be misleading, the following chapter examines why, and under which conditions, perceived CSR information has an effect on subjective product evaluations (Chapter 2). Subsequently, chapter 3 specifies reasons why it seems indeed plausible to assume that there is an objectively positive relationship between CSR and product quality. Chapter 4 analyzes the extent to which the quality of end products actually covariates with the level of a company's CSR. The article ends with a discussion of the findings derived from the empirical results. The distinct role of product-related CSR tests, in particular, will be considered extensively.

2. The influence of CSR information on subjective perceptions of product quality

Research findings to date allow for the idea that there is a direct effect of CSR information on the product quality perceived by the consumer (Brown/Dacin 1997; Madrigal 2000; Berens et al. 2005; Biehal/Sheinin 2007). The phenomenon of information overload (Eppler/Mengis 2004), known from consumer research, offers an explanation for this finding. In the role of a cognitive miser (Fiske/Taylor 1991), the consumer tries to reduce the uncertainty surrounding the quality of a product by relying more heavily on heuristics. Especially under low-involvement conditions, i.e. when motivation to actively seek product information drops fairly low, the consumer falls back on simple decision rules in order to achieve cognitive relief in the process of product choice. As essentially all information that an individual holds about a company can influence his or her subjective assessment of products (Brown/Dacin 1997), CSR information therefore also seems to have an effect on product evaluations. It is possible that it may even serve as key information that, in the sense of a risk indica-

tor, denotes a certain minimum level of quality: in agreement with the theory of perceived risk (Bauer 1960), the consumer believes that purchasing a product that has been produced by a socially responsible company is "a safe choice". Faced with a choice between several products the individual uses CSR information (e.g. socio-ecological production conditions) for orientation, in order to at least exclude the possibility of selecting particularly poor quality.

The degree of influence that CSR information ultimately has on subjective perceptions of product quality is dependent on the specific circumstances of the purchasing situation. A CSR-oriented quality evaluation is most likely if the consumer has little product knowledge, if the situational conditions do not allow sufficient informative activities (time pressure, complexity and diversity of the product characteristics etc.) where other quality signals (e.g. test reports) are not available (in particular in the case of product innovations) or if the information is not subjectively perceived as useful (c.f. Brown/Dacin 1997). In addition to this, the extent of CSR effects is crucially conditioned by the specific type of corporate involvement (Brown/Dacin 1997, Madrigal 2000). If the companies' CSR initiatives are in no way associated with the business's core activity (e.g. corporate giving or sponsoring), then CSR information plays only a minor role in subjective product evaluation. The diagnostic value of such CSR initiatives is relatively small for the consumer, as it is not clear how the corporate involvement is reflected in the product. In this case the effect of CSR information on perceived product quality can only be indirect, working through an improvement of the company's image (Brown/Dacin 1997). By contrast, a good fit between CSR initiatives and corporate key competencies increases the probability that CSR information is seen as consistent with a company's internal image (Simmons/Becker-Olsen 2006), represents a logical consequence of the company's core business activities in the eyes of the consumer (Becker-Olsen et al. 2006), and thus directly influences the consumer's assessment of the product's attributes (Madrigal 2000).

Overall, it can be stated that consumers tend to extrapolate high product quality from perceived high CSR quality. The influence of CSR does seem to be bound by numerous conditions, but its effect is not entirely negligible. This immediately prompts the question of how justified such behaviour would be in purchasing practice. For this reason, we now discuss why an objectively positive relationship between CSR and product quality can indeed be assumed.

3. Possible explanations for an objectively positive relationship between CSR quality and product quality

CSR can help companies to gain innovative strength

For companies to offer new and improved products in the midst of complex and dynamic changes in the markets, they must relentlessly invest in innovative ideas. Aligning one's corporate philosophy with a model of sustainability shows particular potential here, because "sustainability not only helps improve the world, but also energizes the company" (Göran Lindahl, former Manager of ABB, quoted in Senge/Carstedt 2001).

In science, CSR is often described as a driver of product innovation (Porter/Linde 1995; Keeble et al. 2005; Mendibil et al. 2007, Asongu 2007, Orlitzky 2008, 125): sensitised for socio-ecological challenges, companies that trade responsibly are in a position to develop forward-thinking solutions and continually improve their products more rapidly than other companies through foresight, an innovation budget for sustainability and a business culture that promotes innovation. An economic view of the situation also sees business' use of CSR as a tool for innovative strength as being on the increase (Löw et al. 2009). Internal control mechanisms that ensure adherence to stipulated guidelines and guarantee consistent ethical reflection can stimulate diverse ideas for product developments within innovation processes. An open information policy and an intensive dialogue with external stakeholders (scientists, NGOs etc.) secure additional stimulus and knowledge.

In the energy and transportation sector in particular, orientation towards sustainable development has already helped to provide numerous innovations. Examples of this include the CFC-free refrigerator and the catalytic exhaust converter for cars. However, CSR-driven product improvements, such as the exclusion of hazardous materials from the production process, not only reduce environmental stress but also increase the quality of the products offered. The safety of clothing, for example, is assessed according to, among other things, the content of harmful substances in the textile dyes (Kromer 2005, 22).

CSR can help companies to acquire and retain competent and motivated employees

The employment market has changed from a supply-driven market to one that is dominated by demand in the struggle for the best talent (Lado/Wilson 1994). Despite unemployment, qualified human capital is becoming a critical factor for economic success. A reputation for being a responsible

company can be of value here because, according to research findings regarding the attractiveness of employers, and corresponding to signalling theory (Connelly et al. 2011), potential employees extrapolate the prevailing working conditions in a business from the perceived CSR information (Turban/Greening 1996, Greening/Turban 2000). Employees who have the choice appear to value increasingly highly not only material remuneration but also the opportunity to work in a company that takes social responsibility seriously (Albinger/Freeman 2000).

In addition to positive effects on personnel recruitment, a good CSR image can strengthen employees' identification with the organisation (Drumwright 1996, Berger et al. 2006, Larson et al. 2008, Rodrigo/Arenas 2008, Kim et al. 2010)¹: as employees of a company wish to be viewed in a positive light by other people, the company's public perception is important to them. If employees believe that the public image of the company is positively influenced through CSR activities, they have a stronger sense of belonging to the company. Occasionally, they gain trust and pride in their function of representing the company both in direct contact with the customer (Larson et al. 2008) and in business functions without face-to-face contact.

Furthermore, CSR has an effect on employee commitment (Rupp et al. 2006, Brammer et al. 2007).² In particular, positive effects are generally assumed for the diverse forms of corporate volunteering (Gilder et al. 2005): if employees see opportunities to immediately contribute to the success of a good deed through their own action, this has positive effects on working morale and on the self-image of work (Drumwright 1996, see also Rodrigo/Arenas 2008). Moreover, employee commitment is enhanced by CSR-oriented human resources management³: non-discrimination, handling diversity and fair wages are examples of key thematic points here. Correspondingly, Maignan et al. (1999) state that good corporate citizens put great emphasis on aspects such as fairness, trust and care, because humanity as an ethical orientation promotes a business culture in which employees assist each other, motivate themselves and show interest in the wishes of their colleagues (Cooke and Hartmann 1989, 25). The emotionally driven employee retention arising from this increases welfare in the workplace and promotes desirable behaviours. Occasionally, studies suggest positive correlations between commitment and employee motivation, a low level of staff turnover, low levels of

¹ Identification with the business represents a form of belonging and produces a relationship between the subjectively perceived self-image and the organisational membership (Asforth/Mael 1989). The theory of social identity serves to explain this phenomenon (Asforth/Mael 1989). In their struggle to differentiate themselves from others, individuals in a group feel that they belong when their own assessment of value agrees with those of the group. In the context of organisational identification, self-categorisation reflects the drive for broad congruency between one's own values and those of the company (Ashforth und Mael 1989). Behind the drive for identification there is the desire to find your own convictions reflected in the business, in order to preserve or increase social and personal self-respect.

² Commitment denotes an employee's emotional connection to the business (Ashforth et al. 2008).

³ According to Snider et al. (2003), employee orientation is an essential part of an integrative CSR concept in the largest businesses in the world.

employee absenteeism and a high level of willingness to perform and learn on the part of the employees (Mowday et al. 1979, O'Reilly/Chattman 1986).

Meanwhile, competent and motivated employees who identify with the values and goals of the business are indispensable for the development and consistent improvement of high-quality products (Haller 2003, Asongu 2007, Clausen/Loew 2009): Human capital, and not the complexity of technology is responsible for resolving quality issues. Improvements come above all from employees who find themselves in constant contact with the company's stakeholders (customers, suppliers etc.), observe production processes in detail and analyse what works, what causes problems and where optimisations are possible. Companies cannot force such contributions; rather they arise freely from within a contented and motivated workforce. Thus, CSR raises the likelihood that companies acquire and retain competent and motivated employees, who align their activities to the internal business' agreements to ensure and constantly improve product quality.

CSR can help companies to reduce the likelihood of deficiencies in the quality of their goods

Rising competition and pressure on profit margins increase the outsourcing of production activities and the transfer of procurement to markets in low cost countries. In trying to gain cost advantages, companies seek ever-cheaper sources of supply. This development is not without consequences for the quality of the product components purchased, because the unbroken price pressure in the supply chain fosters opportunistic behaviour by suppliers. Specifically, due to geographical and cultural distances suppliers might use their information advantage to the disadvantage of co-operative aims (c.f. the principal-agent theory, Eisenhardt 1998), which has a negative effect upon the quality of the end products (Kromer 2005, 78).

Furthermore, companies are active in various cultures, belonging to a large extent to developing and emerging economies. A varying understanding of quality compared to the West, and a varying level of competence in the local work markets, increase the likelihood of deficiencies in the quality of goods – for example, where quality requirements are not understood or education-related problems arise with the operation, maintenance and repair of machines (Kromer 2005). With regard to this, it seems that the poor social circumstances in manufacturing countries, which are revealed in the western media with ever-increasing frequency – even more than is already expected – compromise the quality of the end products. Particularly in the more remote stages of production there are often inhumane working conditions. Low wages, long working hours, mistreatment of employees, and unhygienic working environments are not unusual. Businesses that use or even consciously exploit the-

se kinds of circumstances in their supply chain adopt the risk of incorrectly developed or manufactured products and product components.

In consequence, it would be far too forceful to state that quality controls and product improvements, which are now initiated both upstream and downstream, can only fully unfold if contractually agreed working conditions keep the number of occupational accidents and illnesses to a minimum (Katz et al. 1985), if high-quality work is ensured through commitment to demand-oriented training, performance and performance awareness even in the more remote production stages (Roethlisberger/Dickson 1939, Kromer 2005, 20) and if one is successful in building up long-term and stable organisational relationships which are based on all parties trading in a co-operative and mutually advantageous way (Kromer 2005, 222, Küng et al. 2010, 228).

4. Empirical investigation of the objective relationship between CSR quality and product quality

Empirical findings to date

The sole attempts at an empirical examination of the objective relationship between CSR and product quality thus far are by Imkamp (2005) and Imkamp/Beck (2008). In order to examine whether and to what extent responsible companies provide the markets with goods which are superior to other products, the authors correlated product test results with CSR ratings. However, the results of their studies do not support the assumed expectation of a positive correlation. Instead, a slight reverse tendency arose in the average assessment of the industrial sectors examined.

Nevertheless, the validity of this finding is limited: the crucial weakness of the CSR rating used by the authors in their examination is that they allow inferences only regarding the work of the producer, and not regarding the product itself. As CSR ratings are not product-related, the data constitutes a lot of information about the business of the company but no information about whether one product from among the many goods provided by the same company is more worthy of recommendation than another from an eco-social perspective.

In this respect, the authors of this article have investigated, by conducting a further correlation analysis, whether other findings can be drawn if one refers to CSR tests that differ from the CSR ratings that were used for investigation in the previous studies.

Our own study

Data basis

To investigate the correlation between CSR and product quality, extensive data provided by the German comparative testing institution Stiftung Warentest was used. In addition to their traditional investigation of technical product quality, Stiftung Warentest has also been assessing, for some years, the social and environmental behaviour of the companies whose products have been included in comparative tests (Schoenheit/Hansen 2004). Therefore it was possible to examine the objective relationship between CSR quality and product quality in a variety of consumer goods offered in Germany.

The data on product quality. In their investigations, Stiftung Warentest ascertains quasi-teleological quality assessments, conducted by experts and representative consumers who rate the product's practical use or functional quality according to strictly scientific methods (Hansen et al. 2001, 42). Although there are more products for almost every test than could be examined by the experts, no random sample is gathered. Instead, in each product category investigated, attempts are made to cover the market offer as extensively as possible, but at least capture all leading brands (Diller 1988, 196).

In most product tests, the test programme is subdivided into the areas of functionality (practical assessment), sustainability and safety (technical assessment), ergonomics (application assessment) and ecology (environmental assessment) (Hansen et al. 2001, 43). Stiftung Warentest derives the overall assessment of product quality from the testing report of the experts (Hansen et al. 2001, 43): initially, each characteristic of the product under consideration is graded in imitation of the school grading system into the categories *very good* (grades 0.5 to 1.5), *good* (grades 1.6 to 2.5), *satisfactory* (grades 2.6 to 3.5), *sufficient* (grades 3.6 to 4.5) and *not sufficient* (grades 4.6 to 5.5). Objectively closely-related product characteristics are then compiled into group assessments that are weighted according to their importance. The overall assessment ultimately results from the combination of the weighted group assessments (Hansen et al. 2001, 43).

The test results are published in the generally accessible issues of the magazine *test* as well as on the homepage of Stiftung Warentest. The publication is intended to inform the public about how products compare in terms of utility and value in use, thereby contributing to help the consumer make purchasing decisions more easily and effectively (Stiftung Warentest 2008, 1). However, it should be noted, that product quality is evaluated exclusively by objective criteria and test procedures. Subjective elements of perception are foregone, which means that products' test assessments can differ from the consumer's subjective quality evaluation. It is, however, undeniable that comparative prod-

uct testing – as a valid instrument for consumer information – can raise consumer's buying efficiency (Maynes 1976) and therefore afford the user enormous economic benefit (Imkamp 2005, 217).

The data on the company's CSR. In order to provide consumers with a CSR assessment as auxiliary information alongside the well-known product judgments, Stiftung Warentest decided in 2002 to develop a method for investigating and judging the socio-ecological business behaviour of suppliers and producers (Sieber 2010, 195). This method involves a product-based approach: investigated is not the whole business, but only that part of the business which manufactures the product or subcontracts it out to another producer. Furthermore, the selection of the CSR criteria which are used in the testing are adjusted to the respective group of goods. Therefore, unlike with most CSR ratings, no fixed testing programme is used; rather, an initial selection is taken from a number of core criteria⁴ and then amplified by product-specific criteria, which are used to consider any idiosyncrasies in the production of the good (Sieber 2010, 195). A further feature of product-related CSR assessments is that they are supported not only by simple consultations with companies. Alongside additional investigation of the detailed answers by means of freely accessible sources and undercover consumer requests, contracted experts visit both end product suppliers and the relevant manufacturing sites for product components in order to confirm on the ground that the information provided is accurate (Sieber 2010, 196).

Since the end of 2004 Stiftung Warentest has published CSR tests about three times per year. As this should be expressly a matter of supplementary information about the socio-ecological business behaviour of suppliers and producers, the CSR results are not combined with the test assessments on product quality (Schoenheit 2006, 64). The judgements from the product tests in the form of grades are also not used, instead the semantics are substantially different (Schoenheit 2006, 64): first, the selected criteria are subdivided into the categories "very strongly committed" (5 points), "strongly committed" (4 points), "committed" (3 points), "steps taken" (2 points) "modest steps taken" (1 point) and "information refused" (0 points). These criteria are then weighted and combined into an overall CSR assessment, so that the information gathered enables a comprehensible comparison of companies regarding their specific approach to product-related responsibility (Stiftung Warentest 2004, 2).

⁴ The key criteria are categorised into four overarching themes: social/employee (voluntary social initiatives), social/supplier (social minimum standards), environment (environmental compatibility), consumer and society (transparency and information policy).

Results of the data analysis

If all CSR investigations carried out by Stiftung Warentest from December 2004 to October 2010 are taken into account, there are now 14 tests (product types) that identify both a product-related assessment of CSR quality and an assessment of the utility and value in use of consumer products. Altogether, 271 individual products are included in the analysis.

In a general validation of the hypothesis that better quality products co-vary with correspondingly better socio-ecological production conditions, a correlation coefficient of close to 1 is to be expected.⁵ However, according to our calculations, the correlation coefficient is only in the region of 0.11 ($p = 0.27$). If, instead of calculating the correlation from the full data set, one distinguishes between the four product groups investigated so far by Stiftung Warentest (food, textiles, technical products, cleaning agents)⁶ and then calculates the mean coefficient weighted against the number of products, a slightly higher but still relatively low value of 0.14 arises. In addition, it emerges from table 1 that CSR and product qualities can by no means be said to correlate equally across all product types. Rather, the coefficients vary between -0.380 (for laundry detergent) and 0.672 (for washing machines). It already becomes clear here that knowledge of high levels of CSR quality cannot serve as a reliable indicator for better products.

Table 1: Weighted mean values and extreme values of the correlation coefficients, subdivided by product group.

Product group	Number of individual products	Weighted average coefficient	Maximum correlation coefficient	Minimum correlation coefficient
Food	114	0.164	0.370	-0.205
Textiles	73	0.152	0.619	-0.261
Tech. products	69	0.363	0.672	0.114
Cleaning agents ^a	15	-0.380	-0.380	-0.380

^a Product group "cleaning agents" contains only one type of product (laundry detergent).

⁵ The assessments regarding the socio-ecological quality of production have been interpreted as equidistant (quasi-metric data), transformed into grades 1 to 6 (from 1= very strongly engaged to 6 = information refused) and correlated with the assessment of product quality (metric data).

⁶ For the investigation discussed here, the product groups have been categorised as follows: food (farm-raised salmon, prawns, boiled ham, roasted coffee, chicken breast fillets), textiles (parkas, men's shirts, women's t-shirts, footballs), technical products (flat-screen televisions, digital cameras, remote control cars, washing machines), and cleaning agents (laundry detergent that can be used for all programmes and all temperatures).

A similar picture can be seen by comparing better and worse CSR quality with better and worse product quality (c.f. Figure 1): in only 62.3% of cases can consumers rely on the fact that better socio-ecological production conditions lead to better products. In all other cases, consumers would buy a lower quality product, if they were guided *solely* by information about the social and environmental behaviour of the suppliers and producers of the goods.

Figure 1: Comparison of better and worse CSR quality against better and worse products

		CSR-Quality ^a	
		worse (n=157)	better (n=114)
Product Quality ^b	better (n=145)	47,1 %	62,3 %
	worse (n=126)	52,9 %	37,7 %

^a The three assessments "very strongly committed", "strongly committed" and "committed" are shown as better CSR qualities, and the three other assessments "steps taken", "modest steps taken" and "information refused" as worse CSR qualities.

^b As the best product is "only" evaluated with the grade 1.5 (maximum value 0.5), the median value has been calculated in order to subdivide the five categories "very good" to "not sufficient" into better (grades 0.5 to 2.7) and worse (grades 2.8 to 5.5) products.

If the analysis, however, is restricted to those products that are provided by companies classified as "very strongly committed" (5 points) or "strongly committed" (4 points), it can be seen that 62.7% of the articles offered by these companies are evaluated with the grades "very good" or "good", while at 13.7% comparatively few products that performed best in terms of CSR aspects were classified as "sufficient" or "not sufficient". Thus, although the possibility of buying a poor product from a socio-ecologically responsible company still exists, the likelihood of this decreases quite considerably.

5. Discussion

Interpretation of the results

As previously established by Imkamp (2005) and Imkamp/Beck (2008), the hypothesis of a strongly positive correlation between socio-ecological production conditions and the quality of the end products is to be rejected. A rejection of this hypothesis, however, in no way means, that socially and ecologically desirable business practices would have no effect on the production of quality goods: The question of whether and to what extent the quality of CSR influences the quality of consumer goods, i.e. whether there is a cause-effect relationship between these two quality aspects, cannot be answered by simple correlation analysis. Firstly, correlations do not indicate the direction of causality but merely the direction of the relationship, and secondly, it should not be forgotten that product quality is determined by many factors (e.g. capital invested, product strategy), that are not taken into consideration here. "Firms may have reasons for offering low-quality products that do not suggest bad character (e.g., a low-quality product is designed to serve a segments' need for a low-priced product)" (Stiftung Warentest 2004, 2). As it is therefore not apparent to what extent the covariation rests on such external variables, no valid statement can be made about the actual influence of CSR on product quality.

However, it can be stated that the empirically obtained findings in this study - by contrast to the results found by the authors Imkamp and Beck (Imkamp 2005, Imkamp/Beck 2008) - tend to correspond with the arguments put forward in chapter 3: independently of whether one calculates the correlation by means of the complete data set ($r = 0.11$) or forms the weighted mean coefficient of the four product groups investigated ($r = 0.14$), the coefficients point to a positive correlation. An evaluation of the individual CSR tests further indicates that 11 of a total of 14 investigated product types show calculated correlation coefficients with a positive sign. Also, by referring again to the comparison between better and worse CSR quality and better and worse products presented in Figure 1, the impression given is an analogical one. As a comparison of the mean values shows, the likelihood that firms which are concerned about the socio-ecological level of their production provide markets with better products is significantly higher than the likelihood that quality products are manufactured under socio-ecologically incompatible production conditions ($p = 0.013$). This result becomes even clearer if we concentrate our analysis on a comparison between CSR top performers ("very strongly committed" and "strongly committed") and CSR under performers ("modest steps taken" and "information refused") (c.f. Figure 2). While the correlation between CSR quality and the

quality of the 162 products manufactured by these companies at least reaches a value of 0.20 ($p = 0.013$), the corresponding mean comparison is highly significant ($p = 0.000$).

Figure 2: Comparison of CSR top performers and CSR under performers with better and worse products

		CSR-Quality ^a	
		Under-Performance (n=111)	Top-Performance (n=51)
Product Quality ^b	better (n=87)	43,2 %	76,5 %
	worse (n=75)	56,8 %	23,5 %

^a The "very strongly committed" and "strongly committed" evaluations are shown as top-performance, and the "modest steps taken" and "information refused" evaluations as under-performance.

^b The five categories from "very good" to "not sufficient" have been subdivided into better (grades 0.5 to 2.7) and worse (grades 2.8 to 5.5) products (see above).

If we summarise these findings and integrate them in the explanatory patterns above (chapter 3), we come to the idea - even though with reservations - that confounding variables that have an effect on the correlation between CSR and product quality distort the correlation coefficient downwards rather than upwards. At least, however, the counter argument, that socio-ecologically responsible company behaviour would work at the expense of product quality (Imkamp/Beck 2008, 68) should be viewed with scepticism.

Conclusions for the consumer

The empirical findings of this study confirm that the quality of CSR does not represent a reliable measure for the quality of consumer goods. This is valid in any case in the sense that the consumer cannot expect that a socio-ecologically conscientious management will necessarily go with higher product quality. Admittedly, the data sets examined do indicate a moderate positive correlation. Responsible companies - predominantly the CSR top performers - primarily provide the markets with more high-quality than low-quality products. CSR is certainly unsuitable for use as the sole quality characteristic, but before consumers are advised against considering product-related CSR as an additional selection criterion, the consumer must have access to more reliable quality information.

Conclusions for the consumer policy

From a consumer policy perspective, the results of the study are two-fold: firstly, there is indeed a risk of a potential misguidance of companies' product-related CSR statements; secondly, the possibility remains that the level of CSR can at least serve as a weak indication of higher-quality products. The question, however, is: are these findings sufficient to stress the consumer organisation's overall budget, which is already meagre, with the implementation of regular CSR tests? Or are there, alternatively, more compelling arguments for establishing, besides the traditional Thorelli consumer information system (Thorelli/Thorelli 1974, 1977) a second system, which informs about the CSR quality of producers and production processes? In order to discuss this question which is particularly important in terms of consumer policy, a conclusive demonstration of the particular role of product-related CSR tests is required.

Significant signs of a change in consumer consciousness

A multitude of studies document that consumers' manifestations of interest and concern for social and ecological issues do not have a strong impact on their buying behaviour. Depending on income, situation and lifestyle, the issues of price, quality and brand awareness are regularly identified as decisive purchasing criteria (Boulstridge/Carrigan 2000, Carrigan/Attala 2001, Belk et al. 2005). The ethical egoist, it seems, shifts responsibility onto third parties, benefitting from the success of socially desirable changes (example: environmental protection), independent of the individual's own contribution or otherwise. Confronted with the individual costs of conscious consumption (surcharge, additional need for information), the consumer justifies inactivity through subjectively felt powerlessness (Carrigan/Attala 2001), believing that the support of one small agent (Klein et al. 2004) would not make a difference. This leads to routine buying behaviour and to consumers trying to avoid – if possible – any situation in which they would actually have to engage in any overly complicated decision making (Schoenheit 2009, 63).

And yet, in contrast to the assumptions of classical economics, the image of the egoistic consumer, who calculates every decision based on whether it results in material benefit, should be relativised (Schoenheit 2005). Views of morality have grown sharper with the increasing prosperity of industrial countries (Werther/Chandler 2005). The consumer is now more interested than ever in the social and ecological challenges of our time, and due to the high number of catastrophes such as the atomic disaster in Fukushima and the famine in the Horn of Africa, the public's sensitivity is on the rise. Consequently, there are increasing signs that a relevant consumer group does exist, who has in mind to - at least in part - take ethical criteria into consideration in their purchasing decisions (Auger et al.

2003, Werther/Chandler 2005, Shaw et al. 2006). This includes, for example, the newly evolving grouping of LOHAS, who follow the principles of a "Lifestyle of Health and Sustainability" (Ray/Anderson 2000, 34). In Germany alone, there are reportedly up to 15 million consumers who, through conscious and responsible use of end products, strive to increase their personal quality of life (Schulz 2008). It is therefore also no wonder that Fairtrade goods find themselves on a course for growth (Transfair 2011), organic products are continually increasing their market share (GfK 2007), and companies that breach certain social or ecological standards are subject to numerous boycotts (Klein et al. 2004). Much as trade may persist in complaining about the substantially weaker turnover of goods that are, socially and ecologically, responsibly produced and offered at a slightly higher price (Sieber 2010, 209), the idea of essentially egoistically motivated consumer behaviour is beginning to form cracks due to the tangible and apparently irreversible start of a change in the consumer's consciousness (Schoenheit 2005, 19f., imug 2006, 16ff., Schoenheit 2009, 24).

The issue of companies' credible CSR communication

As a precondition for the fact that changing thought and behavioural patterns within individual consumer groups lead to a wider social movement, consumers must be provided with information about socio-ecological production conditions. However, companies then face the challenge of communicating the credence good CSR in a visible and credible manner (imug 2007, 21ff.). This is problematic as consumers, having developed intuitive competency in dealing with influential advertising (Friestad/Wright 1994), take particularly critical notice of the convergence of marketing and morals (Carrigan/Attala 2001). CSR promises are not accorded credibility because consumers know that marketers often exaggerate their representations and distort information. In addition, the choice of a particular CSR initiative only promises a view toward the consumer's positive assessment, insofar as consumers believe that the company is genuinely interested in the success of the good deed (Barone et al. 2000). Conversely, context-relevant information, which confirms the suspicion of hidden motives – as, for example, when companies boast their CSR initiatives as part of hugely expensive advertising campaigns – increases the likelihood that consumers see the company's communication about its CSR performance as mere PR or ethical windowdressing and dismiss it as a purchasing criterion (Alsop 2002, Yoon et al. 2006).

The particular importance of product-related CSR tests

To enable consumers to perceive the role envisaged for them as responsible actors, the company's CSR information should be reviewed by independent third parties. This demands a particularly high importance of product-related CSR tests. As evaluative and mediating agencies it is therefore the responsibility of consumer organisations to assess the company's CSR activities, aided by experts from credible institutions. If the social and ecological incompatibilities associated with the product

are thereby successfully made more comparable and visible for the public, i.e. if transparency of proof of achievement is produced, then it should be expected that the existing discrepancies between professed and actual purchase behaviour will decrease.

From this perspective, it seems absolutely necessary to develop all possible institutional conditions in such a way as to allow consumers to not only compare high and low product quality but also compare companies' high and low CSR quality and adjust their purchasing behaviour accordingly. Such an alteration in consumer habit is indispensable if a conscious change of production structures is to be achieved. Therefore, it is indeed worth establishing a second system of information, alongside the traditional Thorelli consumer information system, one which educates the consumer about aspects of companies' assumption of social responsibility (educational function) and provides information about the company's verifiable quality standard of corporate social responsibility (informational function).

References

Albinger, H.S. & Freeman, S.J. (2000) Corporate Social Performance and Attractiveness as an Employer to Different Job Seeking Populations. *Journal of Business Ethics*, **28**, 243-253.

Alsop, R. (2002) For a Company, Charitable Works Are Best Carried Out Discreetly. *The Wall Street Journal*, January 16th, B1.

Ashforth, B.E., Harrison, S.H. & Corley, K.G. (2008) Identification in Organizations: An Examination of Four Fundamental Questions. *Journal of Management*, **34 (3)**, 325-375.

Ashforth, B.E. & Mael, F. (1989) Social Identity Theory and the Organization. *Academy of Management Review*, **14 (1)**, 20-39.

Asongu, J.J. (2007) Innovation as an Argument for Corporate Social Responsibility. *Journal of Business and Public Policy*, **1 (3)**, 1-21.

Auger, P., Burke, P., Devinney, T.M. & Louviere, J.J. (2003) What Will Consumers Pay for Social Product Features?. *Journal of Business Ethics*, **42**, 281-304.

Barone, M.J., Miyazaki, A.D. & Taylor, K.A. (2000) The Influence of Cause-Related Marketing on Consumer Choice: Does One Good Turn Deserve Another?. *Journal of the Academy of Marketing Science*, **28 (2)**, 248-262.

Bauer, R.A. (1960): Consumer Behaviour at Risk Taking. Proceedings, *43rd Conference of AMA*, Chicago, 389-398.

Becker-Olsen, K.L., Cudmore, B.A. & Hill, R.P. (2006) The impact of perceived corporate social responsibility on consumer behavior. *Journal of Business Research*, **59**, 46-53.

Belk, R., T. Devinney & G. Eckhardt (2005) Consumer ethics across cultures. Center for Responsible Business, *Working paper series*, **23**, University of California, Berkeley, CA, USA.

Berens, G., van Riel, C.B.M. & van Bruggen, G.H. (2005) Corporate Associations and Consumer Product Responses: The Moderating Role of Corporate Brand Dominance. *Journal of Marketing*, **69 (3)**, 35-48.

Berger, I.E., Cunningham, P.H. & Drumwright, M.E. (2006) Identity, Identification, and Relationship Through Social Alliances. *Journal of the Academy of Marketing Science*, **34 (2)**, 128-137.

Biehal, G.J. & Sheinin, D.A. (2007) The Influence of Corporate Messages on the Product Portfolio. *Journal of Marketing*, **71 (2)**, 12-25.

Boulstridge, E. & Carrigan, M. (2000) Do consumers really care about corporate responsibility? Highlighting the attitude-behaviour gap. *Journal of Communication Management*, **4 (4)**, 355-368.

Brammer, S., Millington, A. & Rayton, B. (2007) The contribution of corporate social responsibility to organizational commitment. *International Journal of Human Resource Management*, **18 (10)**, 1701-1719.

Brown, T.J. & Dacin, P.A. (1997) The Company and the Product: Corporate Associations and Consumer Product Responses. *Journal of Marketing*, **61 (1)**, 68-84.

Carrigan, M. & Attalla, A. (2001) The myth of the ethical consumer – do ethics matter in purchase behaviour?. *Journal of Consumer Marketing*, **18 (7)**, 560-577.

Clausen, J. & Loew, T. (2009) CSR und Innovation: Literaturstudie und Befragung [www. document]. URL: http://www.4sustainability.org/downloads/Clausen-Loew_CSR-und-Innovation-Literaturstudie_und_Befragung.pdf [accesses on August 15th, 2011].

Connelly, B.L., Certo, S.T., Ireland, R.D. & Reutzel, C.R. (2011) Signaling Theory: A Review and Assessment. *Journal of Management*, **37 (1)**, 39-67.

Cooke, R.A. & Hartmann, J.L. (1989) Interpreting the Cultural Styles Measured by the OCI. In: *Organizational Culture Inventory Leader's Guide* (ed. by R.A. Cooke), 23-48. Human Synergistics, Plymouth, MI, USA.

Diller, H. (1977) Der Preis als Qualitätsindikator. *Die Betriebswirtschaft*, **37 (2)**, 219-234.

Diller, H. (1988) Die Preis-Qualitäts-Relation von Konsumgütern im 10-Jahresvergleich. *Die Betriebswirtschaft*, **48 (2)**, 195-200.

Drumwright, M.E. (1996): Company Advertising With a Social Dimension: The Role of Noneconomic Criteria. *Journal of Marketing*, **60**, 71-87.

Eisenhardt, K. M. (1989): Agency theory. An assessment and review. *Academy of Management Review*, **14 (1)**, 57-74.

Eppler, M.J. & Mengis, J. (2004) The Concept of Information Overload: A Review of Literature from Organization Science, Accounting Marketing, MIS, and Related Disciplines. *The Information Society. An International Journal*, **20(5)**, 1-20.

Fiske, S.T. & Taylor, S.E. (1991) *Social Cognition*, 2nd edn. McGraw-Hill, New York, NY, USA.

Folkes, V.S. & Kamins, M.A. (1999) Effects of Information About Firms' Ethical and Unethical Actions on Consumers' Attitudes. *Journal of Consumer Psychology*, **8 (3)**, 243-259.

Friestad, M. & Wright, P. (1994) The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, **21**, 1-31.

GfK (2007) Organic foods taking German households by storm [www. document]. URL: http://www.gfk.com/imperia/md/content/presse/pd_bio-lebensmittel_2008_efin.pdf (accessed on August 14th, 2011).

Gilder, D. D., Schuyt, T. N.M. & Breedijk, M. (2005) Effects of an Employee Volunteering Program on the Work Force: The ABN-AMRO Case. *Journal of Business Ethics*, **61**, 143-152.

Greening, D.W. & Turban, D.B. (2000): Corporate Social Performance as a Competitive Advantage in Attracting a Quality Workforce. *Business & Society*, **39 (3)**, 254-289.

Haas H. (1998) *Dienstleistungsqualität aus Kundensicht. Eine empirische und theoretische Untersuchung über den Nutzen von Zertifikaten nach DIN EN ISO 9000ff. für Verbraucher*, Berlin, Germany.

Haller, C. (2003) Verhaltenstheoretischer Ansatz für ein Management von Innovations-prozessen [www. document]. URL: http://elib.uni-stuttgart.de/opus/volltexte/2004/1580/pdf/Dissertation_Christine_Haller.pdf (accessed on August 14th, 2011).

Hansen, U., Hennig-Thurau, T. & Schrader, U. (2001) *Produktpolitik*, 3rd edn. Schäffer-Poeschel-Verlag, Stuttgart, Germany.

Imkamp, H. (2005) Do better companies provide better products?. In: *Consumers, policy and the environment, A tribute to Folke Ölander* (ed. by K.G. Grunert, K.G. & J. Thøgersen), 217-232. Springer, New York, NY, USA.

Imkamp, H. & Beck, A. (2008) Bessere Unternehmen – bessere Produkte? Beobachtungen zum Zusammenhang zwischen sozial-ökologischen Unternehmensratings und getesteter Produktqualität. *Hauswirtschaft und Wissenschaft*, **2**, 60-69.

imug (2006) Wirkungen von vergleichenden Untersuchungen zur Corporate Social Responsibility bei Verbrauchern – am Beispiel der Stiftung Warentest. *Working paper series*, **16**, Hannover, Germany.

imug (2007) Corporate Social Responsibility als Verbraucherinformation. *Working paper series*, **17**, Hannover, Germany.

Katz, H.C., Kochan, T.A. & Weber M.R. (1985) Assessing the Effects of Industrial Relations Systems and Efforts to improve the Quality of Working Life on Organizational Effectiveness. *Academy of Management Journal*, **28 (3)**, 509-526.

Keeble, J., Lyon, D., Vassallo, D., Hedstrom, G. & Sanchez, H. (2005) Innovation High Ground Report – How Leading Companies are Using Sustainability-Driven Innovation to Win Tomorrow's Customers (ed. by Little A.D.) [www. document]. URL: http://www.adlittle.de/uploads/tx_extthoughtleadership/ADL_Innovation_High_Ground_report.pdf [accessed on August 15th, 2011].

Kim, H.-R., Lee, M., Lee, H.-T. & Kim, N.-M. (2010): Corporate Social Responsibility and Employee-Company Identification. *Journal of Business Ethics*, **95 (4)**, 557-569.

Klein, J.G., Smith, N.S. & John, A. (2004) Why We Boycott: Consumer Motivations for Boycott Participation. *Journal of Marketing*, **68**, 92-109.

Kromer, S. (2005) *Produktorientiertes Qualitätsmanagement des Einzelhandels. Gestaltung und Lenkung komplexer Qualitätssysteme bei der Beschaffung in Schwellen- und Entwicklungsländern*. DUV, Wiesbaden, Germany.

Lado A.A. & Wilson, M.C. (1994) Human resource systems and sustained competitive advantages: A competency-based perspective. *Academy of Management Review*, **19**, 699-727.

Larson, B.V., Flaherty, K.E., Zablah, A.R., Brown, T.J. & Wiener, J.L. (2008) Linking cause-related marketing to sales force responses and performance in a direct selling context. *Journal of the Academy of Marketing Science*, **36**, 271-277.

Loew, T., Clausen, J., Hall, M., Loft, L., Braun, S. (2009) Fallstudien zu CSR und Innovation: Praxisbeispiele aus Deutschland und den USA [www. document]. URL: http://www.4sustainability.org/downloads/Loew-Clausen-etal_Fallstudien-zu-CSR-und-Innovation.pdf (accessed on August 15th, 2011).

Madrigal, M. (2000) The Role of Corporate Associations in New Product Evaluation. *Advances in Consumer Research*, **27**, 80-86.

Maignan, I., Ferrell, O.C. & Hult, G.T.M. (1999) Corporate Citizenship: Cultural Antecedents and Business Benefits. *Journal of the Academy of Marketing Science*, **27 (4)**, 455-469.

Maynes, E.S. (1976) *Decision-Making for Consumers*, MacMillan Publishing Company, New York, NY, USA.

Mendibil, K., Hernandez J., Espinach, X., Garriga, E. & Macgregor, S. (2007) How Can CSR Practices Lead To Successful Innovation In SMES [www. document]. URL: <http://www.kantakji.com/fiqh/Files/Companies/z132.pdf> (accessed on August 15th, 2011).

Mowday, R., Porter, L. & Steers, S. (1979) The Measurement of Organizational Commitment. *Journal of Vocational Behavior*, **14**, 224-247.

O'Reilly, C.A. & Chatman, J. (1986) Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior. *Journal of Applied Psychology*, **71 (3)**, pp. 492-499.

Orlitzky, M. (2008) Corporate Social Performance and Financial Performance: A Research Synthesis. In: *The Oxford Handbook of Corporate Social Responsibility* (ed. by Crane, A., McWilliams, A., Matten, D., Moon, J. & Siegel, D.S.), 113-134, New York, USA.

Porter, M.E. & van der Linde, C. (1995) Toward a New Conception of the Environment-Competitiveness Relationship. *Journal of Economic Perspectives*, **9 (4)**, 97-118.

Ray, P.H. & Anderson, S.R. (2000) *The cultural creatives: how 50 million people are changing the world*, New York, USA.

Rodrigo, P. & Arenas, D. (2008) Do Employees Care About CSR Programs? A Typology of Employees According to their Attitudes. *Journal of Business Ethics*, **83**, 265-283.

Roethlisberger, F. & Dickson, W. (1939) Management and the Worker. *Harvard university press Cambridge*, MA, USA.

Rupp, D.E., Ganapathi, J., Aguilera, R.V. & Williams, C.A. (2006) Employee Reactions to Corporate Social Responsibility: An Organizational Justice Framework. *Journal of Organizational Behavior*, **27 (4)**, 537-543.

Schoenheit, I. & Hansen, U. (2004) Corporate Social Responsibility – eine Herausforderung für den vergleichenden Warentest. In: *Management mit Visionen und Verantwortung* (ed. by Wiedmann, K.P., Fritz, W. & Abel, B.), 233-258, Wiesbaden, Germany.

Schoenheit, I. (2005) Die verborgenen Qualitäten der Waren – Transparenz über Produktion und Wertschöpfungsketten durch vergleichende Unternehmenstests. In: *Warenethik und Berufsmoral im Handel* (ed. by Lungershausen, H. & Retzmann, T.), 19-24, Essen, Germany.

Schoenheit, I. & Grünwald, M. (2006) Absichtserklärung oder Kaufverhalten?. Die Wirkungen der CSR-Tests der Stiftung Warentest bei Kaufentscheidungen. *Forum Ware*, **34**, 63-67.

Schoenheit, I. (2009) Nachhaltiger Konsum. *Aus Politik und Zeitgeschichte*, **32-33**, 19-26.

Schulz, W.F. (2008) 200 Milliarden Euro Marktpotential. Ausgabefreudige Weltverbesserer etablieren sich als Mega-Konsumentengruppe [www. document]. URL: https://www.uni-hohenheim.de/uploads/tx_newspmfe/pm_Marktpotential_LOHAS_-_Vorstudie_2008-04-14_status_6.pdf (accessed on August 15th, 2011).

Senge, P.M. & Carstedt, G. (2001) Innovating Our Way to the Next Industrial Revolution. *MIT Sloan Management Review*, **42 (2)**, 24-38.

Shaw, D., Newholm, T. & Dickinson, R. (2006) Consumption as Voting: An Exploration of Consumer Empowerment. *European Journal of Marketing*, **40 (9/10)**, 1049-1067.

Sieber, P. (2010) Der Verbraucher als Empfänger der CSR-Botschaft. In: *Gesellschaftliche Verantwortung von Unternehmen. Von der Idee der Corporate Social Responsibility zur erfolgreichen Umsetzung* (ed. by Hardtke, A. & Kleinfeld, A.), 186-210, Wiesbaden, Germany.

Simmons, C.J. & Becker-Olsen, K.L. (2006) Achieving Marketing Objectives Through Social Sponsorships. *Journal of Marketing*, **70**, 154-169.

Snider, J., Hill, R. P. & Martin, D. (2003) Corporate Social Responsibility in the 21st Century: A View from the World's Most Successful Firms. *Journal of Business Ethics*, **48**, 175-187.

Stiftung Warentest (ed.) (2004) *Kernkriterien für die Untersuchung der sozial-ökologischen Unternehmensverantwortung durch die Stiftung Warentest*. Stiftung Warentest, Berlin, Germany.

Stiftung Warentest (ed.) (2008) *Stiftung Warentest – Satzung*, Stand Januar 2008. Stiftung Warentest, Berlin, Germany.

Thorelli, H.B. & Thorelli, S.V. (1974) *Consumer information handbook: Europe and North America*. Praeger, New York, NY, USA.

Thorelli, H.B. & Thorelli, S.V. (1977) *Consumer information systems and consumer policy*. Ballinger, Cambridge, MA, USA.

TransFair (2011) Fairtrade weltweit. [www. document]. URL <http://www.fairtrade-deutschland.de/ueber-fairtrade/fairtrade-weltweit.html> (accessed on May 31th, 2011).

Turban, D.B. & Greening, D.W. (1996) Corporate Social Performance and Organizational Attractiveness To Prospective Employees. *Academy of Management Journal*, **40** (3), 658-672.

Werther, W.B. & Chandler, D. (2005) Strategic corporate social responsibility as global brand insurance. *Business Horizons*, **48**, 317-324.

Wieland, J. (2010) How can we manage values? Practical Guidelines. In: *Manifesto Global Economic Ethic. Consequences and Challenges for Global Businesses* (ed. by Küng, H., Leisinger, K.M. & Wieland, J.), 223-264, München, Germany.

Yoon, Y., Gürhan-Canli, Z. & Schwarz, N. (2006) The Effect of Corporate Social Responsibility (CSR) Activities on Companies With Bad Reputations. *Journal of Consumer Psychology*, **16** (4), 377-390.