Influences on consumer attitudes towards CSR in agribusiness

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Influences on consumer attitudes towards CSR in agribusiness

by

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Abstract

Research has highlighted a growing gap between public perceptions of farming and the realities of modern agriculture and the food industry. A number of food scandals have exacerbated consumers’ critical perceptions of the agribusiness sector. This can threaten the reputation and legitimacy of companies. For this reason, companies in the food industry strive to meet the expectations of society in order to safeguard their future license to operate. One proactive means of doing this is for a firm to make an active commitment to society and the environment; this commitment is known as corporate social responsibility (CSR). Arguing that consumers are a firm’s most important stakeholders and referring to Carroll’s distinction between economic, legal, ethical and philanthropic responsibility, this paper seeks to empirically measure consumers’ attitudes towards the CSR commitment of agribusiness companies. The results do not confirm Carroll’s distinction between four responsibility classes; instead, they show that consumers distinguish between a firm’s economic, internal and external responsibilities. Furthermore, political support of a company’s CSR has a positive influence on consumers’ attitude towards that firm’s commitment. Other positive influences are the respondent’s age, buying behavior with regard to organic products and CSR knowledge. These results improve our understanding of what drives public perceptions of firm behavior and have interesting implications for agribusiness firms designing and implementing their CSR strategies.

Key words: corporate social responsibility, agribusiness, consumer attitude

1. Introduction

As a result of various crises, in recent years agribusiness has been closely scrutinized and suffered increasing public criticism. Livestock farming has become a particular focal point for public debate in many industrialized countries. Developments such as growing urbanization and an increasing alienation of society from the realities of modern agricultural production have led to a gap between public expectations concerning agricultural and food production and actual practices in farms and food companies. Consumers’ psychological perceptions may also contribute to this development (Albersmeier/Spiller 2008; Böhm et al. 2009). The high complexity of modern agricultural and food value chains has caused information asymmetries between producers and processors and the wider public. For a long time, the meat industry in
particular has failed to adequately communicate changes in its production technologies. A number of food scandals have exacerbated this situation and resulted in growing uncertainty among consumers and a loss of confidence in producers and processors (Hierholzer 2010; Spiller et al. 2010; Berk 2012). The critical perception of the industry can threaten the reputation and legitimacy of individual companies, as well as of the whole sector. Both can be considered important social capital resources that provide access to other resources, such as information (Lin 2001) or political support; serve as a basis for sustained competitive advantage (Nahapet/Ghoshal 1998); and guarantee a firm’s or industry’s social license to operate (Hiss 2006).

One way to describe companies taking action to meet the expectations of the wider society is the concept of corporate social responsibility (CSR). So far, in the field of agribusiness, this concept has been given little attention in corporate practice or academic investigation (Gössling 2011; Hartmann 2011; Heyder/Theuvsen 2012). Based on Freeman’s (1984) stakeholder theory, we argue that a firm has several stakeholders. One of the most important is consumers. It is, therefore, our primary objective to measure consumers’ attitudes towards the CSR commitment of agribusiness companies. More specifically, we will investigate whether Carroll’s (1991) distinction between four classes of corporate responsibility adequately reflects consumer perceptions of CSR activities. In this paper, we first introduce the concept of CSR in agribusiness (section 2) and then derive our research hypotheses (section 3). We next explain our methodological approach (section 4) and the empirical results (section 5). The paper ends with a short discussion and some conclusions (section 6).

2. CSR in agribusiness

The spotlight of public attention has only recently come to shine on agribusiness-related aspects of CSR; hence, existing research is scarce (Hartmann 2011; Heyder/Theuvsen 2012). Consequently, the concept of CSR in agribusiness is still fuzzy and lacks a clear definition. This very much parallels the situation in the general management literature where, despite (or due to) a much longer research tradition, Dahlsrud (2008) was able to analyze 37 different definitions and Carroll (1999) constitutes the evaluation of the CSR construct in an academic context. The concept of CSR has been an academic issue since the 1950s, when it was first defined and described (e.g., Bowen 1953; Davis 1960; Carroll 1999). As a result, CSR is still a kind of a self-service shop, where every interested stakeholder, such as an agribusiness company, can find something to choose from but where, in the end, very diverse concepts are
summarized under the same label. Hence, in the remainder of this paper we use Carroll’s (1991) understanding of CSR; Carroll (1991) developed the pyramid model, which recognizes four classes of corporate responsibility: economic, legal, ethical and philanthropic.

A company is said to take social responsibility when these four classes are met (Carroll 1991). Thus, social responsibility is based on economic and legal responsibility. Long-term profit is required by society, as is acting within the law. Ethical responsibility concerns norms and values within society. It is expected by society that a company comply with these requirements; when it does not, the company is sanctioned by society by such means as a deterioration in reputation. Carroll (1991) puts philanthropic responsibility at the top of the CSR pyramid; companies that use their resources to support the local community are seen as “good corporate citizens”. Philanthropic responsibility is desired (rather than required) by society, and a company is not sanctioned if it defaults (Carroll 1991).

Aupperle et al. (1985) published one of the first studies that empirically confirmed Carroll’s (1991) model of four responsibility classes. Maignan (2001) also examined the four responsibility classes and developed items to explain each of them. However, up to now, no similar studies have been conducted with regard to the agribusiness sector. This study contributes to the closing of this research gap by empirically investigating consumers’ perceptions of CSR activities by agribusiness firms. For our study, we developed a set of items based on Maignan (2001) to measure consumers’ perceptions of corporate CSR commitment.

3. Hypothesis development

It has been repeatedly shown that CSR has a positive influence on consumers’ opinions of companies and their willingness to reward a company’s commitment (Creyer/Ross 1997; Maignan 2001; Mohr et al. 2001). In this study we focus on the evaluation of consumers’ opinions of a company’s CSR commitment. Based on Carroll’s (1991) determination that there are four responsibility classes, the following hypothesis can be stated:

**H1:** The four dimensions that distinguished the items in Carroll’s (1991) responsibility classes can be observed.

Attitude is a widely discussed theoretical concept in the literature and a variety of definitions are commonly known. Newcomb (1959) describes attitude as an individual’s personal opinion on an issue, consisting of acting, noticing, thinking and feeling. Later Fishbein and Ajzen
(1975) defined attitude as a learned disposition to consistently act either positively or negatively towards a social object. According to Petty and Cacioppo (1986), attitude is a person’s general positive or negative feeling towards an object or circumstance. In the common literature, attitude is generally introduced as an influencing factor on behavioral intention (cf. Fishbein and Ajzen’s (1975) model). In respect to CSR, researchers focus mostly on consumers’ attitudes and their willingness to pay for products from companies who introduce ethical concerns into their production process (Sen/Bhattacharya 2001) or their attitudes towards a company or its products (Mayerhofer et al. 2008; Singh et al. 2008; Tian et al. 2011). We share the understanding that consumers take the engagement of companies into account. They may do this by, for instance, supporting these companies, valuing their commitment or trusting them (cf. Maignan 2001; Ramasany/Yeung 2009).

To measure the determinants on consumer’s attitude, we constructed a conceptual model by dividing the influencing factors into three groups. According to Meffert et al. (2008), the factors are subsumed under sociodemographic, psychographic and behaviorally oriented criteria. This is reflected in the development of our hypotheses in that our criteria are divided into three parts.

**Influence of sociodemographic factors on consumer attitude**

It has been mentioned in various studies that sociodemographic factors such as gender, age or educational level influence consumers’ perception of a firm’s CSR engagement (Singhapakdi et al. 2001). Some studies have found differences between men and women regarding their attitudes towards a firm’s CSR commitment, whereas others do not find any gender-related differences (Robin/Hunt 1997; Loe et al. 2000). However, all in all, there are more studies which state that gender has a positive influence on consumer attitudes towards a company’s CSR commitment in that women tend to react more sensitively to ethical questions (cf. Singhapakdi et al. 1995; Karande et al. 2000; Singhapakdi et al. 2001). Therefore, the following hypothesis is included in the model:

\[ H2: \text{Gender has an influence on consumer attitude as women are more likely to value a company’s CSR commitment as an important factor.} \]

The impact of age is another sociodemographic factor which is part of our research model. Some researchers have found a correlation between age and attitude towards a firm’s CSR commitment. Most of the studies found that elderly people are more sensitive towards ethical
questions (Singhapakdi et al. 1999). In accordance with Vitell et al. (1991), the following may be proposed:

H3: The attitude of older respondents is more positive towards a company’s CSR commitment.

Research into educational influence on consumer attitudes towards a company’s CSR commitment is scarce. Mohr et al. (2001) developed a typology of consumers based on their purchasing behavior in relation to their perception of a company’s CSR commitment. They find that people with a higher interest in CSR have also achieved a higher educational level. From that, we derived our next hypothesis for the model:

H4: The higher the consumers’ educational level, the more positive is their attitude towards a company’s CSR commitment.

Loew et al. (2004) described a link between attitude toward CSR and religion. In fact, many studies have discovered a significant relationship between business ethics—or, rather, CSR—and religion (e.g., Epstein 2002; Weaver/Agle 2002). Calkins (2000) states that “religion’s moral precepts and narratives [discourses about God and people within the setting of a story] inform and shape … morality” (Calkins 2000) and therefore influence ethical decisions. Other researchers (e.g., Ramasamy et al. 2010) have found that there is a significant relationship between people’s religiousness and their support of CSR. Based on that, we hypothesize as follows:

H5: The more religious a consumer’s upbringing or way of life, the more positive is that person’s attitude towards a company’s CSR commitment.

Research on the influence of political preference on attitude towards the CSR commitment of agribusiness companies is scarce. In a study by Gabriel (1992), it is stated that each individual in a society develops an attitude towards politics. This attitude can be seen in context with other aspects of the individual’s orientation, such as religious belief or economic interests. In another study on the relationship between voting behavior and political preferences and attitudes, Durant and Legge (2002) found that people who do not have an extremely left-leaning position are more market orientated and, therefore, have more positive feelings towards profits and markets. Thus, we deduce the following hypothesis:

H6: A consumer with a more left-wing political orientation has a positive attitude towards a company’s CSR commitment, while a consumer with a more market and economic orientation has a negative attitude.
Influence of psychographic factors on consumer attitudes

Knowledge influences how consumers perceive and search for information. In a broader sense, it influences consumers’ attitudes and buying behaviors (Alba/Hutchinson 1987). Wigley (2008) examined how knowledge about a firm’s CSR efforts influences consumers’ attitudes towards CSR and their buying behavior, concluding that consumers with greater knowledge about a company’s commitment have a more positive attitude towards CSR. From that, we derive the following hypothesis:

\[
H7: \text{The more consumers know about CSR, the more positive is their attitude towards a company’s CSR commitment.}
\]

In contrast to knowledge, involvement is a person’s degree of interest in acquiring information and accumulating knowledge about an issue (Meffert et al. 2008). Busch et al. (2012) used cluster analysis to identify two groups of consumers; the group with greater involvement concerning animal welfare was also much more critical regarding animal husbandry than the group with less involvement. According to Maloni and Brown (2006), animal welfare is an important and effective field for CSR, leading to our next hypothesis:

\[
H8: \text{The higher the involvement of consumers in agricultural production, the more positive is their attitude towards a company’s CSR commitment.}
\]

The ethical attitude of consumers is a further variable in the construct. On the basis of a study by Forsyth (1980; 1992), Kolodinsky et al. (2010) found a positive relationship between respondents’ ethical ideology and their attitude towards CSR. They include different variables by which to measure ethical ideology; one of these is ethical idealism. Ethical idealism considers the extent to which a person takes care of others without causing distress (Forsyth 1992; Kolodinsky et al. 2010). Based on these findings and the study by Kolodinsky et al. (2010), we include variables related to consumer’s ethical idealism in our model to measure their influence on respondents’ attitude towards corporate CSR, resulting in the following hypothesis:

\[
H9: \text{The more positive consumers’ ethical idealism, the more positive is their attitude towards a company’s CSR commitment.}
\]

Depending on the cultural context, CSR is experienced differently by society, as is the form and involvement of the state. This becomes evident when one examines CSR development in the United States in contrast to Europe and even Germany, where different governmental forms exist (Raupp et al. 2011). In contrast to the USA, Germany is a highly regulated state.
CSR is therefore much more politically motivated in Germany, while companies in the United States must assume greater responsibility with less political support (Schoenheit 2006; Backhaus-Maul/Braun 2007). Albareda et al. (2008) investigated the changing role of government in CSR and government’s role in CSR in different countries in Europe. It was shown that government has an intermediary function between companies as suppliers of CSR and consumers as demanders of CSR, leading to the following hypothesis:

\[
H10: \text{The more consumers prefer political support for company’s engagement in CSR, the more positive is their attitudes towards a company’s CSR commitment.}
\]

**Influence of behavior-oriented factors on consumer attitudes**

Pivato et al. (2008) determined that there is a positive correlation between consumers’ perception of a company’s CSR activities and their trust in organic products. Furthermore, Öberseder et al. (2011) related consumers’ attitude towards CSR to various fields of interest, including organic products. Thus, we include buying behavior regarding organic products in our model in the following hypothesis.

\[
H11: \text{The more organic products consumers buy, the more positive is their attitude towards a company’s CSR obligation.}
\]

Fig. 1 summarizes the hypotheses developed above and shows the theoretical framework underlying the empirical analysis.
4. Methodology

To answer the research question and evaluate consumer attitudes towards a company’s CSR commitment, we first examine:

(1) How do consumers think agribusiness companies should behave and what kind of commitment do they prefer?

(2) What are consumers’ attitudes towards a company’s CSR commitment?

First, we operationalize the four levels of Carroll’s (1991) CSR concept. We use Maignan’s (2001) CSR variables since they are based on Carroll’s (1991) four levels of responsibility. We used Maignan’s (2001) variables as a starting point for developing our own items, which suit the context of German agribusiness. In addition, we use the CSR items suggested by Ramasamy and Yeung (2009), which also rely on Maignan’s (2001) variables, to identify more variables per responsibility level and to broaden the selection of corporate obligations in each responsibility class1. To answer the second research question, we apply a linear regression. As a dependent variable, we chose the importance the respondents attribute to a

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1 All CSR commitments are presented in Tab. 4 in the appendix.
company’s CSR commitment and measured it on a five-point Likert scale from 1 = completely unimportant to 5 = extremely important. The independent variables used in the regression are described in the previous chapter.

Participants in the survey were recruited with the help of a panel provider. Predefined quota criteria concerning age, gender, education and place of residence guaranteed a representative sample of the German population based on data from the Federal Statistical Office (2012). The study was carried out in February 2014. In an online panel, 509 selected respondents answered a questionnaire consisting of three parts: 1) demographic questions concerning age, income, living arrangements, origin and preferred political party; 2) statements to evaluate consumers’ attitudes towards a company’s CSR commitment; 3) specific questions about CSR knowledge, the respondents’ attitudes towards a firm’s CSR engagement and their relation to agriculture or food production. The questionnaire contained mostly closed questions. Tab. 1 shows the demographic characteristics of the sample.

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>%</th>
<th>Demographic characteristics</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49.1</td>
<td>18–25 years</td>
<td>11.8</td>
</tr>
<tr>
<td>Male</td>
<td>50.9</td>
<td>26–35 years</td>
<td>13.8</td>
</tr>
<tr>
<td>Education level(^2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>36.5</td>
<td>36–45 years</td>
<td>14.5</td>
</tr>
<tr>
<td>Middle</td>
<td>32.6</td>
<td>46–55 years</td>
<td>16.9</td>
</tr>
<tr>
<td>High</td>
<td>30.8</td>
<td>&gt; 65 years</td>
<td>26.3</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.

5. Results

5.1. Corporate social responsibility in agribusiness

In this section we analyze whether Carroll’s (1991) distinction between the four classes of a firm’s responsibility adequately reflects consumer perceptions of CSR activities. To do so, consumers were asked how they wish agribusiness companies to behave. Based on Maignan’s (2001) items and Carroll’s pyramid, 21 items regarding the responsibilities of companies in the agribusiness were developed. Consumers’ expectations regarding the behavior of agribusiness companies were measured on 5-point scales ranging from 1 = completely unimportant to 5 = extremely important.

\(^2\) Education level: low = Certificate of Secondary Education, middle = General Certificate of Secondary Education, high = advanced technical college or university entrance qualification.
unimportant to 5 = extremely important. To answer the research question, an explorative factor analysis was conducted.

After rejecting cross-loadings (> 0.5), 12 items were left over and distinguished into three factors. First, the quality criteria were tested if the requirements for the explorative factor analysis were fulfilled. Hence, the data adequacy is measured (MSA = measure of sampling adequacy) with the Kaiser-Meyer-Olkin criteria; it lies at 0.75 above the minimum level. To verify that the correlation coefficient of the population is not zero, Bartlett’s test of sphericity was conducted and proved significant at the 1% level (Backhaus et al. 2008). To measure the reliability to quantify the internal consistency of a scale, Cronbach’s Alpha was used. The better the internal consistency, the higher is Cronbach’s Alpha (Brosius 2011). For an explorative factor analysis, Nunnally (1967) proposes a Cronbach’s Alpha cut-off at 0.6. With Cronbach’s Alpha ranging between 0.64 and 0.74, the internal consistency of the factors is confirmed. As a rotational method the varimax rotation was used, yielding the three groups shown in Tab. 2.

**Tab. 2: Results of the explorative factor analysis**

<table>
<thead>
<tr>
<th>I wish that companies in the agribusiness behaved as follows:</th>
<th>Econ (^b)</th>
<th>Intern (^b)</th>
<th>Extern (^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company wants to sell as many products as possible.</td>
<td>0.703</td>
<td>-0.054</td>
<td>0.215</td>
</tr>
<tr>
<td>The company produces food that is desired by consumers.</td>
<td>0.641</td>
<td>0.217</td>
<td>-0.121</td>
</tr>
<tr>
<td>It is important that the company prospers and does not go bankrupt.</td>
<td>0.572</td>
<td>0.441</td>
<td>-0.133</td>
</tr>
<tr>
<td>Profits are important for the company.</td>
<td>0.786</td>
<td>-0.088</td>
<td>0.156</td>
</tr>
<tr>
<td>The employees always comply with rules (e.g., hygienic rules).</td>
<td>0.085</td>
<td>0.714</td>
<td>-0.260</td>
</tr>
<tr>
<td>The company always complies with contractual terms in dealings with its suppliers.</td>
<td>0.261</td>
<td>0.664</td>
<td>-0.058</td>
</tr>
<tr>
<td>The company does everything it can to avoid accidents at work.</td>
<td>0.048</td>
<td>0.783</td>
<td>-0.016</td>
</tr>
<tr>
<td>The company complies with animal welfare standards beyond legal requirements.</td>
<td>-0.035</td>
<td>0.677</td>
<td>0.126</td>
</tr>
<tr>
<td>The company increases the number of apprenticeship training positions for disadvantaged young people.</td>
<td>-0.032</td>
<td>0.638</td>
<td>0.273</td>
</tr>
<tr>
<td>The company supports the local symphony orchestra.</td>
<td>-0.001</td>
<td>-0.075</td>
<td>0.821</td>
</tr>
<tr>
<td>Company managers take on a chair in nearby sports clubs.</td>
<td>0.150</td>
<td>-0.104</td>
<td>0.819</td>
</tr>
<tr>
<td>The company imports goods from developing countries</td>
<td>0.017</td>
<td>0.234</td>
<td>0.596</td>
</tr>
<tr>
<td>UCVE(^c)</td>
<td>16.27%</td>
<td>22.94%</td>
<td>16.37%</td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td>0.64</td>
<td>0.74</td>
<td>0.65</td>
</tr>
</tbody>
</table>

\(^a\) rotational method: varimax rotation, \(^b\) Econ = economic responsibility class, Intern. = Internal CSR commitment, Extern. = External CSR commitment, \(^c\) unique common variance explained; \(^d\) total common variance explained = 55.58 %

Source: Authors’ calculation.
As shown in Tab. 2, three factors are segmented as a result of the explorative factor analysis. The first factor is “economic responsibility”; it includes four items from the economic responsibility class: *profits are important for the company, the company wants to sell as many products as possible, the company produces food that is desired by consumers, and it is important that the company prospers and does not go bankrupt.* The second factor is “internal responsibility”; this includes items from the legal responsibility class: *the company does everything it can to avoid accidents at work, the employees always comply with rules (such as hygienic rules), and the company always complies with contractual terms in dealings with its suppliers.* This factor also includes one item from the ethical responsibility class (*the company complies with animal welfare standards beyond legal requirements*) and one item from the philanthropic responsibility class (*the company increases the number of apprenticeship training positions for disadvantaged young people*). The third factor is “external responsibility”; this factor contains three items from the philanthropic responsibility class: *the company supports the local symphony orchestra, company managers take on a chair in nearby sports clubs, and the company imports good from developing countries.* The three factors identified through the factor analysis do not fully reflect Carroll’s (1991) distinction between four responsibility classes. Hence, H1 is rejected.

### 5.2. Consumer attitudes towards a company’s CSR commitment

In this section the analysis focuses on consumer attitudes towards CSR commitments by agribusiness companies. The dependent variable determines consumer attitudes with the question *“How important is it for you that companies assume responsibility for society?”* As explained in section 3, the hypotheses are divided into three groups: sociodemographic (H2–H6), psychographic (H7–H10) and behavioral (H11) criteria.

To test these hypotheses, a multiple-linear-regression was conducted. To measure the influence of ordinally scaled variables, they are formed as dummies (Backhaus et al. 2008). The quality of the model is shown through $r^2$, which explains 30.9% of the variance in our model. An analysis of variance (ANOVA) shows that the proportion of declared to undeclared variance is measured. The F-value is highly significant at a 0.000 level and, therefore, the estimated model is based on a random result. To check whether an autocorrelation of the residuals exists, we employed the Durbin-Watson test. Given the resulting value of 2.026, autocorrelation can be eliminated. Tab. 3 shows the results of the regression analysis in terms of the standardized beta-coefficients, the significance levels and the variance inflation factors.
(VIF) to test the model for multi-collinearity. There is no suspicion of multi-collinearity because all VIFs are near 1 (Backhaus et al. 2008; Brosius 2011).

Tab. 3: Results of the multiple-linear-regression

<table>
<thead>
<tr>
<th>Independent variable*</th>
<th>Regression coefficient beta</th>
<th>p-value*</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociodemographic-criteria</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.065*</td>
<td>0.096</td>
<td>1.112</td>
</tr>
<tr>
<td>Education&lt;sub&gt;high&lt;/sub&gt;</td>
<td>-0.098**</td>
<td>0.028</td>
<td>1.425</td>
</tr>
<tr>
<td>Religious upbringing</td>
<td>0.095**</td>
<td>0.016</td>
<td>1.112</td>
</tr>
<tr>
<td>Party&lt;sub&gt;MO&lt;/sub&gt;</td>
<td>-0.098**</td>
<td>0.011</td>
<td>1.054</td>
</tr>
<tr>
<td>Party&lt;sub&gt;LWO&lt;/sub&gt;</td>
<td>0.067*</td>
<td>0.080</td>
<td>1.044</td>
</tr>
<tr>
<td><strong>Psychographic criteria</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR knowledge&lt;sub&gt;def&lt;/sub&gt;</td>
<td>0.091**</td>
<td>0.018</td>
<td>1.049</td>
</tr>
<tr>
<td>Politic&lt;sub&gt;CSR through law&lt;/sub&gt;</td>
<td>0.262***</td>
<td>0.000</td>
<td>1.073</td>
</tr>
<tr>
<td>Politic&lt;sub&gt;CSR supported by consultancy&lt;/sub&gt;</td>
<td>0.183***</td>
<td>0.000</td>
<td>1.448</td>
</tr>
<tr>
<td>Politic&lt;sub&gt;CSR supported by guidelines&lt;/sub&gt;</td>
<td>0.090**</td>
<td>0.038</td>
<td>1.348</td>
</tr>
<tr>
<td><strong>Behavioral-orientated criteria</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buying organic food</td>
<td>0.225***</td>
<td>0.000</td>
<td>1.067</td>
</tr>
</tbody>
</table>

* Overview about the independent variables in long versions can be found in Tab. 5 in the appendix; * significance: p < 0.1*, p < 0.05**, p < 0.01***

Source: Authors’ calculation.

With regard to the sociodemographic criteria, the results show that the variable gender is not included in the model since it does not have a significant influence on consumer attitudes towards a company’s CSR commitment; therefore, H2 has to be rejected. However, H3 can be accepted: The older people become, the more positive is their attitudes towards a firm’s CSR commitment. H4 is also included in the model, but the hypothesis cannot be confirmed: Contrary to the hypothesis, consumers with a higher education have more negative attitudes towards a company’s CSR commitment. To research consumers’ religiousness and its effect on the perception of CSR activities, two factors were included: religious upbringing during childhood and religiousness as an adult. The question of whether respondents currently live a religious life style is not included in the model. The more religious a consumer’s upbringing, the more positive is his or her attitude towards a company’s CSR commitment. Therefore, H5 is confirmed. With regard to the influence of political leanings, H6 can be confirmed: Respondents who prefer a left-wing party have more positive attitudes towards corporate CSR commitment than do voters from a more economic and market-oriented party.

With regard to psychographic criteria, H7 and H10 are included in the model, whereas H8 and H9 have to be rejected. H7 assumes that consumers with more knowledge about the
theoretical construct of CSR have more positive attitudes towards a company’s CSR commitment. This hypothesis can be confirmed. Respondents’ relationship with agricultural practice does not have a significant influence on their attitudes towards a company’s CSR commitment. Similarly, ethical attitude does not have a significant influence on consumer attitudes. Hence, H8 and H9 are both rejected and are not included in the research model. H10 can be accepted; consumer attitudes are positively influenced if the political system supports the CSR commitment of agricultural companies. Three variables were used to describe the possible political support: policymakers should introduce a law to regulate corporate commitment, support companies through consulting and introduce guidelines to support firms. The greatest impact on consumers’ attitude towards CSR engagement comes from that the political system should introduce laws concerning CSR. All in all, H10 can be approved.

Summarizing the result from the behavior-oriented criteria, H11, however, is valid: The more organic products consumers buy, the more positive is their attitudes towards agricultural companies’ CSR commitment.

In relation to Tab. 3 the results are summarized in Fig. 2.

**Fig. 2: Results of the multiple-linear-regression**

![Diagram showing the results of the multiple-linear-regression](image)

Significance: $p < 0.1^*$, $p < 0.05^{**}$, $p < 0.01^{***}$

Source: Authors’ illustration.
6. Discussion and conclusions

The critical perception of agribusiness by the wider public can threaten the reputation and legitimacy of individual companies. The benefit of CSR for companies in the agribusiness sector is meeting the demands of the public in a proactive way (cf. Heyder/Theuvsen 2009). A definition of CSR for agriculture is still needed; the definitions used relate to the general literature. Following the understanding of Carroll (1991), we primarily evaluated whether his four responsibility classes could be confirmed in our study. An explorative factor analysis revealed that respondents can clearly separate an economic commitment from other external and internal aspects but cannot distinguish between legal, ethical and philanthropic responsibilities. Therefore, we do not divide the responsibility classes into the four levels suggested by Carroll (1991). The results imply that one major responsibility of companies is to make profits. The internal responsibility dimension concerns a company’s internal processes, such as production processes and employees. The external dimension refers to the company’s philanthropic responsibilities. Upon examination, it is evident that all these commitments relate to the part the company plays in the local community. This hearkens to the postulation of Freeman (1984) that a company acts within an area of conflict between its stakeholders and is therefore obligated to take responsibility for them (Carroll 1999).

The identification of the three factors provides a focus for companies looking to improve how consumers perceive them. Of course, CSR commitment needs to match a company’s culture if it is expected to be perceived as authentic. Thus, companies might develop further or more individualized CSR activities on the basis of the commitments evaluated in this study (Sen/Bhattacharya 2001; Eisenegger/Imhof 2009; Thießen 2011).

The second part of the analysis highlighted the research question which determinants have an influence on consumer attitudes towards a company’s CSR commitment?

The independent variable that has the highest influence on consumer attitudes is their perception of political involvement in business practices. This can be explained by reference to the cultural and legal environment of CSR in Germany. Companies in Germany act in a highly regulated environment. Social, labor and environmental legal standards are already anchored in companies’ processes and structures (Schoenheit 2006; Backhaus-Maul/Braun 2007). The situation is different in the United States, which tends to be a more liberal market economy with a lower level of social protection for citizens. The state intervenes little in
regulatory processes. Hence, the firms have a greater responsibility. In this type of market, a firm’s engagement is more a necessity than real voluntary commitment (Carroll/Buchholtz 2006; Münstermann 2007; Müller-Christ/Rehm 2010). Thus, it seems reasonable that German consumers prefer a higher involvement of government in the CSR of agricultural companies. A profound CSR knowledge also has a high influence on CSR attitudes. A closer look to the results of our study reveals that 60.9% of the respondents do not know anything about CSR. Only 4.7% of the respondents had heard of the concept. These findings lead us to the assumption that companies should receive more support from the government in terms of consultancy or CSR guidelines. CSR communication, then, should focus on what companies are doing for society to make their engagement more transparent for consumers because it could lead to an increase in consumer trust.

Limitations of the study result from the distribution of the sample, which was not normally distributed. The results, therefore, need to be interpreted carefully. Furthermore, the empirical data were collected in Germany; this limits the transferability of the results to different settings.

For further research it might be interesting to analyze whether there are specific respondent groups. Thus, the next step would be to measure different groups concerning their CSR attitudes, ranging from a positive to a negative CSR attitude. Further segmentation can be done according to consumers’ CSR knowledge using cluster analysis.
References


Appendix

Tab. 4: CSR items included in the study

<table>
<thead>
<tr>
<th>Economic responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company wants to sell as many products as possible.</td>
</tr>
<tr>
<td>The company sells low-cost products.</td>
</tr>
<tr>
<td>It is important that the company prospers and does not go bankrupt.</td>
</tr>
<tr>
<td>The company produces food that is desired by consumers.</td>
</tr>
<tr>
<td>Profits are important for the company.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legal responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>The employees always comply with rules (e.g. hygienic rules).</td>
</tr>
<tr>
<td>The company always complies with contractual terms in dealing with its suppliers.</td>
</tr>
<tr>
<td>The company employs political refugees without work permits.</td>
</tr>
<tr>
<td>The company does everything it can to avoid accidents at work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethical responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>For me it is enough if the company complies with the law.</td>
</tr>
<tr>
<td>The company has strict rules concerning the relationship between men and women.</td>
</tr>
<tr>
<td>The company does not employ contract workers and therefore pays permanent employees less.</td>
</tr>
<tr>
<td>The company meets ethical standards to reach company goals.</td>
</tr>
<tr>
<td>The company complies with animal welfare standards beyond legal requirements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Philanthropic responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company increases the number of apprenticeship training positions for disadvantaged young people.</td>
</tr>
<tr>
<td>The company supports the local symphony orchestra.</td>
</tr>
<tr>
<td>Company managers take a chair in nearby sport clubs.</td>
</tr>
<tr>
<td>The company imports goods from developing countries.</td>
</tr>
<tr>
<td>The company employs local people even when other people are better qualified for the job.</td>
</tr>
</tbody>
</table>

Source: Authors’ illustration based on Maignan (2001); Ramasamy/Yeung (2009).

Tab. 5: Long version of independent variables

<table>
<thead>
<tr>
<th>Short version</th>
<th>Long version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Respondents’ age</td>
</tr>
<tr>
<td>Education$_{high}$</td>
<td>High education (advanced technical college or university entrance qualification) – dummy variable</td>
</tr>
<tr>
<td>Religious upbringing</td>
<td>Degree of religious upbringing</td>
</tr>
<tr>
<td>Party$_{MO}$</td>
<td>Preferred party: Market oriented – dummy variable</td>
</tr>
<tr>
<td>Party$_{LWO}$</td>
<td>Preferred party: Left-wing oriented - dummy variable</td>
</tr>
<tr>
<td>CSR knowledge$_{def}$</td>
<td>High CSR-knowledge in that respondents can give their own CSR definition – dummy variable</td>
</tr>
<tr>
<td>Politic$_{CSR}$ through law</td>
<td>Preferred level of political involvement in corporate CSR through legislation</td>
</tr>
<tr>
<td>Politic$_{CSR}$ supported by consultancy</td>
<td>Degree to which government should support companies by introducing CSR through consultancy</td>
</tr>
<tr>
<td>Politic$_{CSR}$ supported by guidelines</td>
<td>Degree to which government should support companies by introducing CSR through guidelines</td>
</tr>
<tr>
<td>Buying organic food</td>
<td>Intensity of buying organic products</td>
</tr>
</tbody>
</table>

Source: Authors’ illustration.