The impact of Reputation in the performance of the Organization in the perspective of members of the cooperatives

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Abstract

Corporate reputation (CR) is often an important intangible asset of a company. This study investigates the role of CR on cooperative members’ behavior and organizational performance, considering loyalty, satisfaction, trust and image. The study aims to verify the effects of communication, culture and satisfaction with management as antecedents of CR. To achieve the research objectives and based on a literature review, the study proposes a conceptual framework and tests the framework using structural equation modeling. For this purpose, 263 valid questionnaires were collected from a research sample comprised of members of the biggest dairy three co-operatives in Iberia. The results show that communication has an impact on CR as well as on culture and on satisfaction with management. CR has a significant impact on co-operatives members’ loyalty and performance. The model provides a wider comprehension of the CR concept and introduces both the drivers and consequences.

Keywords: Corporate reputation, communication, culture, satisfaction, loyalty, performance.

JEL codes: M3, M31.

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Introduction

Companies’ intangible assets, such as patents, brands and copyrights, are valuable tools that ensure financial returns and generate significant results to companies (Carmeli, 2004; López, 2006; Flatt et al., 2008; Lev et al., 2009; Moeller, 2009). The corporate reputation is one of these assets and is considered an important intangible resource that can provide competitive advantage to companies. Numerous articles mention how corporate reputation affects organizational performance (Carmeli, 2004, Rose and Thomsen, 2004, López, 2006, Gabbioneta et al., 2007, Flatt et al., 2008, Thomaz and Brito, 2010).

Conceptually, according to Rindova et al. (2005, p. 1033), the corporate reputation can be defined as “stakeholders’ perceptions about an organization’s ability to create value relative to competitors”.

Flatt et al., (2008), Rindova (2006), and Thomaz and Brito (2010) examine the antecedents of corporate reputation. This study investigates the role of corporate reputation on cooperative members’ behavior and on organizational performance, considering loyalty, investor satisfaction, trust and image. Furthermore, the study aims to verify the effects of communication, culture and satisfaction with management as antecedents of corporate reputation. This investigation adopts a holistic view, considering antecedents and consequents of corporate reputation and giving a general overview of corporate governance, based on an investor’s approach.

The research sample is composed by the members of three co-operative’s shareholders from the biggest dairy company in the Iberian Peninsula. According to Cunha et al., (2012), the milk sector is considered as an important segment of the national agro-industry, and the role developed by co-operatives is central to the consolidation and strengthening of this sector. Approximately 70% of the milk is collected and processed by co-operatives, and they play an important role in the agriculture field, all across Europe.

According to Fulton and Hueth (2009), farmers create co-operatives to pool their resources and become stronger in the market by increasing their negotiating power. Dunn (1988) argues that the main principle underlying co-operatives is that individuals may collectively achieve goals that are unattainable if they act alone. This is possible through joint efforts and mutual interests. It is important to define a co-operative and the basic principles in order to understand the differences between them and other types of organization, and to clarify the responsibilities and expectations of all stakeholders.

The International Co-operative Alliance (ICA) considers a co-operative as “an autonomous association of persons, voluntarily united to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”.

This paper has five parts. The next part presents the research background and the hypothesis development. The third part, the method, provides the sample and
data collection procedures, the measures and the statistical modeling. The fourth part presents the results and the supported and non-supported hypotheses. The fifth part comprises a discussion of the findings and the conclusions of the investigation, together with the managerial implications, the study’s limitations and recommendations for future research.

Research background and hypothesis development

The conceptual model tested in this investigation is presented as Figure 1. The model represents the effects of communication, satisfaction with management and culture on corporate reputation. Furthermore, the model shows the relationship between the corporate reputation and loyalty (affective and behavior), investors satisfaction, trust, performance and image.

Corporate Reputation

According to Rindova et al., (2005), two schools of thought offer different definitions of corporate reputation. From the economics perspective, reputation can be defined as the observers’ expectations or estimations of a particular attribute of an organization, especially the organization’s ability to produce quality products. In this perspective, the true attributes of firms are revealed to their stakeholders, based on past actions. Another school tends to characterize reputation as a collective perception of a group of stakeholders. The information exchange and the social influence of interest groups interacting with the organization form the corporate reputation. In this investigation a stakeholder approach was adopted to capture the best predictors of reputation. Rindova et al., (2005) considers the organizational reputation very valuable because of the reduction on uncertainty that stakeholders face when evaluating companies as potential suppliers of products and services. However, disagreements occur about how reputation can actually do this. From an economic perspective, uncertainty is seen as a function of information asymmetries between competing companies and their stakeholders. Companies may reduce information asymmetries, and hence the market uncertainties, when they make choices that reveal their true attributes. These choices work as signals for buyers to assess the relevant attributes of companies, for example, if the firm is a high or low quality manufacturer. Thus, the reputation reduces stakeholders’ concerns about the quality of products, which may induce them to pay premium prices for these products. That may in turn positively influence the organization’s outcomes.

Otubanjo and Chen (2011) defined corporate reputation as a functional phenomenon resulting from the creation of a variety of valuable attributes that differentiate companies, relationships and acceptance, and that make business
organizations become famous over time through formal and informal lines of corporate communication.

Shamma (2012) argues that the corporate reputation construct is properly conceptualized as the integration of corporate concepts like corporate identity and corporate image. And, the sum of all the images developed as a result of stakeholders’ perceptions forms the corporate reputation.

In the specific case of co-operatives, Nguyen (2006) found that co-operative value, the organizational culture and identity, frontline employees and physical environment, all have a significant relationship with corporate image, which contributes to corporate reputation. Furthermore, it is important that co-operatives promote a culture based on the co-operation principles. This can increase job satisfaction, as employees tend to be proud to belong to an organization based on fraternity and interdependence.

The following investigation model shows how corporate reputation is formed and what the main drivers and the mains impacts are.

**Figure 1. Conceptual Model**

![Conceptual Model](source)

Source: Authors’ own research.

**Antecedents of Corporate Reputation**

Several studies have investigated the antecedents of corporate reputation (Brown, 1998; Roberts and Dowling, 2002; Carmeli and Tischler, 2004; Flatt et al., 2008;
López, 2010). The importance of intangible elements such as culture and identity, and their impacts on corporate reputation are highlighted by Carmeli (2004) and Flatt et al., (2008). Culture is related to organizational identity, which in turn is related to corporate reputation (Flatt et al., 2008). Communication is another antecedent of corporate reputation and is used as a strategy to boost the corporate identity and consequently to improve the company’s corporate image, highlighting the quality of the products and services (Hawabhay et al., 2009). Satisfaction with management can also be viewed as an antecedent of corporate reputation. Satisfaction results from a positive stakeholder’s perception regarding the co-operative’s management. As noted by Nguyen (2006), it is an important issue to create a favorable corporate image and, thus, to reinforce the company’s reputation.

Culture

According to MacIntosh and Doherty (2007), organizational culture is defined as the set of values, beliefs and basic assumptions that are guided by leaders and shared by employees. They set the guidelines and explain how the procedures are carried out within organizations. Although extensive theoretical support exists for the relationship between culture and corporate reputation, empirical studies are limited (Flatt et al., 2008). The organizational culture is considered to be an intangible asset with significant impact on business performance. In this respect, Flatt et al., (2008) argue that corporate culture reflects the values and beliefs that are absorbed and shared by employees. Thus, a strong culture influences the financial performance of an organization. Culture leads to higher consistency in the behavior of employees in terms of co-ordination and control, improves goal alignment, and increases employee’s commitment and effort. Corporate culture and reputation are considered intangible assets because they add value through originality, since they are rare, difficult to imitate and replace.

Carmeli (2004) and Flatt et al., (2008) have empirically investigated the influence of culture on corporate reputation. Specifically, Flatt et al., (2008) examined the direct and indirect effects of organizational culture and corporate reputation on financial performance. Their work showed that a stronger corporate culture leads to a higher reputation rating, which then leads to a higher financial performance. Carmeli (2004) tested the influence of intangible elements such as managerial capabilities, human capital, perceived organizational reputation, internal auditing, labor relations, and organizational culture on organizational performance.

Consequently, the proposing hypotheses were derived:

*Hypothesis 1: Culture has a positive and significant impact on corporate reputation.*

*Hypothesis 2: Culture has a positive and significant impact on performance.*
Communication

Corporate communication is a core element used by corporate marketers to communicate with specific stakeholders. Communication allows companies to align their own interests with stakeholders’ interests or to create a favorable basis to interact with their different stakeholders, as pointed out by Shamma (2012). It is through communication that companies can show the reliability of their processes and products/services, their social and environmental commitments and their financial stability. Sincerity, transparency and consistency are the trinomial developed by Halderen and Riel (2006) to characterize the communication elements that can impact upon a company’s reputation.

Brown et al., (2013) showed how communication between co-operatives and their members was crucial for those co-operatives success. Moreover, inadequate communication among co-operatives’ members, as well as between the board of directors, management and the community can be identified as the main reason for failure.

The role of corporate communication in building corporate reputation has been studied by Romenti (2010), who argues that the function of communication is to engage stakeholders beyond the influence of stakeholders’ perceptions, so that the corporate reputation will be more stable and durable.

Communication is important to reputation building and is a basis over time, together with behavior and symbolism, for the management of corporate reputation (Bernstein, 2009; Hawabhay et al., 2009; Omar et al., 2009). Communication strategy can be used by companies to strengthen long-term relationships with their stakeholders and then shape those companies’ images and reputations (Argenti and Druckenmiller, 2004).

Hence, the third hypothesis is:

*Hypothesis 3: Communication has a positive and significant impact on corporate reputation.*

Satisfaction with Management

Satisfaction with management is related to the stakeholders’ perception about the management of company procedures and the actual performance of a company.

In this study, cooperative members’ satisfaction with management is related to four issues, as follows: (i) management behavior and decisions; (ii) the degree to which the board hears complaints; (iii) management quality; (iv) sense of equity and ethics.

It is known that co-operatives exist to serve the interests of their members. The principle of democracy has been an important element in co-operatives since the creation of co-operative organization (Osterberg and Nilsson, 2009). Cechin et al., (2013) argue that the problem with member control is due to information
asymmetry, because members have imperfect knowledge about the signals they send to management or to the board of directors. Information asymmetry makes the co-operative performance assessment more difficult and less reliable. People are more willing to accept changes that affect them profoundly, when they have a chance to influence the decision-making process, which can result in more commitment to the co-operatives and more trust in the board of directors. The same authors note that a co-operatives’ success reflects members’ commitment towards the particular characteristics of co-operatives, and members’ trust in the board of directors.

Satisfaction with management can be considered a determinant of corporate reputation. Stakeholders (co-operative members) develop a positive image of the company according to the relationships they maintain with each other and with the community (Nguyen, 2006; Duarte and Neves, 2011).

However, the feeling remains that in a co-operative, the management works preferentially to satisfy and defend the interests of the co-operative’s members (Cook, 1995). Including this variable as a determinant of corporate reputation could be a way of understanding this concept in the field of a co-operative, especially when based co-operatives members’ perceptions.

Therefore, the following hypotheses have been formulated:

\[ \text{Hypothesis 4: Satisfaction with management has a positive and significant impact on corporate reputation.} \]

\[ \text{Hypothesis 5: Satisfaction with management has a positive and significant impact on trust.} \]

\[ \text{Hypothesis 6: Satisfaction with management has a positive and significant impact on investor satisfaction.} \]

**Impacts of Corporate Reputation**

**Corporate Reputation and Performance**

According to Venkatraman and Ramanujam (1986), the concept of business performance is at the center of strategic management. Business performance is a sub-set of the overall concept of organizational effectiveness. These authors presented three domains of business performance measures: the domain of financial performance, including operational measures, the domain of non-financial performance, related to organizational effectiveness, and performance that includes two domains and various organizational goals, considering the influence of multiple stakeholders.

The corporate reputation has been considered as the most valuable intangible resource that firms can have (López, 2006). The corporate reputation can influence their potential to generate sustainable competitive advantages, and in line Dowling...
(2006) has explained how corporate reputation can improve the intrinsic value of a firm and the market share. Some authors argue that the relationship between corporate reputation and performance can be a two-way relationship (Sabate and Puente, 2003; López, 2010).

Carmeli and Tishler (2004) also found evidence that corporate reputation has a positive impact on organizational performance. Their study tested intangible elements such as managerial capabilities, human capital, internal auditing, labor relations, organizational culture and corporate reputation comparing their impact on organizational performance. Organizational culture and corporate reputation resulted to be variables far more important than the other intangible resources.

Then, the following hypothesis is formulated:

_Hypothesis 7: Corporate reputation has a positive and significant impact on performance._

**Corporate Reputation, Trust and Loyalty**

Trust can be defined as user’s perceptions of attributes of a product or service and also company characteristics, such as the company’s ability to meet customer needs, integrity and benevolence (Deng et al., 2010). Trust has an impact on loyalty. Trust can reduce risk to change to another provider and customers tend to be co-operative with the supplier demonstrating behavior evidence of loyalty. Esen (2012) defines trust as the willingness that someone has to be vulnerable to the actions of another person or entity. So, it is expected that the other person will perform an action that is important to someone, though no control or monitoring of this action can be achieved. Deng et al., (2010) finds trust to be an important determinant of satisfaction, and that both trust and satisfaction affect loyalty. According to Esen (2012), positive corporate reputation practices contribute to trust in organizations. Trust is important in fostering improved co-operation among individuals and organizations and also reduces uncertainty in negotiations. The trust has a significant and positive relationship with job satisfaction and engagement, organizational citizenship behavior and organizational engagement.

Cechin et al. (2013) consider that co-operatives, which are based on equality and solidarity principles, will achieve greater identification among their members, and between the members and the co-operatives themselves. The greater members’ trust in their co-operative’s leadership, the greater members’ commitment to the co-operatives strategies and the stronger the cohesion within the groups. The degree of group cohesion can be a measure of the strength of the members’ desire to belong and continue to be part of the co-operative, which, in the last instance, represents their commitment to it.

Commitment and loyalty are closely linked. However, commitment can also be considered as an antecedent of loyalty, showing the farmer’s willingness to patronize
The impact of Reputation in the performance of the Organization in the…

the co-operative and his/her willingness to invest in a lasting and successful relationship. Helm (2007) built a model representing the relationship between investor loyalty, reputation, and satisfaction. Moreover, she argued that investor loyalty can reduce the risks of a takeover, and that definitely decreases the equity volatility, and reduces transaction costs. Helm (2007) studied loyalty as a two-dimensional construct, namely as affective loyalty and behavior loyalty. Individuals act according to an affective predisposition so affective loyalty can be viewed as an antecedent of behavior loyalty. Weiwei (2007) emphasizes the importance given by researchers to the corporate reputation and the corporate image as the most important factors on loyalty building.

Consequently, the study formulates the following hypotheses.

Hypothesis 8: Corporate reputation has a positive and significant impact on trust.

Hypothesis 9: Trust has a positive and significant impact on loyalty.

Hypothesis 10: Corporate reputation has a positive and significant impact on loyalty.

Hypothesis 11: Affective loyalty has a positive and significant impact on behavior loyalty.

Hypothesis 12: Corporate image has a positive impact on loyalty.

Corporate Reputation and Image

According to Weiwei (2007), image is what comes to mind when someone hears the name of a company and the picture formed is a result of all impressions that customers or other stakeholders have about that company. Brown et al. (2006) propose another definition of corporate image as that which encompasses all the associations held by internal organizational members about external stakeholders’ perceptions of the organization. Nguyen (2006) notes that corporate image is viewed as the consumer’s responses to the offers given by companies and the results of the sums of beliefs and ideas about the firm. After studying the factors affecting consumers’ perceptions of corporate image in co-operatives, the results showed that corporate identity, organizational culture and co-operative value are significant factors affecting consumers’ perceptions of corporate image.

Davies et al. (2001) have also offered definitions of corporate image, as well as Porter (1985), claiming that an innovative firm image can be built from a good reputation. According to Weiwei (2007), the corporate image is the portrait of the firm that is formed in the mind of a consumer, while the corporate reputation is the degree of trust (or distrust) in a firm’s ability to meet customers’ expectations on a given attribute. However, Nguyen and Leblanc (2001) argue that, due to the meaning of
the constructs corporate reputation and corporate image, it is acceptable to suggest that corporate reputation has an impact on corporate image.

Numerous authors (Rose and Thomsen, 2004; Nguyen and Leblanc, 2001; Shapiro, 1982) recognize the influence of corporate reputation and corporate image on performance, and argue that a firm can increase the sales and market share and establish and maintain good and loyal relationships with stakeholders, if they have a good perception of the company’s reputation and image. The characteristics of intangible assets inherent within a good corporate image may provide the company with a competitive advantage which can generate abnormal return (Rose and Thomsen, 2004).

So, the following hypothesis is formulated:

**Hypothesis 13:** Corporate reputation has a positive and significant impact on image.

### Corporate Reputation, Investors Satisfaction and Loyalty

Satisfaction can be defined as the successful outcome in the context of a customer’s expectations of a company and the actual experiences in that connection (Helm et al., 2009). Satisfaction with investments and corporate reputation can be considered as determinants of investor loyalty (Helm, 2007). Ryan et al., (1999) found that reputation has the strongest influence of all other factors upon the degree of loyalty shown by customers. Some studies have examined the relationship between satisfaction and reputation and found that satisfaction leads to reputation (Anderson & Sullivan, 1993; Bontis & Booker, 2007). Other empirical studies demonstrate the positive influence of corporate reputation on satisfaction (Anderson et al., 1994; Davies et al., 2003).

Some authors have found that corporate reputation influences satisfaction (see for example, Andreassen, 1994; Andreassen and Lindestad, 1998; Davies et al., 2004; Wiertz, 2004; Helm, 2006). Others find that satisfaction influences corporate reputation (Carmeli and Tishler, 2004) or that these two constructs are strongly correlated (Walsh et al., 2006).

Helm et al., (2009) argue that some authors consider satisfaction an affective construct, contrary to the cognitive interpretation that considers satisfaction as the outcome of the consumer’s comparison of his/her expectations concerning the attributes of products or services with their real performance. In the affective approach, satisfaction is defined as an emotional response to the experiences with services and products provided by companies. More recently, the literature suggests a cognitive-affective approach considering satisfaction, as described by Oliver (2010, p. 8) “Satisfaction is the consumer’s fulfillment response. Satisfaction is a judgment that a product or service feature, or the product itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under or over fulfillment made by stakeholders”. So, in the context of shareholders or co-operative
members, this affective approach is more likely to represent the nature of the investors’ reasoning and corporate reputation should impact on investors’ satisfaction (Andreassen and Lindestad, 1998; Wiertz, 2004; Helm, 2007). Finally, Helm (2007) studied the impacts between investors’ satisfaction and loyalty.

Therefore, the following hypotheses have been formulated:

Hypothesis 14: Corporate reputation has a positive and significant impact on investor satisfaction.

Hypothesis 15: Investors’ satisfaction has a positive and significant impact on loyalty.

Methodology

Sample and Data Collection

The research universe in this study comprised the members of three co-operatives, shareholders in the biggest dairy company in the Iberian Peninsula. Data were collected through a survey applied all over the country. The research instrument is a structured questionnaire, developed through an electronic tool called Survey Monkey, a site that enables construction, delivery, and tabulation of data. The instrument consisted of eleven parts. In the first one, respondents were asked to provide information relating to their gender, age, level of education, and duration of their relationship with the company. The other ten parts were related to the constructs present in the investigation model and consisted of a total of eighty items. A Likert-type scale ranging from 1 (disagree strongly) to 7 (strongly agree) was used to measure the constructs corporate reputation, trust, image, communication, investor satisfaction, behavior loyalty, affective loyalty, management satisfaction, and organizational culture. A Likert-type scale ranging from 1 (much lower than expected) to 7 (much higher than expected) was used to measure performance.

Using the electronic tool Survey Monkey, e-mails were sent individually to co-operative members. Between 29th February 2012 and 5th June 2012, 276 answers were collected. They were analyzed and 13 were eliminated because of inconsistent or incomplete information, resulting in 263 valid answers. The sample comprises 74.5% men and 25.5% women. Most of the respondents are between 46 and 60 years (39.9%) and between 31 and 45 years (35.4%). Regarding their education, 35.4% have 1º cycle and 27.4% 2º and 3º cycle. In terms of their relationship duration, 79.8% have been involved with their co-operative for more than 10 years, and 12.5% have 5 to 10 years’ experience.
Measures

In order to operationalize the variables, the researchers conducted a literature review and adapted scales used in existing studies, changing some vocabulary so that the scales were more perceptible for respondents.

Culture

Culture was measured based on Nazari et al., (2011), whose study was, in turn, founded on the work of Earley (1993), Smith et al. (1995), Wagner (1995), Denison (1996), Chow et al. (1999), De Long and Fahey (2000), Detert et al. (2000), Chaminade and Johanson (2003), Ardichvili et al. (2006). The construct culture consisted of three sub-scales representing co-operation (five items), power distance (three items) and fear of the unknown (three items). A total of 11 items were defined. A confirmatory factor analysis was carried out and the construct appeared to be uni-dimensional. The final test presented a cronbach’s alpha coefficient of 0,92.

Communication

The scale to measure communication incorporates an instrument developed by Thomaz and Brito (2010). They based their work on that by Riel (2003). The scale has three sub-scales namely marketing, managerial, and organizational communication. A total of 11 items were defined. A confirmatory factor analysis was conducted and the construct appeared to be uni-dimensional. The final test presented a cronbach’s alpha coefficient of 0,94.

Satisfaction with management

Satisfaction with management is related to the policies and management of the organization and the inherent satisfaction with work. The aim is to measure the extent to which organizational members or co-operants are satisfied with the quality and the support that the company gives to employees and co-operative members and how they perceive organizational justice. The measure used is adapted from the scale of Comer et al., (1989), which in turn is already a reduced version of the scale provided by Churchill et al., (1974) who measured the satisfaction with the policies and management of the organization. A total of four items were defined. A confirmatory factor analysis was conducted and the final result presented a cronbach’s alpha of 0,96.
Corporate reputation

The corporate reputation scale was based on Walsh et al. (2009) and treats the construct as multi-dimensional. The measure has five sub-scales, as follows: customer orientation, good employer, reliable and financially strong company, product and service quality, and social and environmental responsibility. A total of 28 items were defined. A confirmatory factor analysis was conducted and the final items and the respective cronbach’ alphas were as follows:

- **Customer Orientation**: (Cronbach alpha - 0.93).
- **Good Employer**: (Cronbach alpha - 0.92).
- **Reliable and Financially Strong Company**: (Cronbach alpha - 0.94).
- **Product and Service Quality**: (Cronbach alpha - 0.93).
- **Environmental Responsibility**: (Cronbach alpha - 0.91).

Trust

The scale to measure trust was based on a study by Seppanen et al., (2007) and consists of three items. A confirmatory factor analysis was conducted and the final cronbach’s alpha was 0.96.

Investor satisfaction

The construct investor satisfaction was measured using a scale developed by Helm (2007). The scale composes of five items. A confirmatory factor analysis was conducted and the final cronbach’s alpha was 0.93.

Affective loyalty

The scale to measure affective loyalty was based on Helm’s study (2007). The scale was composed of four items and after confirmatory factor analysis, the researchers obtained a final cronbach’s alpha of 0.91.

Behavior loyalty

The scale to measure behavior loyalty was based on Helm’s study (2007). The metric was composed of four items and after confirmatory factor analysis, the final cronbach’s alpha was 0.93.
Image

The construct Image was operationalized according to the study by Nguyen and Leblanc (2001). The scale was composed of three items and after confirmatory factor analysis the final cronbach’s alpha was 0.92.

Performance

The scale to measure performance was based on Yilmaz and Ergun’s study (2008). The scale was composed of seven items, after confirmatory factor analysis, the final cronbach’s alpha was 0.93.

Reliability and validity

In order to perform descriptive statistics, correlations, and exploratory factor analysis, the researchers used the statistic software IBM SPSS 19.0 Statistical package Amos 20.0 was used to perform confirmatory factor analysis and structural equation modeling.

Initially, confirmatory factor analysis (CFA) was conducted to test the measurement model and the psychometric properties of the scales used (Hair et al., 2005). Having analyzed the standardized residuals and modification indices for the sources of mis-specification, the researchers removed several items and a well-fitted 51 items model with fourteen dimensions emerged. Table 1 presents the adjusted measures of the measurement model, which seem to be good according to the benchmarks (Hair et al., 2005).

Table 1. Adjusted Measures – Measurement and Structural Model

<table>
<thead>
<tr>
<th>Measures</th>
<th>Adjusted Measures Measurement Model</th>
<th>Adjusted Measures Structural Model</th>
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<tbody>
<tr>
<td>CMIN/DF</td>
<td>1.66</td>
<td>1.78</td>
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<tr>
<td>TLI</td>
<td>0.95</td>
<td>0.94</td>
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<tr>
<td>CFI</td>
<td>0.95</td>
<td>0.94</td>
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<tr>
<td>RMSEA</td>
<td>0.05</td>
<td>0.05</td>
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<tr>
<td>IFI</td>
<td>0.95</td>
<td>0.94</td>
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Item-total correlations are all above 0.50 and the alpha values on Table 2 are all above 0.90. AVE (Average Variance Extracted) values are between 0.7 and 0.9. The measures used seem to be reliable according to Hair et al. (2005).
The discriminant validity of the constructs was tested. It is assumed that the correlation between the different constructs theoretically is low. Discriminant validity is evidenced by the fact that all correlations between the constructs are significantly smaller than 1 and the squared correlations between each pair of latent variables are smaller than the variance of each extracted variance of each other (Fornell and Larcker, 1981). All extracted variance of the other pairs of variables are higher than the square of the correlation coefficient, thereby confirming the discriminant validity.
Table 2. Standard Deviation; Square Correlations, Cronbach’s Alpha, Composite reliability and Variance extracted

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<thead>
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<th></th>
<th>SD</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
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<th>X6</th>
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<th>X13</th>
<th>X14</th>
<th>CC</th>
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<tr>
<td>Inv Sat (X1)</td>
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<td>0,93</td>
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<td>0,89</td>
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<td>Imag (X2)</td>
<td>0,96</td>
<td>0,42</td>
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<td>RepFinSoli (X5)</td>
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<td>0,47</td>
<td>0,93</td>
<td>0,93</td>
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</table>

Obs: The principal diagonal presents Cronbach’s Alpha; SD= Standard Deviation; CC= Composite reliability; VE= Variance extracted.
Common method variance

The use of a self-administered questionnaire, according to Podsakoff et al. (2003), can lead to potential common variance bias. For these authors, the common method variance (CMV) tests can confirm the existence of variables that can cause measurement errors and systematic biases in the estimation of the relationship between theoretical constructs.

To determine the existence of this problem, the authors suggest the use of statistical techniques and other procedures. Some circumstances may potentiate the risk of common method variance (Podsakoff et al., 2003); for example when the information about the independent and dependent variables comes from the same respondent, when the same scale format is used throughout the questionnaire, or when different constructs are measured at the same time and using the same instrument.

In this investigation the measurement instrument was developed taking care of these possibilities. Each section of the questionnaire was clearly identified and information was given about the nature of the problem that was being measured. At the same time the wording of the questions was very carefully developed and tested. Finally, the respondents’ anonymity was completely assured.

Additionally, the statistical procedures were developed to test the existence of bias in the dataset due to external factors. Following Podsakoff et al. (2003), a Harman’s single factor test and a common latent factor (CLF) to capture the common variance among all observed variables in the model were conducted. The Harman’s test was inconclusive but, using a common latent factor, no substantial differences were found between the model fit and between the standardized regression weights. All the differences found were less than 0.15, below the recommended 0.2.

Results

We then used Structural Equation Modeling (SEM) to test the hypotheses, revealing that the adjustment measures are appropriate and show good levels, as indicated in Table 1.

Table 3 presents the results for the structural model. Most of the paths are statistically significant and give the basis for a good comprehension of the reputation issues.
Table 3. Results – Structural Model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Conclusion</th>
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<td>Rrs</td>
<td>&lt; ----</td>
<td>Cult</td>
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<td>0,05</td>
<td>3,67 ***</td>
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<tr>
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<td>Rat</td>
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<td>Cult</td>
<td>0,21</td>
<td>0,05</td>
<td>4,40 ***</td>
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<tr>
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<td>&lt; ----</td>
<td>Cult</td>
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<td>0,07</td>
<td>4,40 ***</td>
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<td>0,62</td>
<td>0,07</td>
<td>8,54 ***</td>
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<td>Rrs</td>
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<td>0,81</td>
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<td>Rsf</td>
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<td>Comunic</td>
<td>0,67</td>
<td>0,08</td>
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<td>5,26 ***</td>
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<td>H5</td>
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<td>ManagSatisf</td>
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<td>Rrs</td>
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<td>3,45 ***</td>
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<td>Trust</td>
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<td>0,05</td>
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<td>0,09</td>
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<td>0,07</td>
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<td>-4,56 ***</td>
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<tr>
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<td>Rsf</td>
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<td>&lt; ----</td>
<td>Rpq</td>
<td>0,21</td>
<td>0,07</td>
<td>3,28 ***</td>
</tr>
</tbody>
</table>
Results show a positive and significant relationship between culture and three dimensions of the corporate reputation, namely customer orientation, good employer and environmental responsibility. The other two dimensions of the construct corporate reputation (reliable and financially strong company) and product and service quality are not statistically significant. Consequently, hypothesis 1 is partially supported.

Hypothesis 2 is supported. Culture has a positive and significant relationship with performance. The construct communication is positively related to corporate reputation in all five dimensions (customer orientation, good employer, reliable and financially strong company, product and service quality and environmental responsibility). Hypothesis 3 is therefore, supported.

The construct satisfaction with management presents a positive and significant relationship with one dimension of corporate reputation (reliable and financially strong company), so hypothesis 4 is partially supported. However, we found a positive and significant relationship between satisfaction with management and trust and the same occurred with satisfaction with management, and investor satisfaction, so hypotheses 5 and 6 are supported.

Hypothesis 7 is partially supported. Corporate reputation has a positive and statistically significant relationship with performance. The relationship between the dimension customer orientation and performance is the weaker one. Only the relationship between the dimension good employer and performance is not statistically significant.

Corporate reputation presents a positive and statistically significant relationship with trust, but only in two dimensions (good employer and environmental responsibility). So, hypothesis 8 is partially supported.

Hypothesis 9 is supported. Trust has a positive and statistically significant relationship with loyalty. It is important to report that this occurs with two dimensions of loyalty – affective and behavior. Hypothesis 10, which advocates the relationship between corporate reputation and loyalty, is partially supported, considering that only the corporate reputation dimension of reliable and financially strong company results in a positive and statistically significant relationship with loyalty. Regarding the dimension customer orientation, a significant relationship with behavior loyalty is found, although this relationship is negative. However, a positive and statistically significant relationship between affective loyalty and behavior loyalty is evident, so hypothesis 11 is supported.
Regarding the relationship between image and loyalty, a positive and significant relationship is seen to occur between image and affective loyalty, so hypothesis 12 is supported. Corporate reputation presents a positive and statistically significant relationship with image, but only in three dimensions - good employer, reliable and financially strong company and product and service quality. Hence, hypothesis 13 is only partially supported. Regarding the relationship between corporate reputation and investor satisfaction, only two dimensions of corporate reputation present a positive and statistically significant relationship with investor satisfaction - customer orientation and reliable and financially strong company. This partially supports hypothesis 14. Finally, investor satisfaction has a positive and statistically significant relationship with the two dimensions of loyalty.

Discussion, conclusion, and implications

The results reveal culture to be a predictor of corporate reputation. It should be noted that this occurs in three dimensions, namely customer orientation, good employer and environmental responsibility. As Flatt et al. (2008) advocate, culture is a bedrock of corporate reputation as well as the basis of the organizational identity. Furthermore, Hypothesis 2 reinforces the importance of culture and confirms the impact on performance. This is in accordance with the ideas developed by Flatt et al. (2008), who consider culture an important and intangible asset that can enhance competitive advantage and achieve higher financial performance in selected environmental conditions.

Regarding the construct communication, a positive and significant relationship with corporate reputation, in all dimensions, was found, which is an expected result, and is in line with the earlier works by Rindova and Fombrum (1999) and Forman and Argenti (2005). Communication can be used to build strong and lasting relationships with stakeholders who shape the organization’s reputation.

Satisfaction with management affects one dimension of corporate reputation, the dimension named reliable and financially strong company. This reflects the great importance that co-operative members give to financial aspects. Consequently, firms have to direct attention to management issues that can result in good perceptions of financial controls in the co-operatives. Furthermore, satisfaction with management affects trust and investor satisfaction, as posited by Borgen (2001): the more the members identify with the co-operative, the more they trust the co-operative’s leadership. This encapsulates the satisfaction with management and with the adopted organizational practices.

Results show that corporate reputation, in four of the dimensions used, namely reliable and financially strong company, product and service quality, environmental responsibility and customer orientation, affects the firm’s performance. Prior studies find evidence that corporate reputation enhances a firm’s ability to gain a competitive advantage and achieve higher performance (Caves and Porter, 1977; Milgrom
and Roberts, 1982; Roberts and Dowling, 2002; Flatt et al., 2008). These results are, therefore, in line with these findings and show that an intangible asset like corporate reputation can impact upon a firm’s financial performance.

Regarding the impact of corporate reputation on trust, that two dimensions of corporate reputation (good employer and environmental responsibility) are seen to influence trust. This shows how co-operative members value good practices related to workers and the environment. Esen (2012) reveals how positive corporate reputation practices contribute to trust in organizations. Furthermore, results reflect how trust affects loyalty in both dimensions – affective and behavior loyalty. This result is in line with the investigations by Deng et al. (2010).

The relationship between corporate reputation and loyalty is seen to be positive and significant only in the dimension reliable and financially strong company. However, this dimension impacts upon loyalty in the two dimensions: affective and behavior. The dimension customer orientation appears a negative and significant relationship with behavior loyalty and no significant relationship with affective loyalty. Prior studies, developed by Helm (2007), show a positive and significant relationship between corporate reputation and affective loyalty whereas the relationship between corporate reputation and behavior loyalty is not significant. This result seems to contradict what the literature suggests and what investigations have corroborated. However, this investigation is based on a co-operative’s members, which can explain this apparently strange result. Co-operative’s members can see the customer orientation as opposite to a member’s orientation. This would explain this negative relationship.

In the same study by Helm (2007), a positive and significant relationship between affective loyalty and behavior loyalty is confirmed. According to Helm (2007), regarding loyalty, individuals act following an affective predisposition, and therefore, affective loyalty should be considered as an antecedent to behavior loyalty. In line with Helm’s study, we find a positive and significant relationship between affective loyalty and behavior loyalty. At the same time, the relationship between corporate image and affective loyalty emerges as being positive and significant, in line with Weiwei (2007), who emphasizes the importance given by researchers to corporate reputation and corporate image as the most important requirements in the building of loyalty.

Corporate reputation’s impact on image reveals a positive and significant influence in only three dimensions, namely - good employer, reliable and financially strong company and product and service quality. This demonstrates the importance accorded by co-operative members to the co-operative’s nature and to the co-operative’s essentials: the practices related to people, the financial issues, and quality.

Another relationship tested is the impact of corporate reputation on investor satisfaction. Only the reputations’ dimensions of customer orientation and reliable and financially strong company are positively and significantly related to investor satisfaction. The importance given to financial results or to a good financial reputation is confirmed by Osterberg and Nilsson (2009, p. 184), who claim that “Good
financial results in the farm enterprises are expected to result in both commitment to the co-operatives and satisfaction with the boards”.

The overall results are conclusive and contribute to a better understanding of corporate reputation, its antecedents and consequences. These findings are of great importance to managers. Knowing the role of communication as an antecedent of corporate reputation can help them to implement an efficient and effective communication plan, good communication practices and place members at the center of the communication plan and practices. Managers should focus on management practices that promote increases in co-operative members’ trust and satisfaction, which in turn result in greater member loyalty. The knowledge about the impact of corporate reputation on image and on performance can influence managers to invest more and more effort in maintaining a good reputation and in managing the risks related to business.

This study has some methodological limitations affecting the potential contributions. This investigation is based on a sample of members of one union of co-operatives in the dairy milk industry. This can limit the possibility of generalization of the results. It is also a cross-sectional study that captures one image time-delimited. Even if a set of relationships were found, this methodology limits the definition of a strict causality between variables.

As for recommendations for future work, the model could be tested using corporate reputation as a second order factor. Another suggestion is to extend this study to other countries and co-operatives in other industries. At the same time, the relationship between satisfaction with management and corporate reputation as well as between corporate reputation and loyalty in both dimensions should be more detailed. These hypothesized relationships were partially supported in this investigation and a better comprehension of these results is required. Moderators of these effects could also be tested. Finally, the role of commitment should be investigated. Commitment is considered a consequence of trust in the field of studies of co-operatives.

This investigation contributes to a better understanding of the antecedents and consequences of corporate reputation and highlights some conclusions about the preferences and behavior of the members of the biggest dairy company in the Iberian Peninsula. Moreover, this study innovates by including two antecedents of corporate reputation – satisfaction with management and culture, which can help understand how reputation can be built. The use of the two dimensions of loyalty – affective and behavior – is another novelty in this field of study, giving new highlights to the three co-operative members’ behavior towards loyalty.

Concerning the antecedents of corporate reputation, the data confirm a strong relationship between communication and corporate reputation in all five dimensions (customer orientation, good employer, reliable and financially strong company, product and service quality, and environmental responsibility). This corroborates previous studies mentioned in the paper and shows the importance of communication in attempts to build a strong corporate reputation among co-operatives.
Satisfaction with management and culture helps in understanding the corporate reputation formation.

Corporate reputation seems to impact on trust, affective loyalty, image, investor satisfaction and performance. These results show that corporate reputation can contribute to a greater internal cohesion and to the overall performance of the company. Furthermore, they show how an intangible resource can be crucial to enhance the relationships with stakeholders, namely, the co-operative members, and to increase financial performance.

References


Riel, C. B. M. Van., 2003, “The management of corporate communication”. In J. M. T.


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