

# Chapter 9

## Legitimacy and Reputation of Organizations: Their Relationship with Management Systems and Financial Performance



Natalia Orviz Martínez, Tatiana Cuervo Carabel,  
and Cristina del Castillo Feito

**Abstract** Legitimacy and reputation are intangible assets of growing importance for the survival of organizations, so it is very important to develop strategies that improve these assets. In addition, the implementation of management systems based on ISO standards has had a strong development worldwide since their emergence. The main objective of this research is to analyse whether the adherence to ISO 9001 and ISO 14001 and the implementation of an integrated management system (IMS) of both standards can have a positive effect on the legitimacy and reputation of organizations. On the other hand, a complementary objective is to contrast the influence of these intangible assets on their financial performance. For this purpose, the companies of the IBEX-35 stock index were selected, using structural modelling with PLS through SmartPLS software. The results obtained show that the certification in these ISO standards has a positive influence on the legitimacy and reputation of the organizations that implement them; on the other hand, the establishment of an IMS for both standards has a positive effect on the legitimacy of companies, but it does not have this effect on their reputation. There is also a positive relationship of the two intangible assets on the financial performance of organizations.

**Keywords** Legitimacy · Reputation · Financial performance · Management systems · 9001 standard · 14001 standard · Integrated management system (IMS) · Quality · Environment

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N. O. Martínez (✉) · T. C. Carabel  
Universidad Internacional de la Rioja, Logroño, Spain  
e-mail: [natalia.orviz@unir.net](mailto:natalia.orviz@unir.net); [tatiana.cuervo@unir.net](mailto:tatiana.cuervo@unir.net)

C. del Castillo Feito  
Department of Business Economics, Rey Juan Carlos University, Madrid, Spain  
e-mail: [cristina.delcastillo@urjc.es](mailto:cristina.delcastillo@urjc.es)

## 9.1 Introduction

In an increasingly competitive and global environment, the importance of intangible assets in business management is growing steadily. Today, most of the creation of value and competitive advantages of organizations are explained precisely by the contribution of these intangible assets (Cruz-Suárez, Prado-Román, & Díez-Martín, 2014; Sriram, 2008), being legitimacy and corporate reputation two of these intangible assets, representing aspects which are important for the growth of organizations and for improving financial and business results (Deephouse & Carter, 2005).

Legitimacy is now a key element for understanding survival and growth (Zucker, 1987), since legitimized organizations are more predictable, reliable and balanced (Suchman, 1995), allowing them to access the resources needed to survive and grow more easily (Meyer & Rowan, 1977). Reputation is also an intangible asset that can provide a clear competitive advantage (Deephouse, 2000), due to its imitation difficulty (Roberts & Dowling, 2002), which differentiates organizations and creates possible entry barriers for new competitors (Feldman, Bahamonde, & Bellido, 2014).

Therefore, companies need to implement strategies that can improve their legitimacy and reputation. Voluntary implementation of management systems based on ISO standards in organizations may be one of them. This practice is becoming increasingly common, according to the results of the annual reports of the International Organization for Standardization (ISO), which show that at the end of 2015, there were 1,519,952 certificates in the world (ISO, 2015). Out of these standards, those of greater importance were ISO 9001 in relation to quality management (1,033,936 certificates) and ISO 14001 for environmental management (319,324 certificates).

On the other hand, according to the majority of previous investigations, a higher level of these intangible assets should lead to improving the profitability of companies (Roberts & Dowling, 2002; Zimmerman & Zeitz, 2002). However, sometimes the search for greater legitimacy and/or reputation may lead to adopting decisions, which at least in the short-term may lead to a decrease in the performance of organizations (Barreto & Baden-Fuller, 2006; Fisher-Vanden & Thorburn, 2011).

In short, the main objective of this research is to study the impact on the legitimacy and reputation of organizations, both from adherence to management systems based on ISO 9001 and ISO 14001 and from the implementation of an IMS for them. On the other hand, a complementary objective is to contrast the influence of legitimacy and reputation on the financial performance of companies. For this purpose, the companies of the IBEX-35 stock index will be analysed, using structural modelling with PLS through SmartPLS software.

## 9.2 Literature Review

### *Intangible Assets in Companies: Legitimacy and Reputation*

The current dynamic, changing and highly competitive environment causes companies to build and strengthen their relationships with their stakeholders, making them more favourable in both directions. Therefore, the role of intangible assets to generate competitive advantages and future benefits for organizations, in order to create value in them, is increasingly relevant, with legitimacy and reputation being two of these important intangible assets (Ruiz-Rodríguez, 2016).

Legitimacy is the key element of the institutional theory (Haveman & David, 2008), whose search has served to analyse survival, access to necessary resources and growth of companies (Suchman, 1995; Zimmerman & Zeitz, 2002), as it reflects that they have some values and perform procedures, activities or processes that are desired and accepted by the social environment in which they operate (Suchman, 1995). The importance of this study is that it is a key that can lead to success (Meyer & Rowan, 1977; Zucker, 1987) or otherwise to the organization's failure if it does not conform to social norms and values (Diez-Martin, Blanco-González, & Prado-Román, 2010a), which directly conditions its survival (Diez-Martin, Blanco-Gonzalez, & Prado-Roman, 2010b; Díez-Martín, Prado-Roman, & Blanco-González, 2013; Zimmerman & Zeitz, 2002).

On the other hand, reputation is also a very important intangible asset for companies, since it is a clear indicator of their success (Fombrun & Van Riel, 2004). A strong reputation is key for an organization to differentiate itself from its competitors, improve its market prospects with new client contracts (Rhee & Haunschild, 2006) and improve its financial performance (Bergh, Ketchen, Boyd, & Bergh, 2010), as well as its survival (Iwu-Egwuonwu & Chibuike, 2011). In short, reputation would be the degree to which a company seems good, that is, it is the set of ratings of each interest group (Luoma-Aho, 2007), sustained over time (Rhee & Haunschild, 2006), in a stable way (Walker, 2010).

### *Relationship Between Management Systems and Legitimacy*

The importance today of legitimacy implies that organizations must develop strategies to improve it (Suchman, 1995). One of these strategies could be the implementation of management systems, based on standards such as ISO 9001 and/or ISO 14001. A company will increase its legitimacy by adopting one of these standards if its environment perceives it as a desirable and socially adequate instrument (Boiral, 2011; Zeng, Tam, & Le, 2010).

Based on previous studies, adherence to management systems, based on standards such as ISO 9001 and/or ISO 14001, can produce positive internal and external effects

for organizations, with the internal aspects related to their internal efficiency and effectiveness while the external ones refer to commercialization or the markets, as well as to the relationship with different stakeholders (Bernardo, Simón, Tarí, & Molina-Azorín, 2015; Prajogo, 2011; Qi, Zeng, Yin, & Lin, 2013; Sampaio, Saraiva, & Rodrigues, 2009; Wu & Jang, 2014). The achievement of these positive effects is related to the companies' motivations to implement these standards, which, like the benefits, are classified into internal ones (improvements in performance, productivity, process performance, internal communication, etc. of the organization) and external ones such as customer, market and other stakeholder pressures, as well as improvement of the image, business figures, etc. (Del Castillo-Peces, Mercado-Idoeta, & Prado-Román, 2017; Tarí, Molina-Azorín, & Heras, 2012).

Given the objective of this research, external motivations will be studied in more detail, that is, related to any interest group that may influence the decision to implement these management systems, either by imitation of other organizations (DiMaggio & Powell, 1983), to meet stakeholder requirements (Boiral, 2007) or to improve their image and reputation in society (Jiang & Bansal, 2003). Prajogo, Tang, and Lai (2012) and Qi et al. (2013) conclude that one of the main reasons for adopting these standards was institutional pressure and the search for organizational visibility through certification, which is motivated by the desire to obtain institutional legitimacy. Based on all of the above, the following proposition is formulated:

*Proposition 1: The certification of management system standards is positively related to legitimacy.*

On the other hand, another decision to be considered by organizations is whether to adopt an IMS, that is, a tool that unifies the functions of different management systems of a company into one, in order to make it more effective (Beckmerhagen, Berg, Karapetrovic, & Willborn, 2003). There is research that supports the suitability of integrating the different management systems of the company, since the benefits obtained were greater than in those organizations that had them independently (Casadesús, Karapetrovic, & Heras, 2011; Karapetrovic, 2003).

Cost savings, employee motivation, simplification of documentation, optimization of resources, improvement in the external image and satisfaction of customers and the different interest groups are included as some of the positive effects that could be obtained from such integration, as well as an increase in the legitimacy level of the organization (Simon, Karapetrovic, & Casadesús, 2012; Zeng et al., 2010). Therefore, based on the above, the following proposition is formulated:

*Proposition 2: The implementation of an IMS is positively related to legitimacy.*

### ***Relationship Between Management Systems and Reputation***

Among the external motivations of a company to implement a management system are those related to customer and market pressures, which would improve the reputation of the organization, since certification implies that an independent external entity shows compliance with certain requirements established in the different

standards, which gives a greater reputation to those organizations that are not publicly committed (Prajogo, 2011).

In this same line, several investigations show that the implementation of management systems, in an increasingly global environment, can produce a series of positive effects, including improvement of image and reputation (Singh, 2008; Tari et al.; Wu & Jang, 2014), which constitutes a clear competitive advantage (Tari et al., 2012). This improvement in the company's image and reputation is due to the fact that certification responds to pressures from different stakeholders (Jiang & Bansal, 2003; King, Lenox, & Terlaak, 2005), in many cases being a key aspect for implementing the management standard. Based on the above, the following proposition is raised:

*Proposition 3: The certification of management system standards is positively related to reputation.*

In the same way as for legitimacy, the integration of the management of these standards can lead to a series of internal and external improvements, highlighting within the external ones, the improvement of the organization's image (Simon et al., 2012; Zeng et al., 2010). In previous studies, the concept of image sometimes appears as a synonym of reputation (Furman, 2010), others as a completely independent concept (Gotsi & Wilson, 2001), or related (Akdag & Zineldin, 2011). In this research, like Gray and Balmer (1998), both concepts are considered to be related to external perception, that is, what the external agents think of a company (Rhee & Haunschild, 2006), as the reputation would be the result of keeping a positive image over a long time (Ruiz, Gutiérrez, & Esteban, 2012). This approach shows a high relationship level between both constructs, so the following proposition is formulated:

*Proposition 4: The implementation of an IMS is positively related to reputation.*

## ***Relationship Between Legitimacy and Financial Performance***

The institutional theory has argued that the forces that drive legitimacy can lead companies to make inadequate resource decisions. This is because, on the one hand, acquiring legitimacy allows companies to increase their probability of survival (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Zimmerman & Zeitz, 2002), while on the other hand, this increase of the probability of survival can be obtained at the expense of performance (Henderson, 1999). In this same line, Westphal, Gulati, and Shortell (1997) detected a negative impact on the organizational efficiency of a sample of hospitals that adjusted to the required isomorphic pressures. In addition, Barreto and Baden-Fuller (2006) showed that imitation by companies to achieve legitimacy can contribute negatively to their profitability.

However, most researchers contrast that legitimacy can positively affect financial performance, either through the value of public offerings of securities (Higgins & Gulati, 2006), share prices (Zuckerman, 2000), through economic profitability (Bansal & Clelland, 2004) or market value (Díez-Martín et al., 2013). Zimmerman

and Zeitz (2002) mention that an organization gains access to financial resources when it shows its commitment to the rules, norms and values socially accepted by the environment, that is, its improvement of legitimacy and its financial performance can also do it, since it generates confidence to increase the productivity of its assets. In this line, the following proposition is formulated:

*Proposition 5: Organizations with higher legitimacy will have higher financial performance.*

### ***Relationship Between Reputation and Financial Performance***

The relationship between reputation and financial performance has been studied extensively, with a minority of studies finding no relationship between these constructs (Inglis, Morley, & Sammut, 2006), or a negative relationship (Fisher-Vanden & Thorburn, 2011).

Roberts and Dowling (2002) show a positive relationship between a good reputation and an organization's ability to achieve higher results than its competitors over time. Deephouse (2000) finds a significant relationship between reputation and financial performance based on a favourable presence in the media, and Costa, Lawrence, Castelo, and Dias (2014) prove that the financial market gives a higher rating to the best reputed companies, improving the market value of their shares. Other investigations (Fernández-Sánchez, Luna-Sotorrió, & Barabiar-Díez, 2012; Flanagan, O'Shaughnessy, & Palmer, 2011; Sabate & Puente, 2003) also show the same positive relationship between reputation and financial performance, taking reputation as the independent variable. Based on the above, the following proposition is raised:

*Proposition 6: Organizations with a higher reputation will have higher financial performance.*

## **9.3 Methodology**

### ***Sample***

The selected population was formed by IBEX-35 companies in December 2014. A questionnaire was sent to the 35 companies, requesting information on their possible adherence to ISO 9001 and/or 14001 standards, being completed by 29 of them, which made up the first research sample, initiating the process of obtaining information about their legitimacy and reputation, through secondary sources (the media for legitimacy, and the MERCO index for reputation). The final sample consisted of 21 of these companies, which fulfilled the double condition of belonging to the IBEX-35, and being included in the MERCO index, accounting for 77.5% of the turnover of the total number of companies included in the stock market indicator.

## ***Procedure and Information Collection Instruments***

Regarding management systems, as in the majority of previous investigations related to these systems (Sampaio et al., 2009), a questionnaire was sent by e-mail to those responsible for the management and/or social responsibility systems of each of the 35 companies that made up the IBEX 35, completing the information received from 29 of them through the data available on their corporate website.

Regarding legitimacy, it was measured globally, that is, without differentiating its dimensions. For this, the content analysis in written press was used, since it is considered an adequate instrument to identify the opinion of the social environment, because it influences and reflects the values of a culture (Dowling & Pfeffer, 1975) and was considered in previous studies (Bansal & Clelland, 2004; Deephouse, 1996; Li, Yang, & Yue, 2007). As a source of information, a single newspaper was used to avoid duplication of news. In particular, the digital edition of the newspaper *El País* was used for two main reasons: firstly, according to data from the General Media Survey (EGM) from October 2014 to May 2015, prepared by the Association of Media Research (AIMC), it is second in the ranking readership/day, only below *Marca*, a sports newspaper; secondly in the ranking of Internet sites, the digital edition of *El País* is in the third place (behind *YouTube* and *Marca*), with 5195 visitors in the last 30 days, being the first generalist newspaper in the ranking; the major national newspaper of general information is in the third place, according to the Office of Justification of Diffusion (OJD). The analysis of the different articles was done through the database provided by [elpais.com/tag](http://elpais.com/tag) Web.

In relation to reputation, the MERCOR index (corporate monitor of corporate reputation) was the information source, since it is one of the reference monitors in the world and it has been chosen by several empirical publications in Spain (Fernández-Sánchez & Luna-Sotorrió, 2007; Delgado-García, Quevedo-Puente, & Díez-Esteban, 2013).

Finally, two databases of great relevance were used for the measurement of financial performance due to the financial information provided: SABI and *Bankscope*. Return on assets (ROA) was chosen, since it was a very recurrent indicator in previous research related to management systems, legitimacy and reputation (Bansal & Clelland, 2004; De Jong, Paulraj, & Blome, 2014; Gallego, Prado, Rodríguez, & García, 2010).

## ***Measurement of Variables***

Regarding the management systems considered (ISO 9001 and 14001), the following variables were used:

- (a) Certified company: following other authors (De Sena Portugal Días & Heras-Saizarbitoria, 2013; González-Benito, Lannelongue & Queiruga, 2011), this variable was considered as independent, being assigned the value 1 if the

company is certified in ISO 9001, 2 if the company is ISO 14001 certified, 3 if the company has both ISO 9001 and ISO 14001 certificates and 0 if it is not certified in any of these standards.

- (b) Enterprise with integrated management systems: a dichotomous variable was considered, which takes the value 1 if the company has an IMS of the implemented management standards and the value 0 if it does not have it.

Regarding legitimacy, each of the news items identified for the companies in the sample was coded based on the methodology used by Bansal and Clelland (2004). The procedure is to code the news according to its impact on the legitimacy of the company, which can be neutral (code 0), negative (code 1) or positive (code 2). In addition, to calculate the value of legitimacy on an annual basis, the Janis-Fadner coefficient is applied.

As for reputation, and according to previous studies (Brammer & Pavelin, 2006; Fombrun & Shanley, 1990), a scale of 1–100 points is designed, where each point represents the position of each of the 100 companies placed in the MERCO ranking, that is, the value 100 represents the organization with the worst reputation and 1 the best.

Finally, in terms of financial performance, the ROA values were collected from the SABI and *Bankscope* database.

## ***Information Processing Techniques***

In order to analyse the relationships and contrast the propositions raised, structural modelling with PLS was used with the software SmartPLS (beta), version 3.2.3. This technique was chosen because it is a powerful method of analysis (Chin, Marcolin, & Newsted, 2003), presenting adequate advantages for the research to be carried out. The table below describes the technical file of the study (Table 9.1).

**Table 9.1** Technical research file

Universe and field of research	Companies included in the IBEX 35
Sample size	21 companies
Sample turnover	77.5% of total IBEX 35
Information sources	Enterprise questionnaires-corporate websites (management systems)
	Media (legitimacy)
	MERCO index (reputation)
	SABI and <i>Bankscope</i> databases (financial performance)
Study years	From 2005 to 2014 at 3-year intervals
Confidence level	95%
Sample error	13.7%
Methodology	SEM-PLS
Period of field work	December 2014–June 2015



### 9.4 Results

For the contrast of the causal correlations between the latent variables of the described model, and having a basis to confirm or reject the propositions raised, the SmartPLS3 software was used. For the study of the relationships between variables, the research model was decomposed into four sub-models, related to the values of the different variables obtained in 2005, 2008, 2011 and 2014.

Subsequently, we proceeded to validate the model jointly based on fixed criteria, depending on the years in which significant relationships were obtained. For setting these criteria, this research was based on the division made by other authors, including Díez-Martín, Blanco-González, and Prado-Román (2016) (Table 9.2).

#### *Sub-model Year 2005 (Table 9.3)*

The statistic of all relationships (except reputation-ROA) corresponds to a value above  $t(99.9\%) = 3.090$  in absolute value, so there is more than a 99.9% probability that the data used are statistically significant. For the case of the reputation-ROA relationship, the statistic is above  $t(97.5\%) = 1.960$ , so it is also accepted.

The  $R^2$  coefficient reaches values above the established limit of 0.1 for the three endogenous variables ( $R^2_{legitimacy} = 0.137$ ,  $R^2_{reputation} = 0.262$ ,  $R^2_{ROA} = 0.245$ ). According to Chin (1998), it can be deduced that a weak part of the legitimacy variable and a moderate part of the reputation and financial performance variables are being explained with the proposed model.

**Table 9.2** Criteria for validation through the PLS model

Significant relationship	Degree of acceptance
4 years	High
3 years	Moderate
2 years	Low
1 year	Rejected

**Table 9.3** Structural relationships for 2005

Proposition	Relationship		Standard coefficients ( $\beta$ )	T-value	
<b>P1</b>	<b>Certification</b>	→	<b>Legitimacy</b>	0.362***	3.482
P2	Integration	→	Legitimacy	0.021	0.223
<b>P3</b>	<b>Certification</b>	→	<b>Reputation</b>	0.437***	5.821
P4	Integration	→	Reputation	-0.478***	-4.116
<b>P5</b>	<b>Legitimacy</b>	→	<b>ROA</b>	0.374***	3.036
<b>P6</b>	<b>Reputation</b>	→	<b>ROA</b>	0.231*	2.011

$R^2$  (legitimacy) = 0.137;  $R^2$  (reputation) = 0.262;  $R^2$  (ROA) = 0.245

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table 9.4** Structural relationships for 2008

Proposition	Relationship		Standard coefficients ( $\beta$ )	T-value	
<b>P1</b>	<b>Certification</b>	→	<b>Legitimacy</b>	0.330*	2.559
P2	Integration	→	Legitimacy	0.064	0.635
<b>P3</b>	<b>Certification</b>	→	<b>Reputation</b>	0.334***	3.193
P4	Integration	→	Reputation	-0.332**	-2.973
P5	Legitimacy	→	ROA	0.154	1.667
<b>P6</b>	<b>Reputation</b>	→	<b>ROA</b>	0.488***	3.426

$R^2$  (legitimacy) = 0.321;  $R^2$  (reputation) = 0.141;  $R^2$  (ROA) = 0.310

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

The positive  $\beta$ s that imply the confirmation of the propositions raised correspond to P1, P3, P5 and P6. For the case of the integration-reputation relationship (P4), it would be in the opposite sense, which would imply the non-fulfilment of the proposal initially raised.

### *Sub-model Year 2008 (Table 9.4)*

The values of the T-value obtained are above 1.96 for the relationships certification-reputation, reputation-ROA, integration-reputation and certification-legitimacy. All this implies that assuming the propositions whose value is equal to or greater than 1.960 are valid, there is a risk of being wrong in 5% or less. In these cases, the stability of the relationships is adequate.

The explanatory relationship of legitimacy reaches a regression coefficient of 0.321, reputation of 0.141 and financial performance of 0.310, values which indicate a predictive level of the appropriate model.

There is a strong construct connection in the case of the relationships certification-legitimacy, certification-reputation and reputation-ROA ( $\beta > 0.2$ ). The rest of the relationships are weak, reaching results of less than 0.2 or negative results.

All this makes it possible to accept the propositions that relate the variables certification-legitimacy (P1), certification-reputation (P3) and reputation-ROA (P6), rejecting the rest.

### *Sub-model Year 2011 (Table 9.5)*

The results obtained are not very representative. On the one hand, the causal relationship between the constructs is adequate only for the case of the integration-legitimacy relationship with a value of 0.511. In the case of the legitimacy-ROA relationship, a representative coefficient is reached, but as it is negative, it proves the inverse proposition raised.

**Table 9.5** Structural relationships for 2011

Proposition	Relationship			Standard coefficients ( $\beta$ )	T-value
P1	Certification	→	Legitimacy	-0.033	-0.390
<b>P2</b>	<b>Integration</b>	→	<b>Legitimacy</b>	0.511***	3.982
P3	Certification	→	Reputation	-0.144	1.275
P4	Integration	→	Reputation	-0.106	-1.032
P5	Legitimacy	→	ROA	-0.243***	-2.982
P6	Reputation	→	ROA	-0.145	-1.404

$R^2$  (legitimacy) = 0.247;  $R^2$  (reputation) = 0.046;  $R^2$  (ROA) = 0.060

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table 9.6** Structural relationships for 2014

Proposition	Relationship			Standard coefficients ( $\beta$ )	T- Value
P1	Certification	→	Legitimacy	-0.030	-0.298
<b>P2</b>	<b>Integration</b>	→	<b>Legitimacy</b>	0.447***	3.349
P3	Certification	→	Reputation	0.094	0.779
P4	Integration	→	Reputation	-0.207	-1.707
<b>P5</b>	<b>Legitimacy</b>	→	<b>ROA</b>	0.320***	3.463
P6	Reputation	→	ROA	0.130	1.369

$R^2$  (legitimacy) = 0.187;  $R^2$  (reputation) = 0.032;  $R^2$  (ROA) = 0.107

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

24.7% of the dependent legitimacy variable can be explained based on the variables that precede it. In contrast, for the other two endogenous constructs,  $R^2$  is less than 0.1, so the relationships formed by this variable are rejected.

On the other hand, the T-value statistics were adequate only in the case of the integration-legitimacy and legitimacy-ROA relationships.

In short, for this year, only the connection between the integration of management systems and legitimacy (P2) can be validated.

**Sub-model Year 2014 (Table 9.6)**

Significant relationships between the integration-legitimacy and legitimacy-ROA variables are shown. All of this implies, assuming that propositions whose value is equal to or greater than 3.09 are valid, that there is a risk of being wrong in 0.1% or less, so the stability of the previous relationships is adequate.

There is a strong construct connection for the integration-legitimacy and legitimacy-ROA relationships. The rest of the relationships are weak (values lower than 0.2).

Only the legitimacy and financial performance variables can be explained by the variables that precede them, with 18.7% and 10.7%, respectively.

Consequently, once all the requirements have been analysed, the propositions relating integration-legitimacy (P2) and legitimacy-ROA (P5) variables are confirmed, with the rest being discarded.

## *Discussion and Global Analysis*

Once the relevant analyses and interpretations are made through the application of the structural model with PLS (using the SmartPLS beta 3.2.3 software) for each of the study years (2005, 2008, 2011 and 2014), the results obtained are shown.

First, we compile the results obtained in each of the years analysed, to verify the compliance or not of the different proposals presented in this research. Then, considering the criteria previously defined in Table 9.2, the degree of acceptance of each of the propositions is marked, depending on the relationship of significance in the different years studied. That is, it is indicated which are confirmed and their degree of acceptance within the model proposed in the work.

Therefore, Table 9.7 presents the results obtained after the application of the PLS-SEM method for each year analysed, and Table 9.8 indicates the degree of acceptance of each proposal made, according to the number of years in which there is a significant relationship.

Once all the results have been grouped together, five of the six proposals initially formulated can be corroborated, as there is a positive relationship between the

**Table 9.7** Global results structural relationships of the model

Proposition	Relationship			Significance			
				2005	2008	2011	2014
P1	Certification	→	Legitimacy	<b>SI</b>	<b>SI</b>	NO	NO
P2	Integration	→	Legitimacy	NO	NO	<b>SI</b>	<b>SI</b>
P3	Certification	→	Reputation	<b>SI</b>	<b>SI</b>	NO	NO
P4	Integration	→	Reputation	NO	NO	NO	NO
P5	Legitimacy	→	ROA	<b>SI</b>	NO	NO	<b>SI</b>
P6	Reputation	→	ROA	<b>SI</b>	<b>SI</b>	NO	NO

**Table 9.8** Research propositions contrast

Proposition	Relationship			Significatividad	
				Significant relationship	Degree of acceptance
P1	Certification	→	Legitimacy	2 years	Low
P2	Integration	→	Legitimacy	2 years	Low
P3	Certification	→	Reputation	2 years	Low
P4	Integration	→	Reputation	0 years	Rejected
P5	Legitimacy	→	ROA	2 years	Low
P6	Reputation	→	ROA	2 years	Low

certification of management system standards and legitimacy (P1) and reputation (P3), between the integration of management systems and legitimacy (P2), and finally between legitimacy and reputation and financial performance (P5 and P6, respectively). The proposition concerning a relationship between the integration of management systems and reputation (P4) has been excluded. In addition, the degree of acceptance for all the confirmed propositions was low, having been fulfilled in two of the 4 years studied, so these results must be interpreted with caution, until new empirical investigations confirm or explain them.

## 9.5 Conclusions

Companies are currently subject to an increasingly competitive, dynamic and global environment, so intangible assets, such as their legitimacy and reputation, are increasingly relevant for their survival and achieving competitive advantages, which is giving rise to greater attention to establishing strategies to improve these intangible assets.

Therefore, the main objective of this research was to analyse the possible impact on the legitimacy and reputation of the IBEX-35 companies, both from the implementation of management systems based on ISO 9001 and/or ISO 14001 standards and from establishing an IMS for the management of their adherence. In addition, the complementary objective was to contrast the positive impact of these intangible assets on the financial performance of organizations.

According to the results described above, the work carried out reveals that the implementation of the ISO 9001 and/or ISO 14001 standards has had a positive low-level influence on the legitimacy of the IBEX-35 companies participating in the research. These results are in line with previous studies (Jiang & Bansal, 2003; Prajogo et al., 2012; Qi et al., 2013), concluding that the main reasons for adopting these standards were institutional pressure and the search for organizational visibility through certification.

Moreover, the results also show that establishing an IMS to manage the implemented standards has a positive low-level influence on the legitimacy of these companies. These results are also in line with the conclusions of previous studies cited in the theoretical framework (Simon et al., 2012; Zeng et al., 2010).

Regarding the reputation of the IBEX-35 companies, the results show a positive low-level influence, as a result of their adherence to ISO 9001 and/or 14001 standards, as was also true for their legitimacy. These results follow those obtained in previous research in this area (Jiang & Bansal, 2003; King et al., 2005; Singh, 2008; Tari et al., 2012; Wu & Jang, 2014).

However, with regard to the possible positive influence of establishing an IMS to manage the standards implemented, on the reputation of these companies, the results obtained do not reveal it, unlike the legitimacy case, and in contrast to the conclusions of previous studies on brand image (Simon et al., 2012; Zeng et al., 2010). These results may be motivated by the fact that the beneficial effects of estab-

lishing such an integrated system may be more internal, and therefore be less influential on a better positioning regarding competition, which is a distinctive element of reputation compared to legitimacy.

With respect to the relationship between the two intangible assets (legitimacy and reputation), and the financial performance of companies, the results show a positive relationship in both cases. In terms of legitimacy, the results are in line with previous studies, which show that it positively affects various indicators related to financial performance (Bansal & Clelland, 2004; Díez-Martín et al., 2013; Higgins & Gulati, 2006; Zimmerman & Zeitz, 2002; Zuckerman, 2000). On the other hand, in relation to reputation, this positive relationship was also verified in previous studies cited (Costa et al., 2014; Deephouse, 2000; Fernández-Sánchez et al., 2012; Flanagan et al., 2011; Roberts & Dowling, 2002; Sabate & Puente, 2003).

On the other hand, it is necessary to indicate that this research has limitations, which makes it advisable to be cautious when extrapolating its results, until new empirical studies that confirm or explain them are carried out. In the first place, the size of the sample (21 companies from a population of 35) causes the sample error to be 13.7%, despite the fact that the sample turnover is very high (77.5% of the total of the stock market indicator). Secondly, the positive influence detected for the first three propositions is low, that is to say, it takes place only in two of the four periods considered, and also concerning the relationship between certification and both legitimacy and reputation, this low positive influence is only seen in the first two periods.

In view of all this, it is proposed to carry out further future research, which can confirm the results achieved, firstly by increasing the size of the sample and secondly by considering possible reasons for the proposals raised having only been confirmed for two of the periods considered. Furthermore, other future studies could be carried out by expanding the scope of the selected population (other countries, stock-listed companies but smaller, etc.), adding new variables to the model (image, corporate social responsibility, etc.) or using other methodologies (use of other secondary sources to measure intangible assets or other primary sources such as structured surveys and/or interviews, application of the case method, etc.).

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