 doi:10.20944/preprints201811.0028.v1

Type of the Paper (Article)

ISO 14001 and 26001, agents of change in the SMEs

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Abstract: At present, business strategies in SMEs (Small and medium enterprises) are crucial for consolidation in highly competitive markets, in achieving a better image and in business profitability. One of the strategies that have the most success and business success are sustainable practices and social responsibility such as: ISO 14001 and ISO 26001. The literature related to sustainable business is based mainly on the theory of resources and capabilities, and in theory based on Stakeholders. These currents state that companies should focus on profitable strategies to ensure significant and long-term results, in order to achieve organizational and financial results for stakeholders. In this work, the sample consists of 215 companies from the commerce, services and industry sectors, located in the southern region of the State of Sonora in Mexico. The objective of the work is to analyze the influence of ISO 14001 and 26001 standards on the image and profitability of SMEs. The statistical analysis of the data has been carried out through the linear regression technique by OLS (Ordinary Least Squares). The findings prove that the ISO 14001 standard is the one that most influences the improvement of the business image and the level of profitability of the SME. In addition, we discovered that ISO 26001 has a partial influence on the image and profitability of the SME.

Keywords: ISO, Social Responsibility, Image, Profitability, SMEs.

1. Introduction

Since the appearance of the industrial revolution and with the changes in economic systems, companies have been in constant movement towards learning, standardization of their processes and the ongoing struggle for competitiveness [1,2]. To this type of organizations that live in environments with technological advances and economic obstacles, they are called as visionary, strategic and innovative [3]. One of the effective strategic actions that in recent years has been generating value within and outside organizations, has been the implementation of certification standards related to quality management, environmental management and social responsibility practices [4,5]. These regulations are controlled by the international organization for standardization (ISO-International Organization for Standardization), with the purpose of improving the internal processes of organizations [6,7]. Due to strong international regulations on the subject of process improvement, the quality of products and services, and the control of natural resources, companies are becoming more aware and rational [8,9]. Theories such as resources and capabilities (RBV-Resource Based View) have considered these business practices as a trigger for growth, improvement of corporate image, increased innovation and significant financial returns for their stakeholders[10,11]. However, this philosophy focuses its efforts on the social and economic aspect, often bordering on the theme of sustainability [12]. From another perspective, some scholars have exposed that sustainability and social practices have penetrated with force in their organizational results [13]. Stakeholders theory (interest groups) has been one of the main axioms taken as reference by specialists in the subject to support that sustainable businesses with social and environmental

actions achieve significant organizational and financial benefits [14]. These benefits usually focus on investors, internal customers, external customers, suppliers and residents of communities. This is achieved through collaborative work between the different actors involved in the social economy [15,16]. Undoubtedly, these two theories conceive that the ISO 14001 standard focused on the sustainability of business can contribute more to the reputation and business image [17]. In the same direction, the ISO 26001 standard, focused on the management of social responsibility, has recently been a business practice of great value for business [6]. Among the most significant benefits of these regulations, is that they help to standardize processes, improve the quality of products (sustainable), improve collaborative work, strengthen productive work, reduce costs, increase image and strengthen the organizational reputation [18]. However, in the case of the SME (small and medium enterprises), the implementation of these standards has been a complicated and pending issue. The main barriers faced by these organizations to incorporate these practices, mainly focus on the lack of financial budget (high implementation and monitoring costs), the short-term vision of managers and the lack of commitment of investors and employees [6,19,20]. Derived from the above, we have defined that the main objective of this work is to empirically analyze the effect of the environmental standard ISO 14001 and the social responsibility standard ISO 26001, on the image and profitability of SMEs in the southern region of the State of Sonora in Mexico. The research questions we present and try to answer are: 1) Does the SME that focuses its resources and capacities on the implementation of the ISO 14001 standard obtain higher results of image and corporate performance? 2) The SME that focuses its resources and capacities on the implementation of the ISO 26001 standard obtains higher image results and business performance? This work contributes to the literature of the resources and capacities and to the theory the groups of interest from two perspectives. First, analyzing the ability of companies (SMEs) in the application of human and financial resources in terms of standardization and standardization of their processes, with the firm purpose of strengthening their image and increase their performance in competitive markets. In the literature there is a considerable number of empirical studies that analyze the business, environmental and financial benefits that are achieved through the standardization of their processes [21–23]. However, these works mostly focus on the study of large companies with international scope [22,24,25]. Second, from the perspective of the Stakeholder theory, we analyze the benefits that occur within the SME, derived from the application of environmental standards and CSR (Corporate Social Responsibility) practices in global markets. In this same direction, we have detected that a large number of researchers have studied these variables in multinational companies, leaving aside the impacts of these variables within the SME. The research has been structured through: 1) literature review, and development of hypotheses for analysis; 2) the second section describes the methodology, the sample and the justification of the variables under study; 3) the third section examines the results obtained and 4) finally the main conclusions and discussions are presented.

2. Literature Review and Development of the Hypothesis

2.1. ISO 14001 and 26001 standards, in the business image

Some theoretical currents, such as the Stakeholders and the RBV, have concluded that there are companies of different sizes that have achieved success through the implementation of quality and environmental standards [26,27]. Taking sustainability as a reference, businesses are adopting economic models that will lead them to improve their profitability [28]. For this, companies have a greater occupation for the environmental care issue, for the satisfaction of internal and external customers [29,30]. For example, recently some scholars have concluded that an effective way to generate wealth for investors, is improving the working conditions of employees, improve quality processes and care for the environment, this through the so-called circular economy [31,32]. The

issue of sustainability and social responsibility in the last decade has been a business strategy aimed at improving innovation, reputation, image and contributes to the business leadership of the business [16,33,34]. A large number of studies in Europe and North America have concluded that SMEs have a serious problem when implementing environmental management systems, this has caused disinterest and a null value added [35–37]. On the other hand, several studies have confirmed that the implementation of standards focused on sustainable and environmental actions, help in the design and innovation of products, control their production processes, improve the strengthening of the image, improve the perception of the community (customers) and the benefits for investors are maximized [27,38]. In the subject of social responsibility, the regulation for companies through the standard 26001 is currently a business practice that is mostly applied as a marketing strategy [39]. This is because it is adopted for convenience and not for conviction (ethics and moral) [7]. Some research in the field of SMEs from countries with developed and emerging economies have exposed that these practices generate a greater projection of the commercial image of companies, increase the satisfaction of their stakeholders and increase the business reputation [12,40]. From the theoretical and empirical analysis we have developed the following hypotheses:

Hypothesis 1a (H1a). A greater focus (implementation) in the ISO 14001 standard, the SME becomes an innovative company.

Hypothesis 1b (H1b). A greater focus (implementation) in the ISO 14001 standard, the SME is consolidated as a leader in its sector.

Hypothesis 1c (H1c). A greater focus (implementation) in the ISO 14001 standard, the SME is consolidated as a safe company.

Hypothesis 1d (H1d). A greater focus (implementation) in the ISO 14001 standard increases the business image in the SME.

Hypothesis 2a (H2a). A greater focus (implementation) in the ISO 26001 standard, the SME becomes an innovative company.

Hypothesis 2b (H2b). A greater focus (implementation) in the ISO 26001 standard, the SME is consolidated as a leader in its sector.

Hypothesis 2c (H2c). A greater focus (implementation) in the ISO 26001 standard, the SME is consolidated as a secure company.

Hypothesis 2d (H2d). A greater focus (implementation) in the ISO 26001 standard increases the business image in the SME.

2.2. The norms ISO 14001 and 26001, in the business profitability

The theory of resources and capabilities has exposed during the last two decades that organizations that focus their efforts on strategies based on business sustainability, manage to develop products and services with greater value, increase innovation, improve profitability and strengthen their administrative processes and productive [3,13]. Numerous studies developed in large organizations have explained that environmental management and CSR are correlated and that, in addition, they generate significant financial returns [20,41]. In the field of SMEs, some researchers have reported mostly that environmental management standards and CSR actions are

 doi:10.20944/preprints201811.0028.v1

in a development phase [42,43]. But in this last decade, there is a greater interest in putting them into practice by small businesses, this because of the benefits that are achieved [44]. For example, scholars in the subject have exposed that the SMEs that carry out these practices and/or business strategies manage to improve their processes, manage to efficiently manage logistics, and standardize products and services. These actions lead them to more competitive markets and to the total satisfaction of their customers [34,45]. In addition, with strategies aimed at environmental sustainability and commitment to stakeholders, companies achieve the improvement of the business image, innovation is increased, they manage to penetrate new markets with greater force, they manage to increase the level of customers, they increase their sales, competitiveness increases and consequently the financial and economic profitability increases [46–49]. After reviewing the theoretical and empirical context, the following hypotheses have been developed:

Hypothesis 3a (H3a). A greater focus (implementation) in the ISO 14001 standard increases the market share in the SME.

Hypothesis 3b (H3b). A greater focus (implementation) in the ISO 14001 standard increases the level of satisfaction of the SME's customers.

Hypothesis 3c (H3c). A greater focus (implementation) in the ISO 14001 standard increases the profits of the SME.

Hypothesis 3d (H3d). A greater focus (implementation) in the ISO 14001 standard increases the profitability of the SME.

Hypothesis 4a (H4a). A greater focus (implementation) in the ISO 26001 standard increases the market share in the SME.

Hypothesis 4b (H4b). A greater focus (implementation) in the ISO 26001 standard increases the level of satisfaction of SME customers.

Hypothesis 4c (H4c). A greater focus (implementation) in the ISO 26001 standard increases the profits of the SME.

Hypothesis 4d (H4d). A greater focus (implementation) in the ISO 26001 standard increases the profitability of the SME.

In Figure 1, we can observe the theoretical model proposed for this investigation. This model has been developed based on the premises of stakeholder theory and sustainable business.

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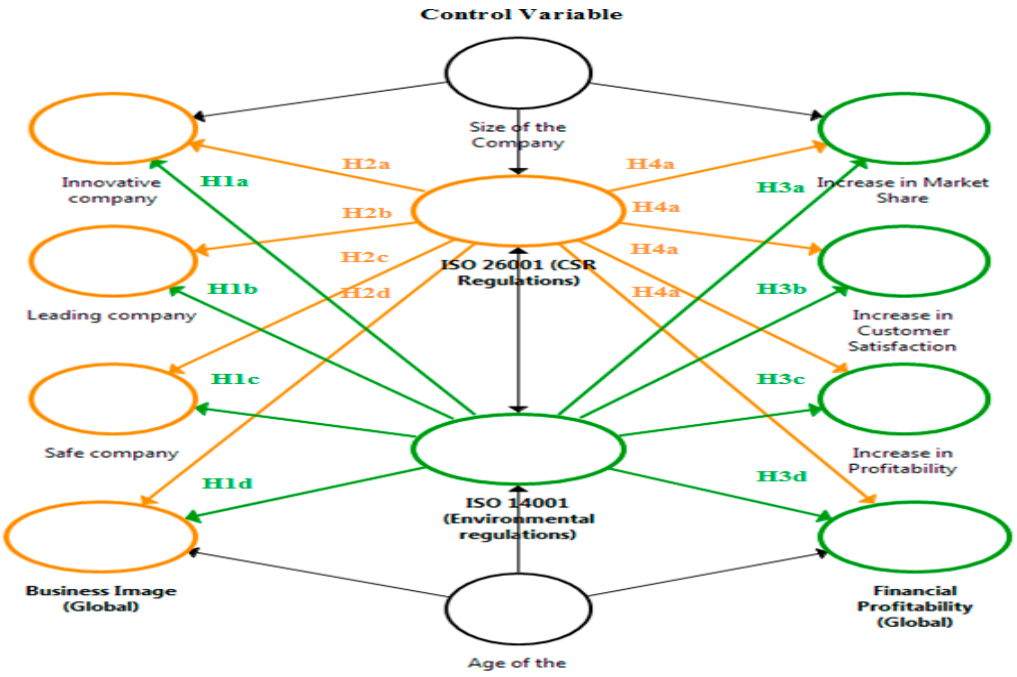

Figure 1. Theoretical operational model

3. Methodology

The structure and determination of the sample has been developed based on the principles of stratified sampling for finite populations. The population of companies is segmented according to the business activity (see table 1). The companies in the commerce, services and industrial sectors are the participants in the research. The total number of companies established in the southern region of the State of Sonora in Mexico. Each one of the built sectors has been obtained from the information provided by the economic census of the National Institute of Statistics and Geography [50]. Companies with 10 to 100 workers are included in the sample. The sample size was determined to ensure that the maximum margin of error for the estimation of a proportion was less than 0.03 points with a confidence level of 95%. The technique for collecting the information was through a personal interview (questionnaire) addressed to the manager of the companies. The fieldwork for data collection was carried out during the months of May to September 2016. Finally, a sample of 215 companies was obtained, which have had experience with the implementation of ISO 14001 and 26001 standards (see table 1 and 2).

Table 1. Conformation of the population.

Sector	Total companies	Small Companies	Medium Companies	% Total
Commerce	176	81	95	49.7
Services	101	39	62	28.5
Industrial	77	14	63	21.8
Total	354	134	220	100.0

Source: Own elaboration

 doi:10.20944/preprints201811.0028.v1

Table 2. Structure of the sample.

Sector	Total companies	Small Companies	Medium Companies	% Total
Commerce	88	35	53	40.9
Services	55	24	31	25.6
Industrial	72	9	63	33.5
Total	215	68	147	100.0

Source: Own elaboration

3.1. Measurement of Variables

3.1.1. Exogenous Variables

ISO 14001, 26001. The literature has exposed that the norms and/or environmental regulations and corporate social responsibility, are generators of innovation, growth, image, reputation and financial profitability in organizations [20], [51]. From the theoretical and empirical review, a series of structured questions were developed in a questionnaire addressed to SME managers. Respondents were asked to indicate if in their company they had introduced environmental management (ISO 14001) and ISO (26001) social responsibility standards in their internal processes. To the values given for the positive answers (yes), the 1 was assigned and for the negative answers (no) the value of 0 was assigned.

3.1.2. Endogenous variables

The Business Image. In this study, the managers answered the questions of the questionnaire to assess the degree of importance of the results obtained in the corporate image in terms of environmental regulations and social responsibility practices during the last two years. This variable was measured with 3 items that comprise it: 1. Innovative company, 2. Leader company and 3. Secure company. In addition, the business image variable was also measured through the average of the three items that build it. For this, a Likert scale of 5 points was used with 1 = Not important and 5 = Very important. The questions were elaborated based on the studies of Sarbutts [52], Jenkins [53] y Lee [54], observe table 3.

Table 3: Reliability and validity.

Variable (Global image) In the last 2 years:	**LF**	**Validation of the variable**
An innovative company	0.804***	CA = 0.670, Factorial: 1: KMO: 0.678
A leading company	0.815***	Explained variance: 60.09%, Sig. Bartlett: 0.000
A safe company	0.677***	

Source: Own elaboration. LF, Load Factor; CA, Cronbach's Alpha; KMO, Kaiser-Mayer-Olkin, *** $p < 0.001$.

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Financial profitability. To measure this variable, we have considered the relationship and influence that financial results receive from ISO standards, social responsibility practices and corporate image [55,56]. In this study, the managers answered the questions of the questionnaire to classify the degree of importance of the profitability of the SME obtained in the last two years. The variable was measured with 3 items: 1. Increase in market share, 2. Increase in customer satisfaction, and 3. Increase in profits. In addition, this variable was also measured globally by building an average of the three components that make up the business profitability of the SME. For this, a Likert scale of 5 points was used with 1 = Poor performance and 5 = High performance. These questions have been developed taking as reference the studies developed by Orlitzky, Schmidt, & Rynes [57] and by Melnyk & Tobias [58], see table 4.

Table 4: Reliability and validity.

Variable (Global Financial profitability) In the last 2 years:	**LF**	**Validation of the variable**
Increase in market share	0.780***	CA= 0.776, Factorial: 1: KMO: 0.787
Increase in customer satisfaction	0..833***	Explained variance: 57.20%, Sig. Bartlett: 0.000
Increase in profits	0..754***	

Source: Own elaboration. LF, Load Factor; CA, Cronbach's Alpha; KMO, Kaiser-Mayer-Olkin, *** p< 0.001.

3.2 Control Variables

Frequently the structural size and age of the company are seen as a determining factor in the generation of economic and financial performance for organizations [59]. *The size of the company,* this variable was measured with the natural logarithm of the total of the employees of the year 2016. *The age of the company,* in the literature and in empirical studies this variable is used in the research models to analyze the financial influence and economic growth that is generated in organizations during a given period of time [60]. *The age of the company* determines the degree of consolidation and maturity within a market, results that are explained through the evolutionary theory [1]. This variable is measured based on the start of the operation and up to the current activities of the companies, see table 5.

Table 5. Age and Size of the company.

Characteristic	**Minimum**	**Maximum**	**Average**	**SD**
Age of the company (in years)	1	36	14.00	15,456
Size of the company (number of employees)	10	96	18.00	27,332

Source: Own elaboration; SD, Standard Deviation.

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3.3 Reliability and Validity

For the evaluation of the reliability and validity of the endogenous variables of the instrument, an Exploratory Factor Analysis (EFA) was performed through the maximum likelihood method, using the SPSS software version 21. The reliability of the measurement scales was evaluated using the Cronbach's alpha, the percentage of variance explained, the KMO (The Kaiser-Meyer-Olkin test) and the factorial loads. Cronbach's alpha is considered satisfactory above .60 and/or close to 0.70 [61]. Our results are within the values of 0.670 and 0.776, demonstrating an acceptable reliability between the constructs. The KMO is measured in a range of 0 to 1. To consider an acceptable measure and a satisfactory interrelation between the items is recommended to obtain a value close to and/or equal to 0.700 [61]. Our results are in a range of 0.678 and 0.787, indicating good reliability. With respect to the variance explained, our values are 57% and 60%. For this indicator it is recommended that the factorial solution explain, at least, 50% of the total variability of the test response [62,63]. With regard to factor loads, the results obtained are 0.677 and 0.833, this indicator is convenient to provide results above 0.600 as suggested by [61,64]. Other authors recommend that these values be close to or above 0.707 as proposed by Carmines & Zeller [65] y Christmann & Steinwart [66]. The validity of the scales has been carried out through the theoretical and empirical review (content validity). With the previous analyzes it is concluded that the theoretical model has an adequate consistency, validity and reliability among all the constructs.

4. Results

To validate the hypotheses presented in the research and verify the effect that environmental and social responsibility standards have on the corporate image and profitability, the linear regression model by OLS was used. To test the hypothesis, four linear regression models were developed with the following equations. The first equation represented in model 1, outlines the influence that the business image (βo) receives from ISO14001 (β1), the size of the company (β2) and the age of the company (β3) + £ (error). In model 2, the designed equation symbolizes the effect that the business image (βo) receives from ISO26001 (β1), the size of the company (β2) and the age of the company (β3) + £ (error). In model 3, the equation is observed indicating the influence that business profitability (βo) receives from ISO14001 (β1), the size of the company (β2) and the age of the company (β3) + £ (error). In the last structured equation represented in model 4, we observe the influence that business profitability (βo) receives from ISO26001 (β1), the size of the company (β2) and the age of the company (β3) + £ (error).

1. Model 1. Business image$_i$ = β_o + β_1 x ISO14001 $_i$ + β_2 x size of the company + β_3 x age of the company + £.
2. Model 2. Business image$_i$ = β_o + β_1 x ISO26001 $_i$ + β_2 x size of the company + β_3 x age of the company + £.
3. Model 3. Financial profitability$_i$ = β_o + β_1 x ISO14001$_i$ + β_2 x size of the company + β_3 x age of the company + £.
4. Model 4. Financial profitability$_i$ = β_o + β_1 x ISO26001 $_i$ + β_2 x size of the company + β_3 x age of the company + £.

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Table 6. Hypothesis test results.

	Endogenous variables			
Exogenous Variables	**IC**	**LC**	**SC**	**GI**
ISO 14001	0.198***	0.213***	0.174***	0.238**
	(3.483)	(3.677)	(3.059)	(4.195)
ISO 26001	0.002	-0.073	0.117**	-0.066
	(.008)	(-1.225)	(2.007)	(-1.137)
Age of the Company	0.033	-0.012	0.017	0.075
	(.626)	(-.218)	(.321)	(1.387)
Size of the Company	0.122***	0.002	-.0103*	0.027
	(2.154)	(0.035)	(-1.819.)	(.609)
Highest VIF	1.29	1.29	1.29	1.28
Value of F	4.641***	2.745***	1.928***	5.611***
R^2 adjusted	0.059	0.035	0.070	0.064

Source: Own elaboration. IC: Innovate Company; LC, Leading Company, SF, Safe Company; GI, Global Image. The value of the standardized coefficients and below them in parentheses the Student t value is observed, the values of the Highest VIF, the value of f, and the value of R^2 adjusted. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Table 6 presents the regression results of model 1 and 2. This equation represents the relationship between ISO 14001 and ISO 26001, with the corporate image. The results show empirical support for H1a, H1b, H1c, H1d, and H2c. However, for H2a, H2b and H2d we did not find empirical support. The hypotheses H1a, H1b, H1c and H1d have a strong and significant positive influence on the corporate image according to the values of (β=0.198, p<0.001), (β=0.213, p<0.001), (β=0.174, p<0.001) y (β=0.238, p<0.001). This allows us to assume that the implementation of ISO 14001 in the SME increases the corporate image. The H2c, indicates that the ISO 26001 has a positive and significant influence on the corporate image, according to the value of (β=0.117, p<0.05). With this the SME is perceived as a safe company. In relation to the control variables introduced in both models, the results indicate that only the size of the company has a positive and significant influence on the variable innovative company according to the value of (β=0.122, p<0.001). On the contrary, we find that the size of the company with a significant and negative effect exerts an influence on the variable of a secure company, according to the value of (β=-0.103, p<0.01). In order to validate the linear regression models of the hypothesis, the R^2 adjusted with a value of (0.059), (0.035), (0.070) (0.064) and the values in F of (4.641***), (2.745***), (1.928***) and (5.611***). In addition, the independent variables of the linear regression model show the variance inflation factor (VIF) close to the unit of (1.29), (1.29), (1.29) and (1.28), with this we rule out the presence of multicollinearity.

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Table 7. Hypothesis test results.

	Endogenous variables			
Exogenous Variables	**IMS**	**ICS**	**IP**	**GFP**
ISO 14001	-0.170***	0.200***	0.142***	0.182**
	(-2.970)	(3.521)	(2.453)	(3.352)
ISO 26001	0.128**	0.061	-0.028	0.121**
	(2.166)	(1.038)	(-.477)	(2.064)
Age of the Company	-0.032	-0.012	0.013	-0.015
	(-0.605)	(-0.218)	(0.238)	(-0.279)
Size of the Company	0.126***	0.002	0.047	-0.034
	(2.158)	(0.035)	(0.811)	(-0.628)
Highest VIF	1.29	1.28	1.29	1.28
Value F	3.657***	5.151***	2.594***	5.485***
R^2 adjusted	0.047	0.070	0.037	0.062

Source: Own elaboration. IMS: Increase in market share; ICS, Increase in customer satisfaction, IP, Increase in profitability; GFP, Global financial profitability. The value of the standardized coefficients and below them in parentheses the Student t value is observed, the values of the Highest VIF, the value of f, and the value of R^2 adjusted. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Table 7 shows the regression results of model 3 and 4. This equation represents the relationship between ISO 14001 and ISO 26001, with the financial profitability of the company. The results show empirical support for H3a, H3b, H3c, H3d, H4a and H4d. However, for H4b, and H4c, we do not find empirical support. The hypotheses H3a, presents significant and negative effects according to the value of (β=-0.170, $p<0.001$), Indicating that less importance in the implementation of environmental standards, the company achieves less market share. The hypotheses H3b, H3c and H3d present a strong and significant positive influence on the financial profitability according to the values of (β=0.200, $p<0.001$), (β=0.142, $p<0.001$) y (β=0.182, $p<0.001$). This allows us to assume that the implementation and execution of ISO 14001 in the SME increases the financial profitability. H4a and H4d indicate that ISO 26001 has a positive and significant influence on market share and overall profitability, according to the values of (β=0.128, $p<0.05$) y (β=0.121, $p<0.05$). In relation to the control variables introduced in the statistical models, we have detected that only the size of the company has a positive and significant influence on the variable market share according to the value of (β=0.126, $p<0.001$). To validate the linear regression models of the hypothesis, the R^2 adjusted with a value of (0.047), (0.070), (0.037) (0.062) and the values in F of (3.657***), (5.151***), (2.594***) y (5.485***). In addition, the independent variables of the linear regression model show the variance inflation factor (VIF) close to the unit of (1.29), (1.28), (1.29) and (1.28), ruling out the presence of multicollinearity.

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4. Discussion

The results of the research are derived from the analysis of a sample of 215 SMEs from the services, trade and industrial sectors. The study has been developed in a context plagued by strict environmental regulations, commercial uncertainty and complicated international financial markets [67–69]. The results confirm that SMEs established in the southern region of the State of Sonora in Mexico have placed greater interest in compliance with environmental regulations imposed by government institutions and have been minimizing CSR actions. The main contribution of the study is to corroborate that the SMEs established in this region, which are part of the business fabric of a country submerged in the development and economic growth, are in an initial phase and on the right path towards the implementation of environmental practices and of social responsibility. In this section, we discuss our results in the context of the literature on the influence exerted by the ISO standards of environmental management and social responsibility, on the image and business profitability that is manifested in the SME. This research first shows that the SMEs that guide their resources and capabilities in environmental actions significantly improve their image, particularly in: 1) the perception of an innovative company, 2) a leading company in the market, 3) and as a safe company. In addition, these sustainable strategies contribute to: 1) increase in customer satisfaction and 2) increase in business profits. Secondly, we corroborate that SMEs that practice social responsibility actions achieve significant results in: 1) being viewed as a safe company, 2) in increasing market share and 3) in the overall profitability of the SME. With the above we have given answers to the questions and the objective of the investigation.

5. Conclusions

Analyzing our results in greater depth, we show relevant empirical evidence on the influence of ISO 14001 on the image and profitability of SMEs. First, the result with greater strength is located in the regression model 1, demonstrating that environmental management standards have a positive and significant impact on the image of SMEs. These results are aligned with the literature related to environmental management (Stakeholders) and with the theory of resources and organizational capabilities [25,70]. In this same direction with an important force the regression model 3, states that environmental management significantly influences the profitability of SMEs, results that align with the Stakeholder literature and sustainability and, in addition, with some empirical studies [13,27,34]. Regarding model 2, we observe that there is a smaller influence between ISO 26001 and the business image. These findings have a similar behavior with model 4, which indicates that there is a significant but smaller relationship between ISO 26001 and the profitability obtained in the SME. This allows us to argue that these types of businesses are not adopting these strategies in their entirety, this is mainly due to their limitations and barriers they face in global markets and economies of scale, as enunciated by different theoretical and empirical studies [23,71,72]. From the above, it can be deduced that SMEs must focus their resources and capacities on sustainable business and models, on the adoption of ISO standards for environmental management and even more on implementing CSR practices through ISO 26001. These strategic actions they can lead to competitiveness in global terrains and to sustained profitability for all interest groups that participate directly or indirectly in the business. On the other hand, it has been detected that the control variable size of the company has a significant impact on the size and profitability of the SME. In other words, when companies grow in structure and capacities, they strengthen their level of innovation and increase their market share, penetrating more dynamically and aggressively its sales strategy towards the client [73,74]. But these results also indicate that the larger the company, the more complex and difficult to control, so organizations can become

 doi:10.20944/preprints201811.0028.v1

insecure from the point of view of the organizational structure (complexity of resource management) [75,76]. Results that are aligned with the theory of resources and capabilities and with evolutionary economic theory [1,3].

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The research exhibits some limitations and on the other hand it opens the door to continue developing future lines of research. The first limitation refers to the fact that the information can stimulate the bias of the results, this because the data were obtained from subjective perceptions issued by the managers and/or managers of the SME. Second, the sample has only been focused on companies in the southern zone of the State of Sonora in Mexico, and may be extended to other geographical areas of the country. The last limitation considered in this paper is about the type of statistical analysis carried out for the verification of hypotheses (linear regression). In order to face these limitations, it is important to consider, in the future, the consolidation of the conceptual model on the subject of sustainability, social responsibility, image and profitability through the inclusion of a greater number of constructs. With this, we intend to strengthen the analyzes through the use of the structural equations technique (variance and/or covariance). To continue in this same direction and develop high value studies, it is advisable to continue with this type of studies considering variables such as: 1) innovation 2) sustainable entrepreneurship and 3) the supply chain in SMEs.

Author Contributions: Contributions of the author: L.E.V.J. Developed the operational model of the research, developed the objective and the approach of the hypotheses, supervised the work of gathering information to the managers through a questionnaire, contributed in the development of the literature, in the analysis of the results and wrote the conclusions of this document and has made the final revision of the entire document. E.R.E. Contributed in the development of the literature review, in the justification of the hypotheses and supported writing part of the conclusions of this document and reviewed the translation from Spanish to English. D.G.V. and E.P.B.A. They contributed with the validation of the instrument and discussions of the document. All the authors declare to have contributed in the development of this work. In addition, the authors report having read and approved the final version of this document.

Funding: This project received funding for its development and publication by the Program for Strengthening Educational Quality (PFCE, 2018) of the Secretariat of Public Education of Mexico.

Conflicts of Interest: The authors declare no conflict of interest.

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