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CSR and the Supply Chain: Effects on the Results of the SME

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Abstract: Currently, companies and SMEs (small and medium enterprises) are looking to be more competitive. In order to achieve this, they are adopting new business models and strategies that allow them to move towards sustainability. Strategies such as CSR (Corporate social responsibility) and supply chain management have become essential for ensuring a company's permanence and financial consolidation. The literature has stated that the theories of Stakeholders and Sustainability are fundamental pillars for the development and sustained growth of business. The purpose of this article is to examine the effects of CSR and the SC (supply chain) on innovation, image and reputation, and in turn, their influences on profitability in SMEs. This research is based on a sample of 143 companies in the city of Guaymas Sonora, in Mexico. For the analysis and validation of the results, we used the SEM (Structural Equation Modeling) statistical technique based on the variance, through PLS (Partial Least Squares) (using SmartPLS version 3.2.6 Professional). The findings show that SMEs that develop social and sustainable practices increase their level of innovation, and improve their image, their reputation, and their financial profitability. This work contributes mainly to the development of Stakeholders and Sustainability.

Keywords: corporate social responsibility; CSR; supply chain; SC; image; reputation; stakeholders; innovation; small and medium enterprises; SMEs

1. Introduction

The evolution of the economy, technological trends, and the socio-economic demands of communities have influenced and affected the actions of business owners in an important way [1,2]. These factors have unleashed a high degree of competitiveness and accelerated globalization of markets, forcing companies to improve their processes and their products, and to know their consumers in greater depth [3–5]. To face these changing manifestations of the micro- and macro-environment, companies are incorporating into their business models renewed and more efficient strategies, such as social responsibility and certification of their processes and innovation practices [6,7]. At present, more and more companies are developing practices based on social marketing in order to penetrate new markets and obtain faster performance gains [8–10]. Undoubtedly, corporate social responsibility (CSR) and supply chain management are among the most successful business actions to have emerged in the last two decades [11,12], as determinant and necessary practices for the competitiveness and survival of companies [11]. The literature shows that CSR has been one of the most studied theoretical currents since the middle of the last century, undergoing evolution and achieving ever greater importance among researchers and directors of companies [13,14]. However, despite undergoing extensive study, this theory remains the subject of debate and discussion by experts [15]. The theories with the greatest presence in the literature involve those interest groups (stakeholders) focused on the shared benefits among shareholders,

employees, customers, and suppliers [16]. This theory promotes CSR practices based on the "triple bottom line" for business sustainability [17]. The theory of sustainability is focused on the practice of social, economic, and environmental actions to obtain long-term profitability for businesses [14]. Another important theory is that of the shareholders focused on the free market legal competition, which has the purpose of obtaining greater financial and economic returns for shareholders [18,19]. Some theoretical currents have been identified focusing on the search for improved financial and economic performance for organizations. For example, Friedman [19] and Porter and Kramer [20] have argued that some social and philanthropic practices lead to the reduction of productivity. Contrary to this, Carroll and Shaban [13] and Engert, Rauter, and Baumgartner [21] argue that the social, economic, and environmental actions of CSR are positively related to the profitability of organizations. The companies aimed at the search for greater financial and organizational returns are incorporating into their processes the management of the supply chain. This is because this is a key element for the success of the sustainability strategy, and is an efficient guide for companies' voluntary CSR practices [22,23]. These assertions are contemplated in the theory of sustainability and in the theory of stakeholders, which have to, as a fundamental objective, meet the present and future needs of the stakeholders of a company [24]. To meet these expectations, supply chain management plays a leading role in the internal processes of organizations [25,26]. The main functions and responsibilities of the supply chain (SC) are environmental performance, controlling the quality of goods and services (supplies) of suppliers, and regulating delivery times and improving the quality of the products offered by the company [27,28]. With the globalization of markets, large corporations have adopted ISO (International Organization for Standardization) certifications in their processes (mainly from the ISO 14000 family) in order to meet their social obligations, taking into account the demands of the market and complying with environmental standards [29]. In this field of research, some experts have agreed that CSR and the efficient management of the supply chain generate significant quantitative and qualitative benefits for businesses [26,30,31]. These business sustainability practices seek shared benefits, such as the social and economic development of the regions, an increase in the quality of life, the professional development of employees, an increase in the satisfaction of clients and investors, and the strengthening of their image and business reputation [30,32,33]. These actions consequently allow businesses to achieve sustainability [32,34]. However, business sustainability based on CSR and supply chain management to strengthen competitiveness in SMEs remains poorly studied in the literature, and is especially lacking empirical studies [35–37]. These topics are often analyzed and addressed in a non-complementary and shallow way [38–40]. In addition, most of the research work focuses on large companies, especially multinationals [18,41–43].

The size and resource capacity (human and financial) of small businesses have become the main barriers to the adoption and successful deployment of CSR and supply chain management [44,45]. If we add to this a lack of strategic vision of the leader, prioritization of day-to-day activities, lack of business discipline, high costs, and excessive regulation for the implementation of certifications in quality processes, all together these have become a challenge for SMEs [46,47]. Often, these business practices are imitated and adopted by SMEs that are taking reference from large companies [48,49]. These actions are adopted for novelty and to gain more clients in the short term (and therefore to gain more money), and do not take into account or prioritize a sustainability strategy [17,50]. Therefore, the importance of developing the type of work that analyzes these variables in terms of their ability to generate a competitive advantage and promote sustainability through CSR is clear. The relevance of this research lies in the results that are achieved with the adoption of these strategies in SMEs.

The purpose of this research is to: Examine the effects of corporate social responsibility, in terms of its social dimension, on the supply chain and innovation; analyze the effect that the supply chain has on the innovation, image, and reputation of a business; and examine the effect of innovation on image, reputation, and profitability in SMEs. The re-search questions contemplated in this paper are:

1. Does CSR, in its social dimension, have a positive influence on the SC and innovation in SMEs?
2. Does the SC have positive effects on innovation, image, and reputation for the SME?
3. Does the innovation that is generated in the SME positively influence the image, reputation, and profitability of the company?

Globally, in both developed and developing countries, these companies represent an average of 95% of all companies, generate close to 50% of jobs, and are the engine that drives the social and economic development of the regions [51]. This research is based on a sample of 143 SMEs from the industrial, services, and commerce sector of the city of Guaymas Sonora, in Mexico. For the analysis and validation of the results we used the statistical technique of Structural Equation Modeling (SEM), based on the analysis of variance, in order to validate the structured relationships through Partial Least Square (PLS) with the support of the SmartPLS software, version 3.2.6 Professional.

This research contributes to the development of the theory of interest groups (stake-holders) and the theory of sustainability from two crucial perspectives. First, from the theoretical perspective of the interest groups, the study analyzes the organizational (employees, customers, suppliers, and society) and financial benefits (profitability of the investors) that are obtained from the social practices of CSR. Second, we analyze the theory of sustainability, and its implications in the efficiency of the supply chain on innovation and business results (image, reputation, and profitability) of SMEs. This article has been structured as follows: The first part presents the review of the literature, the empirical review, and the development of the hypotheses proposed in the theoretical model. Secondly, the methodology, structure, definition, and characteristics of the sample are explained. In addition, the justification and measurement of the variables under study are outlined. Finally, the results, the main conclusions, and the discussion of the research are presented.

2. Literature Review

2.1 CSR, the Supply Chain, and Innovation in SMEs

From 1975 to the present, there have been numerous contributions to the concept of Corporate Social Responsibility (CSR). Initially, Sethi [52] introduced the ideas of the voluntary character of CSR and social obligations; Carroll [53] and Carroll [54] considered the economic, legal, and ethical aspects of CSR; Wokutch and Shepard [55] considered safety as another component to be taken into account; Clarkson [56] introduced the philanthropic character of CSR; Shrivastava [57] included the environmental dimension in their discussion; Clair, Crary, McDaniels, Spelman and Buote [58] advocated diversity; Jennings and Entin [59] included a discussion on human rights; and Vives [60] also considered the ethics and religious values of CSR. Thus, successively, the concept of CSR has been shaped. As a general adopted definition, we can mention the Green book defining CSR as "the voluntary integration, by companies, of social and environmental concerns in their commercial operations and in their relationships with interested parties" [61] (p. 7,8). More recently, European Commission [62] has pointed out the responsibility of companies for their impact on society, and made explicit reference to the need for collaboration with stakeholders to "integrate social, environmental and ethical concerns, respect of human rights and the concerns of consumers in their business operations and their basic strategy" European Commission [62] (p. 7).

At first, it was large companies that addressed the implementation of socially responsible actions [44,63–65], although later, small and medium-sized companies (SMEs) began to address this strategy [66–68]. The progress that the SMEs have shown in this sense is important given that they constitute the true motor of economic growth and are generators of value in the territories [69–71]. This allows us to affirm that "CSR can be applied by all types of companies, regardless of their characteristics, size, sector of activity or scope of action" [72] (p. 27). Therefore, today, CSR has a universal character in its application, and its application is relevant for all types of organizations [17].

There is an important aspect of CSR that is related to the guarantee of supplies, which implies the extension of CSR practices throughout the supply chain [27,32]. Socially responsible companies want their suppliers to be so also, thus promoting the implementation of CSR through the entire supply chain [23,73]. These companies are responsible for the welfare, productivity, and performance of all suppliers that contribute to their activities [24,46]. In this way, a transfer of socially responsible behaviors is carried out along the supply chain, which will undoubtedly influence the practices of other interest groups, and will provide a basic standard of social and environmental principles to be fulfilled [25,73,74].

The topic of supply chain management in a sustainability context has grown considerably in importance in recent years [27,32,75]. Related to the three typical dimensions of CSR (economic, social, and environmental), and following the perspective of the triple bottom line [17], green/environmental issues have dominated research until recently [12,27,76]. However, we should not forget the existence of the social and economic aspects. This perspective of chain management analyzes the different linkages in a production process, with consequences for relevant groups of interest (the suppliers and customers) [71].

It is common to link the study of CSR with the innovation undertaken by a company because CSR is, in itself, an innovation [68,77], and furthermore it is a mechanism that facilitates innovation [13,78,79]. CSR is an efficient business strategy that penetrates every innovative organization and becomes a key element in differentiating between competitors [68,80]. It is clear that there is a synergy between CSR and innovation as both are strategic elements of competitiveness [81–83]. The literature indicates that companies that undertake CSR actions are more prone to innovation [17,84], while also being more likely to achieve better performances [80,85,86] and greater advantages and competitive success [87–89]. Rexhepi et al. [87] affirms that innovation is stimulated by a global commitment to CSR.

Moreover, in linking innovation with the supply chain, the conventional notion some years ago was that innovation in the supply chain was only originated by the buyer [45,90]. To-day, this perspective has been challenged and researchers consider that, due to the fact that the production process is a multidisciplinary activity with the involvement of all areas and sections in an organization, innovation is generated in the different steps of the supply chain by interactions within buyer-seller relationships [47,89,91].

2.2 Reputation, Corporate Image, and Profitability in SMEs

In addition to the above, CSR and reputation are also closely related variables [13,30]; CSR actions can determine an increase in a company's reputation [69,92], which becomes a strategic factor capable of strengthening the competitive advantage of SMEs and is therefore of great value in organizations [38,93]. Reputation is considered as a collective perception associated with the identity of the company [94,95]. Reverte, Gómez-Melero, and Cegarra-Navarro [96] and Graafland [30] have pointed out that SMEs are incorporating CSR practices into their processes and thereby increasing their perceived value or reputation among stakeholders. On the other hand, Roberts and Dowling [97], Abigail McWilliams et al. [17], and Kim, Kim, and Qian [98] qualify reputation as an asset that generates profitability and sustained performance in the company.

In line with the previous arguments, the literature indicates that CSR is capable of generating a competitive potential that results in the strengthening of the brand and improvement of the business image [30,99]. Today, image is a vital indicator for organizations because it significantly affects consumers' attitudes, in spite of other marketing factors. Image is often externally viewed with cynicism [100,101], therefore some companies are reluctant to communicate their sustainability practices [21,102]. In this situation, firms must have credibility in their efforts to get sustainability initiative messages across to stakeholders [17,103]. This leads to a positive image for the company and could provide its legitimation. At the present time, it is possible to affirm that the implementation of socially responsible initiatives, innovation, reputation, and a good corporate image are strategies capable of determining a certain amount of profitability for companies. Green

innovation is able to ensure both environmental sustainability and economical profitability [77,104,105]. Moreover, some authors relate a good reputation with a company's ability to obtain profitability [76,106,107]. Finally, a positive image could generate profitability for companies, and in this sense the literature presents numerous cases [21,107,108].

3. Development of the Hypothesis

3.1 CSR, the Supply Chain, and Innovation in SMEs

3.1.1 CSR and the Supply Chain

The growing concern regarding corporate social responsibility, especially in the environmental dimension, has promoted research on environmental risks [23,109] and influenced supply chains [22,110]. Moreover, pressure from consumers determines the development of processes in a supply chain. In this sense, it is obvious that the minimization of emissions or recycled products [31,111], waste reduction, environmental innovation, and cost-effective solutions should be prioritized [112,113]. Today, in order to be consistent, socially responsible organizations are expanding their corporate social responsibility practices to include managing their partners within the supply chain [23,114,115]. In this way, the CSR actions of every company determines and implies a corresponding degree of CSR in the supply chain for all its components. Hsueh [115] studied a new revenue sharing contract including corporate social responsibility for coordinating a supply chain, which determined the expected investment in CSR and formalized the contract between a manufacturer and a retailer. With this in mind, we posit the first hypothesis:

H1. CSR positively affects the SME supply chain.

3.1.2 CSR and Innovation

Some authors [10,84,87,116,117] state that the innovation processes that are undertaken by an organization are greatly influenced by the CSR actions implemented in the organization. The fact that SMEs implement CSR strategies means they are more innovative [45,118], with a direct relationship existing between these variables [119,120]. The literature indicates that there is a parallel increase between the adoption of socially responsible practices and the realization of innovations [121–123]. Based on this, we formulate the second hypothesis:

H2. CSR positively affects SME innovation practices.

3.1.2 Supply Chain and Innovation

The review of the literature by experts in the field has made clear that there is a relationship between the supply chain and increased innovation actions (by reducing costs, increasing quality, and improvement of customer service) which ensures process continuity in a context of global competitiveness [32,124,125]. At the same time, Soosay, Hyland, and Ferrer [126] and Panwar, Nybakk, Hansen, and Pinkse [127] discuss integration, cooperation, and collaboration in a supply chain strategy, which demands innovative strategies for synchronized performance. More precisely, Soosay et al. [126] states that "collaboration in supply chains is important for innovation as partners realize the various benefits of innovation such as high quality, lower costs, more timely delivery, efficient operations and effective coordination of activities". Corsten and Felde [128] and Leuschner, Rogers, and Charvet [129] have agreed that the suppliers, who constitute an important step in the supply chain, could transfer ideas, perform R&D (Research and Development) of their own in order to absorb some of the R&D costs of the buying firm, and influence the firm's performance. In this way, this supply chain link enhances innovation for the company. This opinion is also shared by Author [130] and Author [131]. From this, we introduce the third hypothesis of the study:

H3. The SC positively influences the level of innovation of the SME.

3.2 *The Supply Chain, Reputation, and Business Image of the SME*

3.2.1 Supply Chain and Reputation

A poor environmental performance at any stage of the supply chain process may damage the company's reputation [132,33]. Therefore, the successful development of the supply chain determines the reputation of the business [134]. Saeidi, Sofian, Saeidi, Saeidi, and Saeidi [135] argues that activities concerning the supply chain (such as reducing packaging and improving working conditions) could reduce costs while improving corporate reputation. Quarshie et al. [23] identified supplier selection procedures and supplier assessment capabilities as the main means for effectively managing suppliers' sustainability, and thereby the related corporate reputations. Teuscher, Grüniger, and Ferdinand [136] and Walker [95] affirmed that proactivity in sustainable supply chain management may help manage reputational risk in a company. Multaharju, Lintukangas, Hallikas, and Kähkönen [137] and Kopnina and Blewitt [34] explored how companies can manage sustainability-related risks from the supply chain, an essential process for maintaining their reputation. They argue that suppliers' non-sustainable actions and neglect of sustainability along the supply chain can cause reputational damage and broad financial losses for a focal company. Following this, we can establish the fourth hypothesis:

H4. The SC positively influences the improvement of the business reputation of the SME.

3.2.2. Supply Chain and Image

Wolf [138] and Luo et al. [50] studied how CSR behavior in the form of charitable donations receives a positive reaction from suppliers. The results support the strategic philanthropy view and apply stakeholder theory in the supply chain, observing that strategic CSR can support the positive opinions of suppliers. Furthermore, this practice could enhance a company's corporate image. Jafari, Hejazi, and Rasti-Barzok [139] and Ngai, Law, Lo, Poon, and Peng [140] have explored the interaction between retailers and consumers, offering supply chain solutions, and they conclude that focusing on this boosts the brand image for retailers. Schaltegger and Wagner [7] and Kopnina and Blewitt [34] found that promoting and applying sustainable practices in the company gives multiple benefits, such as improving a company's image and increasing profitability. These practices have become successful and key strategies for businesses. In addition, when both large and small businesses implement a strategy focused on sustainability (triple bottom line), and the supply chain is involved, the corporate image is significantly improved [17,141,142]. Considering this, we can posit the fifth hypothesis:

H5. The SC positively influences the improvement of the business image of the SME.

3.3 *Innovation, Reputation, Image, and Profitability in SMEs*

3.3.1 Innovation and Reputation

Innovation results (tangible or intangible) follow as an outcome of applied efforts and activities. Among the intangible results are the firm's stability and reputation [3,143]. In recent years, some authors have pointed out the close relationship that innovation maintains with reputation [116,144]. Overstreet, Hazen, Byrd, and Hall [145] and Reverte et al. [96] examined the effects of innovativeness on various aspects of performance and reputation, and consequently suggested that the first strategy is positively related to the second one. In this sense, it is true that an improvement in the design of new products, in production processes, in customer service, and so forth generates an improvement in business reputation. Based on this, the sixth hypothesis is stated:

H6. Innovation increases business reputation in SMEs.

3.3.2 Innovation and Image

Several researchers have expressed that, when a company is perceived as innovative, this becomes a part of its image [3,89]. Author [146] studied open innovation and customers' activity in innovation communities, taking into account user preferences, comments, and votes. Their research found that managerial decisions are more focused on the features associated with brand image. Foroudi, Jin, Gupta, Melewar, and Foroudi, [147] and Finoti, Didonet, Toaldo, and Costa [148] have expressed that consumer innovativeness has a positive impact on image. Later, Wikhamn and Styhre, [149] studied open innovation as a management concept of increased attention, which implies the existence of a difficult and challenging process. Moreover, this innovation generates employee engagement and improves the entrepreneurial image of the corporation. Based on this, the seventh hypothesis is stated:

H7. Innovation improves the business image of the SME.

3.3.3 Innovation and Profitability

Hall [150] and Flynn, Huo, and Zhao [151] refer to green supply chain management as an environmental innovation practice that companies can utilize in order to gain some profitability. Aguilera-Caracuel and Ortiz-de-Mandojana [152] and Dangelico [153] explained that the intensity of green innovation is positively related to firm profitability. In reality, Fliaster and Kolloch [154] researched green innovation and found that it is likely to be affected by the interactions between primary and secondary stakeholders and, it is further expected to ensure profitability. In addition, there is evidence that innovation in the products and processes of companies generates social, organizational, and financial results [77,155,156]. Due to this, we can posit the eighth hypothesis:

H8. Innovation increases the level of profitability in the SME.

3.3.4 Reputation and Profitability

The literature expresses in detail the relationship between reputation and profitability. In this sense, Sarbutts [38] explained how genuine intentions of engaging in CSR activities could generate outcomes, such as an enhanced reputation, that improve the profitability of the firms. Gray and Balmer [157] and Roberts and Dowling [97] have shown that a good business reputation, that is valued and granted by customers, considerably increases the finances and the economy of the organization. Later, Helm and Tolsdorf [158] stated that corporate reputation plays an important role in determining the impact of crises on firms, which can greatly affect small and medium-sized enterprises, and related this factor to firm profitability. At the same time, Biong [159] and Saeidi et al. [135] studied the role of suppliers in competitive situations, and affirmed that suppliers with a strong positive reputation should achieve profitability for the company. Finally, green and/or sustainability strategies are beneficial as long as managers include them in their overall strategic programs that also promote firm value and reputation [7,21]. The authors also clarified the impact of green programs on profitability. Based on this, the ninth hypothesis is stated:

H9. Business reputation increases the level of profitability in the SME.

3.3.5 Image and Profitability

Related to the relationship between image and profitability, Burin, Roberts-Lombard, and Klopper [160] studied the influence of internal marketing on service quality, and determined that the application of this approach enabled staffing agencies to improve brand image and, as a consequence, this could result in higher levels of profitability. Moreover, Rosenbaum and Wong [107] found that green equity plays a significant role in customers' overall assessment of a hotel's marketing programs, determining the effect on brand image. These authors also linked green marketing with an impact on profitability. Various research in the literature links market orientation with the improvement of image, due to the fact the companies are able to focus on the best strategy [104,161]. At the same time, as a result, a right market orientation could also correlate strongly with

image and profitability [5,162]. Put simply, a strategy which improves image should improve profitability. Based on this, the tenth hypothesis is stated:

H10. The business image increases the level of profitability in 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 sustainability.

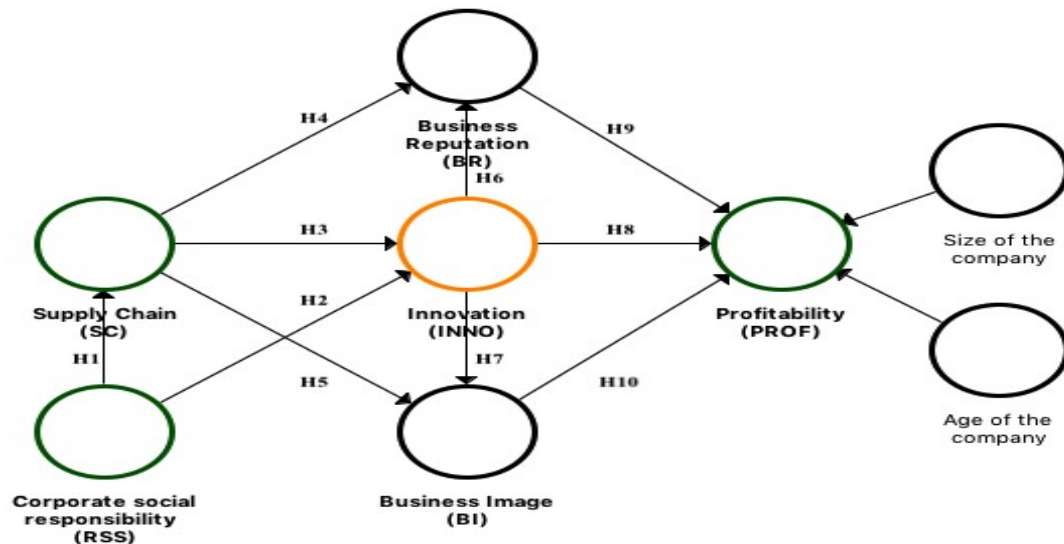


Figure 1. Theoretical operational model

4. Methodology

The structure of the sample is based on the principles of stratified sampling for finite populations. The population is made up of the SMEs established in the city of Guaymas, of the State of Sonora in Mexico, and has been segmented according to the activity criterion. The number of companies in each of the built strata was obtained from the information of the economic census provided by the National Statistical Directory of Economic Units (DENUE), of the National Institute of Statistics and Geography [163]. The sample is composed of SMEs that have from 10–185 workers. The sample size was determined to achieve a maximum margin of error for the estimation of a proportion (relative frequency of response in a specific item of a question) that was lower 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 leader of the SME. The field work was carried out during the months of September–November of 2016. Finally, a sample of 143 companies was obtained; 7.0% belonged to the industrial sector, 37.0% to the service sector, and 56.0% to the commercial sector. The composition and characteristics of the sample can be seen in Tables 1 and 4. The companies that refused to participate in the project were replaced by a similar company (randomly chosen) of the same activity and geographical area. The non-response bias was analyzed [164,165]. The response effectiveness of the companies that responded in the first round was 90% of the sample, and they were compared with those that responded by substitution (10% of the sample). For all the variables considered, no significant differences emerged between the two groups using the t and chi-square tests.

Table 1. Total number of companies by activity.

Sector	Small companies	Average companies	Number of companies	% Total
Industrial	8	2	10	7.0

Service	37	16	53	37.0
Commerce	65	15	80	56.0
Total	110	33	143	100.0

Source: Own elaboration

4.1 Measurement of Variables

Corporate Social Responsibility (CSR). Based on the literature and the main theories that are addressed in the studies that support this business activity, we took as reference the theory of interest groups, which encompasses the mutual benefits in social, economic, and environmental terms for the company (managers and employees), clients, and the community [49]. Therefore, we decided to focus the measurement of this variable on social activities for the achievement of organizational profitability. Based on the literature, we selected the social dimension as a fundamental part of CSR: Corporate Social Responsibility with a Social Approach (SSR) was measured, taking as reference the studies developed by Freeman et al. [16], Abigail McWilliams et al. [17], and Carroll [71]. The variable is composed of five questions within the questionnaire. The manager was asked to identify and rate the CSR social activities that the company had carried out in the last two years, using a five point Likert scale with 1 = total disagreement and 5 = completely agree.

Table 2. Internal consistency and convergent validity by construct.

In the last two years, your company has:	LF	CR	CA
SSR		0.894	0.895
Continuously sponsored training activities	0.796***		
Continuously sponsored public health activities	0.813***		
Continuously sponsored sports activities	0.766***		
Continuously sponsored cultural activities	0.813***		
Made constant financial donations to social causes	0.776***		

Source: Own elaboration. LF = Load Factor, CR = Composite reliability, CA = Cronbach's Alpha

Supply Chain. To measure this variable, the analysis focused on the benefits that the SC provides to the interest groups of the organizations. For this reason, we have taken as a reference the theories of Stakeholders and Sustainability, as streams that contribute to the organizational (employees-clients) and financial (shareholders-interest groups) profitability of the company [14,16]. In the questionnaire, managers were asked to answer four questions about the importance of SC results in CSR practices developed by the company in the last two years, using a five point Likert scale with 1 = nothing important and 5 = very important. These questions were developed with reference to the studies of Hannes et al. [25] and Hervani, Helms, and Sarkis [166].

Table 3. Internal consistency and convergent validity by construct.

The company, in the last two years, has obtained:	LF	CR	CA
SUPPLY CHAIN		0.863	0.860
Reduction of response times through the SC	0.822***		
Improvement of the integration of activities through the SC	0.802***		
A higher level of CS trust for the client	0.784***		
Increase in productivity with time	0.714***		

Source: Own elaboration. LF = Load Factor, CR = Composite reliability, CA = Cronbach's Alpha

Innovation. This variable was measured based on the models of OECD [11] and Teece [12]. These models consider innovation as the means to consolidate productivity and business competitiveness. In order to obtain timely information from the managers of the companies in the questionnaire, their responses were collected to indicate if their SME had introduced innovation actions during the previous two years (1 = yes, 0 = no), as well as the degree of importance of the innovative activity. For this, a scale is used (five point Likert type scale, with 1 = not important and 5 = very important). This variable measured the innovation in products and services developed by the SME with five structured questions (see Table 4).

Table 4. Internal consistency and convergent validity by construct.

The company has developed in the last two years:	LF	CR	CA
INNOVATION (Products and services)		0.861	0.862
New products and/or services	0.806***		
Products and/or services for special needs	0.702***		
Higher quality products and/or services than its competitors	0.758***		
Products and/or highly differentiated services	0.715***		
A high degree of value in products and/or services	0.736***		

Source: Own elaboration. LF = Load Factor, CR = Composite reliability, CA = Cronbach's Alpha

Business Image and Business Reputation. Frequently, when assessing these intangible results, company researchers have had difficulties in measuring these variables. The theory of the Stakeholders has been one of the main theoretical currents that explains the importance of CSR practices in the achievement of an improved reputation, image, and organizational profitability [16,168]. Based on the literature review we carried out, the Business Image variable was structured according to the studies of Gray and Balmer [14] and Chun [15]. This variable was measured through three questions formulated in a questionnaire addressed to the managers of the sampled SMEs. The Business Reputation variable was developed based on the studies of Dowling [16] and Walker [17]. This variable was measured through three questions formulated in a questionnaire addressed to the managers of the sampled SMEs. For both sets of questions, the managers expressed their perception of the image and reputation results obtained by the SME in the last two years. For this, we utilized a five point Likert scale with 1 = total disagreement and 5 = completely agree (see Table 5).

Table 5. Internal consistency and convergent validity by construct.

The organization is:	LF	CR	CA
BUSINESS IMAGE		0.794	0.795
A dynamic company	0.768***		
An innovative company	0.660***		
A progressive company	0.820***		
BUSINESS REPUTATION		0.834	0.838
A respected company	0.857***		
An admired company	0.772***		
A company with prestige	0.745***		

Source: Own elaboration. LF = Load Factor, CR = Composite reliability, CA = Cronbach's Alpha

Profitability. This is one of the indicators that has been most analyzed by the literature, due to its value and importance for companies, and also due to the complexity of its measurement [171,172]. The measurement of this variable has been structured based on the theories of *Stakeholders* and corporate sustainability. For the measurement of this variable, we have taken as a reference financial profitability related to CSR and sustainability, for which we have considered the studies developed by Hubbard [20] and Abigail McWilliams et. [6]. This variable was measured with five questions formulated in a questionnaire addressed to the managers of the sampled SMEs, who were asked to express their answers based on the performance results obtained by the company in the last two years. The questions were structured on a five point Likert scale with 1 = poor performance and 5 = high performance (see Table 6).

Table 6. Internal consistency and convergent validity by construct.

In the last two years, your company has achieved:	LF	CR	CA
PROFITABILITY		0.847	0.847
Customer satisfaction	0.715***		
Rapidity of adaptation to the needs of the markets	0.784***		
Increase in sales	0.708***		
Increase in market share	0.712***		
Increase in productivity	0.715***		

Source: Own elaboration. LF = Load Factor, CR = Composite reliability, CA = Cronbach's Alpha

4.2 Control Variables

Size of the company. This variable was measured with the natural logarithm of the total number of employees in 2016. This variable is frequently used in empirical studies because it is an important parameter in the development and growth of a business [21].

Age of the company. The age of the company determines the degree of consolidation and maturity within a market, as explained by evolutionary theory [22].

This variable is measured according to the start of business operations up until the current activities of the companies (see Table 7).

Table 7. Size and age of the company.

Characteristic	Minimum	Maximum	Average
Size of the company (number of employees)	10	185	37
Age of the company (in years)	1	45	18

Source: Own elaboration

4.3 Reliability and Validity

The reliability and validity of the instrument was checked using a structural equation model (SEM) to avoid measurement errors and multicollinearity [23]. Our study analyzed the variables of the theoretical model through SEM based on the variance, with this being the method that best adapts to our model and to the objectives of the research [175,176]. The use of the PLS methodology implies a two-phase approach [176,177] including the measurement model and the structural model. The measurements are based on a confirmatory factor analysis (CFA), used to rule out the indicators that have a low correlation with the rest of the scale. In addition, internal consistency, convergent validity, and discriminant validity were all analyzed [178,179].

4. Results

4.1 Measurement Model

To evaluate the measurement model with reflective-type variables, we analyzed the composite reliability of each item, the internal consistency of the scale, and the convergent validity. To measure the relationship and individual reliability of each item, it is recommended a standardized load of the major factor is set to 0.707 [180,181]. The values of the research were within the range of 0.711–0.910, and all were above 0.707. The composite reliability shows the values fell in the range of 0.847–0.910; the indicator must be above 0.80 for basic research, as proposed by Nunnally [30] and Wetzels, Odekerken-Schröder, and van Oppen, [31]. Cronbach's alpha is considered satisfactory if it is over 0.70²³. Our results showed values between 0.759 and 0.868, which indicates high reliability of the construct. The average variance extracted (AVE) indicates the average amount of the variance explained by the indicators of the construct. Our AVE values ranged from 0.581–0.748; these results must be above 0.500, as indicated Hair²⁴. Finally, the discriminant validity of the constructions in the model was verified by analyzing the square root of the AVE. The (diagonal) results of the vertical and horizontal AVE are below the correlation between the constructs [29]. This shows that there is no anomaly (see Table 8). Our results suggest adequate validity (convergent and discriminant) and reliability of the model.

Table 8. Discriminant validity of the theoretical model.

Construct	AVE	SSR	SC	INNO	BI	BR	PROF
SSR	0.628	0.793					
SC	0.612	0.506	0.782				
INNO	0.531	0.462	0.629	0.729			
BI	0.601	0.500	0.598	0.604	0.709		
BR	0.503	0.216	0.403	0.468	0.484	0.730	
PROF	0.533	0.488	0.341	0.654	0.614	0.468	0.730

Source: Own elaboration. SSR: Corporate Social Responsibility, SC: Supply Chain, INNO: Innovation, BI: Business Image, BR: Business Reputation, PROF: Profitability.

4.2 Structural Model

The statistical technique of structural equations based on variance was used to validate the hypotheses of this research through the SmartPLS version 3.2.6 Professional software. The use of this technique with the support of this software is appropriate in exploratory and confirmatory research [176,185]. In Table 5, the β coefficient results, the degree of significance (p-value), and the importance of the distribution of the values using the Student's t test are shown. To test the hypothesis, the bootstrapping procedure with 5000 subsamples was used as recommended Chin and Dibbern [32].

Table 9. Hypothesis test results.

Hypothesis	Beta value	T Score	P Value	F ²	Confirmed / Rejected
H1. SSR->SC	0.445***	4.308	0.000	0.345	Confirmed
H2. SSR->INNO	0.214**	2.376	0.018	0.048	Confirmed
H3. SC->INNO	0.445***	4.016	0.000	0.363	Confirmed
H4. SC->BR	0.178	1.216	0.224	0.028	Rejected
H5. SC->BI	0.379***	3.125	0.002	0.146	Confirmed
H6. INNO->BR	0.378***	2.965	0.003	0.098	Confirmed
H7. INNO->BI	0.350***	3.118	0.002	0.154	Confirmed
H8. INNO->PROF	0.415**	2.126	0.034	0.207	Confirmed
H9. BR->PROF	0.133	0.639	0.523	0.026	Rejected
H10. BI->PROF	0.299**	2.016	0.044	0.107	Confirmed

Source: Own elaboration. SSR: Corporate Social Responsibility, SC: Supply Chain, INNO: Innovation, BI: Business Image, BR: Business Reputation, PROF: Profitability. *: p < 0.05, **: p < 0.01, ***: p < 0.001.

Table 9 shows the results of the estimation of the structural equations made with PLS. We find empirical support for the hypotheses structured in the model (H1, H2, H3, H5, H6, H7, H8, and

H10), except for the hypotheses H4 and H9. The results of the hypotheses are as follows: H1 and H2 have positive and significant effects at 0.001 and 0.05. H1 shows a strong positive and significant relationship between SSR and the SC in the SME, according to the beta value of 0.445 ***. H2 indicates that SSR exerts a positive and significant influence on innovation activities in the SME, according to the beta value of 0.214 **. With respect to the SC variable, we found that H3 and H5 exert a positive and significant effect at 0.001. These results show that the SC has a strong relationship with the innovation and business image of the SME, according to the beta values of 0.445 *** and 0.379 ***, respectively. In this same direction, the results show a strong relationship and significant effects of 99% for innovation on the reputation, image, and profitability of the SME (H6, H7, H8), according to the beta values of 0.378 ***, 0.350 *** and 0.415 ***, respectively. In addition, hypothesis H10 has positive and significant effects at 0.05, indicating that the image has a strong influence on the profitability of the SME according to the beta value of 0.299 **. However, hypotheses H4 and H9, with values of $\beta = 0.178$ and $\beta = 0.133$, show that the SC does not have a significant effect on reputation, and that profitability is not affected by reputation. The variables of size and age of the company have also been incorporated into the model. The results indicate that these two variables do not show a significant influence on profitability in SMEs, according to the values of $\beta = -0.029$ and $\beta = 0.001$, respectively.

Evaluation of the adjustment of the theoretical model with the SEM techniques that are based on the covariance through PLS is not yet fully developed, and it is only possible to estimate these measurements based on: 1) the value of the path coefficients, 2) the analysis of R^2 , and 3) the values of F^2 , which are significant individual measures to explain the predictive capacity of the structural model [32]. Trajectory coefficients around 0.2 are considered economically significant [33]. Our most important coefficients of the model range from 0.299 ** to 0.445 ***. For the analysis of the variance and the prediction quality of the model through R^2 , the following measurement scales are taken: The values of 0.1, 0.25 and 0.36 are small, medium and large effects [31]. The results of the model through R^2 show an important explanatory power of the dependent variables in the model; these results can be seen in Table 10. The value of F^2 shows the size of the effect introduced in the model. The values of F^2 were 0.02, 0.15 and 0.35, indicating a weak, medium, or large effect [34]. The analysis of F^2 shows the results of the key relationships of the model with values of 0.107, 0.146, 0.154, 0.207, 0.363 and 0.345. These results show that the proposed model has adequate structural properties and a good explanatory level. The statistical test Q^2 (cross-validated redundancy index) is used to evaluate and test the predictive relevance of endogenous constructs in a structured model, with variables of reflective type [23]. Our value was found in values ranging from 0.113–0.239. Values greater than 0 show a remarkable predictive quality [23]; this demonstrates the existence of a remarkable explanatory quality of the model. To explain more accurately the predictive effect of our model, we have added a goodness-of-fit test performed by PLS. When the standardized value of the residual quadratic mean (SRMR) is in the range of <0.08–0.1, there is an acceptable fit [35]. Our result of 0.080 confirms that the proposed model has an acceptable predictive quality and demonstrates that the empirical results are aligned with the theory (see Table 10).

Table 10. Predictive quality and fit of the model.

Dimension	R^2	Q^2	SRMR
Supply Chain	0.193	0.122	0.080
Business Image	0.402	0.239	
Business Reputation	0.166	0.113	
Innovation	0.319	0.187	
Profitability	0.389	0.215	

Source: Own elaboration

4. Discussion

Based on the theories known as integrators (stakeholders and sustainability), we carry out the discussion of our research results from a social, environmental, and economic perspective. From the perspective of the Stakeholder theory, it has been argued and evidenced that the social practices developed by companies are the means by which to achieve an improved image, reputation, and profitability for organizations [49,168]. In addition, if companies seek sustainability, taking care of the elements of the triple bottom line and transferring this to their processes such as supply chain management results in the generation of innovative products, in more environmental (ecological) products, and in the improvement of customer and shareholder satisfaction [17,34]. Therefore, these strategies and new business models strengthen companies to achieve global competitiveness, permanent innovation, quicker adaptation to market changes, and sustained returns. [16,32].

The results of our analyses inform us that CSR (specifically the social dimension) is an excellent driver in the generation of greater innovation activities in a company [49]. These findings are similar to those found in the literature and previous empirical studies [71]. We also found that SSR influences the management of the supply chain. In highly competitive, global, and demanding markets, companies have to voluntarily take on social actions in order to improve internal processes and raise the quality of the product and the satisfaction of consumers [25,45]. These are results that align with the theories of sustainability and strategic management of the supply chain [188,189]. Along these same lines, the findings inform us that the SC as a sustainability strategy is an effective agent in achieving greater innovation, and contributes strongly to achieving a better corporate image [190]. By taking care of internal processes through the correct management of the SC (selection of suppliers and inputs), companies can manage to improve the quality of their products, control the inventory, control costs, and above all improve the satisfaction of their clients [25,191]. This leads companies to be more innovative and dynamic in globalized markets [3,32]. Another important finding in this study is related to the influence of innovation activities in an SME on image, reputation, and profitability. These results are aligned with the theory of sustainability, and also recently with the theory of dynamic capabilities [3,34]. These theories suggest that the companies that incorporate into their processes new business models, with a focus on sustainability, manage to improve their processes, design new products, and thereby obtain invaluable organizational results [77,192]. These results are reflected in the improvement of the perception of stakeholders of the transformation into a more innovative company—an admired, dynamic and respected company—it becomes clear that this leads to organizational and financial sustainability [17,103]. In addition, our results and the literature report that companies with a good image, as perceived by stakeholders, contribute strongly to financial profitability for shareholders [49,71]. On the other hand, we did not find significant empirical evidence for the relationship between the SC and reputation. In addition, reputation does not influence the profitability results of the SME. The literature shows that this activity and/or business result (output) is a key element in the organizational, economic and financial results [21,30]. However, our results differed from this. This may be due to the priority of other activities for SMEs, which may direct their resources and capabilities towards responding to market competition, prioritizing the short-term benefits of the shareholder, and trying to meet the daily demands of customers [48,171].

5. Conclusions

This research has analyzed the social practices of CSR with an approach directed towards the efficient management of the supply chain under the context of Stakeholder theory and Sustainability theory. To answer this objective and the research questions, the results indicate that: 1) the social practices of CSR practiced in SMEs are focused on improving innovation and strengthening the management of the supply chain; 2) in addition to influencing SC management in SMEs, these factors are strongly influencing innovation and achieving a better corporate image; and 3) the actions in terms of innovation in the SME manage to satisfy the interested parties and are achieving the desired improvements in reputation, image, and financial profitability. The results of the research have generated important implications that can help strengthen the business management of SMEs. First, managers must continue to strengthen their sustainability practices; this can be

achieved through the implementation of new business models and the adoption of strategic trends focused on green businesses (green marketing) [8,193]. Secondly, the owners and managers of SMEs should focus their resources and capacities on the implementation of ISO standards, in order to achieve certification of internal processes to become sustainable businesses (ISO 14001), and should adopt guidelines aimed at further developing CSR practices (ISO 26001) [29,194]. In the short term, for SME managers to compete in economies of scale, it is important that they adopt current economic models such as the circular economy and the bioeconomy in order to achieve sustainability through strategic alliances between stakeholders, such as government, society, and customers [103,195].

This research exhibits some limitations, and on the other hand demonstrates some of the possibilities for the development of future lines of research. The first limitation of the work is the use of a single source of information, because the data was collected from the subjective perceptions of the owners and/or managers of SMEs. Secondly, the sample was only focused on companies established in a specific geographical area, and could in future be extended to other geographical points across the country. Finally, the measurement scales used to measure CSR in this paper focused exclusively on the social sphere, and worked with variables of a reflective type. In the future, in order to address this limitation, it would be convenient to perfect and incorporate a greater number of constructs for the analysis of CSR and sustainability in SMEs. Given the relevance of this business topic and the current situation of fragmented economies, this type of study is expected to be repeated in future, involving these variables along with ISO 14001, 26001, green marketing, and open innovation. Furthermore, it is favorable to continue evaluating indicators within SMEs that influence development, growth, and competitiveness.

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. D.G.V. Contributed in the development of the literature review, in the justification of the hypotheses and supported writing part of the conclusions of this document. E.R.E. Contributed to the research and wrote part of the literature, he also supported writing the justification of the variables of the theoretical model and in the final revision of the structure 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.

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