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Analysis of CSR in Costa Rica Agribusiness: Its Influence on Cooperation, Innovation and Performance*

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Antonio Juan Briones Peñalver
Universidad Politécnica de Cartagena, España
ORCID: https://orcid.org/0000-0002-2893-007X

Carmen de Nieves Nieto
Centro Universitario de la Defensa de San Javier. Universidad Politécnica de Cartagena, España
ORCID: https://orcid.org/0000-0001-9142-1908

Juan Andrés Bernal Conesa [a]
Centro Universitario de la Defensa de San Javier. Universidad Politécnica de Cartagena, España
jandres.bernal@cud.upct.es
ORCID: https://orcid.org/0000-0003-4626-4805

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Abstract:

Corporate Social Responsibility in developing countries has become an emerging field of research. In this paper a model of structural equations is proposed to analyze the relationship between Corporate Social Responsibility actions and its influence on Cooperation, Innovation and Performance in the Costa Rican agribusiness sector. Structural equation modeling was used to investigate the conceptual relationship model and explain the associations among variables. The model results suggest that CSR and Innovation positively influence the agribusiness Performance. On the contrary, it seems that Cooperation does not have an influence on such Performance.

Keywords: Corporate Social Responsibility (CSR), Developing Countries, Innovation, Cooperation, Agribusiness, Performance.

[a] Autor de correspondencia. Correo electrónico: jandres.bernal@cud.upct.es

Análisis de la Responsabilidad Social Corporativa (RSC) en el sector agroindustrial de Costa Rica: Su influencia en la cooperación, la innovación y el rendimiento

Resumen:

La Responsabilidad Social Corporativa (RSC) en países en desarrollo se ha convertido en un campo emergente de investigación. En este artículo se propone un modelo de ecuaciones estructurales para analizar la relación entre las acciones de Responsabilidad Social Corporativa y su influencia en la Cooperación, Innovación y Rendimiento en el sector agroindustrial costarricense. Se utilizó el modelado de ecuaciones estructurales para investigar el modelo de relación conceptual y explicar las asociaciones entre variables. Los resultados del modelo sugieren que la RSC y la Innovación influyen positivamente en el rendimiento de la agroindustria. Por el contrario, parece que la Cooperación no tiene influencia en dicho rendimiento.

Palabras clave: Responsabilidad Social Corporativa (RSC), países en desarrollo, innovación, cooperación, agroindustria, rendimiento.

Introduction

Among the various forces that have been reshaping the global competitive landscape, the growing attention to Corporate Social Responsibility (CSR) is one of the most noteworthy trends (Yin & Jamali, 2016). CSR is gradually more viewed as a global issue though there remains terrific variation in both the focus and the level of CSR across the countries, especially in developing countries (Forcadell & Aracil, 2017).

Nowadays, the enterprises that employ globalization and internationalization strategies in their search for new markets and cost efficiencies can lead to Human Rights abuses and negative environmental impacts. Hence, CSR can become a powerful instrument to reduce these negative effects (Jamali & Neville, 2011). However, the majority of studies carried out so far note that CSR remains a concept dominated by Western frames, nuances and connotations as presented in mainstream management and business literature (Jamali & Karam, 2016).

On the one hand, within the various industries, more and more companies are focusing on CSR as a response to public pressure to put social concerns on their agenda. One of these industries is the agribusiness sector. Agribusiness firms, have been confronted with numerous conflicts with society related to negative formalities of food production; moral concerns; and other health-related issues (Gill & Mathur, 2018).

Hence, Agribusiness has come under close public scrutiny and suffered increasing public criticism as a result of various recent crises in developed countries (Luhmann & Theuvsen, 2017) and developing countries such as child labor, labor exploitation; and environment degradation (Gill & Mathur, 2018). This perceived pressure on CSR has the potential to become a mechanism for improving working conditions (Voegtlin & Greenwood, 2016). Moreover, sustainability in agribusiness production and trade is increasingly a focus of development, environmental conservation and responsible business (Nelson & Phillips, 2018).

On the other hand, it is especially important to investigate CSR practices in developing countries because of the pervasive institutional voids that characterize these settings (Pisani *et al*., 2017). The heterogeneous socioeconomic, historical and political realities of developing countries provide for unique forms of responsible business as well as tailored adaptations of globally dominant CSR practices to local contexts (Jamali *et al.,* 2017).

Hence, research interest in CSR in developing countries is on the rise (Xun, 2013). However, no studies have been found linking CSR to agribusiness in developing countries, despite the fact that these are one of the most important sources of economic income in these countries.

The relationship between CSR and the economic performance of companies has been studied extensively (e.g. Chen *et al*., 2015; Gallardo-Vázquez & Sánchez-Hernández, 2014). Even though some studies suggest that a

direct relationship does not exist between CSR and Performance (Heyder & Theuvsen, 2012), others (e.g. Briones-Peñalver *et al*., 2018) have shown a positive relationship between CSR and economic performance in agribusiness.

In recent years, the agribusiness sector has invested in technological solutions such as geo-positioning applications, artificial intelligence systems, automated products processing and preservation systems especially products with relatively shorter shelf-life, livestock tracking systems (Ibrahim *et al*., 2018). Innovation management allows companies to respond rapidly to the environment, improving their decision-making processes, and finally their results (Ariño *et al*., 2014).

Globalization has increased the imperative not only to adopt innovations but also to organize these cross-border, inter-firm agreements efficiently, and this has led to a cross-fertilization of ideas from a variety of fields, including international business and management (Martínez-Noya & Narula, 2018). The need for flexibility, capacity development and other resources are drivers to formalize cooperation agreements among companies (Martins *et al*., 2017).

Agribusinesses are no strangers to this type of collaboration as some studios show (Lynch *et al*., 2018). This cooperation promotes sustainable development, since besides economic benefits, it contributes to conserving the landscape, job creation and preserving traditions (Días & Franco, 2018).

Further research is needed on the economic foundations of development cooperation based on trust, accountability and shared values (SV), best practices and the link to desired societal outcomes, such as sustainable development goals. Agribusiness can come together to make joint commitments to a shared development agenda, and where stakeholders hold themselves and others accountable for meeting these commitments (Franklin & Oehmke, 2019).

Since the late 1990s, governments and development agencies have enthusiastically embraced market-based approaches, including shared value chain development (SV), (Donovan *et al*., 2018). This type of SV has been defined as a "positive or desirable change in a value chain to extend or improve productive operations and create social benefits: poverty reduction, income generation and job creation, economic growth, environmental performance, gender equity and other development goals" (Devaux *et al*., 2018).

Latin-American agribusiness sector is a major contributor to most of the region's domestic product, exports and labor force employment. Additionally, the region is a major supply source for feeding the world. In this light, it is worthwhile investing in improving the sector's competitiveness (Geldes *et al*., 2015).

Costa Rica has a stable political system, favorable prospects for long-term economic growth, relatively high social development, growth sustained of exports and people with relatively high job qualifications. However, the different scenarios in which economic and financial evolution is taking place are highly complex. In consequence, multiple stakeholders develop a variety of interrelationships with each other, which, in turn, affect the enterprise-stakeholders-CSR links (Masis Solano *et al*., 2016).

Therefore, the aim of this article is to analyze the influence of CSR on the performance the agribusiness located in Costa Rica and how this can have a positive effect on cooperation and innovation in order to create shared value(SV), since CSR and SV have much in common (Jamali & Carroll, 2017).

For theses aims the work is divided into four sections. First, theoretical and empirical contributions related to the relationships between the variables that are included in the research model are reviewed. Second, methodology employed to test the model is described. Third, results are presented, followed by conclusions and discussion of the results. This final section also highlights the main implications for future research.

Literature review

The prevailing focus of international CSR research is, on the one hand, on relatively broader international issues that deal with the global business context and, on the other hand, on CSR-related matters that specifically concern multinational enterprises (MNEs) policies (Pisani *et al*., 2017). In this way, there is a lot of literature that analyze CSR in developing countries but from Western frames (e.g. García-Sánchez *et al*., 2013). Noting these important advances and the shifting focus to CSR in developing countries, one of the areas that have received relatively less attention within this broad research agenda pertains to the role of small and medium enterprises (SMEs) in CSR. SMEs have been recognized to contribute notably to job creation and poverty alleviation in developing countries, given their labor-intensive production processes and significant employment growth rates (Jamali, Lund-Thomsen *et al*., 2017).

In developed countries, the concerns of specific stakeholders such as regulators, shareholders, creditors, investors, environmentalists and the media are considered very important in disclosing CSR information. In developing countries, CSR reporting is more greatly influenced by the external forces/powerful stakeholders for instance, foreign investors, international buyers, international media and international regulatory bodies (Ali *et al*., 2017). To date, there is no country with an obligation for sustainable development reporting; nonetheless, Brazil was the leader in Latin America with 135 sustainability reports in 2010, in contrast with Costa Rica where only three reports were published, one of them by a company that produces beer, fruit-based drinks, bottled water, natural fruit drinks (Hoeltl *et al*., 2013). In fact, it was considered that CSR was stagnated in Central America and the Caribbean (Shah *et al*., 2016).

Furthermore, in contrast to the attitudes in developed countries, firms in developing countries perceive relatively little pressure from the public with regards to CSR disclosure (Ali *et al*., 2017). Market stakeholder influences are stronger in developed countries, whereas regulatory and social stakeholder influences do not differ significantly between the two country groups. The relationship between CSR practices and positive business outcomes is stronger in emerging than in developed countries (Doegl & Behnam, 2015).

Although most academic research engages with large economies, some hardy researchers have ventured to investigate CSR in some developing countries (Shah *et al*., 2016), although in sector specific contexts, for instance Robinson (2010) analyzed CSR in Costa Rica´s banana industry. In the last years, small, medium and big companies from Costa Rica have intensified their interest in CSR. Given the sustainability and survival growing urgency in modern society, commercial activity assumes responsible and integral actions on the country development (Martínez-Villavicencio *et al*., 2015).

Costa Rica has a long history of state involvement in both social and economic development and the nation's stable yet diverse economy, which includes agricultural, technology and tourism industries, ensures a relatively high standard of living in the region (Robinson, 2010). According to Masis Solano *et al*. (2016), CSR is already implementing actions with results that reflect the relevance of a strategic and cross-cutting approach to CSR in the organization.

Costa Rica also makes for an interesting country to situate the study as it has a tradition of state-led policies to protect worker rights (Robinson, 2010), which links directly with the social dimension of the RSC since CSR addresses specific issues related to human rights, business practices, communications, and community participation (AENOR, 2012).

Hypotheses

Globalization increases competitiveness in agribusiness therefore innovation can be seen as a strategy that contributes to the competitive advantage of agribusiness companies (Briones-Peñalver *et al*., 2018). In addition, innovation is not just an economic and technological tool; it is also a social phenomenon (Segarra-Oña *et al*., 2016) since if there is no transfer of knowledge to the productive sector, chances of economic development are reduced (Scoponi *et al*., 2016).

Furthermore, CSR integration can contribute to the firm in various ways but especially by producing or creating knowledge and fostering social innovation (Payán-Sánchez *et al*., 2018). The recent literature suggests that organizations must seek innovative solutions to transcend and enhance synergies in order to effectively address multiple dimensions of the CSR (Longoni & Cagliano, 2016).

If CSR is integrated into the business process, it will generate innovative practices and consequently improved competitiveness. Therefore, it could be said that capacity to innovate can be increased when the company is socially responsible. Thus, the first hypothesis is formulated as:

H1: CSR has a significant and positive influence on innovation strategy.

Nowadays, the dominant form of cooperation in developing countries is the imposition of regulations and monitoring from Multi-National Enterprises (MNEs), and that collaboration seldom includes financial and technical support (Achabou *et al*., 2017).

CSR initiatives have become a fundamental part of business activities in the food sector and this development is promising to improve the behavior of agribusiness companies as they show an interest in cooperative practices (Alarcón & Sánchez, 2013) such as sharing resources, capacities, or information in order to carrying out an exchange of knowledge that allows them to reinforce their competitive advantages and improve their performance (Guzman *et al*., 2013). Cooperation agreements without impositions from MNEs, i.e. ethics and loyal cooperation from all parts, could allow agribusiness firms to have access to more knowledge, which could help their efforts to innovate, as some authors suggest (Zouaghi & Sánchez, 2016).Yet, future cooperation between stakeholders should improve on access to information and finance (de Boer *et al*., 2019). In addition, Geldes *et al*. (2017) suggest that is necessary to develop strategies such as CSR to help counteract the social and institutional barriers to cooperation, especially in the agribusiness sector.

Therefore, the second research hypothesis is written as follows:

H2: CSR has a positive influence on cooperation between agribusiness companies.

In the literature there is evidence that, by integrating the environmental dimension from CSR into firm strategies, several benefits, can be generated, such as a return on investment, increased sales, development of new markets, improved corporate image, and product differentiation (Dangelico & Pontrandolfo, 2015). From a social perspective CSR mainly aims for excellence in the organization, paying particular attention to individuals and their working conditions and the quality of production processes. In this sense firms can increase operational productivity through being socially responsible what improves their economic value (Gubler *et al*., 2017) and long term performance. Therefore, from economic dimension, CSR not only contributes to reduce poverty and generate employment in developing countries but also facilitates access to financing for socially responsible companies, since corporate social performance has a positive role in reducing the cost of debt capital (La Rosa *et al*., 2018).

There is no clear consensus in the debate on the adoption of CSR measures and performance, since most research suggests that there should be a positive relationship between the two variables. In fact, it is believed that a firm's CSR commitment can contribute to improved reputation and higher financial performance (Luhmann & Theuvsen, 2017). As we mentioned above, findings in relation to this point in the agribusiness sector are contradictory; thus, our research hypothesis is:

H3. CSR has a direct influence on the performance company.

The concept of cooperation refers to joint coordination, sharing and planning of activities, and resources and competencies among trade partners (Geldes *et al*., 2015). Hence, cooperation is especially useful for SMEs as it helps them to reduce the uncertainty of accessing international markets, decreases transaction costs, takes advantage of the synergies and complementarily of resources and/or increases the size in the activities or sectors requiring some volume to obtain positive outcomes (Serrano *et al*., 2016). Días & Franco (2018) suggest that networks of agricultural entrepreneurs have contributed to their performance, besides economic benefits and Geldes *et al.* (2017) established that business cooperation is a positive determinant of business innovation which improve the performance of agribusiness SMEs (Alarcón & Sánchez, 2013). However, Geldes *et al.*(2017) also noted that most of the microenterprises do not collaborate with other organizations with the aim of innovating. Briones Peñalver *et al.* (2018) assert that cooperation and innovation are key factors in achieving performance. Therefore the final two hypotheses are:

H4. Cooperation activities among agribusiness are positively on performance.

H5. Innovation in agribusiness has a positive influence on performance.

These assumptions are summed up in the conceptual model shown in figure 1.

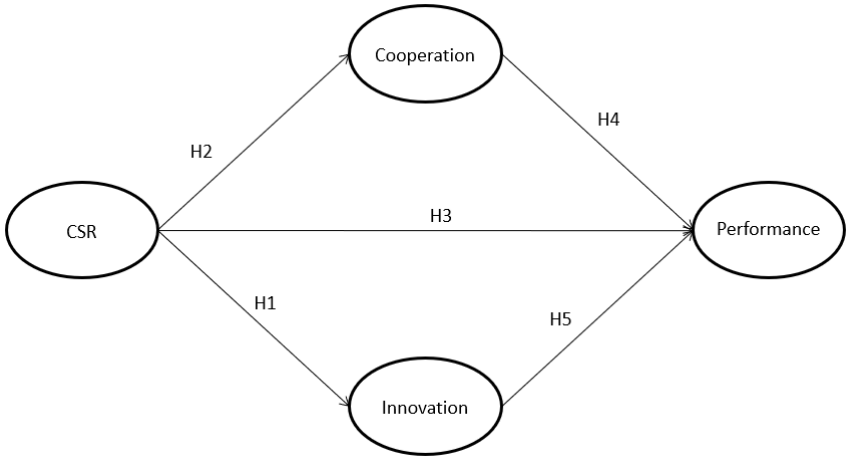

FIGURE 1
Research model
Source: Own elaboration
Note: Relationship between latent variables (construct). Each direct relationship is a research hypothesis

Methodology

In Costa Rica, income from exports of bananas, cocoa, sugar, pineapple and coffee remains significant, although there are other sources of income in the export of non-traditional crops such as flowers and mini-vegetables. In addition, an expansion of the agribusiness services sector has been detected. Therefore, the sample is made up of 72 agribusiness SEMs distributed as follows (table 1). The data was collected through a questionnaire delivered in situ with the response rate of 25.35% (table 2).

TABLE 1
Business distribution

Main activity	Number of companies	Percentage
Sale of fruits and vegetables	37	51%
Coffee Production	9	12%
Agricultural equipment and services	7	10%
Citrus Production	2	3%
Raising cattle	2	3%
Others (seeds, cereals, flowers, etc.)	15	21%
Total	**72**	**100%**

Source: Own elaboration
Note: The table shows the distribution of the businesses and it can be seen that more than 50% corresponds to businesses selling fruits and vegetables, followed by coffee production.

TABLE 2
Technical Data-Sheet

Item	Data
Geographical scope	Costa Rica
Population	284 agribusiness
Method of gathering information	Questionnaire *in situ* reinforced by previous phone call
Sampling unit	Agribusiness' managers
Sample	72
Participation index	25.35%
Maximum error sample	10%
Confidence level	95%

Source: Own elaboration
Note: The table shows the sample size on a total population of 284 agribusinesses. We consider that a 25% response is in accordance with this type of investigation, since it usually gives between 20% and 30% of responses

The capital is intensive in the labor force employed in various activities of fruit and vegetables crops and where casual workers are temporarily hired. For this reason, we believe that the size of firm may not be a clear determinant for the implementation of CSR policies.

To prepare for this study's analysis of the relationships between the constructs shown in Figure 1, a specific questionnaire was designed using a Likert-type five-point scale (i.e. 1 = 'totally disagree' and 5 = 'strongly agree'). The original questionnaire included 26 items related to CSR, innovation, competitiveness and performance in line with used surveys in other studies (e.g. Briones-Peñalver *et al*., 2018; Heyder & Theuvsen, 2012). However, only 17 items were used in this study, as can be seen in table 3 after process of refinement which is described further on.

Structural equation modeling (SEM) was used to investigate the conceptual relationship model and explain the associations among variables. A SEM really consists of both a measurement model and a structural model (Joe F. Hair Jr *et al*., 2014). This ensures that we have adequate indicators of constructs before attempting to reach conclusions concerning the hypotheses. The technique used within SEM is known as PLS (Partial Least Squares). PLS-SEM estimates the parameters of a set of equations in a structural equation model by combining principal components analysis with regression-based path analysis (Sarstedt *et al*., 2017) and the software used was SmartPLS 3.0.

Results and Discussion

Analysis of the measurement model

The measurement model defines the latent variables that the model will use, and assigns manifest variables to each. Reliability and convergent validity of the reflective constructs should be evaluated by checking the Dijkstra and Henseler's rho (ρ_A), average variance extracted (AVE), factor loading values and level of significance (Dijkstra & Henseler, 2015a; Henseler *et al*., 2016).

Individual item reliability is assessed by analyzing the standardized loadings (λ), or simple correlations of indicators with their respective latent variable (Joe F. Hair Jr *et al*., 2014). If λ is greater than 0.6 and it is significant will be considered adequate (Benítez-Amado *et al*., 2015). If a loading's confidence interval includes zero, this provides evidence that the loading is not statistically significant, making the indicator a candidate for removal from the measurement model. Given the initial values obtained, we subjected the model to an iterative process of refinement, eliminating for each construct the reflective indicators that did not satisfy the item reliability criterion.

Construct reliability is usually assessed using composite reliability (ρ_C) (Hair *et al.,* 2014) and Cronbach's alpha and the Dijkstra and Henseler's rho (ρ_A) (Sarstedt *et al*., 2017). Particularly, in our research, all constructs present values above 0.7 (table 2), and even the more restrictive threshold of 0.8 was exceeded (Nunnally & Bernstein, 1994), thus confirming their internal consistency.

To assess convergent validity, we examined the average variance extracted (AVE). AVE values should be greater than 0.50 (Fornell & Larcker, 1981). A Λ_A value greater than 0.70 means that the construct scores are reliable (Benítez-Amado *et al*., 2017).

The discriminant validity with reflective indicators is obtained through the Fornell-Larcker criterion and especially the HTMT (heterotraot-monotrait ratio) of correlations (Henseler *et al*., 2015).

TABLE 3

Indicators, loadings (Λ) and measurement model

Literature Background	Indicators	Description	λ	Confidence intervals		Measurement model assessment			
				2.5%	97.5%	Cronbach´s α	ρ_A	ρ_c	AVE
(Castilla-Polo *et al.,* 2017; Gallardo-Vázquez *et al.,* 2013)	**Innovation**					**0.79**	**0.81**	**0.86**	**0.61**
	16_1	Introduction of new products and services	0.71	0.35	0.90				
	16_2	Research and develop technologies (R & D)	0.71	0.38	0.88				
	16_3	Highly qualified staff	0.86	0.68	0.94				
	16_5	Purchase high production technology	0.83	0.72	0.90				
(Briones-Peñalver *et al.,* 2018; Castilla-Polo *et al.,* 2018; Dias and Franco, 2018)	**Cooperation**					**0.82**	**0.85**	**0.87**	**0.58**
	20_3	Improve efficiency	0.69	0.39	0.86				
	21_2	Saving on resources	0.69	0.34	0.86				
	21_3	Greater flexibility	0.83	0.69	0.91				
	21_4	Environment adaptation easiness	0.85	0.58	0.93				
	21_5	Improvement in time management	0.74	0.44	0.86				
(Briones-Peñalver *et al.,* 2018; Castilla-Polo *et al.,* 2017; Luhmann and Theuvsen, 2017)	**CSR**					**0.70**	**0.70**	**0.81**	**0.52**
	24_1	Suppliers opinions	0.76	0.38	0.90				
	24_2	Address customer suggestions	0.74	0.27	0.89				
	24_3	Implement improvement policies	0.66	0.16	0.88				
	24_5	Develop cooperation agreements	0.70	0.36	0.91				
(Briones-Peñalver *et al.,* 2018; Gallardo-Vázquez *et al.,* 2013; Gallardo-Vázquez and Sánchez-Hernández, 2014)	**Performance**					**0.82**	**0.82**	**0.88**	**0.64**
	28_1	Increase in sales	0.84	0.70	0.92				
	28_2	Support for decision-making	0.78	0.61	0.88				
	28_3	Emergence of new competitors	0.74	0.56	0.85				
	28_4	Emergence of new customers	0.84	0.70	0.91				

Source: Own elaboration

According to the criterion of the relationship of correlations HTMT, a factor has a discriminant validity when its HTMT ratio of correlations is less than 0.85 or greater than 0.85 if the value of HTMT is significantly different from 1 (Henseler *et al*., 2015). In our case all HTMT are lower than 0.85 as shown in table 4.

TABLE 4
Discriminant validity analysis and HTMT values

Discriminant validity				
	CSR	**Cooperation**	**Innovation**	**Performance**
CSR	**0.72**			
Cooperation	0.43	**0.76**		
Innovation	0.06	0.29	**0.78**	
Performance	0.35	0.41	0.51	**0.80**
HTMT values				
	CSR	**Cooperation**	**Innovation**	**Performance**
CSR				
Cooperation	0.48			
Innovation	0.20	0.37		
Performance	0.44	0.49	0.62	

Source: Own elaboration

Note: Diagonal elements (bold) are the square root of the variance shared between the constructs and their measures (Average Variance Extracted). Off-diagonal elements are the correlations among constructs. For discriminant validity, diagonal elements should be larger than off-diagonal elements.

Therefore, the reliability, convergent validity and discriminant validity of our reflective constructs have been assessed.

Structural model assessment

The structural model reflects the model paths hypothesized in our research framework for the purposes of empirical testing.

The assessment of the model's quality is based on its ability to predict endogenous constructs. The following criteria facilitate this assessment (Hair *et al.,* 2014) path coefficients (ß) and their confidence intervals, coefficient of determination (R^2) (Roldán & Sánchez-Franco, 2012).

First, we tested the significance of all the paths of the structural model. Standardized path coefficients were used to analyze the degree of support for the research hypotheses. (Chin, 1998) proposed that this analysis should produce standardized path coefficients with values greater than 0.2. When the ß is less than 0.2, there is no causality, and the hypothesis is rejected. According to Hair *et al.* (2011), bootstrapping (i.e. 5,000 resamples) was used to generate standard errors, t-statistics and confidence intervals. This enabled us to assess the statistical significance of the path coefficients. At the same time, the bootstrapping confidence intervals of standardized regression coefficients were used to accept or reject the hypotheses (see table 5).

Second, the goodness of the proposed model was determined by the strength of each structural path. This analysis was done using the R^2 values (i.e., explained variance) for dependent latent variables. For each path

between constructs, the desirable values needed to be at least equal to or higher than 0.1 (Falk & Miller, 1992). The R^2 is a measure of the model's predictive accuracy (Hair *et al.,* 2014), and, therefore, R^2 values measure the construct variance explained by the model. Values of 0.75, 0.50 and 0.25 describe substantial, moderate or weak levels, respectively, of predictive accuracy (Hair *et al*., 2011), all R^2 are showed in figure 2.

TABLE 5
Hypotheses testing

	Relationships	β	t-values	2.5%	97.5%	Accepted
H1	**CSR -> Innovation**	0.06	0.40	-0.23	0.42	NO
H2	**CSR -> Cooperation**	0.43	3.70	0.23	0.70	YES
H3	**CSR -> Performance**	0.24	2.29	0.03	0.46	YES
H4	**Cooperation -> Performance**	0.17	1.76	-0.03	0.36	NO
H5	**Innovation -> Performance**	0.44	4.13	0.22	0.64	YES

Source: Own elaboration
Note: as it is desirable that ß is greater than 0.2 and has statistical significance, in this case the hypotheses that are rejected are H1 and H4

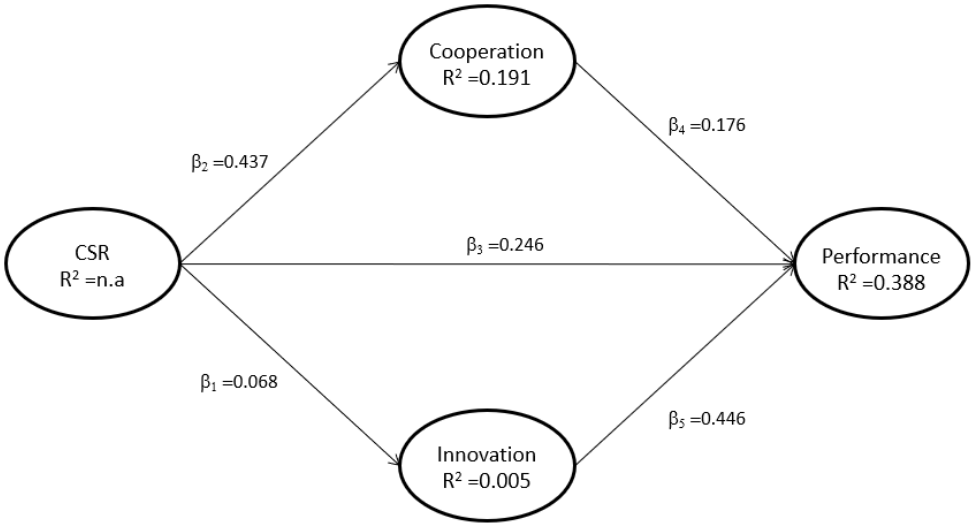

FIGURE 2
Hypotheses testing
Source: Own elaboration

Note: R^2 values measure the construct variance explained by the model. Thus, the performance is explained in 38.8% by the influence of CSR, innovation and cooperation.

Finally, we proceed to analyze the goodness of fit of the model. Currently, SRMR (Standardized Root Mean Square Residual) is accepted as an approximate measure of the overall fit of the model, whose value should be less than 0.08 (Henseler *et al*., 2016) for the measurement model and the structural model but this threshold is likely too low for PLS-SEM therefore values below 0.10 are accepted (Joseph F. Hair Jr *et al*., 2017).

In addition, there is more than one way of quantifying the discrepancy between two matrices, for example the geodetic discrepancy (dG) or unweighted least squares discrepancy (dULS) (Dijkstra & Henseler, 2015b), so there

are several model fit tests. dULS and dG are exact measurements of the overall model setting. The results obtained are shown in table 6, which suggests a good fit of the model.

TABLE 6
Goodness of fit of the model

	Measurement model			Structural model		
	Mean Value	Confidence intervals		Mean Value	Confidence intervals	
		2.5%	97.5%		2.5%	97.5%
SRMR	0.08	0.06	0.11	0.09	0.07	0.11
dULS	1.18	0.70	1.89	1.30	0.75	2.12
dG	0.92	0.48	1.53	0.92	0.48	1.55

Source: Own elaboration
Note: the value obtained must be at least less than that contributed by 97.5%, ideally it would be less than that contributed by 2.5% and 97.5% at the same time

Mediating effect

Total effects (direct and indirect) must be considered. Total effects are reflected in table 7.

TABLE 7
Total effects

	β	t-values	p- values	2.5%	97.5%
CSR -> Innovation	0.06	0.40	0.68	-0.23	0.42
CSR -> Cooperation	0.43	3.70	0.00	0.23	0.70
CSR -> Performance	0.35	3.18	0.00	0.15	0.58
Cooperation -> Performance	0.17	1.77	0.07	-0.02	0.36
Innovation -> Performance	0.44	4.11	0.00	0.22	0.65

Source: Own elaboration
Note In this table we observe both direct effects (arrows in figure 1) and indirect effects (which do not appear in figure 1). It can be seen that the relationship has an increase in its path coefficient, therefore it suggests that this relationship CSR -> Performance is influenced by indirect effects of the other variables.

Mediation occurs when a third mediator variable intervenes between two others related constructs. Thus, direct effects are the relationships linking two constructs with a single arrow. Indirect effects are those relationships that involve a sequence of relationships with at least one intervening construct involved (Hair *et al*., 2013).

Taking into account these indirect effects, the relationship between CSR and performance improves such as ß$_3$ increases from 0.24 to 0.35, being also significant ($p \leq 0.001$). This relationship may be mediated by Cooperation and Innovation. The corresponding total effect is given by the following equation: Total Effect = direct effect + indirect effect (Sarstedt *et al*., 2014).

As the results from the analysis of total effects suggest that Cooperation and Innovation mediate the relationship between CSR and Performance, it is worthwhile to explicitly test for this potential mediating effect. To do so, our analysis draws on Hair. First, specific indirect effects have been study in order to know its significance level. The significance assessment builds on their (bias-corrected and accelerated bootstrap) confidence intervals (Hair *et al*., 2017). Second, if indirect effects are significant could be a partial mediation (complementary or competitive) (Hair *et al*., 2017). Finally, there is no mediation if specific indirect effect is not significant but direct effect is significant, then direct effect only. Results on table 8 show there is no mediation in this case.

TABLE 8
Specific indirect effects and Total indirect effect

Specific indirect effects

	value	t-values	p- values	2.5%	97.5%
CSR -> Cooperation -> Performance	0.07	1.47	0.14	-0.01	0.19
CSR -> Innovation -> Performance	0.03	0.38	0.70	-0.11	0.20

Total indirect effect

	value	t-values	p- values	2.5%	97.5%
CSR -> Performance	0.10	1.15	0.24	-0.06	0.30

Source: Own elaboration
Note: the relationship CSR -> Performance is influenced by cooperation and innovation. Here we can see that this influence is greater in the cooperation.

Discussion

This study adds to the existing literature to date on CSR with an empirical contribution in the agribusiness sector. The absence of previous empirical studies analyzing the relevance of CSR in the Costa Rican Agribusiness and its integration into the firms justified its implementation, and it considers that adding a supplement research studies linking CSR and Performance. In addition, this relationship is not only studied with a direct effect but also incorporates two indirect relationships through Cooperation and Innovation.

On the one hand, CSR enhances Cooperation but not Innovation and can have direct and indirect effects on corporate Performance. This is a difference with similar studies conducted in developed countries in which CSR improved Innovation (e.g. Briones-Peñalver *et al*., 2018). Furthermore, in this study, It seems that Cooperation in agribusiness does not improve the Performance of the company contrary to what was expected and referenced in the literature (e.g. Días & Franco, 2018).

On the other hand, a direct influence is established between CSR and the Performance of the company in line with similar studies (e.g. Briones-Peñalver *et al*., 2018; Castilla-Polo *et al*., 2018).

The results suggest that the total effect that CSR exerts on Performance can be mediated by other variables beyond Cooperation and Innovation; therefore, we must continue researching along these lines to study which mediating variables these would be.

Conclusions

CSR in developing countries is an emerging field of study (Jamali & Karam, 2016); however the main studies have been carried out in Western contexts. This study aims to correct this Western bias given that carries out an empirical and reliable exploration in a developing country through fieldwork in different regions of Costa Rica. Agribusiness in developing countries must comply with demands in terms of quality and training with greater added value and minimization of environmental impacts. Part of these demands lie in the strategy of CSR by social dimension through the labor conditions of employees according to productivity and their job security in order to achieve a competitive and sustainable development of agribusiness. In this way, agribusiness managers should consider the opinions of suppliers and suggestions from clients in order to obtain value-added products, turned into the main engine of social development compatible with conservation and proper use of natural resources.

Agribusinesses in Costa Rica have very different structures, from large producers with links to multinationals, to small farmers related to agricultural production of reduced scale at local level. In this sense, agribusinesses generate activities that help to reduce rural poverty in developing countries.

Nowadays, the private sector is becoming more aware of its social responsibility. This is due to the lack of capacity in some countries to develop technological innovations and the shortage of incentives to incorporate new production technologies in agribusiness. In this case, the private sector needs to invest in activities that produce positive returns from both private and CSR points of view, through Cooperation. These returns are achieved thanks to private innovation. Therefore, innovation is a key factor to be considered in Performance as the analysis carried out in this study shows. CSR is also representative of a firm´s modernization through cooperation, coproduction and public–private partnerships. CSR is an efficient business strategy that penetrates every innovative organization and becomes a key element in differentiating between competitors. Thus, agribusiness managers in developing countries should pay special attention to innovation factors as such highly qualified staff and investment in high production technology.

In the light of the results obtained, the relationships established in the research model are confirmed except in the case of two of them (H1 and H4). CSR encourages cooperative relations between companies. However, this cooperation does not have a clear reflection on the performance, contrary what happens in developed countries.

Reinforcement and dissipation are often simultaneous and ongoing thereby resulting in complex, messy and protracted CSR adaptations (Jamali *et al.*, 2017). For this reason, we believe that knowledge is acquired in cooperation. However, this cooperation can be more easily adopted by multinationals that obtain benefits in a shorter period than SMEs agribusiness companies. Although for SMEs adaptation to environment and greater flexibility are among the most noteworthy factors for their cooperation, this does not have a positive effect on performance.

This raises the question how food and agribusiness MNE can best include smallholders in their sourcing strategies in order to take social responsibility for a sustainable and more equitable supply from a business perspective (Sjauw-Koen-Fa *et al.*, 2018).

Nevertheless, CSR directly favors the performance of agribusiness. This conclusion is in line with other studies (e.g. Briones-Peñalver *et al.*, 2018). However, the indirect influence is not so clear because CSR in developing countries has factors and values which are not considered an influence in Western companies, for example family,

religious beliefs and traditions as suggest Jamali *et al.* (2017) and (Gill & Mathur, 2018). Therefore, this could be a future line of research.

In empirical studies, it is important to identify and consider limitations when achieving interpretations and conclusions. One of them is regarding the sample. The sample of this study is restricted to companies located only in Costa Rica and this could be seen as a restriction to a generalization of the results. However, our results are consistent. Second this study can be considered exploratory, so in-depth research could also analyze more in detail the nature of the relationship between CSR and Performance.

Through this study, our intention was to bridge the gap detected in the literature in developing countries about agribusiness companies for the implementation of CSR measures, because developing countries often present a distinctive set of CSR agenda challenges as compared to developed countries.

References

Achabou, M. A., Dekhili, S., & Hamdoun, M. (2017). Environmental Upgrading of Developing Country Firms in Global Value Chains: Environmental Upgrading in Global Value Chains. *Business Strategy and the Environment, 26*(2), 224-238. https://doi.org/10.1002/bse.1911

AENOR. (2012). *UNE- ISO 26000. Guía de responsabilidad social.*

Alarcón, S., & Sánchez, M. (2013). External and Internal R&D, Capital Investment and Business Performance in the Spanish Agri-Food Industry. *Journal of Agricultural Economics, 64*(3), 654-675. https://doi.org/10.1111/1477-9552.12015

Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review. *Corporate Social Responsibility and Environmental Management, 24*(4), 273-294. https://doi.org/10.1002/csr.1410

Ariño, A., Reuer, J. J., Mayer, K. J., & Jané, J. (2014). Contracts, Negotiation, and Learning: An Examination of Termination Provisions: Contracts, Negotiation, and Learning. *Journal of Management Studies, 51*(3), 379-405. https://doi.org/10.1111/joms.12069

Benítez-Amado, J., Henseler, J., & Castillo, A. (2017). Development and Update of Guidelines to Perform and Report Partial Least Squares Path Modeling in Information Systems Research. *PACIS 2017 Proceedings*. http://aisel.aisnet.org/pacis2017/86

Benítez-Amado, J., Llorens-Montes, F. J., & Fernandez-Perez, V. (2015). IT impact on talent management and operational environmental sustainability. *Information Technology and Management, 16*(3), 207-220. https://doi.org/10.1007/s10799-015-0226-4

Briones-Peñalver, A. J., Bernal-Conesa, J. A., & de Nieves-Nieto, C. (2018). Analysis of Corporate Social Responsibility in Spanish Agribusiness and Its Influence on Innovation and Performance. *Corporate Social Responsibility and Environmental Management, 25*(2), 182-193. https://doi.org/10.1002/csr.1448

Castilla-Polo, F., Gallardo-Vázquez, D., Sánchez-Hernández, M. I., & Ruiz-Rodríguez, M. C. (2018). An empirical approach to analyse the reputation-performance linkage in agrifood cooperatives. *Journal of Cleaner Production, 195*, 163-175. https://doi.org/10.1016/j.jclepro.2018.05.210

Castilla-Polo, F., Sánchez-Hernández, M. I., & Gallardo-Vázquez, D. (2017). Assessing the Influence of Social Responsibility on Reputation: An Empirical Case-Study in Agricultural Cooperatives in Spain. *Journal of Agricultural and Environmental Ethics, 30*(1), 99-120. https://doi.org/10.1007/s10806-017-9656-9

Chen, C.-C., Wang, Y., Shang, K.-C., Fosh, P., & Lu, C.-S. (2015). Corporate Social Responsibility and Performance: A Study of a Chinese Industrial Development Zone. *Journal of Marine Science and Technology-Taiwan, 23*(5), 628-637. https://doi.org/10.6119/JMST-015-0313-1

Chin, W. W. (1998). *Commentary: Issues and opinion on structural equation modeling*. JSTOR. http://www.jstor.org/stable/249674

Dangelico, R. M., & Pontrandolfo, P. (2015). Being 'Green and Competitive': The Impact of Environmental Actions and Collaborations on Firm Performance. *Business Strategy and the Environment, 24*(6), 413-430. https://doi.org/10.1002/bse.1828

de Boer, D., Limpens, G., Rifin, A., & Kusnadi, N. (2019). Inclusive productive value chains, an overview of Indonesia's cocoa industry. *Journal of Agribusiness in Developing and Emerging Economies, 9*(5), 439-456. https://doi.org/10.1108/JADEE-09-2018-0131

Devaux, A., Torero, M., Donovan, J., & Horton, D. (2018). Agricultural innovation and inclusive value-chain development: a review. *Journal of Agribusiness in Developing and Emerging Economies, 8*(1), 99-123. https://doi.org/10.1108/JADEE-06-2017-0065

Días, C., & Franco, M. (2018). Cooperation in tradition or tradition in cooperation? Networks of agricultural entrepreneurs. *Land Use Policy, 71*, 36-48. https://doi.org/10.1016/j.landusepol.2017.11.041

Dijkstra, T. K., & Henseler, J. (2015a). Consistent partial least squares path modeling. *MIS quarterly = Management information systems quarterly, 39*(2), 297-316.

Dijkstra, T. K., & Henseler, J. (2015b). Consistent and asymptotically normal PLS estimators for linear structural equations. *Computational Statistics & Data Analysis, 81*, 10-23. https://doi.org/10.1016/j.csda.2014.07.008

Doegl, C., & Behnam, M. (2015). Environmentally Sustainable Development through Stakeholder Engagement in Developed and Emerging Countries. *Business Strategy and the Environment, 24*(6), 583-600. https://doi.org/10.1002/bse.1839

Donovan, J., Poole, N., Poe, K., & Herrera-Arauz, I. (2018). Ambition meets reality: lessons from the taro boom in Nicaragua. *Journal of Agribusiness in Developing and Emerging Economies, 8*(1), 77-98. https://doi.org/10.1108/JADEE-02-2017-0023

Falk, R. F., & Miller, N. B. (1992). *A Primer for Soft Modeling* (1st edition). Univ of Akron Pr.

Forcadell, F. J., & Aracil, E. (2017). Sustainable banking in Latin American developing countries: Leading to (mutual) prosperity. *Business Ethics: A European Review, 26*(4), 382-395. https://doi.org/10.1111/beer.12161

Fornell, C., & Larcker, D. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.2307/3151312

Franklin, K., & Oehmke, J. (2019). Building African Agribusiness through Trust and Accountability. *Journal of Agribusiness in Developing and Emerging Economies, 9*(1), 22-43. https://doi.org/10.1108/JADEE-01-2018-0005

Gallardo-Vázquez, D., & Sánchez-Hernández, M. I. (2014). Measuring Corporate Social Responsibility for competitive success at a regional level. *Journal of Cleaner Production, 72*, 14-22. https://doi.org/10.1016/j.jclepro.2014.02.051

Gallardo-Vázquez, D., Sánchez-Hernández, M. I., & Corchuelo-Martínez-Azua, M. B. (2013). Validación de un instrumento de medida para la relación entre la orientación a la responsabilidad social corporativa y otras variables estratégicas de la empresa. *Revista de Contabilidad, 16*(1), 11-23. https://doi.org/10.1016/S1138-4891(13)70002-5

García-Sánchez, I.-M., Frías-Aceituno, J.-V., & Rodríguez-Domínguez, L. (2013). Determinants of corporate social disclosure in Spanish local governments. *Journal of Cleaner Production, 39*, 60-72. https://doi.org/10.1016/j.jclepro.2012.08.037

Geldes, C., Felzensztein, C., Turkina, E., & Durand, A. (2015). How does proximity affect interfirm marketing cooperation? A study of an agribusiness cluster. *Journal of Business Research, 68*(2), 263-272. https://doi.org/10.1016/j.jbusres.2014.09.034

Geldes, C., Heredia, J., Felzensztein, C., & Mora, M. (2017). Proximity as determinant of business cooperation for technological and non-technological innovations: a study of an agribusiness cluster. *Journal of Business & Industrial Marketing, 32*(1), 167-178.

Gill, A., & Mathur, N. (2018). Religious beliefs and the promotion of socially responsible entrepreneurship in the Indian agribusiness industry. *Journal of Agribusiness in Developing and Emerging Economies, 8*(1), 201-218. https://doi.org/10.1108/JADEE-09-2015-0045

Gubler, T., Larkin, I., & Pierce, L. (2017). Doing Well by Making Well: The Impact of Corporate Wellness Programs on Employee Productivity. *Management Science, 64*(11), 4967-4987. https://doi.org/10.1287/mnsc.2017.2883

Guzman, I., De-Nieves-Nieto, C., & Briones-Penalver, A.-J. (2013). Evaluating Efficiency in the Agribusiness Sector in Spain: An Empirical Study on the Region of Murcia. *Cuadernos de Desarrollo Rural, 10*(71), 81-100.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice, 19*(2), 139-152. https://doi.org/10.2753/MTP1069-6679190202

Hair Jr, Joe F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review, 26*(2), 106-121. https://doi.org/10.1108/EBR-10-2013-0128

Hair Jr, Joseph F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* SAGE Publications.

Hair Jr, Joseph F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* (2nd Ed.). SAGE Publications.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems, 116*(1), 2-20. https://doi.org/10.1108/IMDS-09-2015-0382

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Heyder, M., & Theuvsen, L. (2012). Determinants and Effects of Corporate Social Responsibility in German Agribusiness: A PLS Model: Corporate Social Responsibility in German Agribusiness. *Agribusiness, 28*(4), 400-420. https://doi.org/10.1002/agr.21305

Hoeltl, A., Brandtweiner, R., & Stock, P. S. (2013). Sustainability reports from the food industry: case studies from Europe and Latin America. En C. A. Brebbia & V. Popov (Eds.), *Food and Environment Ii: The Quest for a Sustainable Future* (Vol. 170, pp. 77-88). Wit Press.

Ibrahim, A. M., Hassan, M. S., & Gusau, A. L. (2018). Factors Influencing Acceptance and Use of ICT Innovations by Agribusinesses: *Journal of Global Information Management, 26*(4), 113-134. https://doi.org/10.4018/JGIM.2018100107

Jamali, D., & Carroll, A. (2017). Capturing advances in CSR: Developed versus developing country perspectives. *Business Ethics: A European Review, 26*(4), 321-325. https://doi.org/10.1111/beer.12157

Jamali, D., & Karam, C. (2016). Corporate Social Responsibility in Developing Countries as an Emerging Field of Study. *International Journal of Management Reviews*. https://doi.org/10.1111/ijmr.12112

Jamali, D., Karam, C., Yin, J., & Soundararajan, V. (2017). CSR logics in developing countries: Translation, adaptation and stalled development. *Journal of World Business, 52*(3), 343-359. https://doi.org/10.1016/j.jwb.2017.02.001

Jamali, D., Lund-Thomsen, P., & Jeppesen, S. (2017). SMEs and CSR in developing countries. *Business & Society, 56*(1), 11-22.

Jamali, D., & Neville, B. (2011). Convergence Versus Divergence of CSR in Developing Countries: An Embedded Multi-Layered Institutional Lens. *Journal of Business Ethics, 102*(4), 599-621. https://doi.org/10.1007/s10551-011-0830-0

La Rosa, F., Liberatore, G., Mazzi, F., & Terzani, S. (2018). The impact of corporate social performance on the cost of debt and access to debt financing for listed European non-financial firms. *European Management Journal, 36*(4), 519-529. https://doi.org/10.1016/j.emj.2017.09.007

Longoni, A., & Cagliano, R. (2016). Sustainable Innovativeness and the Triple Bottom Line: The Role of Organizational Time Perspective. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-016-3239-y

Luhmann, H., & Theuvsen, L. (2017). Corporate Social Responsibility: Exploring a Framework for the Agribusiness Sector. *Journal of Agricultural and Environmental Ethics, 30*(2), 241-253. https://doi.org/10.1007/s10806-017-9665-8

Lynch, B., Llewellyn, R. S., Umberger, W. J., & Kragt, M. E. (2018). Farmer interest in joint venture structures in the Australian broadacre grains sector. *Agribusiness, 34*(2), 472-491. https://doi.org/10.1002/agr.21525

Martínez-Noya, A., & Narula, R. (2018). What more can we learn from R&D alliances? A review and research agenda. *BRQ Business Research Quarterly, 21*(3), 195-212. https://doi.org/10.1016/j.brq.2018.04.001

Martínez-Villavicencio, J., Brenes-Sánchez, R., Araneda-Fornachiari, X., & Jaubert-Solano, W. (2015). Influence factors of the Enterprise's Social Responsibility Development: A case study of the hotel and tourism sector in San Carlos, Costa Rica. *Tec Empresarial, 9*(3), 7-18. https://doi.org/10.18845/te.v9i3.2431

Martins, D. M., Faria, A. C. de, Prearo, L. C., & Arruda, A. G. S. (2017). The level of influence of trust, commitment, cooperation, and power in the interorganizational relationships of Brazilian credit cooperatives. *Revista de Administração, 52*(1), 47-58. https://doi.org/10.1016/j.rausp.2016.09.003

Masis Solano, P., Gomez Pescador, I., & Arzadun, P. (2016). Social, economic and environmental initiatives: impact on the opinion of the membership base of a credit cooperative in Costa Rica. *Ciriec-Espana Revista De Economia Publica Social Y Cooperativa, 86*, 101-122.

Nelson, V., & Phillips, D. (2018). Sector, Landscape or Rural Transformations? Exploring the Limits and Potential of Agricultural Sustainability Initiatives through a Cocoa Case Study. *Business Strategy and the Environment, 27*(2), 252-262. https://doi.org/10.1002/bse.2014

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). McGraw-Hill.

Payán-Sánchez, B., Plaza-Úbeda, J. A., Pérez-Valls, M., & Carmona-Moreno, E. (2018). Social Embeddedness for Sustainability in the Aviation Sector. *Corporate Social Responsibility and Environmental Management*. https://doi.org/10.1002/csr.1477

Pisani, N., Kourula, A., Kolk, A., & Meijer, R. (2017). How global is international CSR research? Insights and recommendations from a systematic review. *Journal of World Business, 52*(5), 591-614. https://doi.org/10.1016/j.jwb.2017.05.003

Robinson, P. K. (2010). Responsible Retailing: The Practice of CSR in Banana Plantations in Costa Rica. *Journal of Business Ethics, 91*, 279-289. https://doi.org/10.1007/s10551-010-0619-6

Roldán, J. L., & Sánchez-Franco, M. J. (2012). Variance-Based Structural Equation Modeling: Guidelines for Using Partial Least Squares. *Research methodologies, innovations and philosophies in software systems engineering and information systems*, 193.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial Least Squares Structural Equation Modeling. En C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research* (pp. 1-40). Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8_15-1

Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy, 5*(1), 105-115. https://doi.org/10.1016/j.jfbs.2014.01.002

Scoponi, L., Fernandes Pacheco Días, M., Pesce, G., Schmidt, M. A., & Gzain, M. (2016). Academic Cooperation in Latin America for Innovation in Agribusiness. *Journal of Technology Management & Innovation, 11*(2), 111-120.

Segarra-Oña, M., Peiró-Signes, A., Albors-Garrigós, J., & Miguel-Molina, B. de. (2016). Testing the Social Innovation Construct: An Empirical Approach to Align Socially Oriented Objectives, Stakeholder Engagement, and Environmental Sustainability. *Corporate Social Responsibility and Environmental Management, 24*(1), 15-27. https://doi.org/10.1002/csr.1388

Serrano, R., Acero, I., & Fernandez-Olmos, M. (2016). Networks and export performance of agri-food firms: New evidence linking micro and macro determinants. *Agricultural Economics-Zemedelska Ekonomika, 62*(10), 459-470. https://doi.org/10.17221/71/2015-AGRICECON

Shah, K. U., Arjoon, S., & Rambocas, M. (2016). Aligning Corporate Social Responsibility with Green Economy Development Pathways in Developing Countries: CSR in the Green Economy. *Sustainable Development, 24*(4), 237-253. https://doi.org/10.1002/sd.1625

Sjauw-Koen-Fa, A. R., Blok, V., & Omta, O. S. W. F. (2018). Exploring the integration of business and CSR perspectives in smallholder souring: Black soybean in Indonesia and tomato in India. *Journal of Agribusiness in Developing and Emerging Economies, 8*(4), 656-677. https://doi.org/10.1108/JADEE-06-2017-0064

Voegtlin, C., & Greenwood, M. (2016). Corporate social responsibility and human resource management: A systematic review and conceptual analysis. *Human Resource Management Review, 26*(3), 181-197. https://doi.org/10.1016/j.hrmr.2015.12.003

Xun, J. (2013). Corporate Social Responsibility in China: a Preferential Stakeholder Model and Effects: A Preferential Stakeholder Model and Effects. *Business Strategy and the Environment, 22*(7), 471-483. https://doi.org/10.1002/bse.1757

Yin, J., & Jamali, D. (2016). Strategic Corporate Social Responsibility of Multinational Companies Subsidiaries in Emerging Markets: Evidence from China. *Long Range Planning, 49*(5), 541-558. https://doi.org/10.1016/j.lrp.2015.12.024

Zouaghi, F., & Sánchez, M. (2016). Has the global financial crisis had different effects on innovation performance in the agri-food sector by comparison to the rest of the economy? *Trends in Food Science & Technology, 50*, 230-242. https://doi.org/10.1016/j.tifs.2016.01.014

Notes

* Research article