# CSR practices that impact the financial performance of Mexican public companies moderated by the legitimacy of social actions

Prácticas de RSE que impactan el desempeño financiero de las empresas públicas mexicanas moderadas por la legitimidad de las acciones sociales

LANDAZURI-AGUILERA, Yara†\* & RUIZ-PEREZ, Roberto

Instituto Tecnológico de Sonora, Mexico.

ID 1<sup>st</sup> Author: *Yara, Landazuri-Aguilera* / **ORC ID:** 0000-0002-7784-2762, **Researcher ID Thomson:** S-6759-2018, **CVU CONACYT ID:** 62507.

ID 1st Co-author: Roberto, Ruiz-Perez / ORC ID: 0000-0001-8884-9890, CVU CONACYT ID: 625356

**DOI:** 10.35429/EJRP.2020.11.6.42.54 Received July 25, 2020; Accepted December 30, 2020

#### Abstract

### The objective of this research is to identify the dimensions of Corporate Social Responsibility (CSR) that impact the financial performance of Mexican public companies, moderated by the legitimacy of social actions. A measurement instrument was designed for the variables, with this a contribution to the literature of a reliable and valid scale on the subject of CSR and legitimacy is made with an instrument of 27 items with a 6-point Likert-type scale. The sample for the data collection was 42 socially responsible companies, listed on the Mexican Stock Exchange and published their sustainability results through their identity page. A theoretical model has been proposed with the hypotheses to be tested, and it has been validated with a multiple linear regression model with a moderating variable. The results obtained show that legitimacy moderates the effect that CSR has on business performance. The effect is positive in the economic and social dimension, in the environmental dimension the effect was negative but significant.

# Resumen

El objetivo de esta investigación es Identificar las dimensiones de Responsabilidad Social Empresarial (RSE) que impactan en el desempeño financiero de las empresas públicas mexicanas moderadas por la legitimidad de las acciones sociales. Se diseñó un instrumentos de medida para las variables, con esto se realiza una aportación a la literatura de una escala fiable y válida en el tema de la RSE y legitimidad con un instrumento de 27 ítems con una escala tipo Likert de 6 puntos. La muestra para el levantamiento de datos fue de 42 empresas socialmente responsables, cotizadas en la Bolsa Mexicana de Valores y publican sus resultados de sustentabilidad a través de su página de identidad. Se ha propuesto un modelo teórico con las hipótesis a contrastar, y se ha validado con un modelo de regresión lineal múltiple con una variable moderadora. Los resultados obtenidos muestran que la legitimidad modera el efecto que tiene la RSE sobre el desempeño empresarial. El efecto es positivo en la dimensión económica y social, en la dimensión medioambiental el efecto fue negativo pero significativo.

#### CSR, Legitimacy, Public companies

#### RSE, Legitimidad, Empresas públicas

**Citation:** LANDAZURI-AGUILERA, Yara & RUIZ-PEREZ, Roberto. CSR practices that impact the financial performance of Mexican public companies moderated by the legitimacy of social actions. ECORFAN Journal-Republic of Peru. 2020. 6-11:42-54.

<sup>\*</sup> Correspondence to Author (Email: yara.landazuri@itson.edu.mx)

<sup>†</sup> Researcher contributing first author.

#### Introduction

The most relevant findings that have been identified in the literature on Corporate Social Responsibility (CSR) have framed a benchmark that allows us to know the theoretical advances that are related to the problem. Ramos, Manzanares and Gómez (2014), in their exploration of the measurement of CSR, managed to confirm that empirical studies on the subject have evolved, identified said evolution from the interest and the way to implement social responsibility initiatives, to applied studies that attempt to test and explain the relationship between the CSR measures adopted by companies and their long-term business results (Waddock and Graves, 1997; De la Cuesta, 2004; Porter and Kramer, 2006; Hull and Rothenberg , 2008; Larrán, Herrera and Martínez, 2013; Baumgartner and Ebner 2010 and Chow and Chen, 2011).

Additionally, an attempt has been made to demonstrate through various investigations how the adoption of CSR has achieved relevant results in organizations. The largest reference that exists on these studies is found in countries of the European Union and the United States, such as Preston and O'Bannon (1997); Orlitzky, Schmidt and Rynes (2003); Porter and Kramer (2006); Marín and Rubio (2008); Gómez and Uiceda (2013); Valenzuela, Jara and Villegas (2015); Villabón, Pinzón, and Fernández (2016). However, these conclusions come from applied research in companies in developed countries, where the conditions and business culture are different from those of an emerging country, as is the particular case of Mexico, where social conflicts have worsened over time. Over time. problems such as social inequality, environment, quality of life, among others, have forced companies to become aware of and support this solution. These gaps in the literature motivate a more analytical study on CSR.

One of the main problems that appear in the review of the literature on the subject of Corporate Social Responsibility continues to be its measurement, there are empirical studies carried out by Davidson and Worrell (1990), Waddock and Graves (1997), McWilliams and Siegel (2001), Orlitzky et al. (2003), Marom (2006), Porter and Kramer (2006), Wu (2006) and Hull and Rothenberg (2008), despite this, the literature on CSR does not offer conclusive results regarding the relationship between CSR and economic or business performance and much less, the relationship with its legitimacy. For this reason and because of the importance that CSR can have for companies in Mexico, and the legitimacy of their initiatives, it is important to develop research that shed light on the relationship between CSR, legitimacy and financial performance.

A study conducted on environmental managers in 185 companies in the US and Canada (Shelton, 1996), found that the greatest internal obstacle to successfully managing environmental, health and safety initiatives was the inability to convince the high direction. Two years later, in a follow-up survey, managers were asked to identify the most significant barriers to the omission of these environmental initiatives, citing reasons such as: Top management did not identify linear a contribution, management Environmental is perceived more as a requirement than as a strategy (Industry Week, 1998).

The case of Mexico is no different, according to the results of the first study, on the panorama of Social Responsibility in Mexico, carried out in 2013 by ResponSable, an agency specialized in the subject of Responsibility, which tries to compile and publish Various studies that measure the types of impacts of socially responsible companies, through the study managed to obtain important results among which stand out that, 50% of the people in charge of Social Responsibility have never studied the subject, 26% of companies do have mechanisms for identifying stakeholders and do not understand the concept, in addition 58% of large companies do not identify the return on investment in social responsibility programs.

# **Objective**

Identify the Corporate Social Responsibility practices (in its three economic, social and environmental dimensions) that impact the financial performance of Mexican public companies, moderated by the legitimacy of social actions.

# Relationship between financial performance and CSR

Competitiveness is still relevant in the business environment, corporate social responsibility (CSR) has become a matter of strategic importance for many companies. researchers have observed that companies consider CSR as a business strategy, because it contributes to financial results (Orlitzky et al., 2003) or to market value (Mackey, Mackey and Barney, 2007). The foregoing has suggested that companies use CSR as a guide in their decisionmaking process, in this way they could turn CSR into a source of competitive advantage (Porter and Kramer, 2006).

The study of CSR can be divided into two main points of view: the orientation towards stakeholders proposed by Freeman (1984) and the economic orientation of Friedman (1970), Murray and Montanari (1986), Lizt (1996), and Porter and Kramer (2011). The first of these suggests that stakeholders are allies of the company. Under this approach, CSR would represent an act of reciprocity between the company and its stakeholders, based on the company's obligations towards its stakeholders, rather than on the profit objectives (Diez, Blanco, Cruz & Prado, 2014). That is, without CSR activities, these groups could withdraw their support for the company (McWilliams and Siegel, 2001). Therefore, some investigations have criticized this orientation, considering that it represents the submission of the company to pressure from interest groups.

The economic orientation takes into account the relationship between CSR and financial performance. In this sense, the literature has developed different models to measure the relationship between CSR and economic performance (McWilliams and Siegel, 2001).

Empirical studies have achieved mixed results. Margolis and Walsh (2003) were unable to establish a clear relationship between CSR and the economic performance of companies. However, (Orlitzky *et al.*, 2003), they demonstrated that the practice of CSR activities has a positive impact on business results. McWilliams and Siegel (2001) demonstrated that the relationship between CSR and the financial result of a company is neutral.

Other authors explain that investment in CSR activities represents for companies, more than a cost or an obligation, a source of competitive advantage (Porter and Kramer, 2006). In this sense, several studies have shown that CSR activities only produce exceptional results when they ensure that competitors do not imitate their strategy and that it is aligned with the organization's objectives. It has also been observed that CSR helps to differentiate a company's products and services, creating a positive brand image.

# Relationship between financial performance and legitimacy

Retaking that the performance in a company can be measured based on the degree of compliance that any entity has with respect to an expected end and that said performance if supported by intangibles can lead to the achievement of objectives in an efficient way. It follows from the above that legitimacy can be a key factor for the success of. According to Díez, Blanco and Prado (2010), they define that legitimacy in an organization can be considered as a key factor that can lead to the success or, failing that, to the failure of the organization.

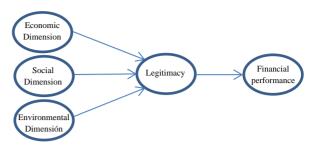
According to Institutional Theory, survival and organizational success are related to legitimacy (Meyer and Rowan, 1977). Likewise, the survival of an organization depends on the degree of support that an organization receives from its interest groups, that is, from the people who grant it legitimacy, the above can be defined as the link between business results and standards associated with the activities of organizations.

Zimmerman and Zeitz (2002), in their publication, mention that according to the economic model, an organization gains access to financial resources when it demonstrates, with appropriate arguments and evidence, that it can achieve a return on investment. In this way, the company will be more attractive to investors, because by allocating financial resources for the acquisition of assets in legitimate organizations and based on financial indicators that can demonstrate the return on their investment, companies will be able to perform better.

Therefore, it can be specified that the organizations with the greatest possibility of survival, in addition to generating financial returns for their shareholders, will be those organizations that are conceived as desirable, correct or appropriate before their stakeholders, in this way society will grant them legitimacy and they will continue to carry out their business activities for which they were created.

For this research, the relationship between the legitimacy of companies' social actions and financial performance will be through a model in which performance is the dependent variable measured through accounting indicators and legitimacy will be a moderating variable, measured by through items specially designed for this work.

The theoretical model proposed for this research presents the interrelationships between of dimensions Corporate Social Responsibility, the independent variables X1 economic dimension, X2 social dimension and X3 environmental dimension, as a moderating variable is L legitimacy which aims to moderate the effect of the relationship between the independent variables (CSR dimensions) and the dependent variable Y (financial performance). Through this explanatory model, the general research hypothesis and operational hypotheses will be tested with the statistical support of the SPSS.



**Figure 1** Explanatory model of the legitimacy of Corporate Social Responsibility (CSR) *Source: Own elaboration, 2018* 

Making an analysis of the literature on Corporate Social Responsibility (CSR), its definitions and previous research related to the subject, it has been identified in studies such as Carroll (1979), Miagan (2001), Orlitzky et al., (2003), García de los Salmones, Herrero and Rodríguez del Bosque (2005), in recent publications Vázquez and Hernández (2013), Manzanares and Gómez (2014), which show that CSR can be studied through its dimensions, which vary depending on the scope of each investigation that is intended to be carried out.

For this research, CSR has been considered as a second order variable, since it is theoretically made up of three other sufficiently differentiated dimensions, the economic, social and environmental dimension.

X1: Economic dimension. To measure the economic dimension of sustainability, we have mainly resorted to analyzing the scales of authors such as Bansal (2005), Alvarado and Schlesinger (2008), Chow and Chen (2011), Ramos et al., (2014), contemplating the Authors' items, a hybrid instrument was generated, which tries to collect the level of commitment that companies have on CSR activities in its economic dimension, in the questionnaire aspects related to long-term profitability are identified, since it is the main objective of the companies, quality of the products and / or services offered by the companies, costs, other income and their relationship with employees, customers, suppliers and the community in general. The instrument measures both the internal and external economic dimension of CSR through 9 items.

X2: Social dimension. In the same way, in this dimension, the Bansal (2005), Alvarado and Schlesinger (2008), Chow and Chen (2011), Ramos et al., (2014) scales were explored, with the intention of selecting items that reflect the actions that companies carry out in practice The social dimension of around CSR. sustainability is related to the impacts of an organization's activities on the social systems in which it operates. In this sense, it is expected that the greater the performance of the company in the initiatives, the better the needs of the company's interest groups will be met, the questionnaire includes aspects related to the fulfillment of commitments with employees and society, through of disclosures and actions that affect internal and external stakeholders, this variable will also be measured with 9 items.

Environmental dimension. *X3*: environmental dimension of sustainability refers to the impacts of an organization on living and inert natural systems, including ecosystems. This dimension tries to collect as far as possible information on the environmental actions carried out by the company for the benefit of society, as well as the obligation it has to preserve the environment, the treatment of its waste, the rational use of natural resources, accident prevention and possible alliances with economic, social and governmental organizations. The items contemplated in the questionnaire are 9 and obey the exploratory study on CSR measurement scales in the literature concentrated in the bank of items in Annex 1, which also considers the internal and external environmental dimension of CSR.

# Moderator variable

Legitimacy. For this research, a recently included variable in the subject of Social Responsibility has been considered as a moderating variable, which has attracted attention in the development of empirical studies. Most of the literature focuses on publications on theoretical studies, based mostly on legitimizing the company through image and reputation. The empirical investigations identified refer to studies from Spain, mostly qualitative studies.

For this research, the definition of Suchman (1995) is retaken, which defines legitimacy as the assumption that the activities of an entity are desirable, correct or appropriate within some socially constructed system of norms, values, beliefs and definitions. With the above, an instrument with items is defined to measure the legitimacy of the actions carried out by socially responsible companies in the practical and cognitive aspect of their implementation, as well as their recognition, that is; in its pragmatic, moral and cognitive dimensions, in this way it is intended to recognize the degree of legitimacy of CSR activities.

# Dependent variable

Y: Financial performance. The most accepted theoretical foundations on the relationship between Corporate Social Responsibility and Financial Results (RF) or business, are the theories that are summarized from the research of Preston and O'Bannon (1997), where it is a question of identifying the different possibilities that the relationship between RSE and RF allows. In the same year, the literature has also identified other explanations for the relationship of variable states. Waddock and Graves (1997), in their research found a positive synergy or virtuous circle between CSR and financial performance. For his part, Gómez (2008) adds to the hypotheses proposed by Preston and O'Bannon (1997) the Hypothesis of Moderating Variables. With it, she tries to explain the neutrality or lack of significance found in said relationship due to the existence of variables that can moderate it.

However, studies have also been identified that demonstrate an inverse relationship between these variables, a reference is the study published by Lima, De Souza and Cortes (2011) where it is shown that in Brazil there is an inverse relationship between CSR and financial performance.

For the purposes of this research, the dependent variable Y (Financial performance) is made up of 6 indicators, which are: Price per share, Market value, Operating profit, Operating cash flow, Economic Value Added and Profit per share.

The variable was determined in the following way. First, the growth generated by each company in the period from 2012 to 2015 was calculated, in percentage terms for each financial indicator. The data for the calculations to determine growth were obtained from the financial statements of the companies for that period.

Subsequently, according to the growth results, the average of the averages of the percentage variations of the financial indicators was calculated, the result of this calculation is equal to 1%, for which a value of 1 was assigned to each indicator that will generate a growth greater than 1%. Therefore, the maximum value that the company can achieve is 6 as a desirable value, as there are six indicators, considering that in all of them it obtained a growth equal to or greater than 1% and 0 as a minimum as it did not achieve growth in any indicator.

Therefore, the statistical representation of the general hypothesis is:

$$Y = \alpha + \beta o + \beta_1 X_1 L + \beta_2 X_2 L + \beta_3 X_3 L + \mu$$

# **Specific hypotheses**

To carry out the verification of the general research hypothesis, it was disaggregated into three specific correlational hypotheses. The specific hypotheses subject to verification in this research are:

H1: The economic dimension of CSR, moderated by legitimacy, has a positive impact on the financial performance of Mexican public companies.

H2: The social dimension of CSR, moderated by legitimacy, has a positive impact on the financial performance of Mexican public companies.

H3: The environmental dimension of CSR, moderated by legitimacy, positively impacts the financial performance of Mexican public companies.

# Methodology

The research is non-experimental since only the level of compliance with the subject of study in question is measured and the variables involved in the present study are not manipulated. It is cross-sectional, due to the type of research, in which the data is collected in a single moment, in a single time, with a correlational-causal approach, whose purpose is to be able to test the established hypothesis.

The techniques used for data collection in this research were, in a first stage, the documentary and bibliographic techniques, these were carried out with the search for information and empirical research about the variables involved, the bibliographic according to the theories and contrasts collected from the literature and finally the field technique, at the time of collecting information directly from the study subjects through a questionnaire specially designed for this.

For the design of this research, it has been decided to divide it into two phases, the first of which is the qualitative study, which has consisted of carrying out a transcendent search in the literature on the variables involved to define the construct, this first methodological phase It comprises the first five stages of the process chosen for the development of the methodology. The second stage corresponds to the quantitative study, starting with the collection of the data, evaluation of the items and determination of the reliability, determination of validity and finally the empirical testing of the proposed theoretical model.

Constructs	Item				
Exploratory	1. Type of company 2. Business sector				
	3. Number of employees				
	4. Development of social				
	responsibility				
	5. Esr badge				
	6. Position of the interviewee				
	7. Type of relationship with csr				
X1	Ec1 profitability				
Economic	Ec2 quality				
dimension	Ec3 input costs				
	Ec4 administrative costs				
	Ec5 other income				
	Ec6 marketing program				
	Ec7 customer service				
	Ec8 support to local suppliers				
	Ec9 certified suppliers				

LANDAZURI-AGUILERA, Yara & RUIZ-PEREZ, Roberto. CSR practices that impact the financial performance of Mexican public companies moderated by the legitimacy of social actions. ECORFAN Journal-Republic of Peru. 2020

	1			
X2	Soc10 sustainability reports			
Social dimension	Soc11 sponsorships			
	Soc12 support for local			
	initiatives			
	Soc13 health and safety in the			
	community			
	Soc14 quality of life in the			
	community			
	Soc15 health and safety for			
	employees			
	Soc16 equal pay			
	Soc17 employee loyalty			
	Soc18 equal recruitment			
X3	Ma19 environmental impact			
Environmental	Ma20 environmental reports			
dimension	Ma21 environmental impact			
	reduction			
	Ma22 environmental accidents			
	Ma23 waste utilization			
	Ma24 environmental alliances			
	Ma25 environmental policies			
	Ma26 rescue and conservation			
	of the environment			
	Ma27 environmental protection			
Moderating	L1 opinion of society			
Legitimacy	L2 recognition by other			
	companies			
	L3 involvement of staff			
	L4 work pressures			
	L5 social pressures			
	L6 tax deduction			
	L7 recognition by stakeholders			
	L8 relationship with			
	stakeholders			
	L9 recognition of social			
	programs			
	L10 community values			
	L11 joint evaluation with stakeholders			
	L12 appropriation of its social			
	responsibility			

Table 1 List of items of independent variables and moderator

Source: Own elaboration, 2019

The financial performance dependent variable was calculated with 6 indicators, based on accounting and market financial information, Price per share, Market value, Operating profit, Operating cash flow, Economic Value Added and Profit per Share. Preston and O'Bannon (1997), Waddock and Graves (1997), Gómez and Ucieda (2013) have used some of these indicators in their research. For this research, the market value and the Economic Value Added or EVA will also be considered.

With the growth results, the average of the averages of the percentage variations of the financial indicators was calculated, the result of this calculation is equal to 1%, so a value of 1 was assigned to each indicator that generated growth greater than 1%. That is, if the indicator results in <1%, its assigned value is = 0 and if it is> 1%, its value is = 1.

#### **Measurement scale**

The measurement scales most used in empirical research for empirical studies on CSR have been ordinal scales structured using Likert-type scales, and which contemplate values between 5 and 7 points of response assignment, granting a central point of indifference as a response option to the subjects interviewed.

Based on the above, and according to the characteristics of the contents of the items in the list generated, the criteria to assess the scaling techniques suggested by Sarabia (1999), for this research it was decided to establish a scale as a measurement format Likert type without a neutral point, that is, with six response assignment points, with the intention of committing the interviewed subject to take a defined position, to guarantee the desired variability, since it is preferable to increase the number of answer assignment positions to reduce it.

Rositas (2014), proposes a semantic intensity scale with even numbers, in which the values not only refer to categories, but also to an increase in tone in the strength with which the variable is presented, that is; when it is not about opinions, but about an intensity that can be orderly increasing. This type of scales without a central point are mostly used when the variables under study have not been tested (related) in previous empirical studies and the literature lacks conclusions in this regard.

#### Population and sample

Considering the temporal context of the research, it was determined that the study will be population-based, applied to a group of companies that share certain characteristics. The unit of analysis on which the study will be carried out will be the Mexican companies listed on the Mexican Stock Exchange (BMV), recognized as especially those Socially Responsible Companies (ESR) by the Mexican Center for Philanthropy (CEMEFI), and those that by carrying out socially responsible practices and publishing their reports or activities through their identity pages will be part of the population subject to study.

Total national companies of the Mexican	134
Stock Exchange	(100%)
Socially responsible national companies	87 (65%)
Companies with the CEMEFI ESR label	60 (45%)
Companies without ESR distinctive with	27 (20%)
sustainability reports	
National companies without ESR distinctive	47 (35%)
and without sustainability reports	

**Table 2** Population

Source: Own elaboration, 2016

#### Sample

However, for the purposes of knowing the sample, the calculation was made where we must consider the probability that the event occurs (p) and that it does not occur (q); always taking into consideration that the sum of both p+q values will invariably always be equal to 1. The sample size formula for a finite population is applied, which is used when it is known how many elements the population has. The calculation was made for the group of N=87 companies recognized as national socially responsible companies.

$$n = \frac{Z^2 p * q * N}{N * e^2 + Z^2 p * q}$$

$$n = 39.38 = 40$$

The result of the sample is for this investigation applying the formula P=Q=50 for the sample, obtaining as a result 40, so it is sought to apply and collect the data of at least 40 companies. For data collection, a response rate between 10 and 20 percent is considered valid in empirical studies with data collection through electronic questionnaires (Chow and Chen, 2012).

ISSN-On line: 2414-4819 ECORFAN® All rights reserved.

#### Results

The determination of the reliability was made through Cronbach's alpha, supported by the SPSS statistical tool, version 21, the objective is to verify that most of the items designed for each variable allow reaching alphas with acceptable values, that is, higher than 0.70, considered as the minimum acceptable for scientific research, according to Sánchez and Gómez (1998) and Cervantes (2005).

Variable	Items removed	Cronbach's alpha
X1 Economic	Eco2	0.840
Dimension		
X2 Social	Soc10, Soc16	0.829
Dimension		
X3 Environmental	Ma19, Ma20	0.874
Dimension	and Ma23	
Moderator	L1, L4, L5, L10	0.869
Legitimacy		0.714

**Table 3** Cronbach's alpha of variables *Source: Own elaboration, 2017* 

The results of the Cronbach alphas for the variables are acceptable according to the theory, values greater than 0.70 and less than 0.90, are considered acceptable values for scientific research in the field of social sciences, according to Sánchez and Gómez (1998) and Cervantes (2005), the items that make up the questionnaire are not correlated and are independent.

#### **Multiple linear regression results**

The proposed model includes the three independent variables through the method of successive steps which has a multiple correlation coefficient of 0.781, and an R squared of 0.610, according to the theory, it is possible to work with models with an R squared greater than 0.25, clarifying that the higher the value of the R squared the model will have a better fit, the result indicates that in the model designed for this research the correlation between the set of moderate predictor variables (X1L, X2L and X3L) and financial performance (Y) the three moderate independent variables explain 61.00% the variability of financial performance, which is 0.781. Hereafter, the statistical data will be analyzed through the introduce method, for the purpose of presenting the results of model 3, which includes the three predictor variables in the summary of the multiple linear regression model.

R square		Standard error of the estimate	0	Sigma Change in F	Durbin W.
.610	.579	1.02175	9.954	.003	1.546

Table 4 Model Summary

Source: Own based on SPSS data, 2019.

In addition, in the table of the summary of the model, the significance of the selected model can be seen, which is significant at 99%, that is; Sig. 0.003, indicates that there is a significant linear relationship between the variables. The standard error of the estimate is low which has a value of 1.02175; therefore, the larger the fit in the model, the error in the estimate will be smaller. For its part, the Durbin-Watson value is 1,546, which indicates that the model has positive self-correlation; In other words, the null hypothesis that the variables are not autocorrelated is accepted. For a significance level of 1%, the values that are in the range between 1.50 and 2.50 are considered to be positively correlated. With these results it can be deduced that the variables are associated or linearly related in the population from which the sample comes, that the model does not have auto-correlation problems and the adjustment of the model according to the statistical results is moderate.

## **Linear regression coefficients**

The IVF is 3,758, lower than the value of 5 established by Petter et al., (2007) and lower than 10 established by Diamantopoulos and Siguaw (2006); therefore, adhering to this rule, the absence of multicollinearity in the model can be confirmed and that each variable contributes significant information to the analysis. The least squares equation of this investigation was as follows:

$$Y = \beta o + \beta_1 X 1 L + \beta_2 X 2 L - \beta_3 X 3 L + \mu$$

 $Y=.700+0.159EcoL+0.161SocL-0.205MaL+\mu$ (t=3.155) (t=3.625) (t=-4.336)

Consequently, and according to the equation, it is observed that an increase in each of the independent variables will also generate a positive impact on financial performance, according to the results of the standardized coefficients it can be observed that the variable that contributes the most to a change in the Y (financial performance), is the independent variable social dimension moderated legitimacy with a value of  $\beta = 0.666$ , therefore it is considered the variable with the greatest weight in the model, followed by the variable economic dimension moderate with a typified beta of  $\beta = 0.620$  and finally the moderate environmental dimension which is highly significant and has an opposite effect on the model by reflecting a negative sign.

On the other hand, the t tests and their critical levels serve to contrast the null hypothesis, the significance values generally less than 0.05 indicate that the null hypothesis should be rejected. Therefore, for this investigation, the null hypothesis is rejected because for the three independent variables there is a 95% confidence level, so it is assumed that the variables are statistically different from zero.

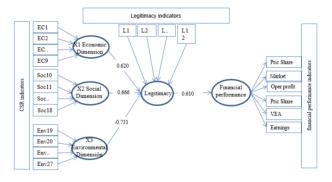


Figure 2 Statistical model

Source: Own elaboration, 2019. Based on the results of the SPSS application.

Once the descriptive and statistical analyzes were carried out, the results were obtained that allow presenting the following set of conclusions about the results of the operating hypotheses.

Hypothesis	β	Sig.	Result
H1: The economic dimension of Corporate Social Responsibility moderated by legitimacy has a positive impact on the financial performance of Mexican public companies.	β = .620	0.003	Accepted
H2: The social dimension of Corporate Social Responsibility moderated by legitimacy has a positive impact on the financial performance of Mexican public companies.	β =.666	0.001	Accepted
H3: The environmental dimension of Corporate Social Responsibility moderated by legitimacy has a positive impact on the financial performance of Mexican public companies.	β =731	0.000	Not accepted

Table 5 Operational hypotheses

Source: Own elaboration based on the results of the multiple linear regression model, 2019

#### Acknowledgments

The development of this research was carried out with the support of PRODEP 2019-2020 resources.

#### **Conclusions**

This research work arises from a questioning derived from the imprecision that is had about the impact that Corporate Social Responsibility has left on the financial performance of public companies in Mexico and the legitimacy of these actions.

Hypotheses 1 and 2 were tested and accepted according to the expected results and based on the theories showing a positive relationship to the moderating effect. Hypothesis 3 was not accepted, a negative relationship between the environmental dimension of CSR by legitimacy and moderated financial performance is an unexpected result in this research, therefore a negative relationship is concluded between the environmental dimension of social responsibility of companies. Mexican companies listed on the Mexican Stock Exchange are moderated by their legitimacy and financial performance.

Through the model, the hypothesis is tested by demonstrating that legitimacy if it moderates the effect of CSR on financial performance and that said effect is positive in the economic and social dimensions, but not in the environmental dimension.

The general objective of the research was to identify the elements of CSR in its three dimensions (economic, social and environmental) that lead to legitimize the social actions of Mexican public companies to improve financial performance through indicators (Price per share, Share performance, Operating income, Operating cash flow, Economic Value Added (EVA), Earnings per Share), according to the results obtained in the investigation, it can be concluded that the objective set was met.

The greatest contribution of this thesis to the literature is the contribution of a valid and reliable scale to measure the legitimacy of the social actions of companies in its three dimensions (pragmatic, moral and cognitive). It is important to note that legitimacy can be understood in different ways, which is why it was essential to develop a questionnaire based on the literature for this variable, from which 12 items were adapted to the particularity of this research. There is relatively recent empirical work on the issue of legitimacy, however valid and reliable scales appropriate for research for this purpose are still scarce.

For future research, it is possible to work on an instrument that allows the validation of the interviewee's responses, on this occasion three control questions were handled to verify that the interviewee was aware of their responses and to be able to take a position, even so it was necessary to eliminate two questionnaires due to atypical data in the control questions and one due to missing data, therefore, it is possible to work on alternative questionnaires applied to a strategically identified stakeholder that gives validity to the answers.

#### References

Alvarado, A. & Schlesinger, M. (2008). Dimensionalidad de la Responsabilidad Social Empresarial percibida y sus efectos sobre la imagen y la reputación: una aproximación desde el modelo de Carroll. Estudios Gerenciales 37, 24 (108), pp. 37-59.

Bansal, P. & Clelland, I. (2004). Talking trash: legitimacy, impression management, and unsystematic risk in the context of the natural environment. *Academy of Management Journal*. 47(1), pp. 93–103.

Baumgartner, R. J., & Ebner, D. (2010). Corporate sustainability strategies: Sustainability profiles and maturity levels. Sustainable Development, 18, pp.76–89.

Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*. 4 (4), pp. 497-505.

Cervantes V. (2005). Interpretaciones del coeficiente de alpha de Cronbach. *Avances en Medición*, 3, pp. 9-25.

Chow, W. S. & Chen, Y. (2011): Corporate Sustainable Development: Testing a New Scale Based on the Mainland Chinese Context, *Journal of Business Ethics*, 105, pp. 519-533.

Chow, W. S. & Chen, Y. (2011): Corporate Sustainable Development: Testing a New Scale Based on the Mainland Chinese Context, *Journal of Business Ethics*, 105, pp. 519-533.

Chow, W. S. & Chen, Y. (2011): Corporate Sustainable Development: Testing a New Scale Based on the Mainland Chinese Context, *Journal of Business Ethics*, 105, pp. 519-533.

Davidson W.N. & Worrell, D.L. (1990). A Comparison and Test of the Use of Accounting and Stock Market Data in Relating Corporate Social Responsibility and Financial Performance, *Akron Business and Economic Review*, 21 (3), pp. 7-19.

De la Cuesta, M. (2004). El porqué de la responsabilidad social corporativa. Boletín Económico del ICE, (2813).

Diamantopoulos, A. y Siguaw, J.A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. British Journal of Management, 17(4), 263-282.

Díez, M. F., Blanco, G. A., Cruz S. A. & Prado, R. C. (2014). Efecto de la Responsabilidad Social Empresarial sobre la Legitimidad de las Empresas. *Anuario jurídico y económico escurialense*, XLVII, pp. 325-348.

Díez, M. F., Blanco, G. A., Prado, R. C. (2010). Legitimidad como factor clave del éxito organizativo. *Investigaciones Europeas de Dirección y Economía de la Empresa*. 16 (3), pp. 127-143.

ISSN-On line: 2414-4819 ECORFAN® All rights reserved. Freeman, R.E. (1984). *Strategic Management: A stakeholder Approach*, Boston: Pitman.

Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, 13 September, pp. 122-126.

García de los Salmones, M.M., Herrero, A. y Rodríguez, I. (2005). Influence of Corporate Social Responsibility on Loyalty and Valuation of Services, *Journal of Business Ethics*, 61, pp. 369-385.

Gómez, C. P. & Ucieda, B. J. L. (2013). La Relación entre Responsabilidad Social Empresarial y Desempeño Financiero: Un Estudio Transversal en los Países de la Unión Europea. *Revista de Contabilidad y Tributación*, 360, pp. 225-260.

Gómez, C. P. & Ucieda, B. J. L. (2013). La Relación entre Responsabilidad Social Empresarial y Desempeño Financiero: Un Estudio Transversal en los Países de la Unión Europea. *Revista de Contabilidad y Tributación*, 360, pp. 225-260. http://www.filantropiatransformadora.org/attac hments/article/198/Shared%20Value%20in%20 Spanish.pdf

Hull, C.E. & Rothenberg, S. (2008). Firm Performance: The Interactions of Corporate Social Performance with Innovation and Industry Differentiation. Strategic Management Journal, 29, pp. 781-789.

Industry Week. 1998. Cracks in the green Wall, 19 (January), pp. 58–68. ISO. (2010). International Organization for Standarization. Disponible en: www.iso.org/iso/home.htm.

Larrán, M., Herrera, J. y Martínez, D. (2013). Relación entre la RSE y el performance competitive en la pequeña y mediana empresa: Un estudio empírico. AECA Revista de la Asociación Española de Contabilidad y Administración de Empresas, (104), pp. 9-12.

Lima Crisóstomo, V., de Souza Freire, F., & Cortes de Vasconcellos, F. (2011). Corporate social responsibility, firm value and financial performance in Brazil. Social Responsibility Journal, 7(2), 295-309.

LANDAZURI-AGUILERA, Yara & RUIZ-PEREZ, Roberto. CSR practices that impact the financial performance of Mexican public companies moderated by the legitimacy of social actions. ECORFAN Journal-Republic of Peru. 2020

Litz, R. A. (1996). A resource-based-view of the socially responsible firm: stakeholder interdependence, ethical awareness, and issue responsiveness as strategic assets. *Journal of Business Ethics*, 15 (12), pp. 1355-1363.

Mackey, A., Mackey, T. B., & Barney, J. (2007). Corporate social responsibility and firm performance: investor preferences and corporate strategies, *Academy of Management Review*, 32(3), pp. 817–835.

Margolis, J.D.; Walsh, J. (2003). Misery Loves Companies: Rethinking Social Initiatives by Business, *Administrative Science Quarterly*, 48 (2), pp. 268-305.

Marín R.J.L., & Rubio B. A. (2008). La responsabilidad social corporativa como determinante del éxito competitivo: un análisis empírico, Revista Europea de Dirección y Economía de la Empresa, 17 (3), pp. 27-42.

Marom, I.Y. (2006). Toward a Unified Theory of the CSP-CFP Link, *Journal of Business Ethics*, 67, pp. 191-200.

McWilliams, A. & Siegel D. (2001). Corporate Social Responsibility. A theory of the firm perspective. *Academy Management Review*, 26 (1), pp. 117-127.

McWilliams, A. & Siegel D. (2001). Corporate Social Responsibility. A theory of the firm perspective. *Academy Management Review*, 26 (1), pp. 117-127

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83 (2), pp.340–363.

Murray, K., & Montanari, J. (1986). Strategic Management of the Socially Responsible Firm: Integrating Management and Marketing Theory. *Academy of Management Review*, 11 (4), pp. 815.

Orlitzky, M., Schmidt, F.L. & Rynes, S. (2003). Corporate social and financial performance: a meta-analysis. *Organization Studies*, 24 (3), pp. 403-411.

Petter, S., Straub, D., and Rai, A. 2007. Specifying Formative Constructs in Information Systems Research, MIS Quarterly 31 (1), pp. 623-656.

Porter, M. E. & Kramer M. R. (2006). Estrategia y sociedad: el vínculo entre ventaja competitiva y la responsabilidad social corporativa. *Harvard Business Review*, *América Latina*.

Porter, M. E. & Kramer M. R. (2011). La creación de valor compartido. *Harvard Business Review, América Latina*.

Preston, L.E. y O'Bannon, D.P. (1997). The Corporate Social-Financial Performance Relationship: A Typology and Analysis, *Business and Society*, 36, pp. 419-429.

Preston, L.E. y O'Bannon, D.P. (1997). The Corporate Social-Financial Performance Relationship: A Typology and Analysis, *Business and Society*, 36, pp. 419-429.

Ramos, M. I. G., Manzanares, M. J. D., & Gómez, F. G. (2014). Propuesta de una escala para la medición de la responsabilidad social corporativa. *Pecvnia. Revista de la Facultad de Ciencias Económicas y Empresariales, Universidad de León*, (18), pp. 1-18.

Rositas Martínez, J. (2014). Los tamaños de las muestras en encuestas de las ciencias sociales y su repercusión en la generación del conocimiento (Sample sizes for social science surveys and impact on knowledge generation). Innovaciones de negocios, 11(22), 235-268.

Sánchez R & Gómez C. (1998). Conceptos básicos sobre validación de escalas. Revista Colombiana de Psiquiatría, 27, pp. 121-130.

Shelton R. (1996). Hitting the Green Wall, summary report. Arthur D. Little; Cambridge, MA.

Suchman, M. C. (1995). Managing legitimacy: strategic and institutional approaches. *The Academy of Management Review*, 20 (3), pp.571-610.

Valenzuela, Jara & Villegas (2015). Prácticas de responsabilidad social, reputación corporativa y desempeño financiero, Revista Administración de Empresas, 55, (3), pp. 329-344. DOI: http://dx.doi.org/10.1590/S0034-759020150308

ISSN-On line: 2414-4819 ECORFAN® All rights reserved. LANDAZURI-AGUILERA, Yara & RUIZ-PEREZ, Roberto. CSR practices that impact the financial performance of Mexican public companies moderated by the legitimacy of social actions. ECORFAN Journal-Republic of Peru. 2020

Vázquez, D. G., & Hernández, M. I. S. (2013). Análisis de la incidencia de la Responsabilidad Social Empresarial en el éxito competitivo de las microempresas y el papel de la innovación. *Universia Business Review*, 38, pp. 14-31.

Villabón, O. G. R., Pinzón, J. V., & Fernández, J. M. R. (2016). La relación entre la responsabilidad social empresarial y el desempeño financiero: estado del arte de estudios y metaanálisis. Sotavento MBA, 27, 112-120.

Waddock, S. & Graves S. (1997). The corporate social performance financial performance ink. *Strategic Managemente Journal*, 18 (4), pp. 303-319.

Waddock, S. & Graves S. (1997). The corporate social performance financial performance ink. *Strategic Managemente Journal*, 18 (4), pp. 303-319.

Zimmerman, M. & Zeitz, G. J. (2002). Beyond Survival: Achieving New Venture Growth by Building Legitimacy, *Academy of Management Review*, 27 (3), pp. 414-431.