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# SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE: EVIDENCE FROM GOODS AND SERVICE FIRMS IN MEXICO

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**ABSTRACT**

*In Corporate Social Responsibility literature, the empirical evidence indicates that adopting a social responsibility program increases firm's financial performance. However, in Mexico few firms are involved in responsible programs and there is little knowledge about their impact in financial performance. The purpose of this study is to analyze the relation between social responsibility and financial performance in Mexican firms participating in an environmental voluntary program in the goods and services sector. We collected information of 41 firms belonging to the goods and services sector, featured in Cable News Network Expansion magazine in the ranking of the 500 most successful firms in Mexico. Firms that participated in an environmental auditing program of the Procuraduria Federal de Protection al Ambiente (Federal Attorney for Environmental Protection) was analyzed. By means of regression analysis, we found that corporate social responsibility programs determine the financial performance of firms. Moderating the effects of company size, the relation's coefficient decreases lightly, but does not lose importance. We conclude that environmental responsibility programs modify the financial performance of firms. Through these programs Mexican firms optimize their energy, water, and reduce their operating costs.*

**JEL:** M14, M21, Q56, C10

**KEYWORDS:** National Environmental Audit Program, Corporate Social Responsibility, Environmental Quality Certification.

## INTRODUCTION

Corporate Social Responsibility (CSR) as a concept has become strong in the last three decades, through the pressure of social groups. These groups have the idea of making companies admit their operating responsibility and social obligations (Frederick, 1978, Cochran, 2007). Taking this into consideration, CSR started with ethical obligations as a response to stakeholders' pressure (Bowen 1970, Carroll, 1979, Wartick & Cochran, 1985). Nevertheless, through time, other obligations have been included, such as: economic (Friedman, 1970) social and political power of institutions (Davis & Blomstrom, 1975), and executive director's philanthropy and values (Freeman 1984, Mahon & McGowan, 1991; Gladwin, Kennelly & Krause 1995). Bowen (1970), states that the diversity of obligations in companies has created a debate in the CSR literature between economics and ethics. From the ethics perspective, the main responsibility of enterprises is towards society and stakeholders. On the other hand, from economic perspective the responsibility of any company is profitability and shareholders. According to Friedman (1970), debates about CSR stand out, because of their vague analysis and lack of accuracy. Firms do not have responsibilities, but persons do have responsibilities, and the unique executive director's responsibility is to look after company profitability. This argument has been supported in different studies that explain the relation connecting CSR and the financial performance of the firms (Cochran & Wood 1984; Ullman 1985, Griffin & Mahon, 1997).

In the "business world" and its relation with environmental responsibility, most decisions taken by directors are influenced by their participation in CSR programs, voluntarily or obligatory. In these administrative decisions, stakeholders have gained an important role (Cochran & Wood 1984, Pava & Krause 1996). For instance, some firms started to participate in a CSR program because they were exposed to be involved in unethical CSR practices. They are forced to make payments via social responsibility programs. These actions, have resulted in a competitive advantage for some firms (Porter & Kramer, 2006; Husted & Allen 2007).

Some companies used CSR programs as tools for implementing business strategies and achieve better corporate results. Several countries have implemented measures for the regulation of companies' obligations using social responsibility programs. Europe regulates firm responsibility by the use of EIRIS (Ethical Investment Research Services). This service, measures company environmental social indicators. In the United States of America the program called TRI (Toxic Release Inventory), measures the toxic releases of companies regulated by north-American law. Developing economies make use of social responsibility indicators such as ETHOS. This denominated "think tank", represents a tool that allows companies to elaborate sustainable development initiatives and commitment with their stakeholders. In Mexico, PROFEPA (Federal Attorney for Environmental Protection) is a federal organism that regulates environmental responsibility of corporations through clean industry and environmental quality programs. These programs are based on guidelines required by General Law on Ecological balance and Environmental Protection in the Field of Self-regulation and Environmental. This organism measures the enterprises environmental performance indicators. PROFEPA manages and regulates the National Environmental Audit Program (PNAA), since 1992. Currently, 1145 companies from the three economy sectors (primary, secondary and tertiary) own an environmental certification. This institution operates with three certifications: Clean Industry, Environmental Quality and, Environmental Quality Tourism

From all 1145 companies in the National Audit Program (PNAA), 32.4% are from the goods and services sector have environmental quality certification. However, in this sector there exist close to 23,313 companies. Thus only 4.9% participate in the environmental responsibility program by PROFEPA. The low index of voluntary participation of these companies in environmental responsibility programs represents an enormous challenge for the institutions to increase Mexican companies' participation. Montiel and Husted (2009) state that participating in an environmental responsibility program such as PNAA, supports the corporations to establish an efficient environmental policy and look after its compliance; these actions bring as a result consumption reduction and economic savings. According to Foster, (2010) clean industry certification helps enterprises to reduce toxic emission levels and let companies to be inspection free while they have the certification.

The results of environmental responsibility programs, as the mentioned PNAA are not well known, due to the low participation of companies. The program has operated for 20 years, and few companies have kept participating. A smaller amount has obtained the certification. In 2010, quality certifications have been diversified to allow enterprises of all sectors to take part in the PNAA program. Nevertheless, in actual time, the number of certified enterprises dropped 15.4%. The purpose of this investigation is the analysis of Mexican companies incorporated in the goods and services sector participating in the National Environmental Audit Program. We examine their financial performance. We aim to provide evidence and comprehend how social responsibility programs transform financial performance of enterprises that have been certified and regulated by public institutions through voluntary programs. In this way they make implications for public policy and corporate sector so the benefits of a social responsibility program can be perceived. The remainder of this investigation is structured as follows: initially the literature reviewed about CSR and financial performance is described, then the method used for data collection and data analysis, finally the results are presented and discussed and the implications are concluded.

## LITERATURE REVIEW

At the beginning of 70's, interest in the relationship between financial performance and corporate social responsibility started to arise from different theoretical perspectives and with different results (Friedman 1970; Bowman, 1975; McGuire Sundgren & Shneeweis, 1988; Cochran & Wood 1984; Porter, 2006; Husted & Salazar 2006, Orsato 2006, Prakesh 2012). A summary of their theoretical approach is given in Table 1. Theoretical debate about the relationship between corporate social responsibility, and financial performance has increased in the last three decades (Friedman 1970; Cochran & Wood 1984; Ullmann 1985). The shareholder's approach states that the only two responsibilities of companies are: rendering of accounts to shareholders and maximization of the firm's profitability or value (Friedman 1970). This view considers a risk to bet on society-company interaction, such as CSR. If a firm generates income by investing in providing services to improve society, it has to be taken in consideration. However, if covering some social demands is only generating costs, they have to be rejected (Chrisman & Carroll, 1984).

Table 1: Theoretical Approach

| Author | Theoretical Approach | Assumption | Variables | Implications |
|---|---|---|---|---|
| Friedman 1970 | Shareholder value theory. *Shareholder Theory.* | Any investment in social demands must generate an increase in shareholders' stocks value. | Capital Shareholder | Shareholder wealth maximization as priority, as a reference in decision-making. |
| Carroll 1991,1984 | Corporate social responsibility pyramid | Four areas make up a corporate social responsibility pyramid: legal, economic, ethical and philanthropic. | Economic performance<br>Social Development | Socially responsible means that profitability and obedience to the law are foremost conditions when discussing the firm's ethics and the extent to which it supports the society in which it exists with contributions of money, time and talent |
| Freeman, 1984 | Stakeholder Theory | The firm has to take into consideration the groups that can be affected or affect the firm with their actions. | Clients Suppliers Performance | All actions from external or internal groups of the firm can affect its performance and the achievement of its goals. |
| Porter, Goold & Luchs 1996. | Competitive advantage strategy | Generating a competitive advantage strategy creates a unique position for the firm. | Cost leadership Differentiation | The basis of above-average performance within an industry is sustainable competitive advantage", taking offensive or defensive actions to create a defendable position in an industry. |
| Barney J. 1991 | The Resources-Based theory of competitive advantage. | Declares that the capacity of a firm to obtain better results that its competitors depends on the unique interaction of resources (human, organizational, and physical). | Tangible resources<br>Intangibles resources | Resources that can lead to competitive advantages must have four characteristics: to be valuable, rare and difficult to imitate and replace by competitors; and the firm has to be organized in order to implement effectively these resources. |
| Hart 1995 | A natural Resource-Based view of the firm. | Establishes that one of the most important drivers of new resource and capability development for firms lies in constraints and challenges by natural (biophysical) environment. | Tangible resources Intangible resources | Develops his conceptual framework with three such interconnected strategies: pollution prevention, product stewardship, and sustainable development. Hart considers as critical resources, continuous improvement, stakeholder integration and shared vision on RSE. |

*Source: Compilation based on different authors. This table shows the theoretical points of view, from which has been analyzed the relationship between economic performance and CSR in the last three decades*

Freeman and Gibert (1988) state that when firms make decisions, they realize that there is another group or external individuals that have some interest in what the firm is doing. These stakeholders, employees, clients, providers and government make decisions as well, and depend on these organizations to achieve

their projects. This is a relationship based on mutual dependency. If one of the parts get damaged it could damage the other part.

In recent years, strategic management has explained the relationship between CSR and financial performance. The relation between competitive advantages strategies and financial performance (Porter & Kramer, 2006), occurs specifically in social and environmental programs. This coincides with the arguments of Reinhard and Stavins (2010) who establish that many firms sacrifice income to appear socially responsible. They invest in environmental programs, either voluntarily or with the purpose of avoiding a sanction from the institutions of the market. When this sacrifice is positive the commitment with CSR is more reliable giving advantages in the management of their products or services.

Competitive strategies based on natural resources have been applied. These strategies start from the firm's capacities to facilitate the activity of an environmentally sustainable economy, a vision based on natural resources (Hart 1995). The view of the firm based on natural resources, emanates from the existing connection between new environmental challenges, firm's capabilities and resources with pollution prevention strategies, product management and sustainable development.

Social Responsibility and Financial Performance Relationship

CSR literature has contributed with different concepts, results and procedures that can be analyzed (Margolis & Walsh, 2001). For about three decades, empirical evidence has been delivered, and theories have been proposed to explain the relation existing between social responsibility and financial performance (Orlitzky, 2006). Different kinds of results are found: positive, negative and combined (Frederick 1978, Griffin & Mahon 1997; Ullman 1985, McGuire Sundgren & Shneeweis, 1988, Carroll 1999, Jensen 2001, Orlitzky, Schmidt & Rynes 2003). Preston and O'Bannon (1993); and Waddock and Graves (1997) state the existence of results regarding the relation between CSR and financial performance. Negative results appeared when companies involved in social responsibility programs invest in modifications or acquisitions that could be executed for other stakeholders. By doing this, companies are incurring in competitive disadvantage. The positive association is the result of the low investment of the company in CSR programs and the benefits are bigger when are reflected in its reputation. Lastly, neutral results are influenced by the existence of several variables taking part that cannot explain the CSR and financial performance relation.

Preston and O'Bannon (1993), a causal sequence between CSR and financial performance. This sequence has been normally studied with CSR as the independent variable, but also as dependent variable. This suggests the relation is studied in both directions and different signs. Freeman (1984) refers the existence of a positive relation between CSR and financial performance, due to the company's ability to satisfy their stakeholders by the means of their environmental strategies and reduce their operating expenses. According to Porter and Kramer (2006), strategies based on philanthropy and ethics generate competitive advantages for the companies. They create prestige and social value. In 1995, Hart points out that strategies based on natural resources generate advantages for companies in expenses, brand, and prestige.

Empirical studies show an impact of social responsibility programs of the companies. For instance Russo and Fouts (1997) study 243 enterprises from all economy sectors. They discovered that environmental strategies, through reduction of consumption and innovation, is related positively with financial performance of the enterprise. The relation was also moderated through the enterprise's growth. Torugsa, O'Donohue, and Hecker, (2012) examined 171 Australian companies of the manufacturing sector. They found a positive relation between CSR and financial performance when adopting environmental strategies to create value for the enterprise. In the same mode, Christmann (2000) studied 88 companies finding that innovation capacities and implementation of environmental practices are determination factors for companies' financial performance. In a similar study with 470 enterprises in Germany, Gamerschlag,

Möller, and Verbeeten, (2011) concluded that these companies produce high financial performance when reporting the results of social responsibility programs implementation. The relationship between CSR and the enterprises financial performance in developing economies and the scarce empirical evidence regarding the relation between CSR and financial performance of enterprises in Mexico, motivate this study. We question why Mexican enterprises adopt environmental responsibility programs? Is there a relation between the adoption of environmental responsibility programs and the financial performance of goods and services Mexican enterprises participating in the PNAA?

## DATA AND METHODOLOGY

The investigation explores character, quantitative, and longitudinal data. The information source was secondary data. The sample included 41 enterprises with environmental certification granted by PROFEPA in 2014. The data-gathering period took place in 2015, when PROFEPA published the report of certified firms in 2014. Table 2 shows the information sources: (1) Institutional Information System (SIIP). This system registers certified enterprises that have environmental quality according to PNNA managed by LA PROFEPA (2) list of the most successful enterprises in Mexico published by CNN Expansion magazine (Cable News Network México).

Table 2: Population, Sample and Source

| Variable | Population | Sample | Source |
|---|---|---|---|
| Social Responsibility<br><br>Financial performance (Net profit + sales Wealth)<br>Enterprise size (number of employees) | 23, 313 goods and services enterprises in Mexico. | Enterprises participating in the National Environmental Audit Program with environmental quality certification in 2014<br>Ranking of 500 most successful enterprises in Mexico published in CNN Expansion Magazine in 2014 | SIEM (Corporate Information Mexican Systems) www.siem.gob.mx<br>SIIP (Institutional Information System PROFEPA)<br>http://www.profepa.gob.mx/<br>Ranking of 500 most successful enterprises CNN EXPANSION<br>http://www.cnnexpansion.com/rankings/2015/las-500-empresas-mas-importantes-de-mexico-de-expansion-2015 |

*This table shows the study variables, the firms in Mexico, the characteristic of the sample and the source where the investigation data was published.*

### Sample

SIIP reports 1,145 certified enterprises in the National Environmental Audit Program of which 663 enterprises are certified as clean industry, 368 enterprises have environmental quality certification and 144 enterprises are certified with environmental quality tourism. As a sample for this study data of 368 goods and services enterprises with environmental quality certification was collected. CNN Expansion magazine informed net profit, gross sales, wealth, assets, capital calls and employees number as economic indicators of 500 enterprises, which were filtered by sector. For this study 254 goods and services enterprises were reviewed. Sampling information from two databases was coordinated (SIIP – CNN Expansion) to filter information of 368 enterprises with environmental quality certification and 254 enterprises in the list of the most successful enterprises in Mexico. By doing this, a total consisting of 41 companies with environmental quality certification and financial performance report from the ranking list of the most successful enterprises in Mexico publish annually by the CNN Expansion magazine was obtained.

The literature examines social responsibility using different measures about corporate social responsibility. These measures have been determined from the reports of different programs such as: TRI, EIRIS, and financial reports such as: FORBES and stock exchange. In this investigation PNAA measurements are determined by the means of PROFEPA environmental quality certification label. The indicators are: The technical aspects covering environmental auditing are classified in two categories: I. Aspects covered by

Mexican Environmental Norms NMX-AA-162-SCFI-2012 and NMX-AA-163-SCFI-2012 and General Law on Ecological Balance and the Regulation to the Environmental Protection in The Field of Self-Regulation and Environmental Auditing. II. Aspects unregulated environmentally with indexes: risk, safety, emergency care, training, international norms and standards, good engineering practice and energy consumption optimization. Enterprises fulfilling these two technical aspects of environmental auditing (I y II) are deserving of environmental certifications of the PNAA managed by PROFEPA. The type of certification depends on the economic sector the enterprises belong to; manufacturing and transformation enterprises obtain Clean Industry certification, tourism enterprises such as, hotels, restaurants, bars and entertainment places with tourist purposes are worthy of Environmental Quality Tourism, and finally goods and services enterprises, for instance, banks, self-service stores, department stores, pharmaceuticals are worthy of environmental quality certification.

Financial Performance

According Orlitzky (2003) financial performance involves obtaining expected economic benefits from enterprises activities as a result of financial viability or as achievement of economical aims. To attain the list of the most successful companies in Mexico, CNN Expansion magazine applied more than 2,000 surveys to capture enterprises corporative information, such as, financial background, enterprise size, net sales and ordered this information as a report consisting of the ranking of 500 most successful enterprises in Mexico. For the purpose of this study, financial performance was measured with annual sales information, profits and assets of the 41 companies with environmental quality certification from PNAA managed by PROFEPA reported in CNN Expansion list. The measurements taken into consideration were:

*Net income:* The consolidated net income of the company's operation. Net income corresponding to minority business enterprises is included (expressed in million Mexican pesos).

*Corporate assets:* are compounded as the audited assets of the company. Therefore, financial performance = annual sales + profits + assets of company

*Company size:* In the literature about CSR, company size has been analyzed as a control variable, moderating variable or intervening variable causing some sort of effect in the relation between CSR and financial performance (Orlitzky 2006; Margolis and Walsh, 2007). Company size is measured with the employment indicator, reported in CNN Expansion magazine list. Employment is the number of company employees, as a result of the addition of employees hire directly for the company, and the employees hired by a services provider company.

## RESULTS

A binary logistic regression analysis of the CNN Expansion magazine list was made. Some 254 goods and services companies were taken into account. Labeling as follows: 1 = companies with environmental quality certification and 0= companies without environmental quality certification Making the logistic regression model the H0 is rejected in terms of probability of the occurrence, by the means of Chi-Square Test. H0 is rejected if $\beta 0=\beta n=0$. In this way, Table 3 displays omnibus tests of the coefficient of the set out model ($\beta \neq 0$ $\beta \neq n$) is found with a level of $P \leq 0.05$. Variables are associated each other. Corporate social responsibility is related significantly with financial performance, this answers the question set out in this investigation that establish a relation between CSR and financial performance.

To evaluate the goodness of fit of this logistic regression model, the indicators displayed in Table 4 were observed for the coefficients of R Square Cox and Snell and Nagelkerke. Table 4 shows that the

Nagelkerke R-Square coefficient explains 18.3% of data variability collected about the number of certified and uncertified companies.

Table 3: The Omnibus Tests of Model Coefficients

| | | Chi-Square | Gl | Sig. |
|---|---|---|---|---|
| Step 1 | Step | 24.931 | 1 | 0.000 |
| | Block | 24.931 | 1 | 0.000 |
| | Model | 24.931** | 1 | 0.000 |
| Step 2 | Step | 3.102 | 1 | 0.078 |
| | Block | 28.033 | 2 | 0.000 |
| | Model | 28.033** | 2 | 0.000 |

*This table displays Chi-Square test of model. Significance of **p≤0.001, shows that variable CSR is significantly linked with financial performance.*

According to Aldás (2011) the best fitting indicator of a logistic regression is its capacity to separate the groups based on estimated probabilities. For this reason, classification matrix is evaluated using Hosmer and Lemeshow test (Table 5). Table 5: Displays the Goodness of Fit Using Hosmer and Lemeshow Test, Where P< .05 This Indicates a Best Fit Model

Table 4: Model Summary of the CSR and Financial Performance

| Step | Logarithm of the Likelihood -2 | Cox and Snell R Square | Nagelkerke R Square |
|---|---|---|---|
| 1 | 189.458[a] | 0.093 | 0.164 |
| 2 | 186.356[a] | 0.104 | 0.183 |

*This table shows results of R Square, where the variability percentage of the collected data from the certified firms is explained.*

Table 5: Hosmer and Lemeshow Test

| Step | Chi-Square | Gl | Sig. |
|---|---|---|---|
| 1 | 8.645 | 8 | 0.373 |

*This table explains data variability between certified and uncertified firms, in order to prove the fitting of the model that indicates an optimal data adjustment.*

From the classification matrix displayed in Table 6, the analysis process reports 85% of companies completely classified. Therefore, the probability with this logistic function is 85%. This indicates the probability that financial performance is related with companies' certification. In step 1 of the 254 companies observed, we find 212 companies are classified as uncertified and 4 companies have behavior of certified companies. Meanwhile 32 of 38 certified companies present behavior of uncertified companies and only 6 companies are classified as certified. In step 2 from 254 observed companies, 209 companies are classified as uncertified and 7 companies have behavior of certified companies. Some 31 of 39 certified companies have behavior of uncertified companies and only 7 companies are classified as certified companies.

Table 6: Classification Matrix

| Observed | | | Expected | | |
|---|---|---|---|---|---|
| | | | Certified | | Percentage Correct |
| | | | Uncertified | Certified | |
| Step 1 | Certified | Uncertified | 212 | 4 | 98.1 |
| | | Certified | 32 | 6 | 15.8 |
| | Overall Percentage | | | | 85.8 |
| Step 2 | Certified | Uncertified | 209 | 7 | 96.8 |
| | | Certified | 31 | 7 | 18.4 |
| | Overall Percentage | | | | 85.0 |

a. Cut value is .500

*This table displays the classification matrix of the analyzed firms*

To make an interpretation of the model displayed in Table 5, coefficients have to be evaluated, which are used to calculate odds or ratio between probability of occurrence and non-occurrence of the event. For this purpose, Table 7 shows (equation variables) the second evaluation.

Table 7: Variables in the Equation

| | | B | Standard Deviation | Wald | Gl | Sig. | Exp(B) | 95% C.I. For EXP(B) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Lower | Upper |
| Step 1[a] | Performance | 0.000 | 0.000 | 17.440 | 1 | 0.000 | 1.000 | 1.000 | 1.000 |
| | Constant | -2.307 | 0.238 | 93.799 | 1 | 0.000 | 0.100 | | |
| Step 2[b] | Performance | 0.000 | 0.000 | 18.499 | 1 | 0.000 | 1.000 | 1.000 | 1.000 |
| | Performance by Employment | 0.000 | 0.000 | 3.814 | 1 | 0.051 | 1.000 | 1.000 | 1.000 |
| | Constant | -2.432 | 0.252 | 92.840 | 1 | 0.000 | 0.088 | | |

*This table illustrates the equation of the model with the interaction of firm's size variable. Variables specified in step 1: Performance.*
*b. Variables specified in step 2: Performance * Employment.*

$$\text{P (state } = \text{ certified)} = \frac{1}{1 + \exp(-2.652 - 0.000\ (\text{performance}))} \quad (1)$$

In the same way, the model shows that in the performance-employment interaction, employment (company size) has significant influence in the model.

Variables in the equation

$$Y = \beta - 2.432\ X1 * X2 \quad (2)$$

Where

Y= Corporate Social Responsibility (Certified company)
X1= Financial performance
X2= Company size

## DISCUSSION AND CONCLUSIONS

This investigation analyzes the link between corporate social responsibility and financial performance of firms belonging to the goods and services sector in Mexico, with the purpose of understanding how the voluntary programs of social responsibility modify the financial performance of the firms. The results show a relationship between CSR and financial performance of goods and services Mexican companies. However, in the context of Mexican companies, corporate social responsibility has a correlation with financial performance. This situation is explained in terms of funds availability. That is, when a company wishes to implement environmental programs, philanthropic or ethical, the adoption of these programs depends on the availability of the economic resources of the company. These results concur with the hypothesis stated by Preston and O'Bannon (1993), which suggests that upper (lower) levels of financial performance lead to upper (lower) levels of CSR. Even when the company desires to adopt measurements and follow the behavior rules, doing so depends on resources availability.

In this economic sense, the requirements for the certification, the PNAA establishes that the company must hire an external auditor, certified by the Mexican Accreditation Entity (EMA), which supervises the established procedures to achieve the certification. In the certification process, companies invest in adopting measures imposed in environmental law to reduce its consumption. These measures go from installation of saving light-bulbs to the acquisition of new technologies. The investment that companies in PNAA make depends on the size of the company and the sector it belongs. Implementation expenses in

goods and services economic sector are minor in comparison with expenses of the industrial economic sector. For the industrial economic sector, guidelines are stricter and implementing new technologies requires a major investment. To achieve PROFEPA environmental certification, companies have to pass the environmentally regulated and unregulated technical aspects, which represents a reduction of energy and water consumption. Therefore, by optimizing energy consumption there are savings for the company.

The conclusions of this study lay the foundations to make recommendations to institutions promoting CSR programs. The goal is to avoid emphasizing only on environmental benefits of adopting a social responsibility program. We also hope entrepreneurs get to know the economic benefits reflected by the consumption reduction and other benefits coming of the certification. In this way, the fear of businessmen of risking their capital in the process could be diminished. The importance of business responsibility must not lay exclusively with governmental institutions and their certification processes. It is necessary to analyze firms from all sectors. The responsibility level is not the same in the goods and services sector compared with other economic sectors. Further research is recommended to analyze the financial performance and social responsibility of firms from all economic sectors with certifications, and evaluate if there is a variation in the results. This study is only one of the three economic sectors of firms in Mexico. Finally, it would be interesting to explore some variables that could moderate the relationship between financial performance and CSR in Mexican firms.

## REFERENCES

Bowen, HR (1953). Social responsibilities of the businessman, New York: Harper & Row.

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

Carroll, A. B. (1999). Corporate social responsibility evolution of a definitional construct. *Business & society*, *38*(3), 268-295.

Cochran, P. L., & Wood, R. A. (1984). Corporate social responsibility and financial performance. Academy of management Journal, 27(1), 42-56.

Cochran, P. L. (2007). The evolution of corporate social responsibility. *Business Horizons*, *50*(6), 449-454.

CNN Expansion (2013) las 500 empresas más importantes de México. http://www.cnnexpansion.com/ ExpokNews, 17 mayo 2013, visto en: http://www.expoknews.com/solo-47-de-las-organizaciones-considera-la-rse-dentro-de-su-plan-de-negocios/

Chrisman, J. J., & Carroll, A. B. (1984). SMR forum: Corporate responsibility–reconciling economic and social goals. *Sloan Management Review*, *25*(2), 59-65.

Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: The role of complementary assets. *Academy of Management journal*, *43*(4), 663-680.

Davis, K., & Blomstrom, R. L. (1975). Business and society: Environment and responsibility. New York: McGraw-Hill

Freeman, R. E. (1984). Stakeholder management: framework and philosophy. *Pitman, Mansfield, MA*.

Freeman, R. E., & Gilbert, D. R. (1988). *Corporate strategy and the search for ethics* (No. 1). Englewood Cliffs, NJ: prentice Hall.
Friedman M (1970), The Social Responsibility of Business Is to Increase Its Profits, Corporate ethics and corporate governance. Springer.

Frederick, W. C. (1978). From CSR1 to CSR2: The maturing of business and society thought (Working Paper 279). Pittsburgh, PA: University of Pittsburgh Graduate School of Business.

Foster, A. (2010). Direct and indirect effects of voluntary certification: Evidence from the Mexican clean industry program.

Gamerschlag, R., Möller, K., & Verbeeten, F. (2011). Determinants of voluntary CSR disclosure: empirical evidence from Germany. *Review of Managerial Science*, *5*(2-3), 233-262.

Gladwin, T. N., Kennelly, J. J., & Krause, T. S. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. *Academy of management Review*, *20* (4), 874-907.

Griffin, J. J., & Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate twenty-five years of incomparable research. Business & Society, 36 (1), 5-31.

Hart, S. L. (1995). A natural-resource-based view of the firm. Academy of management review, 20(4), 986-1014.

Husted, B. W., & de Jesus Salazar, J. (2006). Taking Friedman seriously: Maximizing profits and social performance. *Journal of Management Studies*, *43*(1), 75-91.

Husted, B. W., & Allen, D. B. (2007). Strategic corporate social responsibility and value creation among large firms: lessons from the Spanish experience. Long Range Planning, 40(6), 594-610.

Jensen, M. (2001). Value maximization, stakeholder theory, and the corporate objective function. *European Financial Management*, *7*(3), 297-317.

Mahon, J. F., & McGowan, R. A. (1991). Searching for the common good: A process-oriented approach. Business Horizons, 34(4), 79-86.

Margolis, J. D., & Walsh, J. P. (2001). *People and profits?: The search for a link between a company's social and financial performance*. Psychology Press.

Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2007). Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. Ann Arbor, 1001, 48109-1234.

McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of management Journal*, *31*(4), 854-872.

Montiel, I., & Husted, B. W. (2009). The adoption of voluntary environmental management programs in Mexico: First movers as institutional entrepreneurs. Journal of Business Ethics, 88(2), 349-363.

O'Bannon, D., & Preston, L. (1993). Corporate social responsibility and firm financial performance relationships: A typology and analysis of possible relationships. In *annual meeting of the Academy of Management, Atlanta*.

Orsato, R. J. (2006). Competitive environmental strategies: when does it pay to be green?. *California Management Review*, *48*(2), 127-143.

Orlitzky M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. Organization studies, 24(3), 403-441.

Orlitzky, M. (2006). Links between corporate social responsibility and corporate financial performance: Theoretical and empirical determinants. *Corporate social responsibility*, *2*, 41-64.

Pava, M.L. & C Krause, J. (1996). Corporate Social Responsibility and Financial Performance: The Paradox of Social Cost. Westport, GT: Quorum Books.

Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. Harvard business review, 84(12), 78-92.

Porter, M. E., Goold, M., & Luchs, K. (1996). From competitive advantage to corporate strategy. *Managing the multibusiness company: Strategic issues for diversified groups*, *285*, 285-314.

Preston, L. E., & O'Bannon, D. P. (1997). The corporate social-financial performance relationship. *Business and society*, *36*(4), 419-429.

PROFEPA, Listado de empresas certificadas visto en: http://www.profepa.gob.mx/innovaportal/v/533/1/mx/certificados_expedidos_anuales.html

Reinhardt, F. L., & Stavins, R. N. (2010). Corporate social responsibility, business strategy, and the environment. *Oxford Review of Economic Policy*, *26*(2), 164-181.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. Academy of management Journal, 40 (3), 534-559.

Torugsa, N. A., O'Donohue, W., & Hecker, R. (2012). Capabilities, proactive CSR and financial performance in SMEs: Empirical evidence from an Australian manufacturing industry sector. *Journal of Business Ethics*, *109*(4), 483-500.

Ullmann, A. A. (1985). Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of US firms. Academy of management review, 10(3), 540-557.

Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic management journal*, *18*(4), 303-319.

Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. Academy of management review, 10(4), 758-769.

Wood, D. J. (1991). Corporate social performance revisited. Academy of management review, 16(4), 691-718.

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