Corporate Social Responsibility Effects on Competitiveness: Manufacturing SMEs in Guadalajara, Mexico

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EXECUTIVE SUMMARY

Corporate Social Responsibility (CSR) is the role that companies play for a sustainable development, in order to get a balance between economic growth, social wellness and the correct use of natural resources in the environment. This balance is vital to business operations. Companies have an important part in the solution to challenges we have as a society, in order to have a safe and prosperous environment. Therefore, we are focusing our work on CSR on manufacturing SMEs in the Guadalajara metropolitan area and their effect on competitiveness, which results in better positioning and recognition by society.

Keywords: Social responsibility, Competitiveness, Manufacturing SMEs.

INTRODUCTION

Recently, globalization has impacted companies’ performance in our society (Siegle & Ward, 2007) setting restrictions and requirements to humanitarian labor activities and, in some cases, to obtaining monetary rewards. (Pirson & Lawrence, 2007). Nowadays, it is a fact that the government is not competent enough to meet and cover basic needs for most of the people, and by consequence more options must exist in order to increase population quality lifestyle (Griesse, 2007).

Many companies have adopted social responsibility as part of their activities, for two basic reasons: First: It comes from the problems that society faces everyday as pollution, violence, poverty, etc., which are enough reasons to achieve deeper participation from each person. At this point companies have to show themselves as an example and also to show that they just don’t have profitable purposes. There are also corporations contributing to social and environmental improvement. Second, the competitiveness result that may have this kind of activity, especially for those who are focused on strategies that increases profits, reinforces branding and also increases customer’s loyalty.

By the middle of the 70s, the analysis based on implementation focused on the CSR model. Sethi (1975) proposed a three-stage plan based on the duties and responsibilities that the company has and that it will be including on its operation as: 1. Social responsibility stage, 2. Political stage and 3. Mandatory stage. Later, Carroll (1979) developed a model where he based on social responsibility performance from companies, which defines four interrelated categories: a. Economic, b. Legal, c. Ethics and d. Discretionary.

Drucker (1984) proposes that in order to achieve CSR implementation, it is necessary that businesses take advantage of their social responsibilities as business opportunities, in order to create skills, competencies, better jobs and opportunities for society to access to health services. That’s how the relationship between corporate social performance and financial performance is one of the most researched topics (Chand & Fraser, 2006; McWilliams & Siegel, 2001). There are several studies that examine if CSR has or not a positive effect on financial performance. One of the most frequently arguments is that if the company has a positive influence on its stakeholders it might have a positive impact on its financial position (Allouche & Laroche, 2006). Same case happens about technology, where CSR contributes by developing performance and innovation, because in a long-term technological innovation becomes an important source as a competitive advantage.
Freeman (1994) mentions that the innovation skill is a special resource from the organization, which is part of key areas such as: technology, production, process, strategy, organization, knowledge and experience.

At the same time, some critics argue that the CSR is expensive and the positive effects might become apparent only in the long term. Active members involved from CSR argue that the cost of a social and environmental responsible behavior will return the company over time (Porter & Krammer, 2006). Especially when we talk about the positive relationship that can be found in an environmental and economic performance of the context (Rusao & Fouts, 1997). Then the CSR, for some companies it can generate high costs, and it’s really important to mention that once CSR is implemented is really expensive, but the benefits will be shown in long term and step by step in the future. Keiner (2008) says that CSR is a resource that generates competitive advantage. Moreover, the companies differentiate the reputation and corporate image, with a CSR strategy impacting in the financial performance (Flatt & Kowalczy, 2006; Fernández & Luna, 2007; Lai, 2010; Bear, Rahman, & Post 2010; Orlitzky, Schmidt, & Rynes 2003) getting long term sustainable benefits with a recognized identity as CSR in the society (Bendix & Abratt, 2007).

Therefore, this model can be used in order to increase competitiveness in some sectors that are used for reference for some countries. In Mexico’s case, manufacturing industry is one of the most important parts of the industry, it offers products for domestic and international markets; like Castillo Clavero (1986) says, social responsibility means that when the company is on its real execution, must be aware of the real effects of its actions on the society, internalizing guidelines of behavior that represent a better positive attitude for values and social interests consideration (Carneiro, 2004). This CSR measurement is applied through implementation, involvement, benefits and a social–political and environmental competitiveness aspect based on its costs and financial and technological performance.

**FIGURE 1**

Theoretical Model for Analyzing the Effects of Social Responsibility in the Competitiveness

![Diagram](source: own material)

**METHODOLOGY**

The surveys were applied in 450 SMEs in the manufacturing industry in the city of Guadalajara, Mexico, during August and December 2012. The surveys applied were 512 SME’s but 62 were rejected due information absence, the number of employees was from 11 to 250, simple random sampling was used, and the universe was 2847 SMEs.

Also, there are eight hypotheses that will contribute to this research:

- **H1**: Higher implementation level, better social responsibility.
- **H2**: Higher sustainability level, better social responsibility level.
- **H3**: Higher involvement level, it increases social responsibility level.
- **H4**: Higher social responsibility level, better benefits level.
- **H5**: Higher financial performance level, better business competitiveness level.
- **H6**: Higher cost reduction level, better business competitiveness level.
- **H7**: Higher technology use level, better business competitiveness level.
**H8:** Higher social responsibility level, better business competitiveness level.


To assess the reliability and validation of scales measuring the level of intellectual capital and business competitiveness, a Confirmatory Factorial analysis (CFA) with the method of maximum likelihood and EQS 6.1 software (Bentler, 2005; Brown, 2006; Byrne, 2006).

Rates of statistical adjustment that were considered in the NFI, NNFI, IFC and RMSEA (Bentler & Bonnet, 1980; Byrne, 1989; Bentler, 1990; Hair et al., 1995; Chau, 1997; Heck, 1998).

**ANALYSIS AND DISCUSSION**

Confirmatory Factorial Analysis (CFA) results are represented on table 1 and shows that the model gives well adjustment data ($S$-B$^2$= 1907.8820; $df$= 1321; (p < 0.0000); NFI = .838; NNFI = .938; CFI = .943; RMSEA = .031). At the same time, Cronbach’s alfa and IFC exceed the value 0.70 suggested by Nunally y Bernstein (1994).

**CHART 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Factor Loading</th>
<th>Robust T Value</th>
<th>Cronbach’s alpha</th>
<th>IFC</th>
<th>IVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>RSG1</td>
<td>0.741***</td>
<td>1.000*</td>
<td>0.853</td>
<td>0.854</td>
<td>0.594</td>
</tr>
<tr>
<td></td>
<td>RSG2</td>
<td>0.795***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSG3</td>
<td>0.779***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSG4</td>
<td>0.766***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social-political-environment</td>
<td>RSP1</td>
<td>0.719***</td>
<td>1.000*</td>
<td>0.827</td>
<td>0.852</td>
<td>0.536</td>
</tr>
<tr>
<td></td>
<td>RSP2</td>
<td>0.784***</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>RSP3</td>
<td>0.759***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSP4</td>
<td>0.685***</td>
<td></td>
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<tr>
<td></td>
<td>RSP7</td>
<td>0.709***</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Involvement</td>
<td>RSI2</td>
<td>0.742***</td>
<td>1.000*</td>
<td>0.758</td>
<td>0.814</td>
<td>0.594</td>
</tr>
<tr>
<td></td>
<td>RSI3</td>
<td>0.767***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSI4</td>
<td>0.802***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>RSB3</td>
<td>0.632***</td>
<td>1.000*</td>
<td>0.507</td>
<td>0.618</td>
<td>0.548</td>
</tr>
<tr>
<td></td>
<td>RSB4</td>
<td>0.705***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial performance</td>
<td>FP1</td>
<td>0.672***</td>
<td>1.000*</td>
<td>0.815</td>
<td>0.844</td>
<td>0.521</td>
</tr>
<tr>
<td></td>
<td>FP2</td>
<td>0.762***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FP3</td>
<td>0.749***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FP4</td>
<td>0.707***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FP5</td>
<td>0.714***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Reduction</td>
<td>PC2</td>
<td>0.603***</td>
<td>1.000*</td>
<td>0.732</td>
<td>0.733</td>
<td>0.507</td>
</tr>
<tr>
<td></td>
<td>PC3</td>
<td>0.625***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC4</td>
<td>0.689***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC5</td>
<td>0.634***</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Respect about the discriminant validity evidence, measurement method is given in two ways that are shown on chart 2. First, the range of 90% of confidentiality, none of the individual elements of the correlation factors matrix contains the value 1.0 (Anderson & Gerbing, 1988). Second, the variance extracted between each pair of factors is higher than its corresponding VFI (Fornell & Larcker, 1981). Therefore, based on these criteria we get as a conclusion that the different measurements made on the scale show enough reliability evidence and convergent and discriminant validity. See chart 2.

**CHART 2**

**Discriminant Validity of the Theoretical Model Measurement**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Social Responsibility</th>
<th>Competitiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Responsibility</td>
<td>0.543*</td>
<td>0.360</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>0.275 - 0.468</td>
<td>0.496*</td>
</tr>
</tbody>
</table>

*These values present the estimation between correlation factors with a confidence interval of 90%.

The hypotheses were tested in the theoretical model of competitiveness and business social responsibility, using the Structural Equations Model (SEM) software EQS 6.1 (Bentler, 2005; Byrne, 2006; Brown, 2006).

The nomological validity of the theoretical model was analyzed through the performance of the chi-square test, in which the theoretical model was compared with the model measurement, not finding significant differences (Anderson & Gerbing, 1988; Hatcher, 1994). The results of this analysis are presented in chart 3.

Chart 3 shows the results obtained from the Structural Equations Model, regards to the H1 the results obtained, $\beta = 0.317$, $p < 0.001$, indicates that information research has significant effects in the implementation of manufacturing firms. Also for hypothesis H2, the results obtained, $\beta = 0.318$, $p < 0.001$, suggest that sustainability also has significant effects in social responsibility. In hypothesis H3 the results obtained, $\beta = 0.240$, $p < 0.001$, suggest that involvement also has significant effects in manufacturing firms. In hypothesis H4 the results obtained, $\beta = 0.207$, $p < 0.001$, suggest that the benefits also has significant effects in manufacturing firms.

Also, respect with hypothesis H5 the results obtained, $\beta = 0.115$, $p < 0.001$, indicate that financial performance has significant effects about competitiveness level. In hypothesis H6 the results obtained, $\beta = 0.105$, $p < 0.001$, suggest that cost reduction also has significant effects on business competitiveness. The results obtained in hypothesis H7, $\beta = 0.153$, $p < 0.001$, suggest the technology use also has significant effects on business competitiveness. Finally, the results obtained on hypothesis H8, $\beta = 0.291$, $p < 0.001$, presents that social responsibility has significant effects on business competitiveness.
CHART 3
Results from the Theoretical Model of Business Social Responsibility

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural Relationship</th>
<th>Standardized Coefficient</th>
<th>Robust T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Higher implementation level, better social responsibility.</td>
<td>Implementation → RSE</td>
<td>0.317***</td>
<td>22.149</td>
</tr>
<tr>
<td>H2: Higher sustainability level, better social responsibility level.</td>
<td>Sustainability → RSE</td>
<td>0.318***</td>
<td>18.553</td>
</tr>
<tr>
<td>H3: Higher level of involvement, increase the level of social responsibility.</td>
<td>Involvement → RSE</td>
<td>0.240***</td>
<td>13.227</td>
</tr>
<tr>
<td>H4: Higher social responsibility level, better benefits.</td>
<td>RSE → Benefits</td>
<td>0.207***</td>
<td>7.307</td>
</tr>
<tr>
<td>H5: Higher financial performance level, better business competitiveness.</td>
<td>Financial performance → Competitiveness</td>
<td>0.115***</td>
<td>14.453</td>
</tr>
<tr>
<td>H6: Higher cost reduction level, better business competitiveness.</td>
<td>Cost → Competitiveness</td>
<td>0.105***</td>
<td>10.261</td>
</tr>
<tr>
<td>H7: Higher technology use, better business competitiveness.</td>
<td>Tecnología → Competitiveness</td>
<td>0.153***</td>
<td>20.771</td>
</tr>
<tr>
<td>H8: better social responsibility development, better business competitiveness.</td>
<td>RSE → Competitiveness</td>
<td>0.445***</td>
<td>17.442</td>
</tr>
</tbody>
</table>

$S_{BX2} (df = 1305) = 1884.773;\ p < 0.000;\ NFI = 0.840;\ NNFI = 0.938;\ CFI = 0.944;\ RMSEA = 0.031$

*** = p < 0.001

LIMITATIONS

The first limitation, the sample was based on companies from 20 to 250 workers, excluding companies from 1 to 10 workers, which represents an important amount from total manufacturing SMEs. Future studies should be important to consider this companies to analyze the social responsibility effects on business competitiveness.

A second limitation is that the questionnaire was applied to directors or CEOs, and the results could differ in functional managers. Therefore, in future studies, it would be important to consider customers’ and suppliers’ opinion in order to analyze the obtained results.

Finally, it is important to go beyond technical results: According to the the results, what would happen in SME manufacturing if a sophisticated model for measurement of business social responsibility and competitiveness was executed? What specific activities of the implementation, sustainability, involvement and benefits are the ones that most affect business competitiveness? What specific financial performance activities, cost reduction and use of technology are those that most affect business social responsibility? These and other some questions that might come out could be answered in future researching.

CONCLUSION

This research had shown that SMEs manufacturing in Guadalajara, has a good correlation between the dependent variable competitiveness with the independent social responsibility variable, and the results expressed in this research seems to be
consistent with the relationship between technology use factors, costs and financial performance with variable competitiveness, and also implementation factors, sustainability, involvement and benefits that are related with variable social responsibility.

These SMEs are in a changing process of administrative schemes, with better cognitive and sustainable system, and being conscious in order to create and generate new information, by increasing knowledge and learning on implementation, involvement and benefits of social responsibility in all the organization.

REFERENCES


