The moderating role of stakeholder pressure in the relationship between CSR practices and financial performance in a globalizing world
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The moderating role of stakeholder pressure in the relationship between CSR practices and financial performance in a globalizing world

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Abstract

Studies based on the role of context and stakeholder pressures on the relationship between CSR practices and financial performance are few and inconclusive. Aimed at contributing to filling this gap, the paper is based on data collected in 2013 from the sixth round of the International Manufacturing Strategy Survey (IMSS-VI). Hierarchical regression is used to investigate three hypotheses on the relationships between CSR practices, financial performance and the influence of context and stakeholder pressures. The results show that CSR practices affect financial performance positively, while stakeholder pressures do not moderate this relationship.

Keywords: CSR practices; Environmental Pressure; Social Pressure; Financial Performance

Introduction

Business operations such as manufacturing, outsourcing and reverse logistics may lead to social and environmental problems (Beamon, 1999; Eltayeb et al., 2011). As irresponsible behavior of suppliers is reflected on the buying firm and causes reputation damage and litigation costs (Frank et al., 2007), the pressure on firms from internal and external stakeholders to implement corporate social responsibility (CSR) practices inside as well as in their supply chains is increasing. In effect, the integration of environmental and social practices into business operations has become a competitive factor (Knopf et al., 2011).

The relationship between CSR practices and performance has been widely studied, but the results are mixed (i.e. both positive, negative and neutral effects have been reported). Most of these studies are not 100% reliable due to the omission of contextual variables in this relationship (Saeidi et al., 2015). Firms located in different parts of the
world have different institutions, which creates differences in stakeholder power and lead them to adopt different CSR practices (Lindgreen et al., 2009, Berrone et al., 2013). Few studies have addressed the relationship between CSR practices and performance in developing countries (Zhu et al., 2005), and Goyal et al. (2013) call for more studies in this context. Studies on the relationship between CSR practices and financial performance in developing countries compared to developed countries are missing. Some studies (e.g. Zhu and Sarkis, 2007) have treated external stakeholders pressures in the CSR practice-financial performance relationship, but they only address the environmental issues. Thus, there is a need to investigate the following questions:

1. How do CSR practices affect financial performance?
2. How does context affect this relationship?
3. How do external pressures affect the relationship between CSR practices and financial performance?

Literature review and hypothesis development

Stakeholder pressures and the adoption of CSR practices

According to stakeholder theory, organizations adopt both environmental and social practices in response to stakeholder demands. Previous studies have pointed out various stakeholders, e.g. government, community and other external as well as internal stakeholders (Henriques and Sadorsky, 1996; Kassinis and Vafeas, 2006; Lindgreen et al., 2009; Stigzelius and Mark-Herbert, 2009; González-Benito and González-Benito, 2010; Zyglidoplous et al., 2011; Ervin et al., 2013; Helmig et al., 2013; Lozano, 2013; Thorne et al., 2014). The influence of different stakeholders is different for social versus environmental issues. For example, employees and NGOs influence social sustainability more, while other stakeholders, e.g. government, competitors and customers, influence the environmental side of sustainability more (Meixell et al., 2015). Most studies focus on environmental issues (e.g. Henriques and Sadorsky, 1996; Kassinis and Vafeas, 2006; González-Benito and González-Benito, 2010; Zyglidoplous et al., 2011; Ervin et al., 2013; Helmig et al., 2013; Lozano, 2013; Thorne et al., 2014), some (e.g. Stigzelius and Mark-Herbert, 2009; Lindgreen et al., 2009) consider social issues in addition.

CSR practices and financial performance

Many studies (e.g. Orlitzky et al., 2003; Prado-Lorenzo et al., 2008; Oeyono et al., 2011; Melo and Garrido-Morgado, 2012; Quazi and Richardson, 2012; Lioui and Sharma, 2012; Tang et al., 2012; Wang and Choi, 2013; Boesso et al., 2013; Chang et al., 2013; Saeidi et al., 2015) found a positive correlation between CSR practices and financial performance. Out of these studies, very few investigated the role of intervening (mediating, moderating) variables, for example competitive advantage, reputation and customer satisfaction (Saeidi et al., 2015), high performance work practices (Chang et al., 2013), speed of CSR engagement (Tang et al., 2012), and research and development (Lioui and Sharma, 2012). Some authors found a neutral relationship (e.g. Abbot and Monsen, 1979; Aupperle et al., 1985; McWilliams and Siegel, 2000), some even a negative effect of CSR on financial performance (Weir, 1983; Davidson and Worell, 1988). Thus, although most studies conclude to a positive correlation (Lamond et al., 2008), the CSR practice-financial performance relationship appears complex and results are inconclusive. According to Saeidi et al. (2015), this is due to the omission of intervening variables in the studies reported. The present study focuses on the role of external stakeholder pressures in this relationship and, logically, assumes that role to be (possibly) moderating, rather than mediating.
The role of external stakeholder pressures in the relationship between CSR practices and financial performance

Hoffman and Ventresca (1999) and Zhu and Sarkis (2007) found both market and non-market pressures as moderating variables in the relationship between environmental practices and performance. According to these authors, coercive pressures improve environmental practices (green purchasing and investment recovery), while mimetic pressures (coming from competition) improve economic performance. In contrast to the above studies, Ketikidis et al. (2013) found no significant effect of external pressures. Marshall and McCarthy (2013) concluded that customer pressure affects the relationship between CSR practices and both operational and financial performance. All these studies focused on the environmental dimension of CSR and related pressures, while the influence of the social dimension is still largely undisclosed. This study includes the social as well as the environmental dimension of external stakeholder pressures and CSR practices.

The role of context in the relationship between CSR practices and financial performance

Firms located in different parts of the world have different institutions, which creates differences in stakeholder power and lead them to adopt different CSR practices (Lindgreen et al., 2009; Berrone et al., 2013). In developed countries, due to, amongst others, better education, lower power distance and greater resources, the majority of customers give weight to CSR in their purchasing (Williams and Zinkin, 2008; Li and Zhang, 2010). The existence of powerful NGOs, appeal systems, institutional standards (Chapple and Moon, 2005) and stakeholder dialogue (Roberston, 2009), further adds to stakeholder influence on the adoption of CSR practices in developed countries. Weak institutional structures, poor implementation of regulations, low awareness and low purchasing power of customers (Arevalo and Arvind, 2011; Kemp, 2001), weaken the influence of the stakeholders in developing countries. In the presence of different pressures, companies will adopt different CSR practices and their effect on performance will be dissimilar in developed countries compared to developing countries.

Hypotheses

Based on the above literature review, we formulate the following hypotheses:

\[ H1: \text{CSR practices affect financial performance positively.} \]
\[ H2: \text{External stakeholder pressures (environmental and social) moderate the relationship between CSR practices and financial performance.} \]
\[ H3: \text{The effect of CSR practices on financial performance is different in developed countries compared to developing countries.} \]

Research Design

Sample

The study is based on data from the sixth round of International Manufacturing Survey (IMSS-VI). The data was collected in 2013 from production managers of assembly companies. Targeted at plants with minimum 50 employees, the questionnaire explores the plant strategy, performance, current practices and improvement actions. The initial database comprised of 931 companies from 22 countries worldwide. After cleaning the data, 805 companies remained.

Operationalization

We identified two multi-item constructs and one single item construct in this paper;
external stakeholder pressures, CSR practices and sales performance, respectively. Factor analysis with Varimax rotation gives two factors on the basis of Eigen values greater than one. Several development and design stages of the IMSS survey ensure content validity. All the items have high loadings on their constructs (i.e. > 0.50), which shows high construct validity. Cross-loadings are lower than 0.40, which ensures discriminant validity (Danese and Romano, 2013). The Cronbach alpha values are above 0.70, which shows that reliability is high.

*Table 1 – Factor analysis*

<table>
<thead>
<tr>
<th>Items</th>
<th>CSR practices (Cronbach α = 0.896)</th>
<th>External pressures (Cronbach α = 0.71)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental pressure</td>
<td>-0.093</td>
<td>0.869</td>
</tr>
<tr>
<td>Social pressure</td>
<td>-0.042</td>
<td>0.820</td>
</tr>
<tr>
<td>Environmental certification</td>
<td>0.501</td>
<td>0.308</td>
</tr>
<tr>
<td>Social certification</td>
<td>0.644</td>
<td>0.127</td>
</tr>
<tr>
<td>Energy and water consumption reduction programs</td>
<td>0.690</td>
<td>0.162</td>
</tr>
<tr>
<td>Pollution emission and waste reduction programs</td>
<td>0.673</td>
<td>0.225</td>
</tr>
<tr>
<td>Occupational health and safety management programs</td>
<td>0.543</td>
<td>0.274</td>
</tr>
<tr>
<td>Work/life balance policies</td>
<td>0.819</td>
<td>-0.106</td>
</tr>
<tr>
<td>Supplier assessment</td>
<td>0.814</td>
<td>-0.041</td>
</tr>
<tr>
<td>Supplier training</td>
<td>0.896</td>
<td>-0.199</td>
</tr>
<tr>
<td>Joint efforts with suppliers</td>
<td>0.894</td>
<td>-0.196</td>
</tr>
</tbody>
</table>

*Note:* factors were extracted through principle component analysis and rotation converged in 3 iterations.

CSR practices, the independent variable, is operationalized by asking the respondents to report the effort, ranging from (1) = none to (5) = high, their firm in the last three years put into 1) “environmental certification”, 2) “social certification”, 3) “energy and water consumption reduction programs”, 4) “pollution emission and waste reduction programs”, 5) “occupational health and safety management”, 6) ”work life balance policies”, 7) “supplier assessment”, 8) “supplier training” and 9) “joint efforts with suppliers”. All the items load on the same factor (Cronbach α = 0.896). External stakeholder pressures, the moderating variable, is operationalized by asking the respondents to assess perceived 1) “social pressure and 2) “environmental pressure” on a scale ranging from (1) = very weak to (5) = very strong. Both items load on a single factor (Cronbach α = 0.71). Sales, the dependent variable, is operationalized as improvement in sales relative to three years ago, with (1) = much lower and (5) = much higher.

In addition, we controlled for size, plant age, industry type, investment in sustainability, and investment in research and development. Size is measured by taking log of the number of employees. Plant age is measured by asking when the plant was founded. Industry is measured as a dummy variable with six categories (1 = manufacture of fabricated metal, 2 = computer, 3 = electrical equipment, 4 = machinery, 5 = motor vehicles, 6 = other transport equipment), which reflect ISIC Rev. 4 Divisions 25-30. Investment in sustainability and in research and development are measured as the percentage of sale put into these respective areas.

*Analysis*

In order to investigate the relationship between CSR practices and sales, and the moderating role of external stakeholder pressures on this relationship, we ran a hierarchical regression analysis. Hierarchical regression, as compared to stepwise and simultaneous regression, tests hypotheses based on a sound theoretical background (Petrocelli, 2003), and provides unambiguous results for moderating effects (Evans,
We first entered the control variables size, plant age, industry type, investment in sustainability and investment in research and development in the regression model (Model 0, Table 1). Next, we entered the main independent variables i.e. CSR practices (CSR) and external stakeholder pressures (ESP) in the regression model (Model 1, Table 2). Finally, we entered the interaction term (Model 2, Table 1). A significant interaction term, which also increases $R^2$, is evidence of the existence of the interaction effect. In models 0, 1 and 2 all the controlled variables are significant except for plant age and investment in research and development. CSR practices have a positive effect on sales ($\beta =0.101, p<0.01$). This confirms H1. The interaction term (CSR×ESP) is not significant ($\beta =0.064, p>0.05$). Therefore, H2 is rejected.

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Main effects Model 1</th>
<th>Interaction effects Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>0.212***</td>
<td>0.181***</td>
</tr>
<tr>
<td>Plant age</td>
<td>0.159***</td>
<td>0.156***</td>
</tr>
<tr>
<td>Investment on sustainability</td>
<td>0.126**</td>
<td>0.129**</td>
</tr>
<tr>
<td>Research and development</td>
<td>-0.056</td>
<td>-0.044</td>
</tr>
<tr>
<td>Fabricated metal products</td>
<td>-0.163*</td>
<td>-0.111</td>
</tr>
<tr>
<td>Computer, electronics and optical</td>
<td>-0.128*</td>
<td>-0.100</td>
</tr>
<tr>
<td>Electrical equipments</td>
<td>0.099</td>
<td>0.021</td>
</tr>
<tr>
<td>Machinery</td>
<td>-0.096</td>
<td>-0.037</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>0.043</td>
<td>0.054</td>
</tr>
<tr>
<td>CSR</td>
<td>0.105*</td>
<td>0.111**</td>
</tr>
<tr>
<td>ESP</td>
<td>0.150***</td>
<td>0.155***</td>
</tr>
<tr>
<td>F for the regression</td>
<td>9.889***</td>
<td>11.353***</td>
</tr>
<tr>
<td>F change</td>
<td>9.889***</td>
<td>15.812***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.113</td>
<td>0.154</td>
</tr>
<tr>
<td>$\Delta R^2$ adjusted</td>
<td>0.113</td>
<td>0.041</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01; ***p<0.001

In order to see the differences of the effect of CSR practices on financial performance (sales) in developed versus developing countries, we split the data set into two groups; companies that operate in developed countries and companies from developing countries. Using World Bank (2012) data, countries with an annual Gross National Income per capita (GNI) < USD 11,095 were classified as developing; countries with a GNI above that threshold as developed (see Table 3).

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>Brazil</td>
</tr>
<tr>
<td>Canada</td>
<td>India</td>
</tr>
<tr>
<td>Denmark</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Finland</td>
<td>Romania</td>
</tr>
<tr>
<td>Germany</td>
<td>Taiwan</td>
</tr>
<tr>
<td>Italy</td>
<td>Hungary</td>
</tr>
<tr>
<td>Japan</td>
<td>China</td>
</tr>
<tr>
<td>Netherlands</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows that CSR practices in both developed ($\beta =0.286, p<0.001$) and developing countries ($\beta =0.164, p<0.01$) affect financial performance (sales) positively. There is no statistically significant difference between the effects of CSR practices on financial performance ($t=1.04939697; p>0.05$) in developed countries compared to the
developing ones. This rejects H3.

### Discussion

**Control variables**

Table 2 shows that, except investment in research and development and different types of industries the effect of the other control variables (size, plant age and investment in sustainability) is positive and significant. Thus, larger companies generate more sales compared to small and medium sized companies, and also investment in sustainability increases sales. Furthermore, sales performance levels are not statistically different for different industries.

The analytical results shown in Table 2 support H1. That is, implementing CSR practices significantly increases financial performance. These practices give a firm better operational performance such as lower cost and improved quality and delivery, which enhances customer satisfaction (Mishra and Suar, 2013) and improves companies reputation. Both operational performance and improved reputation enhance the firm’s competitive position and, in effect, financial performance (Pagell and Wu, 2009; de Burgos-Jiménez et al., 2013; Saeide et al., 2015). These findings are in line with previous studies supporting a positive correlation between CSR practices and financial performance (e.g. Boesso et al., 2013; Chang et al., 2013; Wang and Choi, 2013).

Table 2 does not provide support for H2: external stakeholder pressures moderate the relationship between CSR practices and financial performance. Our results are in contrast to that of Hofman and Ventrisca, (1999); Zhu and Sarkis, (2007) and Marshall and McCarthy, 2013). These studies focus on heavy polluting industries and address pressures from different groups of stakeholders such as government, competitors, customers etc. The strong influence of the stakeholders pressure in these studies is responsible for the moderating role of the pressures in the relationship between CSR and financial performance. In contrast to this, our study focused on assembly industry with less environmental and human impact. Also, we did not measure stakeholder pressure from different groups separately. Finally we included the social aspect of the CSR and the social pressure along with the environmental CSR. These reasons may be responsible for the differences in our results compared to the above studies. Our study is inline with Ketidis et al. (2013) who did not find any moderating effect of the stakeholder pressures in the construction industry.

H3 addresses the call to study corporate sustainability and performance in developing
countries (Goyal et al., 2013). The results reported in Table 4 fail to confirm H3. CSR practices affect financial performance in both developed and developing countries, and the differences are not statistically significant. This is quite interesting and encouraging for the development and promotion of CSR in developing countries. Due to global outsourcing, firms from developing countries are adopting CSR practices in order to qualify for doing business with their western partners (Lines, 2004). As a result, corporate governance and economic reforms occur, which move developing countries in the direction of the Anglo-American model of governance (Reed, 2002; Shen, 2004) and lead to an increased adoption of CSR practices in developing countries.

According to Welford (2004), developing countries are still lagging behind developed countries, due to lack of resources, weak institutions, standards and appeal systems and poor implementation (Kemp, 2001; Arevalo and Arvind, 2011). For these reasons there is a common perception among investors that CSR does not pay off in term of financial performance (Roberston, 2009). The present study shows that if firms from developing countries invest in sustainability, it will pay off in terms of financial performance to the extent that the effect of CSR investment on financial performance is not statistically different from that of the developed countries.

Conclusion

Contribution to theory

This study contributes to the literature on the relationship between external stakeholder pressures, CSR practices and financial performance. CSR practices, operationalized in terms of both environmental and social practices, appears to have a positive effect on financial (in this study, sales) performance. Furthermore, social and environmental pressures from stakeholders do not moderate this relationship. Finally, the relationship between CSR practices and financial performance is significant in both developed and developing countries with no significant difference between the two subsamples.

Contribution to practice

The results have several implications for managers. First, by investing and strategically managing CSR operation managers can improve their financial performance. Second, the business case for CSR especially in developing countries should motivate operations managers to invest more and more in CSR practices. Weak institutional structures, poor implementation of laws, low awareness and purchasing power to customers are obstacles in the promotion of CSR practices in developing countries, but the business case for CSR is strong – implementing CSR practices pays off, irrespective of country of location.

Further research

This study has several limitations, which may provide directions for future research. First, we focused only on the sales dimension of financial performance and did not focus on other performance dimensions such as market share or profitability. Future studies should consider these and similar dimensions (e.g. ROS, ROA, market value added, economic value added) as well as environmental and social performance. Second, except for the influence of country development level, we ran our analyses by taking the whole sample into a single model. Separate analyses based on dividing the samples into groups based on, for example, firm size (small, medium, large) and industry type will provide an interesting opportunity for future research (Goyal et al., 2013; Zhu and Sarkis, 2007). Finally, analysis based on data not only from operational managers but also collected directly from external stakeholders will give more
objectivity to the results presented in this paper.

References


Roberston, D.C. (2009), “Corporate social responsibility and different stages of economic development: