Managerial Perceptions on Corporate Social and Financial Performance in the Global Forest Industry

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ABSTRACT

The growing public interest in and global consciousness of environmental and social issues not only have intensified pressures on forest-based industry companies in their efforts to effectively balance potentially conflicting stakeholder demands, but also have forced the management to rethink their business strategies. Although many forestry companies have brought responsible practices into their communication strategies, actual impacts of such strategic shifts are unknown. Proactive and reactive sustainability strategies can lead to different paths of learning and innovation at the business-environment interface for companies, associating with the emergence of unique and various organizational capabilities. Drawing on the resource-based view of the firm (and the stakeholder theory), this present paper explores whether corporate social performance (CSP) can, as an intangible asset, enhance the sustainable competitive advantage and financial performance of forest-based industry companies. It is also of our interest to classify companies’ corporate social responsibility profiles as their response to the changing business environments.

Based on the quantitative survey data collected in 2010-11 from 60 of the world’s leading forest industry companies, our empirical study analyzed the strategic role of corporate social responsibility in managers’ cognition, and whether CSP could be either an internally or externally stakeholder driven multidimensional concept. We also examined whether proactiveness in corporate social responsibility positively impacts on financial performance and self-reported composite performance index (consisting of market share, sales, profitability, and corporate image). The findings from our multivariate analyses indicated that a four dimensional stakeholder orientation of CSR exists in current practices; within the sample proactive responsibility orientation dominates over reactive one and a positive impact of CSP on composite perceived performance index is more clearly presented than on the accounting based financial performance. From a managerial perspective, our study suggests that CSR with explicit orientation towards employees, legal requirements (or government), NGOs, and society represents a promising direction of value creation.

Keywords: corporate social responsibility, forest-based industry, resource-based view, sustainable competitive advantage, responsible leadership

P1
1 INTRODUCTION

Given the increasing importance of corporate social responsibility (CSR) in corporate decision-making, measuring social performance (CSP) is “an important topic to business and society, and measurement is one part dealing seriously with an important matter” (Carroll, 2000, p. 473). By integrating social and environmental concerns in business operations and in interactions with stakeholders, CSR can be interpreted as an extra investment into human capital, the environment, and stakeholder relations (European Commission, 2001; Van Marrewijk, 2003).

A sizable number of empirical studies published primarily in the accounting and management literature during the last thirty years have focused on the relationship between corporate social performance and economic/financial performance (CFP) (for meta-analyses, see e.g. Margolis and Walsh 2001, 2003, 2007; Orlitzky et al., 2003; Salzmann et al. 2005), but no such analyses have been conducted in the context of forest industry. A manager’s attitude toward CSR-related issues is determined by stakeholder power, legitimacy, and urgency (Mitchell et al., 1997). Previous research has shown that managers’ strategic leadership and their support may play a critical role in shaping an organizational values and orientation toward responsible business conduct (Berry and Rondinelli, 1998), and managers’ perception of their company’s identity influence their interpretations of strategic issues as threats or opportunities (Dutton and Dukerich, 1991; Gioia and Thomas, 1996) and thus predict the firm’s corporate social performance (Miles, 1987; Weaver et al., 1999). In an environmentally sensitive sector such as forest industry, companies have introduced responsible business practices into their communication strategies, but actual impacts of such strategic shifts are yet unknown. However, proactive and reactive sustainability strategies can lead to different paths of learning and innovation at the business-environment interface for companies, associating with the emergence of unique and various organizational capabilities (Hart, 1995; Sharma and Vredenburg, 1998).

Drawing on the resource-based view of the firm (and the stakeholder theory), this present paper used an industry survey data of managerial perceptions to examine whether CSP can as an intangible asset enhance the sustainable competitive advantage and financial performance of forest-based industry companies. Our secondary aim is to conceptually examine an existing measurement scale on CSR practices, as well as classify companies’ corporate social responsibility profiles according to degree of perceived positive activeness in these practices.

2 THEORETICAL BACKGROUND AND HYPOTHESES

2.1 CSR, Corporate Strategy and Strategic Groups

Firms must decide how to respond to the competitive threats and opportunities inherent in engaging with social issues. Husted and Allen (2000) describe this decision as “corporate social strategy”, or “the firm’s plan to allocate resources in order to achieve long-term social objectives and create a CA” (p. 25).

Attacking the neoclassical assumptions of firm homogeneity and resource mobility (Barney, 1991), the resource-based theory (RBV) explains the differences in firm performance in terms of
resource characteristic and CA location. Proponents of RBV argue that firms are defined as a bundle of productive resources (Wernerfelt, 1984; Barney, 1991; Amit and Shoemaker, 1993), and a firm’s competitive strategies and performance depend significantly upon firm-specific organizational resources and capabilities, which are more likely to emerge during periods of greater turbulence and organizational change (Wernerfelt, 1984). Firm capabilities evolve as a result of firm response to competitive environments (Barnett, Greve, and Park, 1994; Levinthal and Myatt, 1994), and such capabilities are seen to influence competitive strategies and organizational outcomes (Ginsberg, 1994; Barney and Hansen, 1994). However, these resources must be matched carefully with opportunities in the environment. According to RBV, the priority afforded to CSR depends on the opportunities and threats in the firm’s environment, and the extent to which implementing the strategy might lead to the development of CA. For example, a firm might mobilise internal resources to engage in CSR in order to capture an appropriate opportunity such as potential product differentiation on environmental characteristics, or to counter a significant threat such as damage to competitively valuable reputation.

Along with the vibrant debate concerning CSR and its link with corporate strategy, considerable attempts within the RBV have been devoted to focus on competences and capabilities which could be developed through initiating and implementing appropriate CSR strategies to form a source of SCA for the firm. Intangible resources such as reputation, brand value, skilled employees, and creation of innovation and knowledge have risen in importance as a source of CA, because they are more likely to be valuable, rare, inimitable, and non-substitutable. Firms’ approaches to stakeholder engagement yield clues as to the RBV by involving the ability to establish trust-based collaborative relationships with a variety of stakeholders. CSR research within the RBV tradition has tended to focus on the particular tacit, socially complex, and rare resources that a firm has at its disposal (e.g. Hart, 1995; Buijse and Verbeke, 2003; Verbeke et al., 2006). Such capabilities include stakeholder engagement, higher-order learning and continuous innovation in product design and development, habitat preservation, resource management, waste reduction, and energy conservation (Hart, 1995; Sharma, 1998), improved stakeholder consideration, ethical awareness and issues management (Litz, 1996), integrity capacity (Petrick and Quinn, 2000, 2001), shared vision (Hart, 1995; Sharma and Vredenburg, 1998; Aragon-Correa and Sharma, 2003), and radical transactiveness (Hart and Sharma, 2004). However, such actions require a coherent strategic social vision which would then be implemented throughout the firm (Roome, 1992; Hart, 1995).

The motivation of corporations towards responsibility tends to be a complex bundle of principles and attitudes that are conditioned by various contingencies (Halme, 2007). In addition to the RBV, the strategic group theory within strategic management provides important insights in understanding firms’ motivation for CSR. According to Leask and Parnell (2005), the RBV and the strategic group theory represent different but complementary perspectives on competitive strategies and performance. Strategic group theory provides a means to aggregate firms into meaningful groups based upon their strategies, effectively linking inputs and realised strategies in terms of their activities, whereas the focus on resources fosters an understanding of many processes of the firm important in building CA. An integration of both views may contribute to a more comprehensive understanding of the nature of competition.

Various alternatives exist in the empirical literature classifying businesses in terms of their CSR...
orientation, which are often built on stages of development to sustainable development. Henriques and Sadorsky, 1999) clustered 400 Canadian firms into reactive, defensive, accommodative, and proactive in terms of corporate perceptions of stakeholder importance. Based on the degree of proactivity in environmental management, Hunt and Auster (1990) classified firms into five groups: beginners, fire-fighters, concerned citizens, pragmatists, and proactivists. Hahn and Schneemesser (2006) categorised 195 German companies into sustainability leaders, environmentalists, and traditionalists. More recently, a survey of 401 US firms by Lindgreen et al. (2009) identified four clusters with different CSR practice focus: the first two clusters were traditional capitalistic organizations, and the third and the fourth were extended stakeholder organizations, either with or without emphasis on the natural environment. Approaching from the Global Reporting Initiative (GRI) guidelines with an explicit focus on the forest-based industry, Toppinen et al. (2011) suggested classifying firms into defensive, stuck-in-the-middle, and proactive based on their CSR disclosures. However, in the studies performance differences between strategic groups have often turned out to be insignificant and empirical results sensitive to the model specification and the choice of intervention variables.

2.2 Measuring CSP-CFP

MEASURING CSR

Although the concept and definition of CSP still remain ambiguous (Dahlsrud, 2008), various and more specific definitions matching the development, awareness and ambition levels of organizations have emerged (Aupperle, 1984; Moir, 2001; Van Marrewijk, 2003; Dahlsrud, 2008).

Social dimension in performance has been particularly difficult to capture empirically. It has been argued that there is neither single best way (or “one fits all” solution) to measure corporate social activities (Wolfe and Aupperle, 1991) nor universal ranking of CSR issues and their respective stakeholder groups exists (Mitchell et al., 1997) due to the inherently multidimensional nature of CSR and the complex network of stakeholders who are affected by and grant legitimacy to the firm. While some studies use a one-dimensional CSR measure, such as emissions reduction (e.g., Gouldson and Sullivan, 2007; Ragothaman and Carr, 2008) or charitable donations (Seifert et al., 2003; Crampton and Patten, 2008), with environmental activity being the most common, other papers employ an aggregate measure or index of various CSR indicators such as KLD (e.g., Graves and Waddock, 2000; McWilliams and Siegel, 2000). Alternative methods may be categorised into three main approaches: expert evaluations, single- and multiple-issue indicators, and survey of managers (Maignan and Ferrell, 2000), including force-choice surveys, use of instruments, reputation indices and scales, content analysis of documents, behavioural and perceptual measures, and case studies (Waddock and Graves, 1997). However, since it is difficult to gather actual measures, there is in the literature (Freeman and Reed, 1983; Mitroff, 1983; Freeman, 1984; Evan and Freeman, 1988; Donalson and Preston, 1995; Plender, 1997; Wheeler and Sillanpää, 1997; Carroll, 2000) a strong tendency to rely on stakeholders’ opinions or assessments of performance.

MEASURING CSP-CFP RELATIONSHIP

1 For a comprehensive and updated review on measuring CSP, see Wood (2010).
A sizable number of empirical studies published primarily in the accounting and management literature during the last thirty years have focused on the relationship between corporate social performance (CSP) and economic/financial performance, approaching the subject with a variety of methods, using varying samples and concentrating on different time periods. Qualitative research mainly uses case studies or best practice examples to investigate the influence of CSR on competitiveness, for example, gaining CSR benefits through organizational learning from successful business-NGO partnerships (Argenti, 2004), and cross-sectoral environmental collaborations (Rondinelli and London, 2002). On the other hand, quantitative empirical research mainly use portfolio studies (comparing e.g., portfolios of environmentally and socially proactive and reactive companies), event studies (investigating e.g., market responses after CSR-related events), and multiple regression studies, as identified by Salzmann et al. (2005) and Wagner et al. (2001).

Theoretically, the traditionalist view suggests a negative relationship between CSP and CFP. Advocates of such a view argue that the incorporating of CSR into corporate strategy to meet the demands of various stakeholder groups creates additional constraints in the corporate pursuit of success by incurring greater costs in terms of management time, capital investment, and operating costs (Friedman, 1970; Vance, 1975; Walley and Whitehead, 1994; Jaffe et al., 1995; Gingrich, 1995; Palmer et al., 1995). On the contrast, proponents of stakeholder theory contend that firms must engage in socially responsible behaviour to achieve legitimacy and must respond to a wide array of stakeholders. Meeting the needs of various corporate stakeholders will ultimately lead to favourable financial performance, and vice versa. Failure to meet the expectations of various non-shareowners constituencies will generate market fears which will increase a company’s risk premium and result in higher costs and/or lost profit opportunities (Cornell and Shapiro, 1987). CSR practices aimed at energy conservation, pollution abatement, support for labour rights, and the alike, can be rewarded by, for example, energy-efficiency improved worker productivity, an enhanced corporate reputation, a larger consumer base, and a source of tremendous social progress (see, for example, Freeman, 1984; Hart and Ahuja, 1996; Waddock and Graves, 1997; Konar and Cohen, 2001; Salama, 2005; Porter and Kramer, 2006).

Although extant literature has found mixed results of CSP-CFP relation likely due to, for example, the inconsistent use of variables and methodologies used in the research, a positive relationship seems to predominate. In fact, ‘the overwhelming preponderance of the evidence indicates that CSR-oriented firms perform at least as well as other firms’ (Pava and Krausz, 1996, p. 324), and a positive association is apparent with ‘…very little evidence of a negative association’ (Margolis and Walsh, 2003). A compendium of 95 empirical studies on CSR by Margolis and Walsh (2001) posit that over half of the papers report a positive relationship.

Despite the mixed results of a generic CSP-CFP association, existing empirical and conceptual contributions have argued that different types of CSR-related activities have different implications for CFP (Griffin and Mahon, 1997; Hillman and Keim, 2001; Lankoski 2009), suggesting that CSP has an economic impact within its individual contributes. Therefore our analysis will examine how both the aggregated CSP measure and individual components of it influence on CFP.
In this paper, by following the majority of empirical research findings to date, we assume that the bulk of the available evidence supporting the stakeholder theory is sufficiently strong to hypothesize that the CSP-CFP relationship is positive. CSP is generally considered to be multidimensional (Carroll, 1979; Griffin and Mahon, 1997) and thus a comprehensive assessment of a firm’s social performance should encompass a range of aspects (Carroll, 2000). In that context, this study will examine different stakeholder-related CSP components identified by Turker (2009) as an implementation of multiple stakeholder view with both internal and external orientation. In Turker (2009), the main stakeholder dimensions identified were customers, employees and legal regulation, civil society (including NGOs) and the natural environment (cf. Hart 1995).

HYPOTHESES

In this study, CFP will be assessed through both the financial accounting based performance (1-5a) and the perceived multidimensional construct of satisfaction on company performance (1-5b).

The hypotheses to be tested are as:

**CSP (aggregate)**

**Hypothesis 1a:** There is a positive relationship between corporate social performance and financial performance.

**Hypothesis 1b:** There is a positive relationship between corporate social performance and perceived company satisfaction

**Customer Orientation**

**Hypothesis 2a:** There is a positive relation between customer and legal requirement orientation and financial performance.

**Hypothesis 2b:** There is a positive relationship between customer and legal requirement orientation and perceived company satisfaction.

**Employees & Legal Regulation Orientation**

**Hypothesis 3a:** There is a positive relationship between employee orientation and financial performance.

**Hypothesis 3b:** There is a positive relationship between employee orientation and perceived company satisfaction.

**NGOs & Society Orientation**

**Hypothesis 4a:** There is a positive relationship between NGO and society orientation and financial performance.

**Hypothesis 4b:** There is a positive relationship between NGO and society orientation and perceived company satisfaction.

**Natural Environment Orientation**

**Hypothesis 5a:** There is a positive relationship between environmental orientation and financial performance.

**Hypothesis 5b:** There is a positive relationship between environmental orientation and perceived company satisfaction.
3. DATA AND METHODS

This study was designed to utilize the industry survey data to investigate the construct of CSR in sustainability managers’ cognition, company CSR profile, and the CSP-CFP relationship in the forest-based industry. The questionnaire was designed for the study (also translated from English to Portuguese). With the particular emphasis on CSR practices and orientation, we adopted the measurement scale developed in Turker (2009).

A target data of 750 companies operating under industry code SIC 24 (lumber and wood products) and 26 (paper and allied products) with employment over 5000 were drawn from Thomson One Banker database, with additional 15 companies included from PPI Top100 list. Out of these, 550 were not reached or were ineligible to participate. Of eligible firms 169 contacted persons agreed to participate or asked further information when contacted through telephone, while 46 declined. Out of 169 eligible firms with further contact, 60 completed questionnaires were received through Webpropol between October 2010-March 2011, constituting a response rate of 28%. Geographically the respondents (mainly sustainability officers of the participant companies) represent all major continents; 52% of surveyed companies were headquartered in Europe, 23% in North America, 18% in Latin America and 7% in Asia.

In statistical analysis using PASW Statistics 18 software, principal component analysis (PCA) was conducted on the 17 CSR-orientation-to-stakeholder items (see Table 1 in Appendix) with orthogonal rotation (VARIMAX). In order to determine the CSP profile of the sample companies, using cluster analysis, interdependence techniques were applied. The companies were classified by subjecting the obtained four clustering variables revealed from the PCA. Following the cluster analysis, we tested the impacts of CSP on the financial performance with the presence of two control variables (size, proactiveness). The same specification was used in all the regression models.

The arithmetic means of the corresponding figures of return on assets (ROA) obtained from Thomson Online Bankers database was used as the financial performance indicator in this study. In our regression modelling, financial performance (ROA2007-2009) and a 5-item index of perceived satisfaction (consisting of market share, turnover, sales, profitability, and corporate image) were identified as two dependent variables. The impact of seven independent variables was explored, including aggregate CSP, employees, natural environment, customers & legal requirements, NGOs & society, company proactiveness (items 19 and 20 from Appendix 1), and the number of employees (measuring company size). Each model can be defined as follows, respectively:

**FINANCIAL PERFORMANCE (ROA2007_2009) as the dependent variable**

- (1) $Q_{ROA2007_2009} = \beta_0 + \beta_1 \text{Aggregate CSP} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
- (2) $Q_{ROA2007_2009} = \beta_0 + \beta_1 \text{Employees} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
- (3) $Q_{ROA2007_2009} = \beta_0 + \beta_1 \text{Environment} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
- (4) $Q_{ROA2007_2009} = \beta_0 + \beta_1 \text{Customers & legal requirements} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
- (5) $Q_{ROA2007_2009} = \beta_0 + \beta_1 \text{NGOs & Society} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
PERCEIVED PERFORMANCE SATISFACTION as the dependent variable

(6) $Q_{SAT} = \beta_0 + \beta_1 \text{Aggregate CSP} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
(7) $Q_{SAT} = \beta_0 + \beta_1 \text{Employees} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
(8) $Q_{SAT} = \beta_0 + \beta_1 \text{Environment} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
(9) $Q_{SAT} = \beta_0 + \beta_1 \text{Customers & legal requirements} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$
(10) $Q_{SAT} = \beta_0 + \beta_1 \text{NGOs & Society} + \beta_2 \text{Proactiveness} + \beta_3 \text{Size}$

4. RESULTS

4.1 Factor analysis on CSP

The results of the PCA with orthogonal rotation (VARIMAX) are presented in Table 1. As can be seen, the Kaiser-Meyer-Olkin measure verified that sampling adequacy for the analysis, $KMO = .842$ (‘great’ according to Hutcheson and Sofroniou, 1999). Bartlett’s test of sphericity $\chi^2 (136) = 529.44, P < .001$, indicated that correlations between items were sufficiently large for PCA (Appendix 2). An initial analysis was run to obtain eigenvalues for each component of the data. Four components had eigenvalues over Kaiser’s criterion of 1 and combination explained 69.91% of the variance. Given the sufficient sample size and Kaiser’s criterion on four components, we should be confident that this is the number of components that were retained in the final analysis.

Table 1: Total variance explained and rotated component loading matrix (VARIMAX)

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Components 1</th>
<th>Components 2</th>
<th>Components 3</th>
<th>Components 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Our company participates in activities which aim to protect and improve the quality of the natural environment.</td>
<td>0.801</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Our company makes investments to create a better life for future generations.</td>
<td>0.832</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Our company implements special programs to minimize its negative impact on the natural environment.</td>
<td>0.630</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Our company targets sustainable growth which considers future generations.</td>
<td>0.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Our company supports nongovernmental organizations working in problematic areas.</td>
<td></td>
<td>0.789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Our company contributes to campaigns and projects that promote the well-being of the society.</td>
<td></td>
<td></td>
<td>0.547</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Our company encourages its employees to participate in voluntarily activities.</td>
<td></td>
<td></td>
<td></td>
<td>0.557</td>
</tr>
<tr>
<td>8</td>
<td>Our company policies encourage the employees to develop their skills and careers.</td>
<td></td>
<td></td>
<td></td>
<td>0.693</td>
</tr>
<tr>
<td>9</td>
<td>The management of our company is primarily concerned with employees’ needs.</td>
<td></td>
<td></td>
<td></td>
<td>0.752</td>
</tr>
<tr>
<td>10</td>
<td>Our company implements flexible policies to provide a good work &amp; life balance for its employees.</td>
<td></td>
<td></td>
<td></td>
<td>0.593</td>
</tr>
<tr>
<td>11</td>
<td>The managerial decisions related with the employees are usually fair.</td>
<td></td>
<td></td>
<td></td>
<td>0.671</td>
</tr>
</tbody>
</table>
Our company supports employees who want to acquire additional education. 0.860

Our company respects consumer rights beyond the legal requirements. 0.535

Our company provides full and accurate information about its products to its customers. 0.671

Customer satisfaction is highly important for our company. 0.764

Our company always pays its taxes on a regular and continuing basis. 0.770

Our company complies with legal regulations completely and promptly. 0.894

Sum of squares (eigenvalues) 3.829 3.527 2.888 1.640
% of variance 22.525 20.748 16.989 9.648

Note: Component loadings less than 0.50 have not been reproduced and items have been sorted by loadings on each component.

Table 1 shows the loadings after component rotation. The items that cluster on the same component are as follows:

1) Component 1: including CSR to employees (7th, 8th, 9th, 10th, 11th, and 12th items) and legal requirements (13th item)
2) Component 2: including CSR to the natural environment (1st, 2nd, 3rd, and 4th items)
3) Component 3: including CSR to customers and legal requirements (14th, 15th, 16th, and 17th items)
4) Component 4: including CSR to NGOs (5th item) and society (6th item)

Taking the related literature and the items included in these factors explored from our survey, the corresponding factors can be labelled as CSR to employees, natural environment, customers & legal requirements, and NGOs & society, respectively.

4.2 Cluster analysis of strategic groups

In order to determine the CSR profile of the sample companies, interdependence techniques were applied. The companies were classified by subjecting the four clustering variables revealed from the principal component analysis (PCA). A hierarchical cluster analysis was first conducted using Ward’s method through squared Euclidean distances to assign a company to its nearest cluster (Hair et al., 2010). The number of clusters was determined using the agglomeration schedule.

Following the procedure suggested by Hair et al. (2010), we validated the coherence and stability of the hierarchical cluster method against the results of sequent non-hierarchical cluster analysis, verifying that there were overall inter-cluster differences for each clustering variables. Based on the criterion validity, we were confident that the three-cluster solution retained in the final analysis best fitted our data. Accordingly, the companies in our study were categorised into proactive, stuck-in-the-middle and defensive companies in terms of CSP following typology used in Toppinen et al. (2011). The cluster memberships are presented in Table 2 with a t-test.
indicating strategic groups’ differences in terms of company size, suggesting that companies in strategic groups 1 (proactive) are likely those of largest in size.

Table 2: Final cluster means of CSR profiles in strategic groups.

<table>
<thead>
<tr>
<th>CSR Practices</th>
<th>Strategic Group 1:</th>
<th>Strategic Group 2:</th>
<th>Strategic Group 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Orientation</td>
<td>3.89 (0.49)</td>
<td>3.04 (0.70)</td>
<td>2.37 (0.53)</td>
</tr>
<tr>
<td>Natural Environment Orientation</td>
<td>4.35 (0.50)</td>
<td>3.02 (0.66)</td>
<td>2.70 (1.02)</td>
</tr>
<tr>
<td>Customer &amp; Legal Requirement Orientation</td>
<td>4.79 (0.30)</td>
<td>2.70 (1.02)</td>
<td>2.95 (0.37)</td>
</tr>
<tr>
<td>NGO &amp; Society Orientation</td>
<td>3.61 (0.67)</td>
<td>3.86 (0.90)</td>
<td>2.20 (0.45)</td>
</tr>
<tr>
<td>Number of companies</td>
<td>38</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Average Number of employees</td>
<td>6335 (10987)</td>
<td>3286 (4619)</td>
<td>2539 (2784)</td>
</tr>
</tbody>
</table>

Note: The figures in the table are mean values with standard deviations in parentheses.

4.3 Regression models

DESCRIPTIVE STATISTICS

The descriptive statistics in Table 3 show some significant correlations between financial performance, CSP, and control variables explored in this study. For example, Employee orientation significantly correlates to ROA2007-2009 and aggregate CSP. Perceived performance significantly correlates to ROA2007-2009, aggregate CSP, Employees, Environment, and Customers & legal requirements orientations, respectively.

Table 3: Descriptive statistics and correlation matrix.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>ROA (2007-09)</th>
<th>Aggregate CSP</th>
<th>Employees &amp; legal requirements</th>
<th>Environment</th>
<th>Customers</th>
<th>NGOs &amp; society</th>
<th>Satisfaction</th>
<th>No. of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA (2007-2009)</td>
<td>89</td>
<td>13.19</td>
<td>18.64</td>
<td>18.02</td>
<td>2.92</td>
<td>5.57</td>
<td>0.425**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSP</td>
<td>59</td>
<td>2.15</td>
<td>4.00</td>
<td>3.75</td>
<td>0.65</td>
<td>0.425**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>58</td>
<td>1.95</td>
<td>3.00</td>
<td>3.54</td>
<td>0.75</td>
<td>0.478**</td>
<td>0.819**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Environment</td>
<td>59</td>
<td>1.25</td>
<td>5.00</td>
<td>3.84</td>
<td>0.00</td>
<td>0.199</td>
<td>0.874**</td>
<td>0.414**</td>
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</tr>
<tr>
<td>Customers &amp; Legal Requirements</td>
<td>58</td>
<td>2.50</td>
<td>5.00</td>
<td>4.59</td>
<td>0.00</td>
<td>0.259</td>
<td>0.627**</td>
<td>0.877**</td>
<td>0.435**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs &amp; Society</td>
<td>59</td>
<td>1.00</td>
<td>5.00</td>
<td>3.05</td>
<td>0.00</td>
<td>0.096</td>
<td>0.797**</td>
<td>0.585**</td>
<td>0.619**</td>
<td>0.252</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite index for perceived performance</td>
<td>58</td>
<td>3.00</td>
<td>5.00</td>
<td>3.35</td>
<td>1.50</td>
<td>0.340*</td>
<td>0.462**</td>
<td>0.579**</td>
<td>0.376**</td>
<td>0.388**</td>
<td>0.221</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

### Control variables

| No. of employees | 80 | 100 | 59500 | 5963 | 0186 | -0.095 | 0.119 | 0.082 | 0.017 | 0.061 | 0.170 | 0.045 | 1.000 |
| No. of employees | 57 | 1.00 | 5.00 | 3.04 | 1.12 | 0.362 | 0.478** | 0.499** | 0.364** | 0.376** | 0.221 | 0.260 | 0.124 |

Note: Individual coefficients are statistically significant at the 0.05 level (*), and 0.01 level (**). All CSP variables are z-transformed and thus follow a normal distribution (mean = 0; SD = 1).

Self-reported proactiveness and company size were not found to be statistically significant in any of the models. As shown in Table 4, the adjusted R²s of the five regression models were in the range of 0.114 to 0.275, being highest in the employee orientation model and according to F-test Models 3 and 5 are not significant.

Table 4: Regression analysis on financial performance (mean ROA2007-2009 as dependent variable)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate CSP</td>
<td>3.59 (2.54)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee orientation</td>
<td></td>
<td>3.51 (3.02)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer &amp; Legal Requirement orientation</td>
<td></td>
<td>2.05 (1.56)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs &amp; Society orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.67 (0.83)</td>
<td>0.38 (0.47)</td>
<td>1.37 (1.67)</td>
<td>1.39 (1.83)</td>
<td>0.91 (1.18)</td>
</tr>
<tr>
<td>No. of employees</td>
<td>-9.65 (-1.20)</td>
<td>-8.16 (1.06)</td>
<td>-6.30 (-0.74)</td>
<td>-7.12 (-0.86)</td>
<td>0.00 (0.00)</td>
</tr>
<tr>
<td>Constant</td>
<td>-12.50 (-2.73)</td>
<td>-10.71 (-1.04)</td>
<td>-4.54 (-1.13)</td>
<td>-10.99 (-1.83)</td>
<td>-6.42 (-2.07)</td>
</tr>
</tbody>
</table>

R² = 0.232; Adj R² = 0.17; F=3.829; P < 0.05
R² = 0.275; Adj R² = 0.218; F=4.809; P < 0.01
R² = 0.114; Adj R² = 0.044; F=1.622; P > 0.05
R² = 0.156; Adj R² = 0.089; F=2.336; P > 0.05
R² = 0.220; Adj R² = 0.158; F=3.336; P < 0.05
The figures in the table are regression coefficients with t values in parentheses.

*Significant at the 0.05 level, **Significant at the 0.01 level

- Aggregate CSP positively effects to ROA2007_2009, confirming Hypothesis 1a (H1a);
- Employees orientation positively impacts to ROA2007_2009, confirming Hypothesis 2a (H2a);
- Nature Environment or Customers & Legal Requirements was not found to be significant in the corresponding models, rejecting both Hypothesis 3a (H3a) and Hypothesis 4a (H4a);
- NGOs and Society is positively effecting ROA2007_2009, confirming Hypothesis 5a (H5a);

Table 5: Regression analysis on perceived company performance (mean Satisfaction as dependent variable)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
<th>Model 9</th>
<th>Model 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate CSP</td>
<td>0.93 (2.77)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Orientation</td>
<td></td>
<td>0.71 (2.45)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Environmental Orientation</td>
<td></td>
<td></td>
<td>0.61 (2.51)</td>
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</tr>
<tr>
<td>Customer &amp; Legal Requirement orientation</td>
<td></td>
<td></td>
<td></td>
<td>0.91 (2.85)</td>
<td></td>
</tr>
<tr>
<td>NGOs &amp; society orientation</td>
<td></td>
<td></td>
<td></td>
<td>0.21 (0.92)</td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.09 (0.43)</td>
<td>0.113 (0.570)</td>
<td>0.15 (0.81)</td>
<td>0.25 (1.46)</td>
<td>0.27 (1.37)</td>
</tr>
<tr>
<td>No. of employees</td>
<td>-1.39 (-.07)</td>
<td>8.30 (0.04)</td>
<td>3.20 (0.16)</td>
<td>7.07 (0.04)</td>
<td>4.55 (0.02)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.58 (2.31)</td>
<td>3.48 (3.78)</td>
<td>3.52 (3.95)</td>
<td>1.42 (0.97)</td>
<td>4.88 (6.82)</td>
</tr>
</tbody>
</table>

\[
R^2 = 0.187; \\
\text{Adj} R^2 = 0.141; \\
F = 4.000; P < 0.05
\]

\[
R^2 = 0.164; \\
\text{Adj} R^2 = 0.116; \\
F = 3.401; P < 0.05
\]

\[
R^2 = 0.168; \\
\text{Adj} R^2 = 0.120; \\
F = 3.512; P < 0.05
\]

\[
R^2 = 0.193; \\
\text{Adj} R^2 = 0.147; \\
F = 4.159; P = 0.01
\]

\[
R^2 = 0.083; \\
\text{Adj} R^2 = 0.030; \\
F = 1.564; P > 0.05
\]

As can be seen from Table 5, the adjusted $R^2$’s of the five regression models were in range of 0.083 to 0.193, being highest in the customer model. According to F-value except for model 10, all regressions are statistically different from zero.

- Aggregate CSP is positively correlated to Satisfaction, supporting Hypothesis 1b (H1b);
- Employee orientation is positively correlated to Satisfaction, supporting Hypothesis 2b (H2b);
- Environment is positively correlated to Satisfaction, supporting Hypothesis 3b (H3b);
- Customers & Legal Requirements orientation is positively correlated to Satisfaction, supporting Hypothesis 4b (H4b);
NGOs & Society were not found to be significant in any of the models, rejecting Hypothesis 5b (H5b).

To sum up, the results of the regression analyses confirm H1a, H2a, H5a, H1b, H2b, H3b, and H4b, and reject H3a, H4a, and H5b.

5. DISCUSSION AND CONCLUSIONS

In the light of the results of our research, we could conclude that explicit dimensionality of CSP does exist, thus validating the scale developed in Turker (2009). We also found that in the current practices of forest industry companies, CSR is dominantly externally driven, suggesting that many forest companies are adopting a legitimacy-based strategy in dealing with environmental and social issues. Companies involved in natural resource extraction, such as forestry, have significant impacts on the environment and close interactions with local communities, and therefore must pay more attention to their relationships with governments (e.g., legal compliance), communities (e.g., workforce, raw materials), environmental NGOs (e.g., risk reduction) to maintain their social license to operate. Our results are in line with Oliver (1991), who argued that the strategic choice adopted by firms is determined by institutional pressures and the influence of important stakeholders.

Our results support the common consensus and expectation that responsible business conduct positively contributes to financial performance and composite measure of perceived performance satisfaction, suggesting that CSP can be considered as a source of value creation for the firm. The positive return on CSR initiatives in terms of profitability (measured by ROA) is promising as such findings provide greater motivation and incentives for firms that wish to embrace CSR to create resources (assets) and capabilities (routines) that may lead to sustainable CA and superior economic performance.

However, as one of the five strategic dimensions of CSP identified by Burke and Logsdon (1996), proactiveness was not found to have significant impact on either financial performance or composite perceived performance. This lends some empirical support to previous studies which argue that CSR has much broader effects than the simple measure of financial performance on the competitiveness of the firm (Burke and Logsdon, 1996), and certain dimensions of CSP might not strengthen the CA of the firm under certain conditions (Dentchev, 2004). Further research is still required to understand the strategic relevance of CSP (Husted and Allen, 2004).

The results from regression modelling also suggest that CSR with explicit orientation towards employees, legal requirements (or government), NGOs, and society represent a promising direction of value creation, while, to the majority of the companies, customer orientation and concerns for natural environment (especially to extract industries such as forestry) have long been firmly embedded in the social fabric of the firm. Such observations echo the findings of Henriques and Sadorsky (1999) who reported that not all stakeholders are equally important and that some carry more weight than others (at a time), suggesting that a shift in power and pressure to other stakeholders can occur under different contexts. Literature on strategic human resource management suggest that, to be able to strengthen and convert their relationships with employees...
into strategic assets, companies need to invest in understanding the strategic importance of employees, respecting the values they deserve, and promoting high commitment human resource activities to enhance employees’ internal development (Lado and Wilson, 1994; Wright et al., 1994; Ulrich, 1997; Berman et al., 1999). NGOs, as explicitly value-based organizations outside the core corporate structure, are intermediaries building bridges between businesses and society (Brown, 1993; Burt 1992; Evans 1995; Westley and Vredenburg 1991). Through business collaborations, NGOs provide various functions for their business partners, including risk management and reduction, new product and market development, building barriers to entry, creativity and change (Waddell, 2000).

However, the results of this study must be viewed with caution. Our limitations also provide motivation for further research directions. First, with the returned responses from individual managers that tended to represent the firm’s overall perception (or cognition) on corporate social responsibility and performance, we do not know whether the companies that did not respond behave substantially differently from those that did respond. Second, owing to the nature of cross-sectional data, it is not possible to discern causality among our constructs. The current study was only able to measure CSP and CFP in the single year, leaving the long-term consequences of certain decisions affecting CSP-CFP relationship unexplored. For example, it is conceivable that more profitable firms with slack resources seem to be more willing to invest more in CSR. Third, only a limited number of explanatory variables were available and used in the current study. It would be worthwhile to include a wider range of internal and external indicators measuring CSR scales, financial performance, firm-specific characteristics, and mediators of both internal and external pressures. Fourth, we should consider that using a sample from a very specific industry, such as the forest-based industry companies, is a potential restriction on the generalizability of the results because CSR is highly context-specific and multidimensional. Thus, we propose to carry out further research attempting to ascertain the factors that influence the construction of CSR and social performance in other industries. Lastly, but not least, the literature reminds us that the stage of development of a business can also affect the business value of various stakeholder relationships. According to RBV, a firm’s value creation emanates from the fit of internal capabilities to the strategy pursued, and its relationship with the competitive environment (Spanos and Lioukas, 2001). Further research should need to explore best practices and failure, as well as industry- and firm-specific factors in different context for effective and successful organizational learning.

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2 For a better understanding on the pathway of CSR, we recommend two well-recognized studies here. Sethi (1975) developed a three tiers model for CSR, which include 1) social obligation (a response to legal and market constructs); 2) social responsibilities (congruent with societal norms); 3) social responsiveness (adaptive, anticipatory, and preventive). Sethi’s second tier requires that a firm move beyond compliance and recognize and internalize societal expectations, and the third tier requires that a firm develop the competence to navigate uncertainty, maximize opportunity and engage effectively with external stakeholders on issues and concern. Similarly, Zadek (2005) identified three generations of companies in relations to their responsible competitiveness: first-generation companies have a short-term, pain alleviation strategy; second-generation companies establish strategic planning and risk management policies; third-generation companies incorporate the concept of social responsibility into their strategy.
ACKNOWLEDGEMENT

Financial support from Academy of Finland grants 127889 is gratefully acknowledged. Exceptionally valuable research assistance was provided by Anni Tuppura (in survey and questionnaire design) and Kirsi Sinkkonen (in data collection), from Business School, Lappeenranta University of Technology. All remaining errors are our own.

REFERENCES


Appendix 1: CSR to stakeholder items (modified from Turker 2009).

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Our company participates in activities which aim to protect and improve the quality of the natural environment.</td>
</tr>
<tr>
<td>2.</td>
<td>Our company makes investments to create a better life for future generations.</td>
</tr>
<tr>
<td>3.</td>
<td>Our company implements special programs to minimize its negative impact on the natural environment.</td>
</tr>
<tr>
<td>4.</td>
<td>Our company targets sustainable growth which considers future generations.</td>
</tr>
<tr>
<td>5.</td>
<td>Our company supports nongovernmental organizations working in problematic areas.</td>
</tr>
<tr>
<td>6.</td>
<td>Our company contributes to campaigns and projects that promote the well-being of the society.</td>
</tr>
<tr>
<td>7.</td>
<td>Our company encourages its employees to participate in voluntarily activities.</td>
</tr>
<tr>
<td>8.</td>
<td>Our company policies encourage the employees to develop their skills and careers.</td>
</tr>
<tr>
<td>9.</td>
<td>The management of our company is primarily concerned with employees’ needs.</td>
</tr>
<tr>
<td>10.</td>
<td>Our company implements flexible policies to provide a good work &amp; life balance for its employees.</td>
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<tr>
<td>11.</td>
<td>The managerial decisions related with the employees are usually fair.</td>
</tr>
<tr>
<td>12.</td>
<td>Our company supports employees who want to acquire additional education.</td>
</tr>
<tr>
<td>13.</td>
<td>Our company respects consumer rights beyond the legal requirements.</td>
</tr>
<tr>
<td>14.</td>
<td>Our company provides full and accurate information about its products to its customers.</td>
</tr>
<tr>
<td>15.</td>
<td>Customer satisfaction is highly important for our company.</td>
</tr>
<tr>
<td>16.</td>
<td>Our company always pays its taxes on a regular and continuing basis.</td>
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<tr>
<td>17.</td>
<td>Our company complies with legal regulations completely and promptly.</td>
</tr>
<tr>
<td>18.</td>
<td>The strategy of the company incorporates environmental factors such as carbon emissions and global climate change.</td>
</tr>
<tr>
<td>19.</td>
<td>We are a pioneer in social responsibility issues.</td>
</tr>
<tr>
<td>20.</td>
<td>We place more emphasis on social responsibility than in general in our industry.</td>
</tr>
</tbody>
</table>
Note: 18th, 19th and 20th were not included for factor analysis. 19th and 20th items were computed to form the variable Proactiveness for sequent analysis.

Appendix 2: Correlation matrix of the CSP scale

<table>
<thead>
<tr>
<th>Item No.</th>
<th>1</th>
<th>2</th>
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<th>4</th>
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<td>0.204</td>
<td>0.362</td>
<td>0.417</td>
<td>0.358</td>
<td>0.319</td>
<td>0.468</td>
<td>0.744</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>0.281</td>
<td>0.129</td>
<td>0.227</td>
<td>0.195</td>
<td>0.276</td>
<td>0.142</td>
<td>0.139</td>
<td>0.205</td>
<td>0.154</td>
<td>0.318</td>
<td>0.282</td>
<td>0.232</td>
<td>0.369</td>
<td>0.484</td>
<td>0.649</td>
<td>0.686</td>
</tr>
</tbody>
</table>

Note: Bold-face values indicate correlations significant at the 0.01 level. Values marked by green colour represent no significant correlation.