CSR and Financial Performance – Linked by Innovative Activities

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Abstract

The purpose of the present study was to investigate the relationships between different dimensions of corporate social responsibility (CSR), as well as the mediating role of innovation between CSR dimensions and financial performance. Data was collected with questionnaires from 321 managers of Slovene companies to test a conceptual model with structural equation modeling (SEM). The field-research results were that CSR is the most relevant dimension for employees. It positively influences CSR to the natural environment, to customers, and to the local community. The mediating role of innovation between CSR and financial performance was confirmed. The results also showed that CSR to the natural environment and CSR to customers positively affect innovation, while CSR to the local community had a negative impact. In addition, the positive impact of innovation initiated by CSR on financial performance was confirmed. The principal limitation of this study was its focus on Slovenian firms and the fact that data was obtained from only one manager in each firm. Slovene companies should consider the global initiatives supportive of CSR as the way to create opportunities for innovation and differentiation from other companies and increase their financial performance. The conceptual model developed and tested on the data obtained by Slovene managers gives new perspective on the impacts of social responsibility, innovation and financial performance. It highlights the areas in which the theory of social responsibility needs more research.

Keywords: corporate social responsibility (CSR), Slovene companies, innovation, financial performance, structural equation modeling (SEM)

Introduction

The concept of corporate social responsibility (CSR) is not new and the interest in CSR is still spreading (Bontis & Serenko, 2009; Wagner et al., 2009). However, the European Commission (EC, 2011) found very few enterprises embracing CSR, as an organization’s responsibility for its impacts on society as defined in ISO 26000 (ISO, 2010). Executive managers remain doubtful about engaging in
A literature review suggests that there is still a lack of understanding about the ways in which CSR initiatives can both rely on innovation processes and improve performance, (Perrine, 2013; Lockett et al., 2006). CSR and innovation diminish one-sided, abusing, short-term and narrow-minded practices, but require more systemic values, culture, ethics and norms from decisive persons and bodies (Zore, Mulej & Bastič, 2016).

The resource-based theory sees innovation as an important determinant in creating value and sustaining competitive advantage of companies (Baregheh et al., 2009). Theoretical works (Friedman, 1970; Porter & Kramer, 2006; Asongu, 2007) emphasize the importance of innovation when creating CSR, as the increasing CSR also grows company innovation. CSR initiatives can thus lead to the implementation of innovation processes that respond to social, environmental, and economic needs by creating new work methods, products, services, processes, and markets in a context that could lead numerous firms to redefine their strategy (Little, 2006). The incorporation of CSR criteria as a value-creating element requires a change of philosophy within organization, as CSR involves important modifications in company management (Mathieu, 2005). Less one-way commanding and more creative cooperation results from the managerial social responsibility toward co-workers and leads to more innovation.

The use of innovation to enhance CSR includes complex challenges with multidimensional characteristics. An overview of the empirical research available in the literature shows that several scholars have focused on the quality of CSR in companies and on the relation between CSR and financial performance.

However, we detected no empirical research examining the concept of innovation and its mediating role between CSR dimensions and financial performance. In empirical research, CSR is considered as a single numerical or dummy variable. However, different CSR dimensions may have varying effects on innovations and financial performance. We also did not find consensus regarding the impact of CSR on financial performance (Orlitzky et al., 2003; Vogel, 2005; Hull & Rothenberg, 2008).

Good CSR to employees may make co-workers enthusiastic and effective; CSR to the environment may reduce costs and provide new opportunities to differentiate. We found no empirical studies about the relationship between CSR to either the local community or innovation. If at least one CSR dimension does not positively influence innovation, that may explain the varying findings in theoretical and empirical research about the CSR-innovation relationship.

To extend the previous literature, the aim of this paper is to investigate four CSR dimensions (CSR to employees, CSR to natural environment, CSR to customers, and CSR to the local community) to find out how managers prioritize and balance aspects of CSR. Therefore, we investigated the relationships between CSR to employees and other three stakeholder groups (natural environment, customers, and local community) as well as their impacts on innovation. The effects of innovation initiated by CSR on financial performance were also included in the study.

After briefly reviewing the relevant literature and presenting hypotheses, we present the applied methodology and the results obtained. Finally, we discuss our findings. The empirical research covers Slovenia as a relatively new member of the European Union, experiencing a market economy, with all its currently usual good and bad attributes, for only 30 years (except its older exporting businesses).

Literature Review and Hypotheses Development

CSR and relationships among CSR dimensions

CSR is a process of improvement which companies integrate into their management considerations of social, environmental and economic order in a voluntary, systematic and coherent way, in consultation with their stakeholders (CIDD in Perrine, 2013). In ISO 26000, CSR signifies one’s responsibility for one’s influence on the society (ISO, 2010). ISO 26000 also states that CSR reinforces honesty, reliability, broad-mindedness and long-term orientation, which enhances reputation and brings other advantages: by following CSR principles, the companies can prevent many opportunity costs, which are often hidden in accounting reports. Hence, a firm engaging in CSR should endeavor to make a profit, abide by the law, participate in ethical practices, and be a good business citizen (Carroll, 2016). CSR is a multidimensional construct accommodating not only economic concerns, but also non-economic matters, such as community or employee relations (Saedi et al., 2015).
The literature on CSR shows that the stakeholders’ interests matter. Freeman (1984) defines stakeholders as groups or individuals who can affect, or be affected by the achievement of the organization’s objectives or who are directly or indirectly interested in the company (Turker, 2009). Verdeyen et al. (2004) classify stakeholders as either internal or external. The dimensions of CSR emerge in line with internal and external stakeholders with whom the business is in a relationship (Gürlek et al., 2017). In terms of stakeholders, the CSR dimensions can be evaluated as responsibility to employees, to customers, to local community, and to the environment. Specifically, managers should recognize that a thorough consideration of stakeholders is important, as the utilization of stakeholders in strategic decisions dramatically improved the CSR policy and the effect of self-transcendence (Reisdorf Tolmie et al., 2019). Companies, especially small ones, are constrained with limited resources; thus conflicts of interest among stakeholder groups may arise (Editors of Academy of Management Journal, 2016).

CSR to employees

It covers the way an organization interacts with employees. Responsibility to employees includes activities such as protecting employee rights, guaranteeing occupational health and safety, improving workers’ skills and ensuring labor quality (Longo et al., 2005). Employees who perceive strong encouraging signals from their supervisors, are more likely to develop and implement creative ideas that positively affect their natural environment (Ramus & Steger, 2000). John et al. (2019) showed that when employees perceive organizational CSR positively, it generates a sense of pride in affiliating with the organization and eventually strengthens organizational identification.

While customers have been traditionally considered the key drivers of companies’ social initiatives, employees have become at least as important as customers, if not even more so, in driving company sustainability initiatives (Editors of Academy of Management Journal, 2016). CSR for employees, out of the three aspects of CSR under consideration, has a particularly important effect on organizational attractiveness; thus, firms should pay more attention to the CSR for employees to attract more qualified employees (Zhang, 2020) who, in turn, help organizations to increase efficiency, innovation and growth (Asongu, 2007).

CSR to the national environment

Responsibility to the environment includes minimizing environmental pollution and protecting natural resources, as well as water and energy saving (Benavides-Velasco et al., 2014). Companies that match CSR’s environmental standards are more competitive, at least in the middle and long term. They are better able to invest in more efficient, cleaner, and environmentally friendly technologies (EC, 2007). Environmental issues are closely linked to human rights, community involvement and development, and other issues of socially responsible behavior (ISO, 2010).

CSR to the local community

Responsibility to the local community increases the welfare level of society, supporting educational and artistic activities and increasing living standards of the society (Abaeian et al., 2014). The community provides employees for the organization, makes the environment that either attracts or drives away competent personnel, stipulates taxes, ensures basic support, and can enforce restrictions on the institution’s or industry’s activity (Theaker & Yaxley, 2012). Socially responsible companies should also employ people from their local communities (Salb, Friedman, & Friedman, 2011).

CSR to customers

Relationships with customers are critical in the CSR-to-outcomes relationships, especially customer satisfaction, consumer–organization fit, and consumer trust (Levy et al., 2010). Responsibility to customers refers to consumer rights protection, providing exact information about products and providing high quality products (Longo et al., 2005) which also includes health and environmental dimensions of quality. Socially responsible customers know the social consequences of their shopping; they choose socially responsible suppliers. To enhance customer satisfaction, firms should exert more efforts in CSR activities to offer better products or services, as CSR for customers has the highest impact on customer satisfaction (Zhang, 2020).

Consistent with the theory and findings discussed above and especially with CSR as an important factor in ensuring employee perceptions of CSR initiatives (Lee et al., 2013), we hypothesised that CSR to employees had a positive effect on the other three dimensions of CSR:

**Hypothesis 1a:** CSR to employees positively affects the CSR to customers.

**Hypothesis 1b:** CSR to employees positively affects the CSR to environment.

**Hypothesis 1c:** CSR to employees positively affects the CSR to local community.
Its Relationship with CSR and Financial Performance

The Organization for Economic Co-operation and Development (OECD) defines innovation as the “implementation of a product (goods or service) or of a new or notably improved procedure, of a new method of commercialization, or of a new organizational method in a company’s practices, in the organization of the workplace, or in external relations” (OECD, 2005). New opportunities can arise from different sources, and CSR is a fertile field in which to identify changes in customers’ needs and environmental challenges or to solve social issues through innovation (Porter & Kramer, 2006).

Devinney (2009) considers the link between CSR and innovation as an additional area within the relationship between CSR and corporate performance. Bellow (2012) suggests a model presenting a value chain for sustainable, responsible, ethical corporate governance emphasizing innovation and creativity. Mulej and Dyck (2014) regard innovation and CSR as intertwined factors that bring added value to the company and increase its competitive advantage, but without abusing the influence, although abuse is a frequent characteristic of the influential firms.

CSR-innovation offers companies additional opportunities to differentiate. Lekkerkerk (2008) defines several combinations of CSR and innovation: new ways of implementing CSR in corporate behaviour; a CSR-innovation brings only CSR-benefits; introduction of additional CSR criteria in evaluations of innovations for customers; CSR is based on the idea of “open” innovation.

Although previous literature has argued about the positive relationship between CSR practices and innovation, there is a little explicit research that links innovation and CSR (Bellow, 2012). We found only one empirical study (Hull and Rothenberg, 2008) investigating the impacts of corporate social performance (CSP) and innovations on financial performance. They found a negative correlation between CSP and innovation, and non-significant impact of CSP on financial performance, but positive impacts of innovation and differentiation on financial performance.

Having followed the theoretical findings, which suggest a positive impact of CSR on innovation and the empirical results, but have not confirmed positive impact, we hypothesized:

Hypothesis 2: Among the three CSR dimensions (CSR to natural environment, to customers and to local community) at least one has a positive, and at least one has a negative impact on innovation.

Innovation is needed for companies to survive and maintain their profitability (Hamel, 2000). Strategic CSR can bring both short and long-term financial benefits to socially responsible companies (Asongu, 2007). There is no conclusive evidence of a short-term correlation between CSR and economic/financial performance; many studies highlight the strategic role of CSR in creating value in the long term, because it enables innovation (Husted & Allen, 2007).

Innovation is generally conceived as being positively related to performance (O’Reilly & Tushman, 2004; McWilliams & Siegel, 2000). Some authors reported that innovation positively affects firm performance, when environmental factors are considered ( Werther & Chandler, 2005). Organizational innovation positively and significantly affects performance, covering many innovations, the proactive or reactive character of those innovations, and the resources the firm invests in innovation (Jiménez-Jiménez & Sanz-Valle, 2011).

Due to a consensus in the literature about relationships between innovation and financial performance one may predict positive impacts of innovation on financial performance.


Considering the hypotheses H1a, H1b and H1c, H2 and H3, the following conceptual model was created (Figure 1).

Data and Methodology

Sample selection and data collection procedure

The study was based on a survey of Slovene industrial companies. The respondents were business professionals (managers and owners) knowing CSR, innovation and financial performance in their companies. Considering the small response rate in Slovenia, especially when respondents were managers, we decided to select 4,500 Slovene companies from a wide range of industries, using the Slovene businesses register (PIRS). A self-administered questionnaire was applied to collect data on CSR, innovation, and financial performance within a one-month period, from June 2013 to July 2013. The questionnaire was sent by e-mail, including a cover letter explaining the study purpose and the link for access to the questionnaire.

In all, 321 questionnaires were fully completed and returned. The response rate was about 7.1%, which is normal response rate for Slovenia when the respondents are managers.
Almost half (49%) of the sample included small companies (10-49 employees), a quarter of the sample were micro companies (fewer than 10 employees) and 20% of the sample had 50 or more employees. In order to guarantee anonymity, no personal identifying information was requested from the respondents.

Construct measures

The questionnaire consisted of three sections. The items in the first section measured the respondents’ perceptions of the CSR practices in their company. The second section was allocated to capture data on the respondents’ perception on company’s innovation. The third section was included to measure the company’s financial performance. The respondents expressed their statements on the five-point Likert scale, where 1 means “strongly disagree” and 5 “strongly agree”. Some demographic questions were included in the last section.

CSR scale

We developed the scales to measure four CSR dimensions: environment, customers, local community, and employees; these are described in Zore et al. (2016). High values on these scales mean high firm social responsibility.

The CSR to environment scale included three items. High values on these items mean that companies take care of future generations’ lives; they encourage their employees to take part in voluntary activities to protect and improve the environment quality; and they also manage and control risks within the company to prevent environmental accidents.

The CSR to customers scale consisted of three items measuring the company’s respect for the customers’ rights, its concern about the satisfaction of its customers and its attitude toward unfair competition.

The CSR to local community scale was measured by three items. They referred to the intensity of activities with which companies create employment possibilities, support non-government organizations and promote the well-being of the local community.

The CSR to employees scale included seven items. They measured working environment, employees’ possibilities for constructive criticism and debate, and discrimination against employees.

The innovation performance scale consisted of six items. Two of them were taken from Griffin and Page’s (1996) scale; two were taken from Cooper and Kleinschmidt (1995), and two were proposed by the interviewed experts.

The responses were expressed on the five-point Likert scale, where 1 means “strongly disagree” and 5 “strongly agree”.

The financial performance scale included four items. Three of them belonged to Samiee and Roth’s (1992) scale and...
one item was proposed by the financial experts. The items measured the company’s returns on equity, assets, investments, and profit per employee. The responses were expressed on the five-point Likert scale, where 1 means “strongly disagree” and 5 “strongly agree”.

**Research methods**

We used exploratory factor analysis (EFA) for innovation and financial performance and then confirmatory factor analysis (CFA) to assess construct reliability and validity of measurement instruments for all six constructs (Anderson & Gerbing, 1988). The results of EFA for the other four constructs are described in Zore et al. (2016). The scale reliability was assessed by both the individual reliability of each indicator and by the composite reliability of each factor. Individual reliability coefficient $R^2$ should be higher than 0.5, and composite reliability coefficients should be higher than 0.7 (Hair et al., 1995). In addition, we analysed Cronbach’s alpha, which should be higher than 0.7 (Nunnally, 1978).

Convergent validity was accepted when factorial loadings were higher than 0.4, and $t$ values were significant, i.e. higher than 1.96. Discriminant validity was confirmed when the average variance extracted (AVE) was higher than the squared correlations between constructs (Fornell & Larcker, 1981).

The overall fit of the hypothesised conceptual model (Figure 1) was tested using the Chi-square statistic and other fit indices, such as ratio of Chi-square to degrees of freedom, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), root mean square residual (RMSR), and the root mean square error of approximation (RMSEA). We considered 0.9 as the suggested minimum value for GFI, AGFI and CFI, and 0.05 as the maximum value for RMSR and RMSEA (Lu et al., 2007).

**Results**

Table 1 covers the results of EFA for two constructs — innovation, and financial performance — while the CSR scale description is provided in Zore et al. (2016). The construct innovation performance was hypothesized as a one-dimensional factor measured by six items. All factor loadings were relatively high, ranging from 0.695 to 0.832. The value of Cronbach’s alpha, which was 0.895, confirmed its internal consistency. Four items measured the construct financial performance. The related factor loadings were high, ranged from 0.810 to 0.865 and the value of Cronbach’s alpha of 0.946 additionally confirmed the reliability of this factor.

The hypothesised conceptual model consists of six constructs: CSR to employees, CSR to natural environment, CSR to local community, CSR to customers, innovation performance, and financial performance. Each of them was measured with several items. Therefore, construct validity (convergent and discriminant validity), construct reliability and goodness of fit were evaluated.

Factor convergent validity was assessed by examining the factor loadings and their statistical significance (Dunn et al., 2007). The overall fit of the hypothesised conceptual model was tested using the Chi-square statistic and other fit indices, such as ratio of Chi-square to degrees of freedom, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), root mean square residual (RMSR), and the root mean square error of approximation (RMSEA). We considered 0.9 as the suggested minimum value for GFI, AGFI and CFI, and 0.05 as the maximum value for RMSR and RMSEA (Lu et al., 2007).

**Table 1. Exploratory factor analysis for factors innovation and financial performance**

<table>
<thead>
<tr>
<th>Factor Item</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation performance (Cronbach's alpha = 0.895)</strong></td>
<td></td>
</tr>
<tr>
<td>We successfully placed on the market more radical innovation as our most</td>
<td>0.730</td>
</tr>
<tr>
<td>important competitor.</td>
<td></td>
</tr>
<tr>
<td>We successfully placed on the market more smaller innovations (improvements)</td>
<td>0.695</td>
</tr>
<tr>
<td>as our most important competitor.</td>
<td></td>
</tr>
<tr>
<td>With the introduction of innovation in business processes, we won new</td>
<td>0.764</td>
</tr>
<tr>
<td>markets.</td>
<td></td>
</tr>
<tr>
<td>With the introduction of innovation, we reduced production time, and</td>
<td>0.832</td>
</tr>
<tr>
<td>consumption of energy and material.</td>
<td></td>
</tr>
<tr>
<td>With the introduction of innovation, we increased the use of recycled</td>
<td>0.719</td>
</tr>
<tr>
<td>and environment-friendly packaging.</td>
<td></td>
</tr>
<tr>
<td>With the introduction of innovation, we reduced the annual cost of the</td>
<td>0.800</td>
</tr>
<tr>
<td>purchasing process.</td>
<td></td>
</tr>
<tr>
<td><strong>Financial performance (Cronbach's alpha = 0.946)</strong></td>
<td></td>
</tr>
<tr>
<td>Relative to our most important competitor, during last year we achieved</td>
<td></td>
</tr>
<tr>
<td>Substantially better return on equity (ROE)</td>
<td>0.856</td>
</tr>
<tr>
<td>Substantially better return in assets (ROA)</td>
<td>0.865</td>
</tr>
<tr>
<td>Substantially better return on investment (ROI)</td>
<td>0.836</td>
</tr>
<tr>
<td>Substantially better profit per employee.</td>
<td>0.810</td>
</tr>
</tbody>
</table>
Table 2. Standardized factor loadings, critical ratios and $R^2$

<table>
<thead>
<tr>
<th>Factor Item</th>
<th>Stand. Factor loading</th>
<th>C.R. $^a$</th>
<th>$R^2$ $^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR to employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our company policies provide a safe and healthy working environment avoiding abuse of the labour force, harsh and inhumane treatment of employees.</td>
<td>0.658</td>
<td>- $^c$</td>
<td>0.432</td>
</tr>
<tr>
<td>Our company policies encourage employees' commitment.</td>
<td>0.799</td>
<td>12.418</td>
<td>0.638</td>
</tr>
<tr>
<td>In our company, managers are not reluctant to constructive criticism; they display interest in learning from employees and encourage debate on the ideas.</td>
<td>0.834</td>
<td>12.782</td>
<td>0.696</td>
</tr>
<tr>
<td>Our company practices moral integrity as behaviour that inspires employee trust and promotes transparency throughout the organization, freely admitting mistakes, and valuing integrity over profit or material gain – refusing to use manipulation or deceit to achieve personal goals.</td>
<td>0.868</td>
<td>13.203</td>
<td>0.753</td>
</tr>
<tr>
<td>Our company stimulates ethical consumption.</td>
<td>0.810</td>
<td>12.553</td>
<td>0.656</td>
</tr>
<tr>
<td>In our company, the employees receive a reasonable salary to maintain an acceptable quality of life.</td>
<td>0.712</td>
<td>11.278</td>
<td>0.507</td>
</tr>
<tr>
<td>Our company avoids linguistic, religious, sex, age and ethnic discrimination.</td>
<td>0.670</td>
<td>10.689</td>
<td>0.448</td>
</tr>
<tr>
<td>CSR to natural environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our company invests to create a better life for future generations.</td>
<td>0.761</td>
<td>- $^c$</td>
<td>0.580</td>
</tr>
<tr>
<td>Our company encourages its employees to participate in voluntary activities associated with protection of natural environment.</td>
<td>0.777</td>
<td>13.322</td>
<td>0.604</td>
</tr>
<tr>
<td>Our company manages and controls risks within the organization to prevent environmental accidents.</td>
<td>0.733</td>
<td>12.588</td>
<td>0.538</td>
</tr>
<tr>
<td>CSR to local community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our company emphasizes the importance of its social responsibility to the society/community.</td>
<td>0.816</td>
<td>- $^c$</td>
<td>0.666</td>
</tr>
<tr>
<td>Our company tries to contribute to sustainable economic development.</td>
<td>0.873</td>
<td>14.946</td>
<td>0.761</td>
</tr>
<tr>
<td>Our company creates employment possibility for local community residents.</td>
<td>0.708</td>
<td>11.742</td>
<td>0.501</td>
</tr>
<tr>
<td>CSR to customers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our company respects customers' rights beyond the legal requirements.</td>
<td>0.626</td>
<td>- $^c$</td>
<td>0.392</td>
</tr>
<tr>
<td>Satisfaction of our customers is very important for our company.</td>
<td>0.638</td>
<td>8.880</td>
<td>0.407</td>
</tr>
<tr>
<td>Our company always avoids unfair competition.</td>
<td>0.643</td>
<td>9.931</td>
<td>0.413</td>
</tr>
<tr>
<td>Innovation performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We successfully placed on the market more smaller innovations (improvements) as our most important competitor.</td>
<td>0.715</td>
<td>- $^c$</td>
<td>0.511</td>
</tr>
<tr>
<td>With the introduction of innovation in business processes, we won new markets.</td>
<td>0.831</td>
<td>11.877</td>
<td>0.690</td>
</tr>
<tr>
<td>With the introduction of innovation, we reduced the production time, and consumption of energy and material.</td>
<td>0.678</td>
<td>10.582</td>
<td>0.460</td>
</tr>
<tr>
<td>Financial performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative to our most important competitor, during last year we achieved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantially better return on equity (ROE).</td>
<td>0.951</td>
<td>- $^c$</td>
<td>0.905</td>
</tr>
<tr>
<td>Substantially better return on assets (ROA).</td>
<td>0.966</td>
<td>39.102</td>
<td>0.933</td>
</tr>
<tr>
<td>Substantially better return on investment (ROI).</td>
<td>0.870</td>
<td>26.661</td>
<td>0.757</td>
</tr>
<tr>
<td>Substantially better profit per employee.</td>
<td>0.830</td>
<td>23.368</td>
<td>0.689</td>
</tr>
</tbody>
</table>

Legend:

$^a$ – C.R. is critical ratio obtained by dividing the estimate of the covariance by its standard error. Its value is the same as $t$-values.
$^b$ – $R^2$ is squared correlation coefficient expressing item reliability.
$^c$ – Indicates a parameter fixed at 1.0 in the model.
competitor; with the introduction of innovation, we increased the use of recycled and environment-friendly packaging; with the introduction of innovation, we reduced the annual cost of the purchasing process) were omitted as their R² did not meet the 0.4 criterion (Table 2).

In the next step, we tested an overall model fit applying absolute, incremental, and parsimonious indices. The $\chi^2$ (344.422 with 218 degrees of freedom) was statistically significant ($p < 0.05$). The value of normed $\chi^2 (\chi^2/df = 1.580)$ fell within the recommended interval values between one and two. The GFI had a value of 0.917, which was above the threshold value of 0.9, while the AGFI was 0.895, which is very close to value of 0.9. RMR had the value of 0.043, which was below the threshold value of 0.05.

Among comparative fit indices, the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) were chosen. Their values were 0.973 and 0.969, respectively, indicating support for the proposed measurement model. We also assessed the parsimony model fit by the Parsimony Goodness-of-fit Index (PGFI) and the Root Mean Square Error of Approximation (RMSEA). Their values were 0.724 and 0.043, respectively. The values of these indices indicated a good model fit.

Assuming the adequate model fit, a discriminant validity of the constructs was assessed by comparing average variance extracted (AVE) with the squared correlation between the constructs. As can be seen in Table 3, all values of AVE exceeded the corresponding squared correlations coefficients. These results demonstrated the evidence of discriminant validity of the constructs in the proposed model.

Then the construct reliability was tested by assessing both composite reliability and AVE (see Table 4). All values of the composite reliability exceeded the threshold value of 0.7. The values of AVE were higher than 0.5, except the value of construct CSR to customers, which was close to 0.5. It means that only 46% of the variance in the specified items was explained by this construct.

To summarize, the overall results of the goodness-of-fit of the model and the assessment of the measurement model indicated that the proposed model exhibited a reasonable fit with the collected data.

The significance tests of the estimated standardized regression coefficients provide the basis for accepting or rejecting the proposed relationships between latent variables. The results for the hypothesized model are given in Figure 2. All regression coefficients relating to the proposed relationships in the hypothesized conceptual model were significant at $p < 0.05$.

### Table 3. AVE and squared correlations

<table>
<thead>
<tr>
<th>Factor</th>
<th>AVE</th>
<th>CSR to employees</th>
<th>CSR to local community</th>
<th>CSR to customers</th>
<th>CSR to environment</th>
<th>Innovation</th>
<th>Financial performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR to employees</td>
<td>0.59</td>
<td>1.00</td>
<td>0.347</td>
<td>0.436</td>
<td>0.433</td>
<td>0.150</td>
<td>0.099</td>
</tr>
<tr>
<td>CSR to local community</td>
<td>0.90</td>
<td>0.347</td>
<td>1.000</td>
<td>0.236</td>
<td>0.430</td>
<td>0.102</td>
<td>0.048</td>
</tr>
<tr>
<td>CSR to customers</td>
<td>0.46</td>
<td>0.436</td>
<td>0.236</td>
<td>1.000</td>
<td>0.211</td>
<td>0.098</td>
<td>0.080</td>
</tr>
<tr>
<td>CSR to environment</td>
<td>0.57</td>
<td>0.433</td>
<td>0.430</td>
<td>0.211</td>
<td>1.000</td>
<td>0.205</td>
<td>0.092</td>
</tr>
<tr>
<td>Innovation</td>
<td>0.53</td>
<td>0.150</td>
<td>0.102</td>
<td>0.098</td>
<td>0.205</td>
<td>1.000</td>
<td>0.209</td>
</tr>
<tr>
<td>Financial performance</td>
<td>0.82</td>
<td>0.099</td>
<td>0.048</td>
<td>0.080</td>
<td>0.092</td>
<td>0.209</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: CSR – Corporate Social Responsibility

### Table 4. Construct reliability and AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite reliability</th>
<th>Average variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR to employees</td>
<td>0.91</td>
<td>0.59</td>
</tr>
<tr>
<td>CSR to local community</td>
<td>0.96</td>
<td>0.90</td>
</tr>
<tr>
<td>CSR to customers</td>
<td>0.77</td>
<td>0.46</td>
</tr>
<tr>
<td>CSR to environment</td>
<td>0.80</td>
<td>0.57</td>
</tr>
<tr>
<td>Innovation performance</td>
<td>0.82</td>
<td>0.53</td>
</tr>
<tr>
<td>Financial performance</td>
<td>0.95</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Note: CSR – Corporate Social Responsibility
We have assumed that CSR to employees positively effects CSR to customers (H1a), to the natural environment (H1b), and local community (H1c). The path coefficients measuring the impacts of CSR to employees on CSR to environment, local community, and natural environment were significantly positive and ranged from 0.648 to 0.836, which confirms Hypothesis 1a, 1b and 1c. Social responsibility to employees positively affects employees’ responsibility to customers, environment, and local community.

In Hypothesis 2, we assumed that among the three CSR dimensions (CSR to natural environment, to customers and to local community) at least one has a positive, and at least one has a negative impact on innovation. The regression coefficient measuring the impact of CSR to local community on innovation was significant and negative (-0.304). It means that higher CSR to community reduces the firm’s innovation performance. On the other hand, the regression coefficients measuring the impacts of the CSR to environment and to customers on the firm’s innovation performance are both positive and significant, at 0.633 and 0.274, respectively. CSR to environment generates more opportunities to innovate, which finally reflects in better company’s innovation performance. Positive, but somewhat smaller is the impact of CSR to customers on innovation performance. All these results support Hypothesis H2.

In Hypothesis 3, we hypothesized the positive effect of the innovation performance on financial performance. The regression coefficient measuring this effect is positive and significant (0.471), which confirms Hypothesis 3.

Discussion

The purpose of this study was to investigate the relationships between CSR dimensions and the mediating role of innovation between CSR dimensions and financial performance, in order to clarify the ambiguity in empirical research about the impact of CSR on innovation. Our conclusions are based on the results relating to the hypothesized conceptual model and data on Slovenian companies.

Four stakeholders that are beyond economic and legal interests of companies were included in the conceptual model. We investigated the relationships between CSR to employees, customers, the natural environment, and the local community. According to theoretical findings, we hypothesized that CSR to employees positively effects CSR to customers, natural environment, and local community. The obtained results confirmed this hypothesis. This finding matches the extensive research on employees’ justice perception, which posits that employees’ perceptions of their firms’ CSR activities shape their attitudes and behaviours toward their firm. Employees’ perceptions of a firm’s social policies affect their willingness to participate in, contribute to, and initiate social change (Aguilera et al., 2007). Employees may view a socially engaged organization as one that cares for all people, both internal and external to the organization. Such organizations generally show concern for fairness (respect and care for the environment, for working conditions); employees may deduce that chances and conditions are fair for them, thus satisfying their need for control. Therefore, employees seek and promote CSR.
in order to maximize their own outcomes/benefits. If the company is socially responsible to employees, their ability to invent can be formed and a culture of honesty and accountability to employees is created. This positive culture is also reflected in the other three forms of CSR.

Only a few empirical studies have investigated the impact of CSR, generally considered as a single factor, on innovation and they reported different results about this relationship. To clear up this ambiguity we hypothesized that at least one CSR dimension has negative impact on innovation. Our results also confirmed this hypothesis. We found that CSR to customers and to natural environment create opportunities for innovations, and the higher these responsibilities in companies, the more innovations companies produce. On the other hand, CSR to local community had a negative impact on innovations.

Slovene companies are aware of the importance of their responsibility to well-being of local community. They try to contribute to sustainable development of society and create employment possibilities for local people. On the other hand, the results also showed that CSR to local community significantly, but negatively, influences innovation. This means that Slovene companies have not found opportunities for innovation in their responsibility to local community. This finding can also be understood to show that companies see no need to be innovative to improve their social responsibility to the local community and that the target improvement can be achieved in other well-known ways. Small and medium-sized companies especially (dominating in Slovenia and in the sample) usually lack sufficient staff for innovation development. Probably, they cannot afford to assign their employees with innovation capabilities to activities that improve CSR to local community.

Both CSR to environment and to customers positively affect innovation; however, the responsibility to environment has a higher impact on innovation than responsibility to customers. For example, less waste is an easier goal to attain than increasing customers’ satisfaction by replacement of established work habits.

CSR, as soon it is not considered only as charity, leads to innovation but, of course, is not its only factor. CSR and innovation are related in companies. The relationship is not easily understood, because CSR and innovation are two complex and multi-dimensional phenomena. The causal interaction and relation between the two can be understood this way: socially responsible businesses and management motivate and inspire employees for the invention-innovation-diffusion processes (IIDP), the technological and especially the non-technological IIDP. Internally, CSR supports inspiration and guidance for IIDP. Outwardly, CSR can support IIDP concerning business relations; it also supports the company’s public image, products and trademarks in communication.

If a company reaches a sufficiently larger/more complete integration of CSR and innovation, it can bring some new benefits. Synergy and the impacts of both factors contribute to the improvement of the situation, when organizing management, human rights, environment, labour relations practice, business honesty, customer problems and involvement in the community and its development. CSR enables this more easily because interdependence and a holistic approach are integrated in it as connecting principles. Thus, for businesses, their implementation of all CSR dimensions means creating sources of innovation — technological and, especially, non-technological — in all business processes.

We also assumed that innovation positively affects financial performance. This hypothesis was confirmed, as well. It is already well-known that innovation is a precondition for financial performance. Our study also confirms that companies succeed if they can enable their employees to exercise innovation and entrepreneurship, allowing diversity and recognizing and rewarding performance. Increasing productivity and profits depend on the success of IIDP (as designated by J. Schumpeter decades ago). Its success depends on the integrity of the approach, which can be much more easily reached, if it is designed with a long-term perspective, objectively and within creative collaboration between employees and managers.

The results and findings of this study contribute to the theory of social responsibility in the context of the relationships between CSR dimensions and their impacts on innovation. The important finding also refers to the mediating role of innovation between CSR to different stakeholders and financial performance. The contribution derives from the empirical examination of the structural model of social responsibility, innovation and financial performance. The purpose of the conceptual model was to set assertions in the context of examining the relationship between social responsibility, innovation and financial performance. In accordance with these assertions, social responsibility should influence innovation and financial performance. The results offer to the business practitioners of CSR information on both the positive and the negative impacts on their introduction of CSR in their enterprises.

The research findings show that social responsibility pays off. It is a source of opportunity for innovation and financial performance. With the successful integration of the social responsibility concept, companies can establish
good relations between stakeholders; they can promote innovation, achieve differentiation and enhance the company's reputation. Companies should review their culture and ways of thinking and develop new working methods to integrate their vision of CSR. For companies that wish to develop and introduce major innovations, it is advisable to invest in increasing the level of social responsibility, especially toward the environment, customers, and employees. In their activities, they ought to consider and recognize the fundamental principles of social responsibility, i.e. accountability, transparency, ethics, respect for human rights, respect for all stakeholders and norms, in order to implement all content, fair treatment of employees, customers, integration into the community in which the organization operates, and the preservation of the natural environment. A higher level of social responsibility is achieved by exposing the integrity of the approach, supported by interdependence, when it comes to essential activities and relationships of people. Everyone involved in the process of company operations must participate: owners, their managers and co-workers (employees and business partners). The basic principles must be present at all levels of company functioning; these principles are the key initiatives to ensure that the companies survive in the demanding marketplace.

Limitations, Further Research and Conclusions

The results of the research, despite their substantial contribution, represent only a fraction of the whole picture of studying the relationship between social responsibility, innovation and financial performance. There are still many open topics. The main limitation of this study is its focus on Slovenian firms. We collected data from only one person in each company, which can affect the bias of data. Such focus limits the scope of generalisation on the entire industrial sector.

The conceptual model that we have developed and tested in the study gives new insight into social responsibility. More important, it highlights areas in which the theory of social responsibility, innovation and financial performance is substantively and methodologically under-researched. Mostly we used the already established measurement scales to measure latent variables in the model of social responsibility, innovation and financial performance; we added our own insights, and the approximations proved satisfactory in their present form. The scale for measuring CSR to customers could be expanded by new items to improve its reliability.

All assertions are based on data obtained from respondents as individuals having their opinions and practices and expressing their opinions on a scale of agreement. Since the topic of social responsibility is lately socially popular, they may tend to exaggerate in evaluation. We recommend inclusion of several respondents from the same organization in the survey, because this increases transparency of responses and reduces the possibility of favouritism. For example, managers often assess companies more favourably, regardless of the true opinions and feelings about the problem, so their answers are often overestimating. Involvement of multiple respondents from one organization is a better approach. However, for the researcher and the respondent this causes additional coordination and consequently lower responsiveness of respondents. Finally, we suggest repetition of the study in other economies. Thereby it will be possible to compare results and generate new findings about influence of social responsibility on innovation and business excellence.

Our model addressed an important gap in the existing organizational literature by proposing a multilevel theoretical framework of CSR, which follows the advice of CSR researchers (Margolis & Walsh, 2001; Waddock et al., 2002) and turns our attention to new research questions. We examined the relationships between CSR to different stakeholders and the mediating role of innovation between CSR and financial performance at the organizational level. We provided a unique conceptual model to address organizations and discuss the key variables that will shape CSR in Slovenian businesses and professionals. In sum, while research to date has been fruitful in pushing human knowledge of CSR forward, we hope to show that the conceptual model developed here will shed light on how CSR might be triggering progress. We pointed to important contributions for researchers, managers, and policy makers.
References


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Družbena odgovornost podjetij in finančna uspešnost – povezujejo ju inovativne dejavnosti

Izvleček


Ključne besede: družbena odgovornost podjetij, slovenska podjetja, inovacije, finančna uspešnost, SEM