An Empirical Study of the Relationship between Corporate Social Responsibility and Sustainable Business Growth

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Abstract
The objective of this research is to clarify empirically the relationship between sustainable business growth and the effort by a business firm to solve social and environmental problems. In previous empirical studies, the results of quantitative analyses regarding the relationship between corporate social responsibility (CSR) activity and corporate earnings is inconstant. In this research, the strategic and organisational factors of the company are taken into consideration as intermediation or control variables on searching the analytical model regarding the relationship between solving a social or an environmental problem and business growth. The questionnaire to the company is implemented as a survey methodology. In conclusion, the relationship between the solution to a social or environmental problem and the sustainable growth of a company has been quantitatively verified. In particular, organisational capability, dynamic capability and the cooperation of an inside-and-outside organisation through CSR activity were important in relation to long-term profit.

Key Words: Cooperate social responsibility (CSR), competitive advantage, social problem, sustainable business growth, environmental problem, strategic factor, organisational factor
JEL Classification: M14, Q35, G56
1. Introduction

The objective of this research is to clarify empirically the relationship between sustainable business growth and the effort by a business firm to solve social and environmental problems.

In order for a company to continue, tackling social and environmental problems is required as a social responsibility. Social or environmental problems conventionally have been regarded as market externality in public economics, and the solutions of such problems have mainly been treated as a governmental role. It is desirable, however, that a business firm tackle solving social and environmental problems positively and internalise market externality. A business firm might create a more cost-effective solution compared with governmental solutions. In the first place, as the activities of a business firm may produce the social or environmental problem, the business firm might solve the root cause of the problem through innovation of its activities.

Solving a social or environmental problem is desirable for a company not only to fulfil its social responsibility, but to raise its profitability. If the business firm’s activities for solving a social or environmental problem can be connected with its profit, the profit can be an incentive for the business to invest further in the solution of social or environmental problems. Then, it is expected that the solution of a social or environmental problem is expanded sustainably. For example, the technology developed through the effort to solve a social or environmental problem might be useful for the firm’s future business. Likewise, if the company builds a good relationship with a local society through solving a social or environmental problem, the company’s good reputation might increase, which could increase the local society’s future demand for the firm’s products.

On the other hand, in previous empirical studies, the results of quantitative analyses regarding the relationship between corporate social responsibility (CSR) activity and corporate earnings is inconstant (Vogel, 2005). A positive correlation is verified in some research and a negative correlation in others, while many research studies show no correlation. It is thought that CSR activity and revenue might not have a direct cause–effect relationship but instead have an indirect relationship. Furthermore, CSR activity and profitability may differ in accordance with industry, company, strategy, organisation, etc. and the result of each prior research study may vary by the mixture of those factors.

In this research, the strategic and organisational factors of the company are taken into consideration as intermediation or control variables on searching the analytical model regarding the relationship between solving a social or an environmental problem and business growth. The competitive advantage of the company is set up as a strategic factor. That is, although solving a social or an environmental problem may not improve profitability directly,
it is assumed that some kind of competitiveness might increase. The questionnaire to the company is implemented as a survey methodology.

2. Literature Review

2.1 The Relationship between CSR and Firm Profitability

First, the previous studies on CSR and corporate performance are reviewed. A number of such studies indicated that CSR and corporate performance are positively related. Waddock and Graves (1997) developed two hypotheses concerning the relationship between CSR and corporate performance: 1) if the corporate performance is good, CSR will be addressed (the slack resource hypothesis); 2) the company will see good earnings as a result of addressing CSR (the good management hypothesis). Through the analysis of data from a US firm, the relationship between CSR and corporate performance is found to be positive in both directions. According to McGuire et al. (1988), the business results greatly influence the extent to which a CSR policy is followed, meaning that consideration is given primarily to financial results and then to social responsibility. Moreover, in terms of the relationship between CSR and business results, they found that CSR is not directly linked to subsequent strong business results, but that risk is reduced first and this then leads to high financial results in the future. Orlitzky et al. (2003) undertook a meta-analysis of approximately 52 empirical studies performed in relation to sociality, such as environmental countermeasures and financial business results, in the 30 years following the 1970s. According to this study, there is a significant positive correlation between financial business results, price earnings and societal or environmental performance; the results also verify the existence of mutually complementary cause–effect relationships on the basis of a time series analysis.

On the other hand, Mahapatra (1984) and Jaggi and Freedman (1992), amongst others, found a negative relationship between CSR and corporate performance. According to Mahapatra (1984), eco-management (or social responsibility) and financial business results are negatively related. Aupperle et al.’s (1985) study indicated that CSR and corporate performance are not related. Similarly, Ullman (1985) observed no significant trend between CSR and corporate performance, while McWilliams and Siegel (2000) found that CSR has a neutral impact on corporate performance.

Vogel (2005) noted that no decisive conclusion has been reached about the relevance of social responsibility to company revenue. It has not yet been proven whether more responsible action suits the self-interests of all companies or whether CSR always takes a margin of the profit. Moreover, the direction of the correlation between CSR and profit is undetermined. Financial success may be a cause of social responsibility or an effect. The various study results reported here suggest that there may be high potential for a positive
relationship between CSR and corporate performance in general, but the relationship could be negative or the two could be unrelated. To date, there is no positive established theory.

### 2.2 Sustainability

According to Hart (2007), ‘sustainability’ is a keyword in shareholder value, which leads to a sustainable society. The umbrella term ‘sustainability’ covers many different ways of thinking, issues and concepts, and modes of practice. The degree of involvement can be described using a 2×2 matrix: the first axis is today/tomorrow and the second axis is internal/external to an organisation. A strategy and a return are considered for each of the four quadrants:

1) **Today/internal:** pollution prevention (reduction of cost and risk).
2) **Today/external:** product stewardship, reputation, fairness.
3) **Tomorrow/internal:** clean technology (innovation, repositioning).
4) **Tomorrow/external:** the base of the pyramid (BOP) (growth, route).

Pollution prevention, which seeks to prevent waste and emissions rather than cleaning them up ‘at the end of the pipe’, is associated with lower costs. For example, removing pollutants from the production process can increase efficiency by (a) reducing the inputs required, (b) simplifying the process and (c) reducing the compliance and liability costs (Hart & Dowell, 2011).

Whereas pollution prevention focuses on internal operations, product stewardship extends beyond organisational boundaries to include the entire product life cycle – from raw material access, through production processes, to product use and the disposal of spent products. Product stewardship thus involves integrating the voice of the stakeholder into business processes through extensive interaction with external parties, such as suppliers, customers, regulators, communities, non-governmental organisations and the media (Hart & Milstein, 2003). Through stakeholder engagement, the ‘voice of the environment’ can be effectively integrated into the product design and development process. Product stewardship creates the potential for competitive advantage through strategic pre-emption, for example by securing exclusive access to resources (e.g. green raw materials) or by establishing standards that are advantageous to the focal company (Hart & Dowell, 2011).

Clean technology strategies deal with the way in which firms build new competencies and position themselves for competitive advantage as their industries evolve. Reduced material and energy consumption occurs through the pursuit of clean technologies that provide for human needs without straining the planet’s resources (Hart & Dowell, 2011).

Regarding BOP, Hart (1995, 1997) suggests that ‘a sustainable development strategy means that firms must build markets in the South while reducing the environmental burden created by this new economic activity’. BOP has also attracted growing attention from corporations (Immelt et al., 2009).
2.3 Sustainability and competitive superiority

Porter (1991) took up the position of competitive strategy related to the environmental problem and corporate management. According to Porter (1991), economic competitiveness and environmental measures have a mutually complementary relationship. The strengthening of environmental regulation becomes a factor whereby costs are increased and competitive power reduced in the short term. However, in the long term, by urging companies to undertake technical innovations, environmental pollution may decrease, product costs may fall and their quality may increase. Companies can acquire a competitive advantage in the international market as a result. This paradoxical opinion reversed the previously accepted theory that ‘environmental regulation leads to a cost rise and competitiveness losses’ and was suddenly brought into the limelight. A series of arguments on the competitive advantage resulting from environmental regulation that Porter asserted come to be widely known as the Porter hypothesis. Various arguments, including the pros and cons, were developed thereafter concerning environmental regulation and competitiveness. According to Porter and Van der Linde (1995), although environmental protection may increase costs, technology, products, processes, needs, etc. are changeable. If advanced resource productivity placing a minimal load on the environment is realised, competitiveness may increase. The cost reduction achieved by manufacturing technique innovation and the improvement in the market value resulting from product development innovation can improve a firm’s competitive advantage.

Porter and others claimed that companies could build more advantageous positioning in their competitive strategy with environmental measures. Moreover, in the management strategy theory researchers of the resource-based view of the firm (RBV) discussed eco-management from the viewpoint of the competitiveness of management resources. Management resources consist of financial resources, material resources, human resources and organisation resources. By utilising those management resources in relation to a social concern, the scarcity and the imitation difficulty of management resources increase and a sustainable competitive advantage can be established (Barney & Clark, 2007). In the author’s past papers, a questionnaire completed by companies showed that sustainable activity contributes to an improvement in long-term organisational ability rather than a short-term improvement in sales (Isada & Isada, 2013, 2014). Moreover, the improvement in this organisational ability led to an improvement in the relationship with various global customers, supply chain partners, etc. and an improvement in talented people’s capability to manage those management resources for innovation.

According to information and decision-making theory (Williams & O’Reilly, 1998), regarding the management of diversity, it is claimed that the performance of a group with various attributes is higher than the performance of a group consisting of homogeneous members. If the team members vary, the breadth of the information and knowledge that the
team has will spread, and the external network will also spread (Ancona & Caldwell, 1992). Therefore, it is supposed that diversity has a positive influence on performance, such as the decision-making of a team (Williams & O'Reilly, 1998).

Moreover, there are research findings confirming that diversity has a positive influence on outcomes, such as innovation (Bantel & Jackson, 1989) and creativity (Milliken & Martins, 1996). In relation to diversity and performance, the appointment of women is one of the important subjects of research. Dezsö and Ross (2012) presented research findings showing that the promotion of women to executive officers has a positive effect on the corporate value or the profits on accounts in a company that actively performs innovations, as a result of having investigated US S&P1500 companies.

3. Development of the Hypotheses

Next, a survey hypothesis is derived based on previous research. Solving of the society and the environmental problem by a business firm may not necessarily be connected with the profit of a corporation in the short term. However, a certain competitive advantage may increase through the effort toward solving a societal or an environmental problem. Or improvement in a certain organisational capability may occur. And a rise of the competitive advantage and organisational capability may be complemented mutually, and may be connected with a future profit. The above is a fundamental hypothesis of this research and those relationships are shown in Figure 1.

Figure 1: Basic Structure of the Hypothesis

Prior research on the competitive advantage of a company can be roughly classified into two kinds. The first is a competitive advantage regarding strategic positioning (Porter, 1980) with the external competitor regarding the goods and services a company provides. In relation to a positioning strategy, there is a coopetition strategy (Nalebuff et al., 1996), a platform leadership strategy (Gawer & Cusumano, 2002), etc. These strategy theories include not only
rival positioning with a competitor but cooperation positioning with a complementary player. In this paper, this is collectively named a coopetition strategy.

The second kind of competitive advantage is regarding organisational capability (Ulrich & Lake, 1990). This advantage focuses on the organisation and resources inside a company. In relation to organisational capability, there is a competitive advantage through dynamic capability (Teece et al., 1997), which makes organisational capability correspond to changes in business environment flexibly.

In addition, the organisational factor was classified in this study as either the relationship with the external organisation or the internal organisation of a company. In terms of external organisation, prior research on sustainable supply chain management was mainly used (Carter & Rogers, 2008). To solve a social or environmental problem, it is useful to consider not only the efforts of the company but cooperation with companies which constitute a supply chain. In terms of internal organisation, prior research on diversity management was mainly used (Cox & Blake, 1991). Work to promote diversity and inclusion in a company is in itself solving a social problem. For example, the creation of wide-ranging employment, a healthy workplace environment, etc. correspond to diversity management, and it is thought that diversity in an organisation promotes innovation by a new combination of various knowledge and experiences.

4. Research Methodology and the Research Result

4.1 Research Methodology

In terms of research methodology, a questionnaire was sent to companies in the manufacturing industry. The object of the questionnaire was limited to this industry to reduce variability of the responses. The manufacturing industry was chosen because it is thought that it presents a large strain on the environment via its production activities, transportation, etc. and because of its heavy involvement in social problems such as an international labour problem.

The number of the question items of the questionnaire was 40 in all. Based on the above-mentioned hypotheses, a few questions were set up, respectively about each category regarding solving a societal and an environmental problem, a competitive advantage, an organisational capability and business growth. All response forms were set up using a five-point Likert scale. The questionnaire was conducted from April to May, 2016. The questionnaire was sent to the major manufacturing firms in Japan and 86 effective responses were obtained.

As the initial analysis method, principal component analysis was conducted in order to collect question items. The principal component analysis was conducted after evaluation of
the ceiling effect, floor effect and a reliability scale on the effective response. The correlation analysis between principal component scores was conducted. Each analysis used SPSS Ver23.

4.2 The Research Result

As a result of the principal component analysis, one principal component was extracted from each category of the question item on the condition that an eigenvalue is one or more, respectively. They are named as follows:

- solution of a social problem principal component
- solution of an environmental problem principal component
- sustainable supply chain management principal component
- diversity management principal component
- strategic positioning principal component
- coopetition strategy principal component
- organisational capability principal component
- dynamic capability principal component
- business growth principal component

The result of having conducted a correlation analysis regarding each principal component is outlined in Figure 2.

Fig. 2. Correlation Analysis Result between Each Principal Component

![Correlation Analysis Result between Each Principal Component](image)

**:1% of significant probability

The analysis showed that each competitive advantage (strategic positioning and coopetition strategy, organisational capability and dynamic capability) had a significant correlation with business growth. Next, the solving of a social and an environmental problem had a significant correlation with organisational capability. Further, when sustainable supply chain management
chain management and diversity management acted as intermediary variables, the correlation with organisational capability became stronger, and a social and an environmental problem had a significant correlation with dynamic capability. On the other hand, neither the social problem nor environmental problem solution were correlated with strategic positioning or a coopetition strategy.

5. Discussion

Strategic positioning and a coopetition strategy are the notions regarding a static competitive advantage at this time, and an organisational capability and a dynamic capability are the notions of a long-term competitive advantage for the future. Even if a business firm solves a social or environmental problem, the competitiveness of its products and services may not suddenly increase. However, it is thought that a company accumulates organisational capability by striving in research and development, etc. for many hours and cooperating with various external organisations toward problem solving that organisational capability. For example, the effort to reduce an environmental impact and cost reduction often come into conflict. Innovation is required to achieve conflicting aims simultaneously. Succeeding in realising an innovation takes time and success is uncertain. If, however, a company succeeds in developing a technology after long-term efforts, creating an inexpensive product with a low environmental load, a competitor surely will require a long time to catch up with that company. It is thought that such a technical accumulation serves as a long-term competitive advantage.

In addition, to solve a social or environmental problem, diversity of knowledge and flexibility of organisational operation are considered useful. For example, a multinational firm often tends to make an advance into an overseas developing country in a quest to find a cheap work force and natural resources, and then tends to become a ringleader of labour or environmental pollution. To solve such problems, it is desirable to promote an autonomous innovation in a developing country by understanding the actual local conditions and transferring technology and managerial resources flexibly from the parent nation. For that purpose, if a company adheres to the existing organisational operation method in its own country, it may not work. It is thought that involving various employees from the developing countries in key business decisions in the parent nation can lead to useful and suitable cooperation with the various partners and stakeholders in a developing country, such as non-profit organisations. Although increases in such an organisational capability or dynamic capability might not be connected with revenue in the short term, it is thought that they promote the sustainable growth of a company in the long run.
6. Conclusions

In previous research, the actual proven result of the relationship of CSR and corporate profitability was varied. In this research, the relationship between the solution to a social or environmental problem and the sustainable growth of a company has been quantitatively verified by using a strategic factor and an organisation factor. In particular, organisational capability, dynamic capability and the cooperation of an inside-and-outside organisation through CSR activity were important in relation to long-term profit.

Regarding the implications of this research, the results are expected to promote appropriate decisions of business firms to expand solutions for societal and environmental problems. A future research subject is to complement consideration of a quantitative analysis with qualitative analysis, such as an audio survey.

References


