

Is Corporate Financial Performance Associated with Corporate Social Responsibility in a Crisis?: Focusing on March 11 Disaster

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ABSTRACT: This study discusses how firms damaged by the Great East Japan Earthquake and Tsunami of 2011 (March 11 Disaster) proceeded toward a turnaround by focusing on corporate social responsibility (CSR). We define CSR as the responsibility a firm has to pursue as a public institution for the benefit of the community and its environment. Ota and Nakashima (2015a) proposed the Ota-Nakashima CSR model, which measures CSR by applying the Ota Turnaround model (2013) to the Kanji-Chopra CSR model. We compute CSR by employing the Ota and Nakashima CSR model (2015a) and analyze the association between CSR and corporate financial performance (CFP). By examining the association between CSR and CFP, we investigate how firms damaged by the March 11 disaster consider their CSR and plan and implement CSR to proceed toward a turnaround.

Keywords: corporate social responsibility (CSR), the Great East Japan Earthquake and Tsunami of 2011, corporate financial performance (CFP), Ota and Nakashima CSR model (2015a).

1 INTRODUCTION

This study discusses how firms damaged by the Great East Japan Earthquake and Tsunami of 2011 (March 11 Disaster) proceeded toward a turnaround by focusing on corporate social responsibility (CSR). We define CSR as the responsibility a firm has to pursue as a public institution for the benefit of the community and its environment. Ota and Nakashima (2015a) proposed the Ota-Nakashima CSR model, which measures CSR by applying the Ota Turnaround model (2013) to the Kanji-Chopra CSR model. We compute CSR by employing the Ota and Nakashima CSR model (2015a) and analyze the association between CSR and corporate financial performance (CFP). By examining the association between CSR and CFP, we investigate how firms damaged by the March 11 disaster consider their CSR and plan and implement CSR to proceed toward a turnaround.

This study makes the following contributions. First, because available data on firms that suffered from the March 11 disaster are limited, grasping the financial performance and current state of the internal system of firms affected by the disaster is very difficult. We directly obtain financial performance and managers' actual consciousness and attitudes by implementing a survey. Second, a firm facing a crisis provides guidelines or clues for what firms should do to initiate a turnaround, such as discussing socially responsible behavior and its attitudes, which are common actions for firms affected by the March 11 disaster. Today, when natural disasters are increasing on a global scale, evaluating whether a disaster is a threat or opportunity is useful. Third, few surveys on a CSR report have been conducted because CSR reporting is voluntary. This study contributes to the literature on CSR research by analyzing the association between CFP and CSR using the survey results.

The remainder of this paper is organized as follows. Chapter 2 describes the outline of a CSR model. Chapter 3 reviews the previous literature and develops the hypothesis. Chapter 4 discusses the research design. Chapter 5 reports the empirical results, and chapter 6 provides the

conclusion and limitations to this study and describes possible future studies.

2 CSR MODEL

Although grasping the degree to which a firm fulfils its social responsibility is important, actually measuring its social responsibility is difficult. Kanji and Chopra (2010) indicated the necessity of a framework used to gauge the social responsibility of a firm and developed a model to measure CSR using a hierarchical approach. The Kanji-Chopra CSR model (2010) is viewed as a new system for measuring social responsibility based on a hierarchical modeling approach. In the Kanji-Chopra CSR model (2010),¹ the social responsibility index is measured by dividing it into a social responsibility index, a social investment index, an environmental protection and sustainability index, a governance and economical responsibility index, and an ethics and human rights in peacetime index.

We applied the Ota Turnaround model (2009) to the Kanji-Chopra CSR model (2010) to develop the Ota-Nakashima CSR model for measuring the CSR of firms affected by the March 11 disaster. Figure 1 shows the Ota-Nakashima CSR model. The “organizational strategy” in the left box reflects a business plan for a firm’s CSR. The corporate social responsibility index (CSRI) in the right box reflects the reality of the CSR activity the firm actually fulfills. Social accountability, ethics and human resources, economic responsibility, and the environment exist between organizational strategy and CSRI as components of social responsibility. An arrow points from “organizational strategy” to indicate the social responsibility component a firm emphasizes from social accountability, ethics and human resources, economical responsibility, and the environment. The arrow also indicates whether each CSR component reflects actual CSR activity.

Insert FIGURE 1

¹ Kanji and Chopra (2010, p.120) indicated that CSR is a component of business activity and represents a way of thinking that reflects a firm’s voluntary contribution to society through the economy, the environment, ethics, and social investments. The Kanji-Chopra CSR model (2010) offers a mechanism to enable social responsibility to be communicated through a system.

The Ota-Nakashima CSR model (2015a) differs from the Kanji-Chopra CSR model (2010) with respect to the environment, which is at the bottom of the pyramid. Although the Kanji-Chopra CSR model (2010) focuses on environmental protection from a global perspective, the Ota-Nakashima CSR model focuses on whether small and medium-size firms supported by stakeholders promote turnarounds. Therefore, the difference between the Kanji-Chopra CSR model and the Ota-Nakashima CSR model is seen in their focuses on whether a firm has activities that are friendly to the global environment or whether firms recognize that they are supported by stakeholders.

3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Association between CSR and CFP in Peacetime

Orlitzkey et al. (2003) indicated a positive relationship between CSR and CFP through a meta-analysis of empirical research from 1970 through 2000 on the relationship between CSR and CFP. Suto and Takehara (2008) analyzed hypotheses based on competitive advantage theory, risk management theory, and overinvestment theory, suggesting that a negative association exists between CSR and risk. They supported the risk management theory but found mixed results regarding the association between CSR and profitability. Suto and Takehara (2008) indicated that each CSR item affects CFP through a different channel related to the relationship with stakeholders.

Using the slack theory of resources and good management theory, Fauzi and Idris (2009) developed a hypothesis on the relationship between CSR and CFP using an Indonesian firm sample that suggested a positive association between CSR and CFP. The slack theory states that if financial performance improves, slack resources are available (Fauzi and Idris 2009). The good management theory indicates that good management is highly associated with higher CSR because good management improves the relationship with stakeholders and results in good CSR (Fauzi and Iris 2009). In contrast, Fauzi (2009) analyzed the hypothesis from the same theory using a sample of

U.S. firms, which did not support the hypothesis. Mittal et al. (2008) also investigated the relationship between CSR and CFP using the Indian firm sample but found no positive association.

Association between CSR and CFP in a Crisis

Firms began to reduce costs after the 2008 financial crisis, and CSR projects decreased (Stoian 2013, p.333; Karabrahimoglu 2010). Yelkikalan and Kose (2012, p.295) indicated that firms want to survive, maintain profitability, and minimize losses in times of a crisis. A firm may also prioritize the satisfaction of economical responsibility when confronted with a threat to ensure that it survives a crisis (Yelkikalan and Kose 2012, p.297).

In contrast, Arevalo and Aravind (2010) reported that firms that apply the United National Global Compact (UNGC)² to a business strategy did not experience financial decline or economic shocks. They suggested that the CSR standard is an important starting point when improving businesses. They also showed that the CSR standard improves financial performance in a crisis. Souto (2009) and Yelkikalan and Kose (2012) indicated that using CSR gives businesses the chance to remain in a healthy state during a crisis, switch to more profitable states by converting fundamental values, and overcome serious environments in a crisis (Yelkikalan and Kose 2012, p.297).

We predict that firms affected by the March 11 disaster can manage a turnaround even in a crisis because their mission is a socially responsible one of maintaining the businesses of small and medium-size firms. Ota (2013) analyzed firm A, which suffered from the March 11 disaster, and found that it revived itself because it possessed a strong mission that protected a local lifeline—maintaining food for a local community and saving the lives of local residents. Firm A also had strong support from a client (a financial institution in the same line of business) and the

² This CSR framework was formulated by the United Nations in 2000. <http://www.unglobalcompact.org/>

government. Therefore, we predict that firms affected by the March 11 disaster have a strong mission as local firms that receive support from its stakeholders and management for their turnaround. Thus, we establish the following hypothesis.

H: A positive association exists between the corporate financial performance and the corporate social responsibility behavior of firms affected by the March 11 Disaster.

4 RESEARCH DESIGN

4.1 Outline of Survey Research

Tokyo Shoko Research (TSR) investigated the continuing situation and the cooperation of 135 firms that went through a turnaround-type bankruptcy, including 1,570 firms involved in March 11 disaster-related bankruptcies³ (Corporate Rehabilitation Law and Civil Rehabilitation Law).⁴ We selected 36 firms that currently exist and that cooperated with the TSR in its investigation as our sample in this survey. Table 1 indicates the sample selected.

[Insert here TABLE 1]

Then, we interviewed the firms in our sample between April 24, 2015 and May 21, 2015 using a questionnaire entitled “Survey Investigation about Social Responsibility.” We received 23

³ TSR defines a “bankruptcy” as “the state in which an enterprise fails to make payments for its debt and continuing economic activity becomes difficult.” Bankruptcy is divided into “legal bankruptcy” and “private bankruptcy.” Legal bankruptcy is classified into the turnaround-type—Corporate Rehabilitation Law and Civil Rehabilitation Law—and the settlement type bankruptcy—closures and special closures. “Private bankruptcy” is divided into “suspension of business transactions with banks” and “winding up.” http://www.tsr-net.co.jp/guide/knowledge/glossary/ta_14.html

⁴ According to the TSR website, Corporate Rehabilitation Law represents a reconstruction type bankruptcy that involves plans for a turnaround by carrying on with the business. A courthouse-nominated custodian forces a corporation to focus on a turnaround based on a rehabilitation plan. As a principle, the firm should repay its debt and continue its operations from the support of selected sponsors. The Civil Rehabilitation Law is a substitute for the conventional peace negotiation law and was enacted in April 2000 as a legal procedure primarily for the reconstruction of small and medium-size firms; its targets are a corporation, a special corporation, and an individual. A proprietor can continue to operate a bankrupt firm. One of the positive characteristics of the law is that even if a firm does not currently have excessive debt and impossible payments, it can apply for relief if it faces such a possibility. http://www.tsr-net.co.jp/guide/knowledge/glossary/ta_14.html

effective responses (63.8% collection rate). The questionnaire covered the following topics: organizational strategy, social responsibility, employee ethics, economic responsibility, shareholder support, and corporate social responsibility index.

The industry distribution, attributes, and location classification of the respondents are shown in Figure 1, Figure 2, and Figure 3. Figure 1 indicates that the service, machine, and construction industries have more firms. Figure 2 indicates that 35% of the respondents were presidents, 4% were senior managing directors, 4% were managing directors, and 9% were directors. These figures suggest that half of the representatives of firms who led their employees to a turnaround answered our questionnaires. Figure 3 indicates that the northeast had the highest percent of respondents at 35%; however, the firms affected by the March 11 disaster were distributed throughout the country, including metropolitan areas.

Insert here Figure 1

Insert here Figure 2

Insert here Figure 3

4.2 Survey Results

Organizational strategy, employee morale, economic responsibility, and stakeholder support by stakeholders are shown in Figures 4, 5, 6, 7, and 8, respectively.

Insert here Figure 4

Insert here Figure 5

Insert here Figure 6

Insert here Figure 7

4.3. Observation Variables

An observation variable for each CSR component is shown in Figure 8.

Insert here Figure 8

4.4. Hypothesis Test

The following regression model is used to analyze the hypothesis. Following the Ota-Nakashima CSR model (2015b), CFP is used as the dependent variable and CSR is used as the independent variables in the model as follows:

$$CFP = \beta_0 + \beta_1 OSPS_1 + \beta_2 OSPS_2 + \beta_3 OSPS_3 + \beta_4 OSPS_4.1 + \beta_5 OSPS_4.2 \\ + \beta_6 OSPS_5 + \beta_7 SIZE + \beta_8 AGE + \varepsilon$$

$$CFP = \beta_0 + \beta_1 EHR_1 + \beta_2 EHR_2 + \beta_3 EHR_3 + \beta_4 EHR_4 + \beta_5 EHR_5 + \beta_6 EHR_6 \\ + \beta_7 SIZE + \beta_8 AGE + \varepsilon$$

$$CFP = \beta_0 + \beta_1 ES_1 + \beta_2 ES_2 + \beta_3 ES_3 + \beta_4 ES_4 + \beta_5 ES_5 + \beta_6 ES_6 \\ + \beta_7 ES_7 + \beta_8 SIZE + \beta_9 AGE + \varepsilon$$

Here, *CFP*=corporate financial performance: net income/equity; *OSPS*=organizational strategy variables; *HER*=employee ethics; *ES*= economic responsibility; *SIZE* = ln (number of employees); and *AGE* = ln (years the firm was in operation).

5 EMPIRICAL RESULTS

5.1. Conformability of the Model

The internal consistency of the CSR linear measure is tested to analyze whether our CSR model fits. The α coefficient of each CSR item calculated is shown in Table 2. We find that the Cronbach's α values are adequate and the corrected items are all positive. Moreover, Cronbach's α is shown when an item was eliminated, suggesting that only Question 66 exceeds 0.86, which is the

α coefficient of the whole. The α of each CSR component, including organizational strategy, employee ethics, social responsibility, economic responsibility, and stakeholder support, were 0.779, 0.807, 0.813, 0.836, 0.797, and 0.875, respectively—all higher than 0.7. This result suggests that because these latent variables fit with the model as a positive index, this CSR model can be said to conform.

Insert here Table 2

5.2 Descriptive Statistics

The descriptive statistics are shown in Table 3; these statistics indicate that the mean and median of the firms affected by the March 11 disaster are generally positive. For some firms, the minimum value is the deficit.

Insert here Table 3

5.3. Correlation

Table 4 shows the correlations between net income and each CSR in 2014 and indicates that, in OSPA Question A141 in HER, disclosure requirements by stakeholders, check of employees' work environments, in employee ethics, employee involvement in services to the local community are -732, -513, and -503, respectively. This result suggests a significant negative correlation.

Therefore, firms affected by the March 11 disaster are in the Zone B stage, known as an emergency turnaround. It seems that firms implement CSR project step by step for turnarounds. They do not reach to the CSR project, such as checking of employees' work environments, and employee involvement of services to the local community in employee ethics .

5.4 Regression Analysis

We provide the results of the association between CFP and CSR for firms affected by the

March 11 disaster using the regression analysis in Table 5. Panel A, Panel B, and Panel C of Table 5 show the results of the regression analysis in which organizational strategy, employee ethics, and economic responsibility are inserted as dependent variables and CFP is inserted into the regression model.

Panel A indicates that the CFP of firms is significantly negatively associated with financial content and governance disclosure. Panel B indicates that the CFP of the firms is significantly positively associated with consumer protection and a safe work environment and significantly negatively associated with employee work-check systems and employee services to the local community. In addition, CFP is significantly associated with whether stakeholders understand important employee-related items, such as employee loyalty, high productivity, and maintaining employee employment.

Insert here Table 4

According to Ota (2013), firms that suffered from the March 11 disaster experienced three imbalanced functions: production, distribution, and financing. This imbalance resulted in poor conditions in organizational financial health, in a stage known as Zone A. The Zone A stage indicates that the firm is financially impaired, suggesting that its profitability, liquidity, productivity, growth, and other finances become disproportionate (Ota 2013).⁵ The first priority for firms in Zone A is to organize and recover their organization, production, and distribution and to simultaneously advance their financial functions (Ota 2013). Following Ota (2013), the turnaround from the stage of impairment is referred to as undergoing an “emergency turnaround” (Figure 4).

Insert here Figure 4

⁵ The Ota-risk response for a turnaround model (2013) is the recycling economic system of a matrix resulting from the suffering related to turnaround. The firms affected by the March 11 Disaster faced a crisis related to moving to Zone A and moving from impairment to emergency turnaround for a period to maintain their financial health. If they maintain their financial health and increase their corporate value, they move to the formal turnaround stage (Ota 2013).

The firms affected by the March 11 disaster are in the Zone B stage, which involves emergency turnaround. We find that they do not maintain the work-check system and are not engaged with employee involvement in services to the local community. The result does not support the hypothesis. However, even if they are in the Zone B stage, they focus on providing a safe work environment and creating an organization that corresponds to the viewpoint of consumer protection. The results indicate that stakeholders understand the important items for employees and suggest responsible behavior, which supports the hypothesis. Thus, our results are mixed.

6 CONCLUSION AND FUTURE RESEARCH

This study analyzes the association between CFP and CSR using the survey results. The following implications are provided.

The correlation results suggest a significant negative correlation, which indicates that the firms affected by the March 11 disaster are in the Zone B stage, which is called an emergency turnaround. As mentioned before, the order exists in the process for a turnaround. They did not reach the CSR project, such as checking of employees' work environment, and employee involvement of services to the local community in employee ethics.

The firms affected by the March 11 disaster that are in the emergency turnaround stage carry out their responsibilities in a systematic manner. The most important CSR for them is organizational culture, which stresses consumer protection, employee safety, and stakeholders' understanding of significant employee items. We predict that the next step in a real turnaround is to address the CSR of financial content and the governance disclosure requirement, implement a system to check the work environment, and build employees' understanding of services needed for the local community.

This study has some limitations. The sample size used is small, and the analytical method

was limited. We need to analyze the association between CSR and CFP using a larger sample in the future. We would also like to investigate the relationship between the turnaround stage and CSR using the same questionnaire.

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FIGURE 1. Ota-Nakashima CSR model

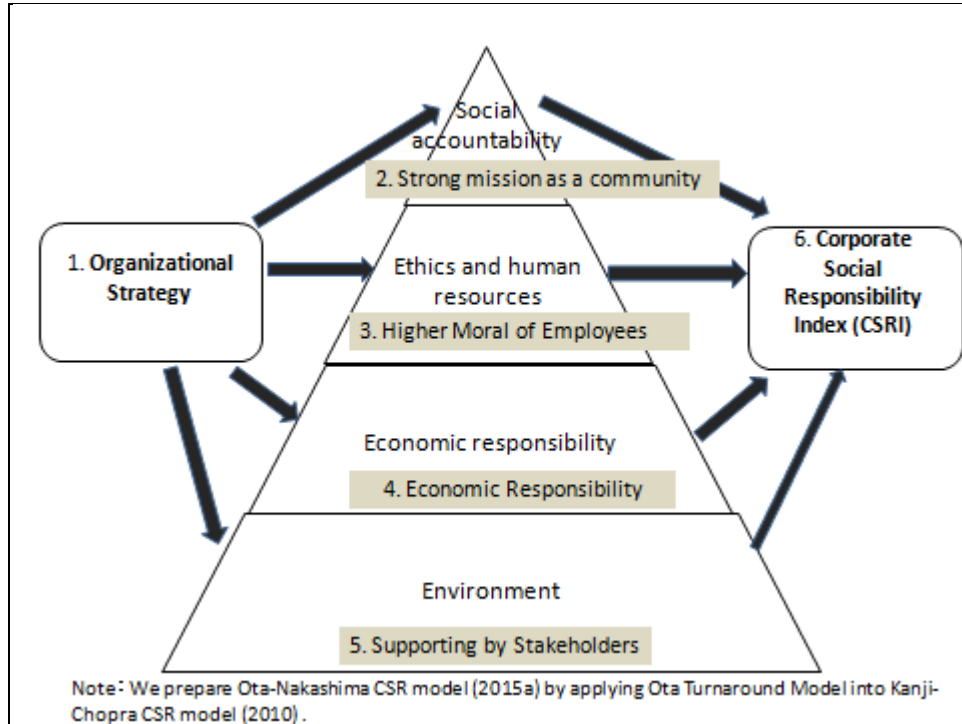


TABLE 1
Sample Selection

Bankruptcy related to March 11 Disaster	1,570
Bankrupt by the Turnaround-type Bankruptcy (Corporate Rehabilitation Law and Civil Rehabilitation Law).	135
Non-continuation firms (After a procedure finish, it is cleaned out.)	32
Non-continuation firms (After a procedure finish, it dismisses.)	14
Non-continuation firms (After a procedure finish, it is closed.)	2
	4
Firms merged by an other firm	9
Continuation firms which are not friendly cooperative with TSR	38
	36
Firms which refused questionnaire answers	13
	23

Figure 1
Industry Distribution

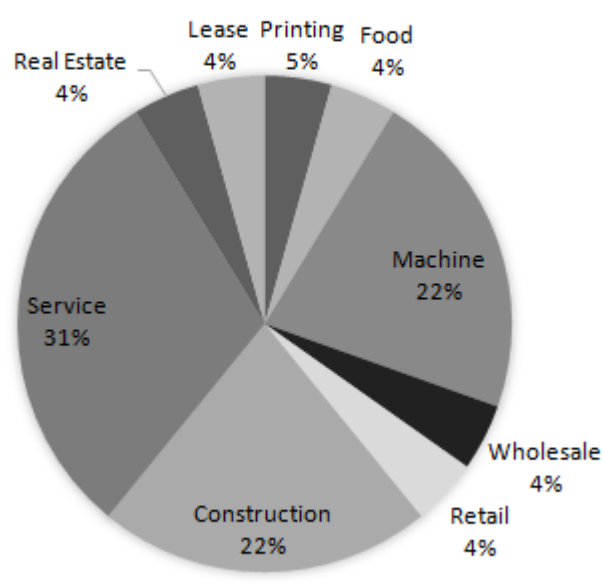


Figure 2
Positions of Respondents

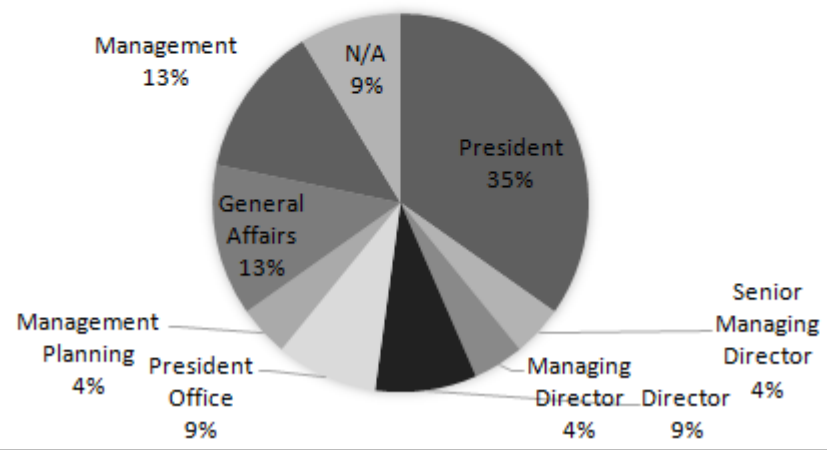


Figure 3
Location of Firms

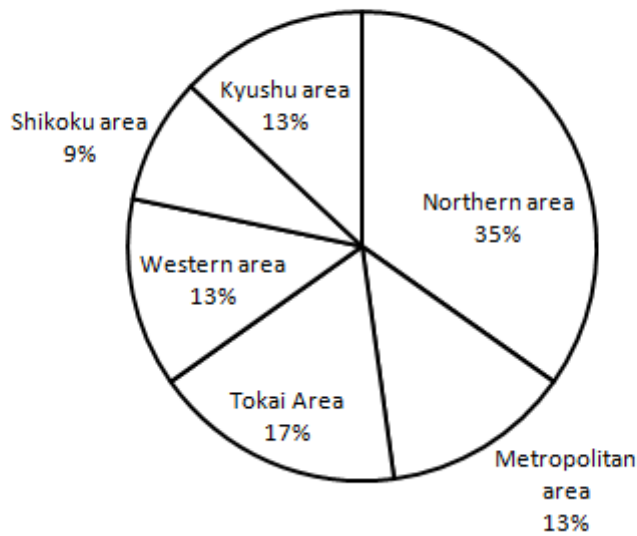


TABLE 2					
Model Creditability Analysis					
Cronbach's Alpha					
1	2	3	4	5	6
OSPS	SA	HER	SR	SS	CSRI
.779	.807	.813	.836	.797	.875

TABLE 3						
Descriptive Statistics						
	N	MIN	MAX	MEAN	Std. Deviation	MEDIAN
EARNING	16	-289.532	977.925	52.373	268.902	3.893
SIZE	22	0.693	5.768	3.681	1.217	3.421
AGE	20	1.609	4.956	3.783	0.701	3.882

Note: Each variable are defined as follows:

EARNING	Net income / Equity
SIZE	Logarithm of Number of Employees
AGE	Logarithm of Number of Years when the Firm Began

TABLE 4					
Correlation with CFP					
<i>OSPS</i>		<i>EHR</i>		<i>ES</i>	
<i>Q11</i>	-.356	<i>Q31</i>	-.231	<i>Q41</i>	-.087
	.177		.388		.749
<i>Q12</i>	-.272	<i>Q32</i>	-.155	<i>Q42</i>	-.364
	.309		.566		.166
<i>Q13</i>	-.076	<i>Q33</i>	-.513*	<i>Q43</i>	.136
	.780		.042		.616
<i>Q141</i>	-.732**	<i>Q34</i>	-.121	<i>Q44</i>	-.028
	.001		.656		.919
<i>Q142</i>	-.423	<i>Q35</i>	.189	<i>Q45</i>	-.265
	.102		.484		.321
<i>Q15</i>	-.408	<i>Q36</i>	-.503*	<i>Q46</i>	-.044
	.116		.047		.872
<i>SIZE</i>	.039	<i>SIZE</i>	.039	<i>Q47</i>	-.484
	.885		.885		.058
<i>AGE</i>	.071	<i>AGE</i>	.071	<i>SIZE</i>	.039
	.795		.795		.885
				<i>AGE</i>	.071
					.795

See Table 1 for variables. **. Correlation and *. Correlation are significant at 0.05 level (2-tailed).

TABLE 5

An Association between CFP and CSR (CSPS, EHR, ER)

Dependent Variable: EARNING

PANELA: OSPS

	B	t	Sig.
<i>(Constant)</i>	-175.804	-.249	.810
<i>Q11</i>	26.634	.425	.684
<i>Q12</i>	-13.061	-.221	.832
<i>Q13</i>	86.980	1.110	.304
<i>Q141</i>	-102.034	-3.300	.013
<i>Q142</i>	-63.191	-.957	.370
<i>Q15</i>	53.752	.997	.352
<i>SIZE</i>	131.953	1.692	.134
<i>AGE</i>	-52.371	-.565	.589
Adjusted R2	0.361		
F-value	2.061		

PANELB: EHR

	B	t	Sig.
<i>(Constant)</i>	-1169.919	-1.567	.161
<i>Q31</i>	-56.217	-.803	.448
<i>Q32</i>	101.206	1.946	.093
<i>Q33</i>	-85.327	-1.964	.090
<i>Q34</i>	105.169	2.133	.070
<i>Q35</i>	41.662	.898	.399
<i>Q36</i>	-60.666	-2.294	.055
<i>SIZE</i>	123.290	1.486	.181
<i>AGE</i>	89.284	.945	.376
Adjusted R ²	0.400		
F-value	2.249		

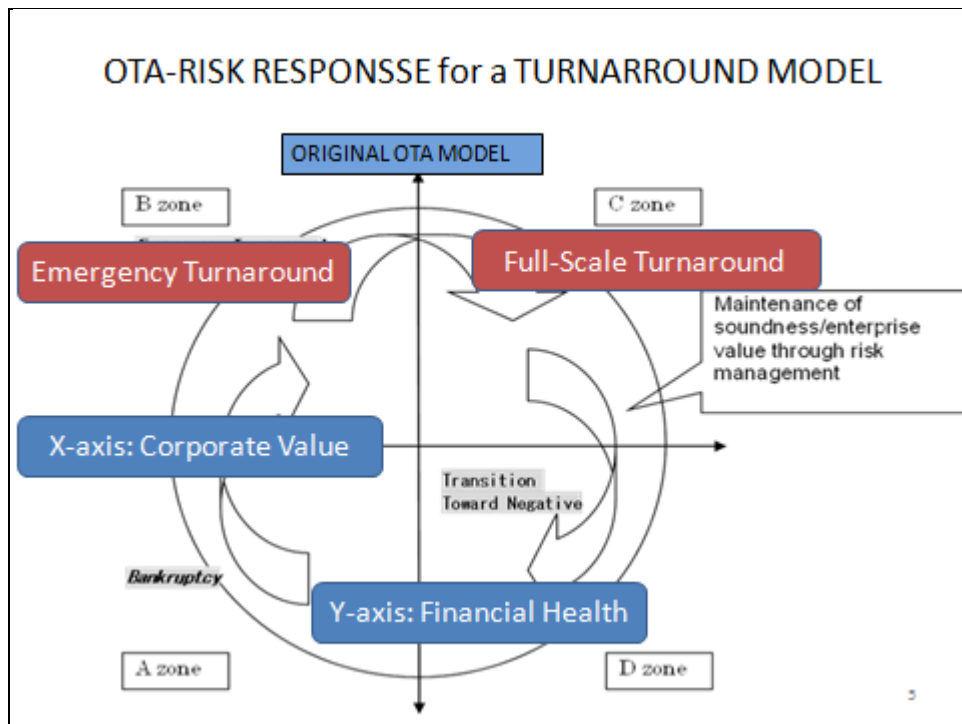
PANELC: ES

	B	t	Sig.
<i>(Constant)</i>	-218.713	-.242	.817
<i>Q41</i>	-4.215	-.077	.941
<i>Q42</i>	-77.964	-.844	.431
<i>Q43</i>	152.753	2.083	.082
<i>Q44</i>	25.150	.376	.720
<i>Q45</i>	-12.797	-.142	.892
<i>Q46</i>	-17.164	-.175	.866
<i>Q47</i>	-73.512	-1.235	.263
<i>SIZE</i>	71.277	.888	.408
<i>AGE</i>	29.709	.275	.793
Adjusted R ²	0.166		
F-value	1.332		

Dependent variable is CFP.

See Table 2 for variables. **. Correlation and *. Correlation are significant at the 0.01 level and (2-tailed).

FIGURE 4



Note: This figure indicates the process of a firm advances for a turnaround. An X-axis is the corporate value and a Y-axis is the degree of financial healthiness (Ota 2013).

APPENDIX

Survey regarding Corporate Social Responsibility

Organizational Strategic Planning Systems for a Turnaround: OSPST

- 1.1. Does your firm implement any strategy for corporate social responsibility for a turnaround?
- 1.2. Does your firm head to a turnaround with a higher mission as a local community member?
- 1.3. Do you have respect for the human rights of your employees since it is significant for your employee to be unified for a turnaround?
- 1.4.1. Does your firm disclose the required level of the financial performance and governance for a turnaround if stakeholders such as banks and lenders request your firm?
- 1.4.2. Does your firm implement any proper internal reporting system to monitor and control social accountability for a turnaround?
- 1.5. Do you have a system for disclosing your policy and the situation of the practice regarding your social responsibility?

Social Accountability: SA

- 2.1 Do you care about transparency and openness regarding your business activities?
- 2.2 Do you have a system for preventing corruption, financial irresponsibility and underhand

dealing?

2.3. Do you have an activity for services to support local community?

2.4. Do you provide resources and education to support local community?

2.5. Do you have social accountability to meet public expectations that community has of business?

2.6. Do you provide education of holding businesses responsible for their actions and products?

2.7. Do you consider safety and development of local community is significant for a turnaround?

Ethics and Human Resources: HER

3.1. Do you have training inside the firm to help employees work positively for a turnaround?

3.2. Do you have ethically high corporate culture to protect consumers when the problems of labor or environment occur?

3.3. Do you have a system to examine the firm's own labor practices and workplace environment?

3.4. Does your firm provide employees with safe work conditions at your workplaces?

3.5. Does your firm have no discrimination on the basis of age, gender or ethnic origin?

3.6. Are your employees involved in activities such as fundraising or community volunteering?

Economic Responsibility: ER

4.1. Do you change in your policies to behave responsibly due to pressure from your stakeholders such as creditors and banks?

4.2. Do you have a willingness to have a good relationship with your stakeholders to act socially responsible?

4.3. Do your stakeholders understand the causes that are important to your employees as it generates business benefits such as more loyalty, higher productivity, and increase retention?

4.4. Do you provide respect for the quality of life of the workforces and their families as well as the local community and society at large?

4.5. Does your firm contribute to economic growth of the local community?

4.6. Does your firm create the employment opportunities for local communities?

Environment Supporting Your Firms for a Turnaround: ES

5.1. Does your firm share controlling risk of events such as natural disasters with your stakeholders?

5.2. Does your firm publish a website or a brochure to make the public aware regarding the arrangement for a turnaround?

5.3. Does your firm inform stakeholders such as local community of the activities for your turnaround?

5.4.1 Do your investors support you seeking a turnaround?

5.4.2 Do your creditors support you seeking a turnaround?

- 5.4.3 Do your banks support you seeking a turnaround?
- 5.4.4 Do your suppliers and clients support you seeking a turnaround?
- 5.4.5 Do the consumers support you seeking a turnaround?

Corporate Social Responsibility Index: CSRI

- 6.1. Do your respond to local community for its socially responsible behavior?
- 6.2. Does your firm possess self-regulating mechanisms to monitor your corporate behavior?
- 6.3.1. Does your firm compensate to the local community for back social and environmental effects of actions or products?
- 6.3.2 Does your firms provide the management and employees all the tools and means required to pursue broader societal goals?
- 6.4. Does your firm disclose the reports on corporate social responsibility issues?
- 6.5. Does your firm have community-based development projects such as children’s education, or new skills for adults?

(Notes: This questionnaire is intended to obtain inner and outer coefficient for Ota-Nakashima CSR model. The original questionnaire is from Kanji and Chopra (2010) for CSR in normal economic conditions. Ota-Nakashima CSR model is a modified model in a crisis based on Kanji and Chopra (2010). Although most of the questions above are based on Kanji and Chopra (2010), some questions are adjusted following Ota-Nakashima CSR model.)

