The Influence of Corporate Reputation on Corporate Value : Based on Empirical Research Results

コーポレート・レピュテーションの企業価値への影響
―実証研究の結果にもとづいて―

Michiharu Sakurai
櫻井　通晴
Emeritus at Senshu University and Visiting Professor at Josai International University
専修大学名誉教授，城西国際大学客員教授
Kazunori Ito
伊藤　和憲
Senshu University
専修大学
Katsuhiro Ito, Shuichi Shinmura
伊藤　克容　　　　　新村　秀一
Seikei University
成蹊大学

■Key Words
Management acounting，Empirical research,
Corporate value Financial performance，Corporate reputation

■Abstract
The paper uses an empirical approach to examine what influence corporate reputation has on corporate value and financial performance using covariance structural analysis. The result shows that organizational value (leadership and workplace) has 0.90 influence on social value (governance and citizenship), and social value has 0.74 influence on economic value (product/services,innovation and financial performance). We got the result that economic value has a 0.32 influence on financial performance (ROE, cash flow, operating income, and sales volume).

■キーワード
コーポレート・レピュテーション，実証研究，企業価値，財務業績，管理会計

■要約
本論文では，コーポレート・レピュテーションが企業価値と財務業績にいかなる影響を及ぼしているかについて，共分散構造分析による実証研究を通じて明らかにしている。その結果は，組織価値（リーダーシップと職場）は社会価値（ガバナンスと市民性）に0.90の影響を及ぼし，社会価値は経済価値（製品／サービス，革新，財務業績）に0.74の影響を及ぼしていることが分かった。さらに，経済価値が財務業績（ROE，キャッシュ・フロー，売上高）に0.32の有意な影響を及ぼしていることも判明した。

1 Introduction

Corporate reputation is an intangible asset that gives a company a sustainable competitive advantage and increases corporate value. One of the authors defined corporate reputation as "a sustainable competitive advantage derived from various stakeholders of a company, based on the results of past and present activities as well as on future forecast of the business manager and employees."

This paper uses an empirical approach to examine what influence corporate reputation has on corporate value and financial performance. To attain this purpose, we first conducted a questionnaire survey to analyze the relationship between the opinions of Japanese managers and corporate reputation.

Economic value is a major element of corporate value. In 2009 Aoki, Iwata, and Sakurai (Aoki et al. 2010, pp. 191–215) conducted a survey to assess the perceptions of Japanese business managers about corporate value. In regard to corporate value, the view which emphasizes economic value as being central to stockholder's value is dominant in Western countries. On the other hand, various surveys show that in Japanese companies, a comprehensive evaluation including social contribution and employee satisfaction greatly influences corporate value. The 2009 survey clarified that many Japanese business managers (89 percent) are of the opinion that corporate value consists of economic value, social value, and organizational value. Here, economic value points to net profit, ordinary income, EVA®, cash flow, etc.; social value points to social contribution such as corporate citizenship, environmental protection, compliance, etc.; and organizational value points to organizational culture, leadership, innovative abilities, willingness for work and teamwork, and ethics, etc. (Sakurai, 2011, pp. 59–84).

Then, Ito, Ito, Shinmura, and Sakurai (2011) used a questionnaire survey to verify which of the elements composing corporate value—economic value, social value, and organizational value—Japanese business managers emphasize the most. Table 1 shows how Japanese business managers perceive corporate value.

The 2011 questionnaire survey showed that the largest group of Japanese business managers placed importance on economic value as in Western countries. Managers that placed emphasis on social value were almost the same as for economic value. In other words, Japanese business managers place about the same degree of importance on social value as they do economic value. On the other hand, business managers that placed emphasis on organization value numbered less than half of those that placed emphasis on economic value.

The main purpose of this paper is to clarify the influence of corporate reputation on financial performance based on empirical evidence. It also aims to examine the relationship between organizational, social, and economic value through an

Table 1 What is Your Understanding of Corporate Value? (N=161 ; Multiple Answers)

Corporate Value	Emphasis on Economic Value	Emphasis on Social Value	Emphasis on Organizational Value
No. of companies (ratio)	125 (78%)	121 (75%)	50 (31%)

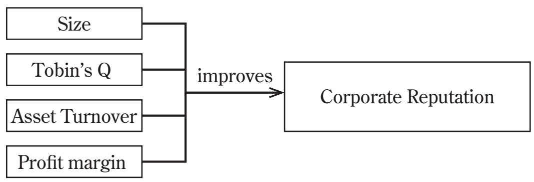
empirical research.

2 Literature

Looking at surveys conducted in Western countries on the relationship between various reputation indexes and financial performance, it is clear that there is a high correlation between corporate reputation and the improvement (or damage) of financial performance, as shown below.

Belkaoui (2001, pp. 1–13) conducted empirical research using size, Tobin's Q, asset turnover, and profit margin as independent variables to examine their influence on corporate reputation. The research used attributes of corporate reputation, namely quality of management, quality of products/services offered, innovativeness, long-term investment, soundness of financial position, ability to attract/develop/keep talented people, responsibility to the community/the environment, and wise use of corporate assets, as dependent variables. The research results showed, as discussed in Sakurai (2005, pp. 51–59), that all of the variables improved corporate reputation. The dependent variables used by Belkaoui are taken from *Fortune* magazine reputation index 1987 and 1988 survey, covering 300 and 306 firms for the "Most Admired Companies" at that time.[1] See Figure 1.

Figure 1 Relationship between Reputation Drivers and Corporate Reputation

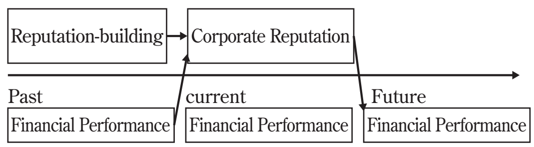


On the other hand, looking at empirical research results regarding the influence of reputation on financial performance, Fombrun and Shanley (1990, pp. 233–258) pointed out the difficulty in directly connecting improvement of corporate reputation to improvement of financial performance. Since then, this view became the common view in the academic world.

Later, Fombrun and van Riel (2004, pp. 27) introduced Bharadwaj's results from a survey targeting 125 American manufacturers, showing that corporate reputation has major influence on operating income.

Even if a company's reputation improves in the short term, it is unlikely that the improvement would immediately be reflected in the company's financial performance. Roberts and Dowling (2002, pp. 1077–1093), utilizing *Fortune*'s "Most Admired Companies" survey data from 1984 to 1998, discovered that companies with comparatively good reputations can sustain higher profits over the long term. The independent variables used were the evaluation attributes used by Fortune at the time: asset use, community and environmental friendship, ability to develop and keep key people, financial soundness, degree of innovativeness, investment value, management quality, and product quality. See Figure 2 (Robert and Dowling, p. 1078).

Figure 2 Relationship between Reputation-building and Financial Performance



1 As of 2010, the reputation index has changed as follows. (1) The ability to attract, develop, and keep talented people, (2) quality of management, (3) quality of products or services, (4) innovativeness, (5) value as long-term investment, (6) financial soundness, (7) use of corporate assets, (8) social responsibility, and (9) effectiveness in doing business globally. It must be noted that drivers of the reputation index change almost every year.

Can the improvement of corporate reputation also improve financial performance in the short term? A study by Rose and Thomsen (2004, pp. 201–210) using the empirical data of Danish companies could not confirm a significant influence of corporate reputation on what they called firm value (the market to book value of equity). However, they found that financial performance had major influence on corporate reputation even in the short term.

Graham and Bansal (2007, pp. 189–200) studied the relationship between performance and reputation of airline companies using MBA students as respondents. This research surveyed the influence of (1) return on equity (ROE), (2) the endorsement of the US Federal Aviation Administration (FAA), (3) size, (4) age, and (5) crash history, on the willingness to pay airline fees. The results proved that (#2) FAA endorsement, (#4) size, and (#5) company age directly or indirectly influence consumers' willingness to pay airline fees. The endorsement of the FAA had the highest influence on reputation and the survey showed that consumers were willing to pay 36 dollars extra if the FAA could endorse the safety of the business. It is highly significant that, not as a general theory, but in the specific industry of airlines, it was made clear that corporate reputation has influence on financial performance.

In Japan, there is no similar survey on corporate reputation from the perspective of management accounting, and there has also been no empirical research on the influence of the improvement of corporate reputation on financial performance. However, one empirical result currently needed the most by reputation researchers in Japan is empirical research on whether financial performance would improve if companies put all their efforts into management that would improve social and organizational values and be admired by society (Good Guys are Prospering), instead of simply focusing on money-making (pursuit of economic value).

This paper uses a covariance structure analysis to clarify what kind of relationship exists between reputation indices assumed to improve corporate reputation, and corporate value and financial performance.

3 Research Data and Basic Model

Here we introduce the questionnaire survey data used in this study and the basic model used as a premise. Corporate reputation is the reflection of social truth regarding business managers and employees as seen by shareholders, customers, creditors, corporate citizenship, the media, suppliers, etc., against the backdrop of a company's internal problems——organizational structure, organizational culture, vision/strategy, leadership, corporate identity (CI) and work environment. Through what processes does the improvement of corporate reputation increase corporate value?

3-1 Questionnaire Survey Data

In undertaking this research, we first conducted a questionnaire survey to investigate companies' attitudes toward corporate reputation. Next, we examined the financial performance of companies that participated in the survey and compared the results against the questionnaire survey results to analyze how companies' perceptions of corporate reputation influence organizational, social, and economic values, as well as financial performance.

Most researchers in Western countries conduct empirical survey using data from *Fortune*'s "Most Admired Companies" (1982–), the *Wall Street*

Journal's "reputation quotient (RQ, 1999–), or the RepTrak® (2006–) reputation index proposed by the Reputation Institute (RI). These reputation indices have been considered global standards at different times and it is easy for researchers in major Western countries to obtain data based on these sources. However, Japan has yet to form ties with such institutions. Therefore, researchers in Japan must obtain data through alternate methods.

For this paper, with the purpose of investigating how business managers of major Japanese companies regard reputation management, we conducted a survey targeting 1,673 companies listed in the first section of the Tokyo Stock Exchange and in Diamond, Inc. 's "Company Staff Records (Kaisya Syokuinroku, in Japanese)." Of these companies, there are some companies that (1) are very small, with less than 200 employees. There are also (2) companies that do not list their executives. The survey was conducted targeting 1, 250 companies excluding types (1) and (2). The survey questionnaires were mailed mainly to managers of management planning departments, and if they were unavailable, CSR/IR managers, intellectual property/PR managers, financial managers, or the statutory auditor[2], in that order. Surveys were collected from 186 companies from January 5, 2011 to February 28, 2011. Of these, 178 responses were valid (valid response rate of 14. 2 percent).

For the 178 companies providing valid responses, we took the Nikkei corporate finance data and Nikkei financial data from Nikkei Media Marketing, Inc. For some companies, this external data was not complete and we only gathered six years' worth of financial data for 161 companies.[3] See Appendix 1 for the distribution by industry of the respondent companies and Appendix 2 for the reason we decreased the number of companies from 186 to 161. The survey questionnaire is shown in Appendix 3. The sample for the survey analysis was the 161 companies.

3-2 Basic Model

In order to improve corporate reputation through internal efforts by a company, first, it is important for employees to improve their skills and capabilities through organizational learning and to enthusiastically engage in their work, and for top management to exercise leadership to raise organizational value. Raising organizational value contributes to product development, the development of innovative production methods, and more appropriate contributions to society, leading to improved social value through customer satisfaction, etc. Economic value is assumed to increase through the improvement of such organizational and social values.

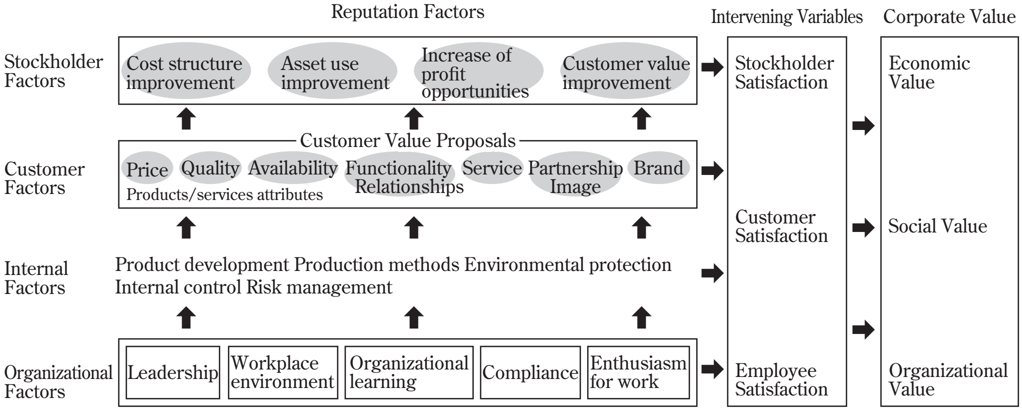
The basic model that we believe represents the relationship between reputation and corporate value is shown in Figure 3. This basic model was developed by Sakurai (2005, p. 30), based on the basic conceptual model of the balanced scorecard proposed by Kaplan and Norton (2001).

Figure 3 shows that the steady implementation of organizational factors such as leadership and organizational learning increases organizational

2 There is statutory (or corporate) auditor system peculiar to Japan in addition to the western-style board committee governance system in Japanese company law. Each company can choose the system they follow. In the "statutory system," a large company must have at least four auditors including two outside auditors. The number of auditors depends on the size of the company.

3 Of the 186 companies from whom responses were collected, eight companies had insufficient data because they were banks or securities firms, three companies had incomplete or incorrect responses, and five companies could not be identified.

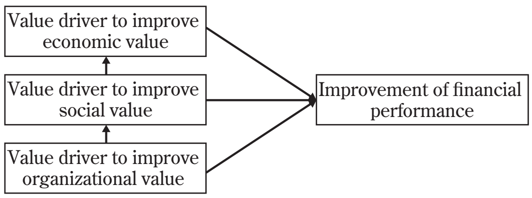
Figure 3 Framework of Corporate Reputation



value and builds product development, production methods, internal control, risk management, etc., as internal factors. This in turn satisfies customers, through customer factors such as (rational) price, (high) quality, and (excellent) services. Customer factors have a strong relationship with factors that greatly increase social value. Finally, stockholder factors such as cost reduction, effective use of assets, and increase of sales lead to more opportunities for increased profits. Shareholder factors have a strong relationship with economic value. From this, we can assume that improving intervening variables such as stockholder satisfaction, customer satisfaction, and employee satisfaction will improve corporate value comprising economic, social, and organizational values.

How should we interpret the relationship between economic, social, and organizational values (right side of Figure 3) and financial performance? We developed a hypothesis that increased organizational value (for example, when employees' willingness to work increases) and increased social value (for example, increased orders, sales, and profits due to an employee winning a Nobel Prize) should enhance financial performance. That is to say, a relationship of organizational value → social value → economic value would be seen. At the same time, there may be a causal relationship between the three types of value (arrows in the opposite direction). Figure 4 illustrates this relationship.

Figure 4 Does Corporate Reputation Improve Financial Performance?



4 Results of the Empirical Analysis and Analysis of the Results

This section examines three hypotheses. The first hypothesis uses the RepTrak® reputation index to verify what kind of causal relationships exist between the elements comprising corporate reputation: economic, social, and organizational values. The second hypothesis also uses RepTrak® to verify the influence of corporate reputation on financial performance. The third hypothesis verifies the influence of the reputation indexes proposed by the authors on financial performance.

4-1 Causal Relationships between Organizational, Social, and Economic Values

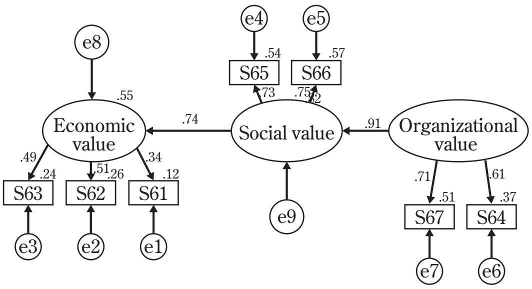
Hypothesis 1 is related to whether any causal relationships exist between economic, social, and organizational values. The hypothesis is separated into two parts as follows in accordance with Figure 3.

Hypothesis 1–1 Organizational value influences social value
Hypothesis 1–2 Social value influences economic value

We structured a causal relationship model based on this hypothesis. Figure 5 is the results using standardized estimates.

In Figure 5, $\chi 2$ value = 18.775, degrees of freedom = 12, significance level = 0.094. From this, we conclude that our model explains the covariance matrix. Standardized estimates in figure 5 show that organizational value (leadership and workplace) has a 91 percent influence on social value (governance and citizenship), and social value has a 74 percent influence on economic value (products/services, innovation, and financial performance). The significance levels of the variables in Figure 5 are shown in Table 2. From Table 2 we see that all variables have significance at the 1 % level.

Figure 5 Causal Relationship Model of Organizational, Social, and Economic Values



The fit of the model is CFI = 0.961 and RMSEA = 0.064. Based on a benchmark of a CFI of 0.9 or above and RMSEA of 0.1 or lower, thus, we can say that the model fit is adequate. In other words, the findings support the first hypothesis that organizational value influences social value and social value influences economic value.

4-2 Causal Relationship between Corporate Reputation and Financial Performance

Hypothesis 2 seeks to prove that organizational, social, and economic values influence financial performance, as can be seen in Figure 4. The results show that organizational value has almost no influence on financial performance. Therefore, we established a new hypothesis that the economic

Table 2 Non-standardized Estimates of the Reputation Relationship Causal Model

			Estimates	Standard Error	Test Statistic	Level	Label
Social Value	<---	Organizational Value	1.049	0.21	4.995	***	
Economic Value	<---	Social Value	0.196	0.069	2.848	0.004	
S61	<---	Economic Value	1				
S62	<---	Economic Value	2.75	1.036	2.653	0.008	
S63	<---	Economic Value	2.366	0.902	2.622	0.009	
S65	<---	Social Value	1				
S66	<---	Social Value	1.197	0.172	6.949	***	
S64	<---	Organizational Value	1				
S67	<---	Organizational Value	1.151	0.207	5.575	***	

value of corporate reputation influences financial performance.

Hypothesis 2 Economic value influences financial performance

While retaining Hypothesis 2 as is, we focused on financial performance and improved the χ2 test, significance level of variables, and model fit test. As a result, we established a model comprising sales volume (a1), ordinary income (a3), and EBITDA (a9), as shown in Figure 6.

In this model, χ2 = 40.969, degrees of freedom = 32, significance level = 0.133; therefore we can conclude that the created model explains the covariance matrix. Standardized estimates show that organizational value has a 90 percent influence on social value, social value has a 78 percent influence on economic value, and economic value has a 32 percent influence on financial performance.

To see the significance levels of the variables, we show the significance levels of the non-standardized estimates in Table 3. In Table 3, all the variables have a significance level of 5 percent. Additionally, in the model, CFI = 0.984 and RMSEA = 0.045, showing that the model fit is adequate. The above results also support Hypothesis 2.

Figure 6　Revised Model of Financial Performance

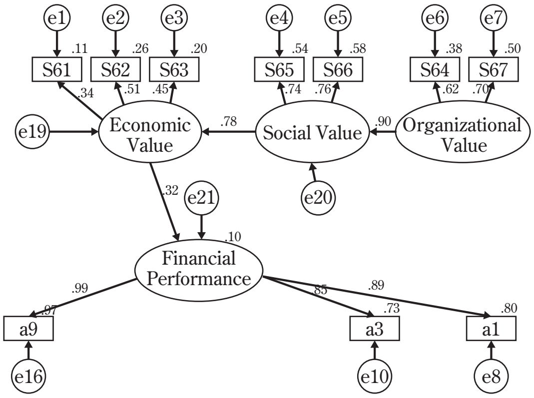


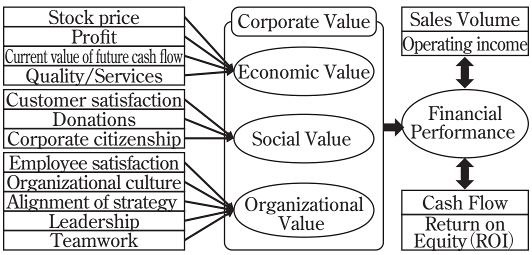
Table 3　Non-standardized Estimates of the Revised Model

			Estimates	Standard Error	Test Statistic	Level	Label
Social Value	<---	Organizational Value	1.033	0.207	4.988	***	
Economic Value	<---	Social Value	0.199	0.069	2.901	0.004	
Financial Performance	<---	Economic Value	2846985	1306071	2.18	0.029	
S61	<---	Economic Value	1				
S62	<---	Economic Value	2.825	1.045	2.702	0.007	
S63	<---	Economic Value	2.234	0.861	2.596	0.009	
S65	<---	Social Value	1				
S66	<---	Social Value	1.204	0.171	7.049	***	
S64	<---	Organizational Value	1				
S67	<---	Organizational Value	1.13	0.203	5.568	***	
a1	<---	Financial Performance	1				
a3	<---	Financial Performance	0.04	0.003	14.546	***	
a9	<---	Financial Performance	0.127	0.007	18.738	***	

4-3 Verification of Proposed Evaluation Points for Corporate Reputation Indexes

Up to this point, we have used the RepTrak® reputation index for analysis. However, we thought that in analyzing Japanese companies, we should consider a reputation index that is more focused on the Japanese situation. We propose 12 evaluation attributes : those comprising economic value (S511 = stock price, S512 = profit, S513 = current value of future cash flow, S515 = quality/services), attributes comprising social value (S 514 = customer satisfaction, S517 = donation, S518 = corporate citizenship), and attributes comprising organizational value (S516 = employee satisfaction, S519 = organizational culture, S520 = alignment of strategy, S521 = leadership, S522 = teamwork). Figure 7 shows a model depicting the relationship between the aspects of corporate reputation, and financial performance.

Figure 7 Relationship between Value Drivers, Corporate Value, and Financial Performance

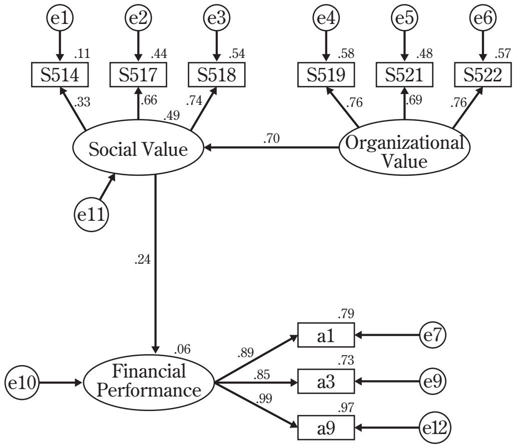


Hypotheses 1 and 2 were verified by using RepTrak®. Hypothesis 3 is established as follows based on the model in figure 8.

Hypothesis 3 Organizational, social, and economic values influence financial performance

This hypothesis could not be verified. Our findings showed there was almost no causal relationship between economic value and financial performance. We then limited the significant financial variables to those identified in Hypothesis 2. Figure 8 depicts the model using standardized estimates.

Figure 8 Causal Relationship Model of Corporate Reputation Based on the Authors' Evaluation Indexes and Financial Performance



In the model in Figure 8, $\chi 2$ value = 18.661, degrees of freedom = 25, and the significance level = 0.813. Because the significance level is above 5 percent, the created model can explain the covariance matrix. Standardized estimates show that the organizational value (organizational culture, leadership, and teamwork) has a 70 percent influence on social value (customer satisfaction, donation, and corporate citizenship), and the social value has a 24 percent influence on financial performance (sales volume, ordinary income, and EBITDA).

In order to look at the significance level of the variables, we show non-standardized estimates in Table 4. Table 4 shows that all the variables have a significance level of 5 percent. The model fit is CFI = 1.000 and RMSEA = 0.000, showing that the fit is adequate as well. In other words, we could not verify that organizational, social, and economic values influence financial performance as in Hypothesis 3, but we found that organizational and social values influence financial performance.

Table 4 Proposed Non-standardized Evaluation Points

			Estimates	Standard Error	Test Statistic	Level	Label
Social Value	<---	Organizational Value	0.226	0.076	2.994	0.003	par_7
Financial Performance	<---	Social Value	1456412	737317.7	1.975	0.048	par_6
S514	<---	Social Value	1				
S517	<---	Social Value	2.931	0.941	3.114	0.002	par_1
S518	<---	Social Value	3.159	1.006	3.14	0.002	par_2
S519	<---	Organizational Value	1				
S521	<---	Organizational Value	0.89	0.128	6.959	***	par_3
S522	<---	Organizational Value	0.959	0.131	7.337	***	par_4
a1	<---	Financial Performance	1				
a3	<---	Financial Performance	0.04	0.003	14.478	***	par_5
a9	<---	Financial Performance	0.127	0.007	18.665	***	par_8

5 Conclusions and Limitations

The purpose of this paper was to examine the relationship between corporate reputation and financial performance. In order to achieve this goal, we conducted a questionnaire survey targeting mainly managers at the business planning department of companies listed in the first section of the Tokyo Stock Exchange. We checked the results of the survey against the companies' financial performance, and investigated the relationship between economic, social, and organizational values as well.

The findings of this paper are the following. First, in the perceptions of Japanese managers, organizational value strongly influences social value and social value influences economic value. Second, we did not see clear influence of economic value on financial performance. The first and second findings correspond to Hypothesis 1 and 2, respectively, and we used RepTrak® as the reputation index. It is possible that Western reputation indices may not be properly applied to Japan. Therefore, thirdly, we proposed a model to verify the influence of economic, social, and organizational values on financial performance. As a result, we verified that organizational and social values influence financial performance.

This paper improves our understanding of the relationships of corporate reputation with economic, social, and organizational values, and with financial performance. However, this research has the following limitations.

First, in order to increase international comparability we utilized RepTrak® as a reputation index for Hypothesis 1 and 2, and we utilized a reputation index matching Japanese corporations as an independent variable for Hypothesis 3. Hypothesis 1 and 2 positioned financial performance, quality/services, and innovativeness as attributes that increase economic value, corporate governance and corporate citizenship as value drivers that heighten social value, and leadership and the workplace as attributes that increase organizational value. For Hypothesis 3, we used an original reputation index taking into account the management activities of Japanese business managers. We assumed that economic value would be increased by attributes such as stock prices, profit, the present value of future cash flow, and quality/services, social value by customer satisfaction, donation, and corporate citizenship, and organizational value by employee satisfaction, organizational culture, alignment of strategy, leadership, and teamwork. However, quality/services and innovation would increase both economic and social values. Although quality/services and innovation would increase social value, we could only include one attribute (economic value).

Second, corporate brands have a hereditary nature. They are created over many years, and in effect, inherited by succeeding managers. On the other hand, corporate reputation shows results in a shorter term in comparison to brands. The deterioration of corporate reputation is also faster than brands. If it is true, even if results do not appear in 1-2 years, the efforts of reputation-building can be assumed to manifest in 10 years. Ideally, the current reputation improvement strategy and efforts should be analyzed using future financial performance. In fact, however, it is difficult to do such an analysis. Therefore, we had no choice but to assume that companies' reputation strategies are consistent. We should replicate this research in future years.

Third, in this paper we confirmed the positions of individual companies regarding reputation by asking questions about their views on reputation through a questionnaire survey. However, we cannot verify the actual relationships between economic, social, and organizational values with each corporate reputation and so in this paper we had to rely on the survey of the perceived relationship between companies' positions regarding reputation and their relationship with financial data.

●References

Aoki, Akimichi, Hironao Iwata, and Michiharu Sakurai (2010), Chapter 18 : Management Perception of Reputation Management: Analysis of Questionnaire Research from the Viewpoint of Management Accounting, *Management Accounting of the Intangibles—With a Focus on Corporate Reputation*, Final report of the Japan Accounting Association Study Group, 69 th Japan Accounting Association National Conference, September 8.

Belkaoui, Ahmed Riehi (2001), *The Role of Corporate Reputation for Multinational Firms, -Accounting, Organizational, and Market Considerations*, Quorum Books.

Fombrun, Charles J., and M. Shanley (1990), What's in a Name? Reputation Building and Corporate Strategy, *Academy of Management Journal*, Vol. 33.

Fombrun, Charles J. and Cees B. M. van Riel (2005), *Fame & Fortune, −How Successful Companies Build Winning Reputations−*, 2004. Translation supervised by Yasuhito Hanado, translated by Dentsu Reputation Project Team, *Corporate Reputation*, Toyo Keizai, 41.

Graham, Mary E. and Pratima Bansal (2007), Consumers' Willingness to Pay for Corporate Reputation: The Context of Airline Companies, *Corporate Reputation Review*, Vol. 10, No. 3.

Ito, Kazunori, Katsuhiro Ito, Shuichi Shinmura, and Michiharu Sakurai, Analysis of Research Results for Reputation Management—For the Main Purpose of Investigation through Empirical Research—, *Shogaku Ronshu in Senshu University*, No. 93, 15–40.

Kaplan, Robert S. and David P. Norton (2001), *The Strategy -Focused Organization, -How Balanced Scorecard Companies Thrive in the New Business Environment*, Harvard Business School Press. Translation supervised by Michiharu Sakurai, *Strategy Balanced Scoreboard*, Toyo Keizai.

Roberts, Peter W. and Grahame R. Dowling (2002), Corporate Reputation and Sustained Superior Financial Performance, *Strategic Management Journal*.

Rose, Casper and Steen Thomsen (2004), The Impact of Corporate Reputation on Performance: Some Danish Evidence, *European Management Journal*, Vol. 22, No. 2.

Sakurai, Michiharu (2005), *Corporate Reputation—Managing Corporate Reputation—*, Chuokeizai-sha.

Sakurai, Michiharu (2011), *Measuring and Managing Corporate Reputation—Theory and Case Studies of Corporate Reputation*, Doubunkan Shuppan.

Appendix 1 Distribution by Industry

	Listed Companies		Valid Responses	
Agriculture, forestry and fisheries	5	0%		
Mining	7	0%		
Construction	95	6%	13	7%
Food	64	4%	7	4%
Textiles	41	2%	2	1%
Pulp/paper	11	1%		
Chemicals	120	7%	4	2%
Pharmaceuticals	35	2%	7	4%
Oil/Coal	10	1%	3	2%
Rubber	11	1%		
Ceramics	29	2%	3	2%
Iron and steel	35	2%	8	4%
Non-ferrous metals	24	1%		
Metalware	36	2%	6	3%
Machinery	119	7%	18	10%
Electronics	155	9%	27	15%
Transportation equipment	62	4%	14	8%
Precision machinery	26	2%	1	1%
Other products	46	3%		
Electricity/gas	17	1%	4	2%
Land transportation	35	2%	8	4%
Sea transportation	9	1%		
Air transportation	3	0%	1	1%
Warehouse and freight-related	19	1%		
Information and communication	98	6%	4	2%
Wholesale	140	8%		
Retail	146	9%	15	8%
Banking	84	5%	8	4%
Securities	21	1%	3	2%
Insurance	7	0%		
Other financial	21	1%		
Real estate	45	3%	7	4%
Services	97	6%	15	8%
Total	1673	100%	178	100%

Appendix 2 Distribution of Collected Data

Classification of Collected Data	Number of Companies	Ratio (%)
Total collected data	186	104%
Incomplete or incorrect data	3	2 %
Company name unknown	5	3 %
Number of valid responses	178	100%
Banks or securities firms with insufficient financial data	9	5 %
General companies with insufficient financial data	8	4 %
Complete financial data (including other financial)	161	90%

Appendix 3

The 2009 survey was conducted from January 5 to February 10, 2009 by sending questionnaire slips by mail. The targeted companies for the survey were 1,062 companies chosen randomly from among companies listed in the first section of the Tokyo Stock Exchange and questionnaire slips were sent addressed to the individuals in those companies responsible for CSR/IR, intellectual property, public relations, management planning, finance, auditing, etc. Responses were sent from 124 companies (collected from 134 companies, the valid response ratio was 12.6%). Additionally, there were some missing values for some of the survey questions, so whenever this occurred the analysis was conducted excluding the data for which there was missing values.