December 1, 2003

Report on the 2003 Corporate Governance Index Survey

Japan Corporate Governance Research Institute (JCGR) http://www.jcgr.org/

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Overview

The purpose of a corporate governance system is to assure that the managers of a corporation maintain healthy, sustainable corporate performance over the long term. Therefore, an effective corporate governance system should result in superior performance. The Japan Corporate Governance Research Institute has developed the JCGIndex, which measures corporate governance in Japanese firms, based on the principle of separation between governance by the board of directors and management by senior executives. For the second consecutive year, JCGR surveyed Tokyo Stock Exchange First Section firms. The JCGIndex measures the state of corporate governance in the responding firms. Both this year and last year, we found that high JCGIndex firms achieved superior performance, as measured by ROA, ROE, stock returns, and employment growth. We believe that the JCGIndex demonstrates the importance of corporate governance in today's business environment, with its challenges of globalization and rapid technological advancement. We hope that firms will share their JCGIndex results with investors, their employees, and the general public. We sincerely thank all that firms that responded to our survey.

- (1) In July 2003, the Japan Corporate Governance Research Institute sent a mail survey to all Tokyo Stock Exchange First Section firms (1523 firms as of July 2, 2003). We received valid responses from 201 firms. We used these responses to generate corporate governance index scores (JCGIndex) to assess how closely governance practices of these firms conformed to JCGR's Corporate Governance Principles.
- (2) This was the second annual JCGR survey. Of the 159 firms that responded to last year's survey, 72 firms responded to this year's survey. Therefore, a total of 288 firms have, either this year or last year, received JCGIndex scores. Due to the revision of the Commercial Code to introduce the committee board structure (in April 2003), the questions in this year's survey are slightly different from those of last year. The index scores between the two years, however, are generally comparable.

- (3) The average JCGIndex for the 201 firms that responded to this year's survey was 37.8 out of 100 possible points (standard deviation 12.0). This is 1.5 points higher than last year's average of 36.3 points (standard deviation 11.2). Given the slight difference in questions from last year, we do not consider this to be a significant change. The low average JCGIndex indicates that the actual corporate governance practices of Japanese firms are still very far from JCGR's governance model.
- (4) The JCGIndex consists of four categories. In general, firms scored the lowest in Category II, structure and function of board of directors, indicating that developments in this aspect of corporate governance have lagged the others. This tendency was also clear in last year's survey.

category		score
Ι	Corporate objectives and CEO responsibility	Cgl
II	Structure and function of board of directors	Cg2
III	Management system	Cg3
IV	Transparency and communication to shareholders	Cg4

Four categories of the JCGIndex

- (5) The distribution of the JCGIndex ranged from a maximum of 73 to a minimum of 12, indicating a wide divergence in corporate governance practices across firms. Last year, the maximum was 73 and the minimum, 13.
- (6) In order to better understand the relationship between the JCGIndex and corporate performance, we selected a group of firms for which the JCGIndex was particularly high and a group of firms for which the JCGIndex was particularly low. The high JCGIndex group (30 firms) consisted of firms with JCGIndex of over 1 standard deviation from the mean. The low JCGIndex group (25 firms) consisted of firms with JCGIndex of over 1 standard deviation below the mean. Return on assets (ROA), return on equity (ROE) and stock returns were higher for the high JCGIndex group, indicating that firms with the highest JCGIndex had superior capital efficiency and delivered greater returns to shareholders. These results are consistent with our results for last year. The consistency between the different samples of firms in the two years increases our confidence in these results, despite the low response rates.
- (7) Over the past 3 years, firms in the low JCGIndex group decreased their number of employees, while those in the high JCGIndex group added employees. We found a similar pattern last year. Although it is often said that it is necessary to sacrifice employees to increase shareholder value, our results suggest that both shareholders and employees benefit simultaneously in high JCGIndex firms.

- (8) This year, for the first time, we examined the relationship between corporate performance and each of the four JCGIndex sub-categories listed in item (4) above, by comparing the performance of groups of the highest and lowest scoring firms in each sub-category. We found that with the exception of Category II, "Structure and Function of the Board of Directors", the higher a firm's category score, the better its performance. This indicates that the external form of corporate governance, as shown by the form of the board of directors, will not lead to higher performance unless it is accompanied by substance, as measured by the other categories.
- (9) The combination of all four categories determines a firm's corporate governance. The high JCGIndex group received high scores relative to the low JCGIndex group across all categories. In other words, there was no single category that led to high JCGIndex levels. To achieve a high JCGIndex, a firm had to receive high scores in all four categories.
- (10) The category most closely related to performance was Category IV, Transparency and Communication to Shareholders. It is not clear whether performance is the cause or the effect of excellent transparency and disclosure, but it indicates that high-performing firms tend to take this aspect of governance very seriously.
- (11) JCGR believes that corporate governance must be based on the fundamental attitude of the firm and its CEO. A firm's corporate governance system must be built to support this attitude, and cannot exist in form only. Our results for the 4 categories are consistent with this.
- (12) The survey results over two years, covering 288 firms, clearly demonstrate the relationship between the JCGIndex and firm performance. While the relationship between the JCGIndex and corporate performance reported here is a correlation and we cannot prove causality, it is possible to infer from these results that firms with higher JCGIndex are delivering greater value to their shareholders.
- (13) We urge Japanese firms to pay attention to their corporate governance systems, and speed the pace of reform in order to achieve the government systems required in today's global environment.

rank	firm	JCGIndex
1	Orix Corp.	73
2	Nomura Holdings, Inc.	72
3	Konica Minolta Holdings, Inc.	71
4	Hitachi, Ltd.	70
5	Omron Corp.	68
6	Teijin Ltd.	67
7	HOYA Corp.	63
8	Parco Co., Ltd.	61
9	Yamaha Motor Co., Ltd.	60
10	Sumida Corp.	59

(14) The top 10 JCGIndex firms and their JCGIndex results.

Our analyses demonstrate that the JCGIndex is useful not only to firms seeking to reorganize their corporate governance systems, but also to fund managers and other investors seeking to better understand firms. We hope that firms that have responded to this survey will disclose their JCGIndex results, and use the index as a means to communicate with their investors, employees, and the general public.

I About the JCGIndex survey

1. Overview of the survey

The Japan Corporate Governance Research Institute (JCGR) sent a mail survey to all firms listed on the first section of the Tokyo Stock Exchange (1,523 firms as of July 2, 2003) in July 2003. We received 201 valid responses by the beginning of October 2003. The names and industries of responding firms are attached as a separately downloadable appendix to this report. We compiled and analyzed these responses to form a corporate governance index (JCGIndex). This is the second consecutive year that we have conducted this survey.

Last year, 159 firms responded to the survey. Of these firms, 72 responded to this year's survey as well. Therefore, 129 firms responded to the survey for the first time this year. Over the two years that we have conducted this survey, we have received responses for a total of 288 firms.

In April of 2003, the Commercial Code was revised to allow the introduction of a committee-based (so-called "US-style") board structure. In order to respond to these changes, the questions have been revised slightly. However, the results over the two years are comparable.

2. Survey objective

Our objective in developing the JCGIndex was to gain an accurate understanding of the current state of corporate governance in Japan, and to present this information in index form. We hope that through the JCGIndex, we can help both the Japanese and international business communities to better understand Japanese firms.

At the same time, we anticipate that through the process of completing the questionnaire, Japanese managers will develop a deeper understanding of our corporate governance attitude and the practices and systems that are increasingly demanded in the global business environment. We hope that the JCGIndex will be a useful tool to help firms to realize their desired corporate governance systems.

3. Underlying principles of the JCGIndex

The following principles underlay the JCGIndex. These principles are based on the corporate governance principles of the Japan Corporate Governance Research Institute.

- governance by the shareholders
- clear and measurable corporate goals
- a system to assure the responsibility of CEO and top management team for realizing the goals
- an independent board with capability to monitor and motivate management
- systems for managerial decision-making, implementation, and risk-management
- accountability to shareholders through providing timely and sufficient information and securing shareholders' trust through investor relations activities
- maintenance of transparency through disclosure to all stakeholders
- The JCGIndex reports the degree to which a firm adheres to these principles, on a scale of 1 to 100 All rights reserved copyright (c) Japan Corporate Governance Research Institute, Inc. 2003

points.

II Analysis results

- 1. Characteristics of the responding firms
- (1) Comparison of responding firms to all TSE First Section firms

The 201 firms that responded represent about 13% of Tokyo Stock Exchange First Section firms. The following table compares the responding firms with the entire set of listed firms, based on consolidated financial data for the previous 3 years. (Firms that did not report data for each of the past 3 years are not included.)

Responding firms tended to be larger than average in terms of total assets, sales, and number of employees. Also, the ROA, ROE, and stock returns of responding firms are higher than the average across all TSE First Section firms, and the dispersion across responding firms is less than dispersion across all TSE First Section firms. These differences are statistically significant. (Last year's results are included in parentheses).

mean	ROA	ROE	Stock return
All man an din a firmer	5.57%	2.26%	-5.58%
All responding firms	(5.39%)	(2.19%)	(6.89%)
All listed firms	4.62%	67%	-7.48%
All listed firms	(4.58%)	(65%)	(4.02%)

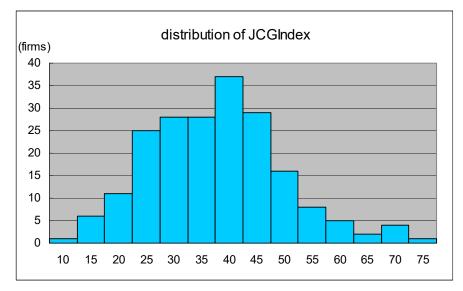
total assets (consolidated)	firms	average	minimun	maximum	standard deviation
· · · · · ·	181	5			
responding firms	-	771,653.73	8,655.00	19,383,583.33	2,117,984.53
listed firms	1,308	435,146.68	1,406.00	20,626,314.33	1,289,442.11
					(million yen)
sales (consolidated)	firms	average	minimun	maximum	standard deviation
responding firms	181	678,157.69	12,287.33	14,861,670.00	1,806,464.18
listed firms	1,308	359,928.46	754.67	14,861,670.00	1,103,031.07
					(million yen)
employees (consolidated)	firms	average	minimun	maximum	standard deviation
responding firms	181	13,120.63	143.67	317,138.00	33,541.88
listed firms	1,305	7,368.84	30.33	317,138.00	20,881.90
					(number of employees)
ROA (consolidated)	firms	average	minimun	maximum	standard deviation
(CONCONCINC		average	mmmun	палнан	Standard deviation
responding firms	177	5.57	-2.23	19.91	3.87
		U			
responding firms	177	5.57	-2.23	19.91	3.87
responding firms	177	5.57	-2.23	19.91	3.87 4.25
responding firms	177 1,260	5.57 4.62	<mark>-2.23</mark> -29.22	<mark>19.91</mark> 43.06	3.87 4.25 (%)
responding firms listed firms ROE (consolidated)	177 1,260 firms	5.57 4.62 average	-2.23 -29.22 minimun	19.91 43.06 maximum	3.87 4.25 (%) standard deviation
responding firms listed firms ROE (consolidated) responding firms	177 1,260 firms 176	5.57 4.62 average 2.26	-2.23 -29.22 minimun -145.29	19.91 43.06 maximum 25.31	3.87 4.25 (%) standard deviation 13.61
responding firms listed firms ROE (consolidated) responding firms	177 1,260 firms 176	5.57 4.62 average 2.26	-2.23 -29.22 minimun -145.29	19.91 43.06 maximum 25.31	3.87 4.25 (%) standard deviation 13.61 27.29
responding firms listed firms ROE (consolidated) responding firms listed firms	177 1,260 firms 176 1,246	5.57 4.62 average 2.26 -0.67	-2.23 -29.22 minimun -145.29 -753.60	19.91 43.06 maximum 25.31 58.89	3.87 4.25 (%) standard deviation 13.61 27.29 (%)
responding firms listed firms ROE (consolidated) responding firms listed firms stock return (consolidated)	177 1,260 firms 176 1,246 firms	5.57 4.62 average 2.26 -0.67 average	-2.23 -29.22 minimun -145.29 -753.60 minimun	19.91 43.06 maximum 25.31 58.89 maximum	3.87 4.25 (%) standard deviation 13.61 27.29 (%) standard deviation

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(2) Distribution of the JCGIndex

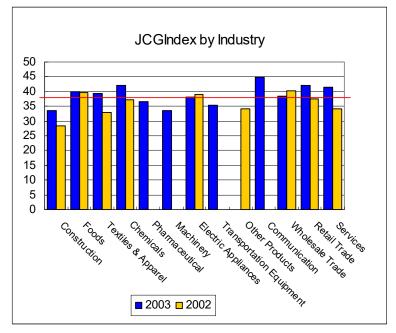
The JCGIndex ranged from a maximum of 73 to a minimum of 12. The mean was 37.8 with the standard deviation 12.0. There was a bell-shaped distribution. Last year we saw a similar distribution for the 159 firms, with a mean of 36.3 (maximum 73, minimum 13).

Although only 72 firms of a total of 288 firms responded to our survey both this year and last year, we did not see, on average, a significant change in JCGIndex between the two years. This suggests that there has not been substantial change in corporate governance among Japanese firms over these two years.



2. JCGIndex by industry

This graph shows the average JCGIndex by industry, for industries in which there were 7 or more respondents. (We report only scores for industries with 7 or more respondents. We also show the distribution by industry for last year (for industries with 7 or more respondents).



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3. Four index sub-categories

The JCGIndex is made up of four sub-categories. Firms tended to score the fewest points in Category II, "Structure and Function of the Board of Directors." On average, firms achieved only 6.1 out of 29 possible points. This indicates that the functions of the board of directors and operating officers have not yet been sufficiently separated, and that independent directors have yet to be fully utilized. (Results in parentheses are for last year.)

Category		Maximum points	Mean	Achievement rate*
		(A)	(B)	(B) / (A)
T	Corporate objectives and CEO	28	12.3	43.9%
I	responsibility	(28)	(10.9)	(38.9%)
п	Structure and function of board of	29	6.1	21.0%
II directors		(29)	(7.3)	(25.2%)
		26	11.6	44.6%
III	Management system	(25)	(10.3)	(41.2%)
IV	Transparency and communication	17	7.7	45.3%
IV	to shareholders	(18)	(7.8)	(43.3%)

*The achievement rate measures the percent of the actual points available that a company achieved.

4. Definition of high JCGIndex and low JCGIndex groups

We compared firm characteristics and performance of groups of firms with high and low JCGIndex levels. The high JCGIndex group had JCGIndex of 1 standard deviation (12) or greater above than the mean (37.8). The low JCGIndex group had JCGIndex of 1 standard deviation or more below the mean.

High JCGIndex group: Firms with JCGIndex greater than 50 (30 firms).

Low JCGIndex group: Firms with JCGIndex less than 25 (25 firms).

(We used the same method to create high and low groups for each of the 4 categories that make up the index.)

III JCGIndex and firm characteristics and performance

The following analyses compare the characteristics and performance of the high and low JCGIndex groups. We also compare the high and low scoring groups for each of the four sub-categories. The first set of analyses use the actual data; the second set of analyses uses data standardized by industry. The results are essentially the same, suggesting that our results are quite stable and robust. We include the analyses with standardized data in a separately downloadable appendix.

1. Analysis of JCGIndex and firm characteristics and performance

In analyses of ROA, ROE and stock return, the high JCGIndex group showed superior performance to the low JCGIndex group. We found the same pattern of results last year. Although the response rate for both years was low, the strikingly similar results for both samples suggest that our results are robust and reliable.

(1) Method of analysis

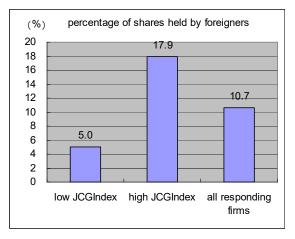
In the following analyses, we compare firm characteristics and financial results for the high and low JCGIndex groups (as described above).

The financial data is on a consolidated basis, and was averaged over the previous 3 years (2000-2003) or 5 years (1998-2002). Firms that did not report data for all years were omitted, resulting in some variation in the number of firms in each group across the different analyses.

ROA is net operating profits before interest and tax payments divided by total assets (the average of beginning and ending levels for the year). ROE is net income after taxes divided by total shareholders' equity (the average of beginning and ending levels for the year). Stock return is the total of dividends and capital gains or losses divided by share price at the beginning of the year.

(2) JCGIndex and characteristics of responding firms

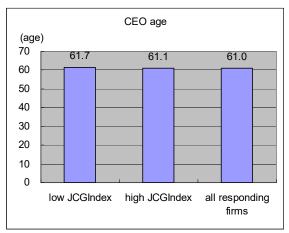
a. Rate of foreign ownership



The high JCGIndex group was significantly higher (1% level) than the low JCGIndex group.

All responding firms	184
High JCGIndex group	30
Low JCGIndex group	22

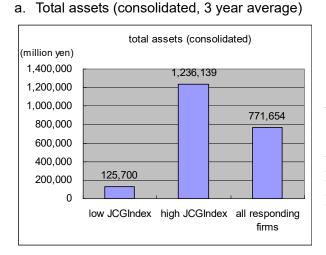
b. CEO age



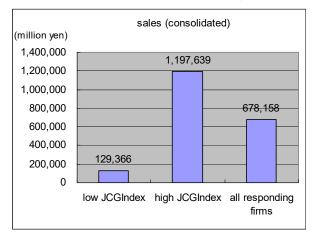
CEOs of the high JCGIndex group were younger than those of the low JCGIndex group, though this difference was not statistically significant (at the 10% level).

All responding firms	188
High JCGIndex group	29
Low JCGIndex group	23

(3) JCGIndex and firm size



b. Sales (consolidated, 3 year average)



The high JCGIndex group was significantly higher (1% level) than the low JCGIndex group.

All responding firms	181
High JCGIndex group	28
Low JCGIndex group	22

The high JCGIndex group was significantly higher (1% level) than the low JCGIndex group

All responding firms	181
High JCGIndex group	28
Low JCGIndex group	22



(number o employees	
lempioyees	,
25,000	23,225
20,000	
15,000	13,121
,	
10,000	7,220
5,000	
0	
	low JCGIndex high JCGIndex all responding firms

c. Number of employees (consolidated, 3 year average)

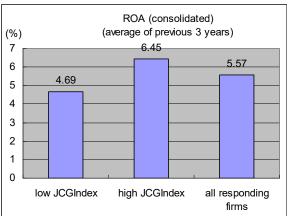
The high JCGIndex group was higher than the low JCGIndex group, though this difference was not statistically significant (at the 10% level).

All responding firms	181
High JCGIndex group	28
Low JCGIndex group	22

(4) JCGIndex and ROA, ROE

From the perspective of shareholders, the essence of corporate governance is to maintain the income-generating potential of assets. The high JCGIndex group showed statistically significant higher levels of ROA and ROE than the low JCGIndex group.





ROA (consolidated) (%) (average of previous 5years) 7 6.10 5.49 6 5 3.85 4 3 2 1 0 low JCGIndex high JCGIndex all responding firms

3 year

The high JCGIndex group was significantly higher (10% level) than the low JCGIndex group.

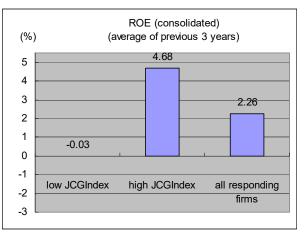
All responding firms	177
High JCGIndex group	25
Low JCGIndex group	22

5 year

The high JCGIndex group was significantly higher (5% level) than the low JCGIndex group.

All responding firms	158
High JCGIndex group	25
Low JCGIndex group	18





b. Return on equity (consolidated, 3 year and 5 year average)

3 year

The high JCGIndex group was significantly higher (5% level) than the low JCGIndex group.

All responding firms	176
High JCGIndex group	25
Low JCGIndex group	22

ROE (consolidated) (%) 5 (average of previous 5 years) 4.64 4 3 1.87 2 1 1 0.14 ŀ 0 low JCGIndex high JCGIndex all responding Ι firms

5 year

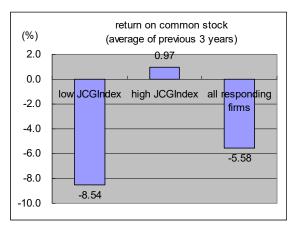
The high JCGIndex group was significantly higher (5% level) than the low JCGIndex group.

All responding firms	158
High JCGIndex group	25
Low JCGIndex group	18

(5) JCGIndex and stock returns (3 and 5 years)

To what degree did the shareholders benefit? The high JCGIndex group had higher returns to common stock over the previous 3 and 5 years than the low JCGIndex group. As shown below, there was no statistically significant difference between the beta's of the two groups. The high JCGIndex group produced a higher return for investors.

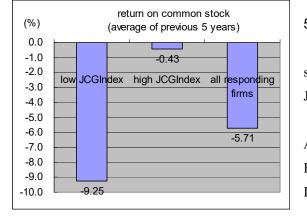
	beta (3 year)	beta (5 year)
High JCGIndex group	.885	.911
Low JCGIndex group	.749	.791
All responding firms	.839	.803





The high JCGIndex group was significantly higher (1% level) than the low JCGIndex group.

All responding firms	166
High JCGIndex group	26
Low JCGIndex group	23



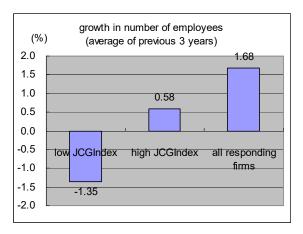
5 year

The high JCGIndex group was significantly higher (1% level) than the low JCGIndex group.

All responding firms	161
High JCGIndex group	24
Low JCGIndex group	23

(6) JCGIndex and employment growth

It is often said that it is necessary to sacrifice employees to increase shareholder value. Our results show that the highly profitable high JCGIndex group actually added employees over the last 3 years, while the low JCGIndex group reduced employees. We found a similar result last year. These results indicate that high JCGIndex firms are not obtaining their superior performance through layoffs and other forms of workforce reductions.



The high JCGIndex group was higher than the low JCGIndex group, though this difference was not statistically significant (at a 10% level).

All responding firms	181
High JCGIndex group	28
Low JCGIndex group	22

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item	Comparison of high and low JCGIndex groups (significance levels)	Comparison of high JCGIndex group and all responding firms (significance levels)
Rate of foreign ownership	1%	1%
CEO age	X*	Х
Total assets (3 year average)	1%	X
Sales (3 years)	1%	10%
Number of employees (3 years)	Х	10%
ROA (3 years)	10%	X
ROA (5 years)	5%	X
ROE (3 years)	5%	X
ROE (5 years)	5%	X
Stock return (3 years)	1%	1%
Stock return (5 years)	1%	1%
Employment growth (3 years)	Х	X

(Table 1) Summary of results for high and low JCGIndex group

*not statistically significant at the 10% level

2. Relationship between JCGIndex and firm performance by sub-category

The JCGI index consists of 4 subcategories: I. Corporate objectives and CEO responsibility, II. Structure and function of the board of directors, III. Management system, IV. Transparency and communication to shareholders. We analyzed the relationship between scores in each category with firm performance. Our analysis method was similar to that for the index as a whole. For each category, we compared firms that scored the highest with those that scored the lowest (one standard deviation above or below the mean). We found that except for Category II, Structure and function of the board of directors, there was a relationship between each category and performance. Category II, which measures the form of the board of directors, had no statistically significant relationship to performance. We believe that this indicates that corporate governance is meaningless if it is form only.

A firm's actual corporate governance was best captured by the combination of the 4 subcategories. We found that the high JCGIndex group tended to score highly on all 4 categories, while the scores for the low JCGIndex group were low on all 4 categories. High JCGIndex firms did not score well on just one category, but tended to do well on all aspects of governance.

Category IV, Disclosure and communication to shareholders, had the strongest relationship to performance. While we cannot evaluate the direction of causality, it is possible that high-performing firms were more likely to be active in disclosure than low-performing firms.

(1) The relationship between JCGIndex sub-categories

The following table shows the scores of the high and low groups across the four sub-categories. The number in parentheses shows how much, on average, each category contributed to the total index score. The differences between the high and low JCGIndex groups in contribution of each category were not large, but for the high JCGIndex groups, Category II, "Structure and Function of the Board of Directors" contributed proportionally more to the average index score. A comparison between the average points for the high and low JCGIndex groups indicate that the high JCGIndex group tended to score well on all dimensions of governance, while the low JCGIndex groups scored relatively poorly on all dimensions.

category	Ι	II	III	IV	JCGIndex
high ICCLs day	18.6	12.5	15.9	10.8	57.8
high JCGIndex	(31.8%)	(21.9%)	(28.9%)	(18.9%)	(100%)
	7.4	3.1	5.5	3.6	19.6
low JCGIndex	(37.8%)	(15.8%)	(28.1%)	(18.4%)	(100%)

(2) Firm performance by high and low JCGIndex groups

Below, we created high and low groups for each category, and compared performance between the high and low index groups. We created these groups in the same way as the high and low JCGIndex groups, taking firms whose index score in each category was 1 standard deviation above or below the mean. In the following section, we will refer to scores for Categories I-IV as Cg1, Cg2, Cg3, and Cg4.

A. Category I (Corporate objectives and CEO responsibility)

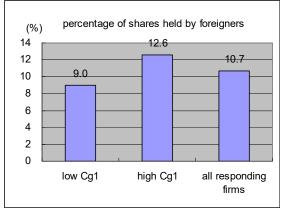
distribution of Cg1 (firms) 60 49 50 38 40 30 30 23 21 19 20 13 10 4 3 1 0 0 2.5 5 7.5 10 12.5 15 17.5 20 22.5

(1) The definition of high and low Cg1 groups

Distribution of Cg1 Mean: 12.3 Standard deviation: 4.7 Maximum: 23 Minimum 0 High Cg1 group: 42 firms above 17 Low Cg1 group: 23 firms below 7.6

(2) Characteristics of Cg1

a. Cg1 and rate of foreign ownership

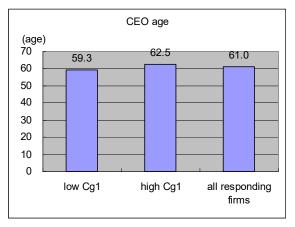


The high Cg1 group was significantly higher (10% level) than the low Cg1 group.

All responding firms	184
High Cg1 group	42
Low Cg1 group	23

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b. b. Cg1 and CEO age

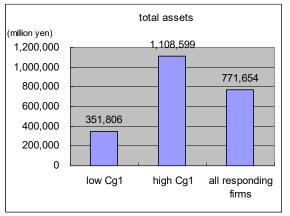


CEO age was significantly higher (5% level) in the high Cg1 group than in the low Cg1 group.

All responding firms	184
High Cg1 group	42
Low Cg1 group	23

(3) Cg1 and firm size

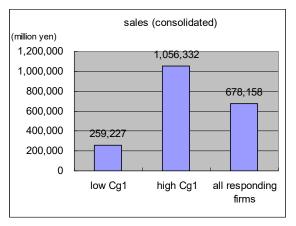
a. Cg1 and total assets (consolidated, 3 year average)



The high Cg1 group was significantly higher (5% level) than the low Cg1 group.

All responding firms	181
High Cg1 group	38
Low Cg1 group	23

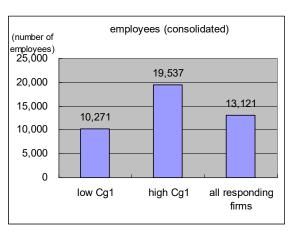
b. Cg1 and sales (consolidated, 3 year average)



The high Cg1 group was significantly higher (5% level) than the low Cg1 group.

All responding firms	181
High Cg1 group	38
Low Cg1 group	23





c. Cg1 and number of employees (consolidated, 3 year average)

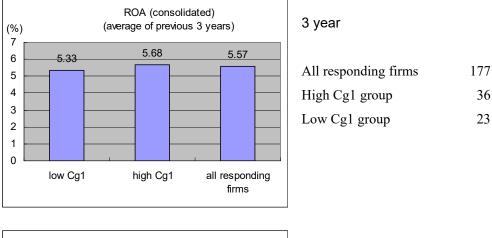
The high Cg1 group was higher than the low Cg1 group, though this difference was not statistically significant (at the 10% level).

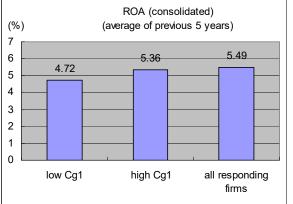
All responding firms	181
High Cg1 group	38
Low Cg1 group	23

(4) Cg1 and firm performance

a. Cg1 and ROA (consolidated, 3 and 5 year average)

The high Cg1 group was higher than the low Cg1 group, though this difference was not statistically significant (at the 10% level).





5 year

All responding firms	158
High Cg1 group	36
Low Cg1 group	21

-2 -3

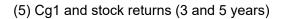
-4

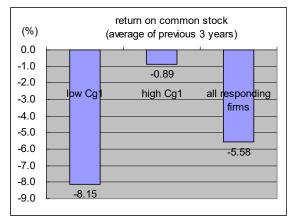
-3.25

b. Cg1 and ROE (consolidated, 3 and 5 year average)

The high Cg1 group was significantly higher (10% level) than the low Cg1 group, for both 3 year and 5 year performance.

ROE (consolidated) (%) (average of previous 3 years) All responding firms 176 4 2.85 High Cg1 group 36 3 2.26 2 Low Cg1 group 23 1 0 -1 -2 ow Cg1 high Cg1 all responding -3 firms -4 -5 -4.94 -6 ROE (consolidated) All responding firms 158 (average of previous 5 years) (%) 3 2.30 High Cg1 group 36 1.87 2 Low Cg1 group 21 1 0 low Cg high Cg1 all responding -1 firms

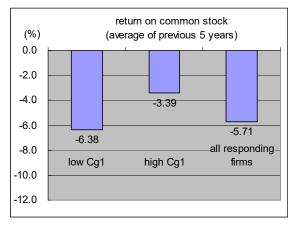




3 year

The high Cg1 group was significantly higher (1% level) than the low Cg1 group.

All responding firms	166
High Cg1 group	37
Low Cg1 group	22



5 year

The high Cg1 group was higher than the low Cg1 group, though this was not statistically significant (at the 10% level).

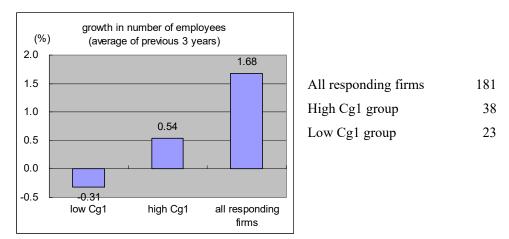
All responding firms	161
High Cg1 group	35
Low Cg1 group	22

There was no statistically significant difference between the beta's of the high and low Cg1 groups. However, for the 3 year data, there was a statistically significant difference between the beta's of the high and low groups.

	beta (3 year)	beta (5 year)
High Cg1 group	.774	.760
Low Cg1 group	.757	.768
All responding firms	.839	.803

(6) Cg1 and employment growth (consolidated, 3 years)

The growth in employment in the high Cg1 group was greater than that of the low Cg1 group, but this difference was not statistically significant (at the 10% level). The employment growth rate for all responding firms was even higher, due to a few firms in neither high nor low groups that had particularly high growth rates.

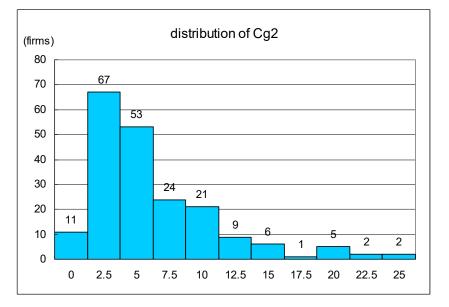


item	Comparison of high and low Cg1 groups (significance levels)	Comparison of high Cg1 group and all responding firms (significance levels)
Rate of foreign ownership	10%	Х
CEO age	5%	10%
Total assets (3 year average)	5%	Х
Sales (3 years)	5%	Х
Number of employees (3 years)	Х	Х
ROA (3 years)	X	Х
ROA (5 years)	Х	Х
ROE (3 years)	10%	Х
ROE (5 years)	10%	Х
Stock return (3 years)	1%	5%
Stock return (5 years)	Х	Х
Employment growth (3 years)	Х	Х

(Table 2-1) Summary of results for high and low Cg1 groups

An X means not statistically significant at the 10% level.

- B. Category II (Structure and function of board of directors)
- (1) The definition of high and low Cg2 groups



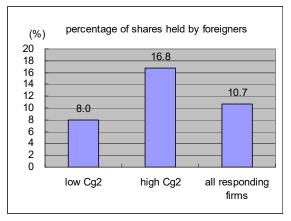
Distribution of Cg2

Mean: 6.1 Standard deviation: 4.9 Maximum: 25 Minimum 0 High Cg2 group: 30 firms above 11

Low Cg2 group: 11 firms below 1.2

(2) Cg2 and firm characteristics

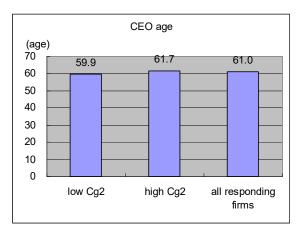
a. Cg2 and rate of foreign ownership



The high Cg2 group was significantly higher (5% level) than the low Cg2 group.

All responding firms	184
High Cg2 group	30
Low Cg2 group	11

b. Cg2 and CEO age

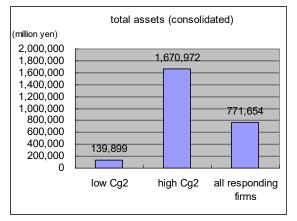


CEO age in the high Cg2 group was higher than the low Cg2 group, though this difference was not statistically significant (at the 10% level).

All responding firms	188
High Cg2 group	29
Low Cg2 group	10

(3) Cg2 and firm size

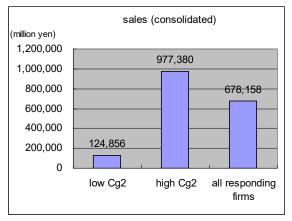
a. Cg2 and total assets (consolidated, 3 year average)



The high Cg2 group was significantly higher (5% level) than the low Cg2 group.

All responding firms	181
High Cg2 group	26
Low Cg2 group	10

b. Cg2 and sales (consolidated, 3 year average)



The high Cg2 group was significantly higher (10% level) than the low Cg2 group.

All responding firms	181
High Cg2 group	26
Low Cg2 group	10

177

25

10



employees (consolidated) (number of employees) 30,000 23,582 25,000 20,000 13,121 15,000 10,001 10,000 5,000 0 low Cg2 high Cg2 all responding firms

c. Cg2 and number of employees (consolidated)

The high Cg2 group was significantly higher (10% level) than the low Cg2 group.

All responding firms	181
High Cg2 group	26
Low Cg2 group	10

(4) Cg2 and ROA, ROE

a. Cg2 and ROA (consolidated, 3 and 5 year average)

ROA (consolidated) (average of previous 3 years) (%) 3 year 8 7.18 7 6.11 5.57 6 5 4 3 All responding firms 2 1 High Cg2 group 0 low Cg2 high Cg2 all responding Low Cg2 group firms

We found no statistically significant relationship between Cg2 and ROA.

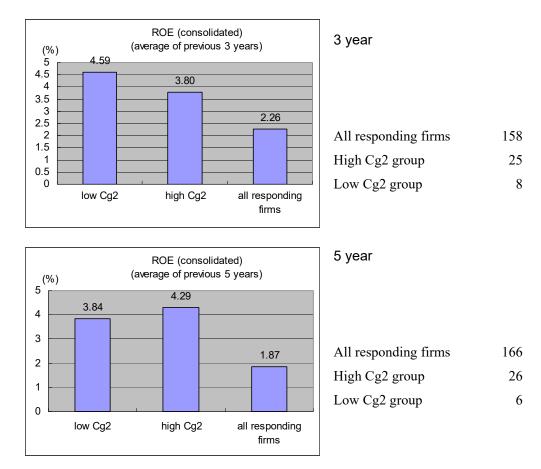
(%)	6.66	ROA (consolidated) (average of previous 5 years) 6.51
6 5 4 3 2 1		
Ű	low Cg2	high Cg2 all responding firms

5 year

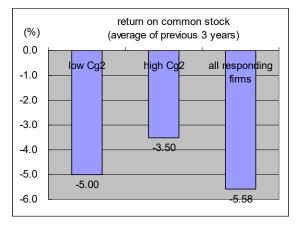
All responding firms	158
High Cg2 group	25
Low Cg2 group	8

b. Cg2 and ROE (consolidated, 3 and 5 year average)

ROE was actually higher in the low Cg2 group for the 3 year data, through this difference was not statistically significant (at the 10% level).



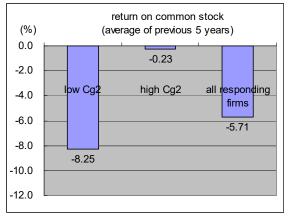
(5) Cg2 and stock returns (3 and 5 year)



3 year

The high Cg2 group was significantly higher than the low Cg2 group, though this difference was not statistically significant (at the 10% level).

All responding firms	166
High Cg2 group	26
Low Cg2 group	6



5 year

The high Cg2 group was significantly higher (10% level) than the low Cg2 group.

181

26

10

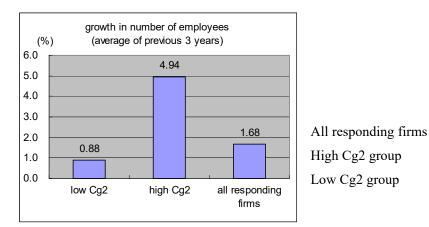
All responding firms	161
High Cg2 group	23
Low Cg2 group	6

There was no significance difference in beta's between the high Cg2 group and the low Cg2 group.

	beta (3 years)	beta (5 years)
High Cg2 group	.742	.790
Low Cg2 group	1.075	.880
All responses	.839	.803

(6) Cg2 and employment growth

The high Cg2 group was higher than the low Cg2 group, though this difference was not statistically significant (at the 10% level).



<Cg2 and firm performance>

There are several potential explanations for the lack of a clear relationship between Category II and performance. First, the scores for Category II were generally low. Even among the high Cg2 group, there were very few firms that were effectively using their boards as a mechanism of governance. Second, there may not be a relationship between the form—the structure of the board—and how governance is actually implemented. The structure of the board may have little meaning, unless the firm is serious about management responsibility and disclosure and transparency. Third, it appears that firms that have experienced poor performance over the last several years have been more likely to adopt the new committee structure, thus resulting in a correlation between poor performance and board structure. We believe that the third explanation is most likely.

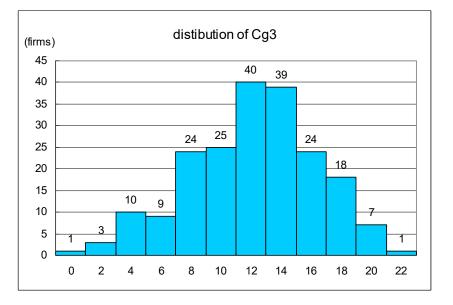
item	Comparison of high and low Cg2 groups (significance levels)	Comparison of high Cg2 group and all responding firms (significance levels)
Rate of foreign ownership	5%	1%
CEO age	Х	Х
Total assets (3 year average)	5%	Х
Sales (3 years)	10%	Х
Number of employees (3 years)	Х	10%
ROA (3 years)	Х	Х
ROA (5 years)	Х	Х
ROE (3 years)	Х	Х
ROE (5 years)	Х	Х
Stock return (3 years)	Х	Х
Stock return (5 years)	10%	1%
Employment growth (3 years)	Х	10%

(Table 2-2) Summary of results for high and low Cg2 groups

An X means not statistically significant at the 10% level.

C. Category III (Management system)

(1) The definition of high and low Cg3 groups



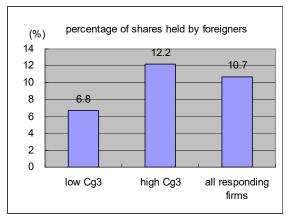
Distribution of Cg3

Mean: 11.6 Standard deviation: 4.4 Maximum: 21 Minimum 0 High Cg3 group: 38 firms above 16

Low Cg3 group: 32 firms below 7.3

(2) Cg3 and firm characteristics

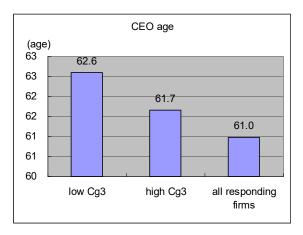
a. Cg3 and rate of foreign ownership



The high Cg3 group was significantly higher (1% level) than the low Cg3 group.

All responding firms	184
High Cg3 group	37
Low Cg3 group	31

b. Cg3 and CEO age

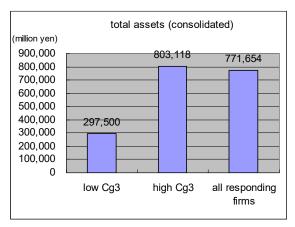


CEOs of the low Cg3 group were older than those of high Cg3 group, though this difference was not statistically significant (at the 10% level).

All responding firms	188
High Cg3 group	38
Low Cg3 group	32

(3) Cg3 and firm size

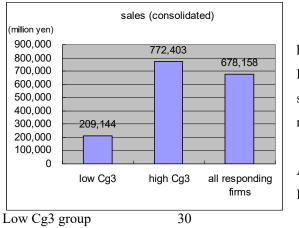
a. a. Cg3 and total assets (consolidated, 3 year average)



The high Cg3 group was significantly higher than the low Cg3 group. However, the high Cg3 group was not significantly different from the mean for all responding firms. This means that firms that score highly on Cg3 were not necessarily the largest ones.

All responding firms	181
High Cg3 group	40
Low Cg3 group	30

b. Cg3 and sales (consolidated, 3 year average)



The high Cg3 group was significantly higher (5% level) than the low Cg3 group. However, the high Cg3 group was not significantly different from the mean for all responding firms.

All responding firms	181
High Cg3 group	40



(number of employees)	employ	yees (consoli	dated)
14,000			13,121
12,000		10,217	
10,000	8,612		
8,000			
6,000			
4,000			
2,000			
0			
	low Cg3	high Cg3	all responding firms

c. Cg3 and number of employees (consolidated, 3 year average)

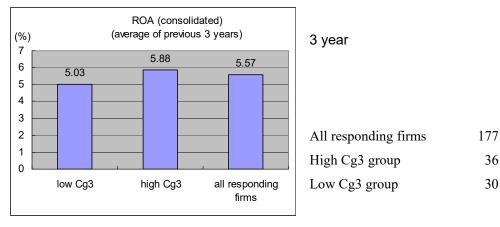
The high Cg3 group was higher than the low Cg3 group, though this difference was not significant (at the 10% level).

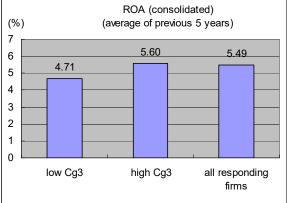
All responding firms	181
High Cg3 group	40
Low Cg3 group	30

(4) Cg3 and ROA and ROE

a. Cg3 and ROA (consolidated, 3 and 5 year average)

The high Cg3 group was higher than the low Cg3 group, though this difference was not statistically significant (at the 10% level).



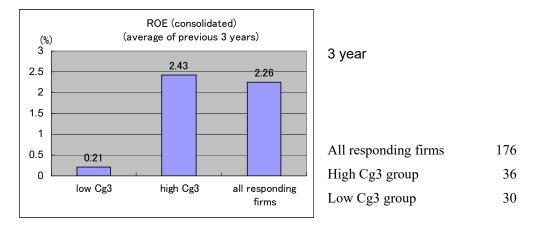


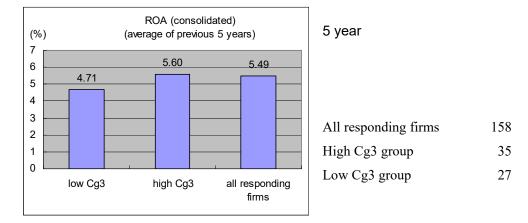
5 year

All responding firms	158
High Cg3 group	35
Low Cg3 group	27

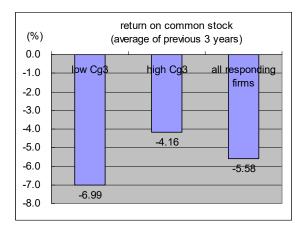
b. Cg3 and ROE (consolidated, 3 and 5 year average)

The high Cg3 group was higher than the low Cg 3 group, though this difference was not statistically significant (at the 10% level).





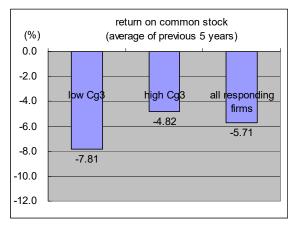
(5) Cg3 and stock return (3 and 5 years)



3 years

The high Cg3 group was higher than the low Cg3 group, though this difference was not statistically significant (at the 10% level).

All responding firms	166
High Cg3 group	34
Low Cg3 group	28



5 year

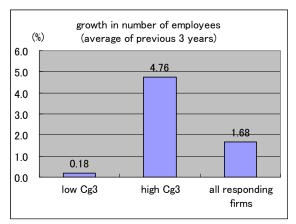
The high Cg3 group was higher than the low Cg3 group, though this difference was not statistically significant (at the 10% level).

All responding firms	161
High Cg3 group	33
Low Cg3 group	28

There was no statistically significant difference in beta's between the high and low Cg3 groups.

	beta (3 years)	beta (5 years)
High Cg3 group	.891	.867
Low Cg3 group	.849	.838
All responses	.839	.803

(6) Cg3 and growth in number of employees (consolidated, 3 year average)



The high Cg3 group was significantly higher (at a level of 10%) than the low Cg3 group.

All responding firms	181
High Cg3 group	40
Low Cg3 group	30

<Cg3 and firm performance>

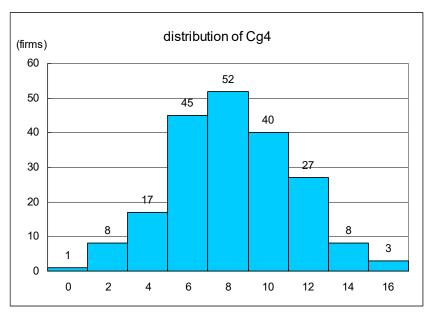
The high Cg3 group showed higher performance than the low Cg3 group, though the significance levels were low. This indicates that the management system does not have a strong relationship with firm performance.

item	Comparison of high and low Cg3 groups (significance levels)	Comparison of high Cg3 group and all responding firms (significance levels)
Rate of foreign ownership	1%	Х
CEO age	Х	Х
Total assets (3 year average)	5%	Х
Sales (3 years)	5%	Х
Number of employees (3 years)	Х	Х
ROA (3 years)	Х	Х
ROA (5 years)	Х	Х
ROE (3 years)	Х	Х
ROE (5 years)	Х	Х
Stock return (3 years)	Х	Х
Stock return (5 years)	Х	Х
Employment growth (3 years)	10%	Х

(Table 2-3) Summary of results for high and low Cg3 groups

An X means not statistically significant at the 10% level.

- D. Category IV (Transparency and communication to shareholders)
- (1) The definition of high and low Cg4 groups

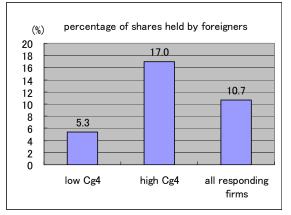


Distribution of Cg4

Mean: 7.7 Standard deviation: 3.2 Maximum: 15 Minimum 0 High Cg2 group: 37 firms above 10.9 Low Cg3 group: 23 firms below 4.5

(2) Cg4 and firm characteristics

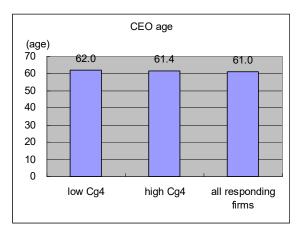
a. Cg4 and rate of foreign ownership



The high Cg4 group was significantly higher (1% level) than the low Cg4 group.

All responding firms	184
High Cg4 group	36
Low Cg4 group	23

b. Cg4 and CEO age

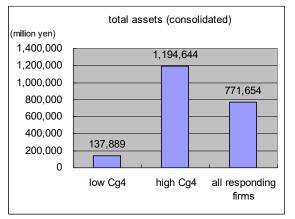


High Cg4 group CEOs were slightly younger than low Cg4 group CEOs, though this difference was not statistically significant (at the 10% level).

All responding firms	188
High Cg4 group	37
Low Cg4 group	22

(3) Cg 4 and firm size

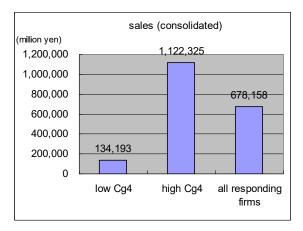
a. Cg4 and total assets (consolidated, 3 year average)



The high Cg4 group was significantly higher (1% level) than the low Cg4 group.

All responding firms	181
High Cg4 group	31
Low Cg4 group	26

b. Cg4 and sales (consolidated, 3 year average)



The high Cg4 group was significantly higher (1% level) than the low Cg4 group.

All responding firms	181
High Cg4 group	31
Low Cg4 group	26



(number of employees)	employ	vees (consoli	dated)
25,000		22,803	
20,000			
15,000		_	13,121
10,000	6,547	_	
5,000		_	
0			
	low Cg4	high Cg4	all responding firms

c. Cg4 and number of employees (consolidated, 3 year average)

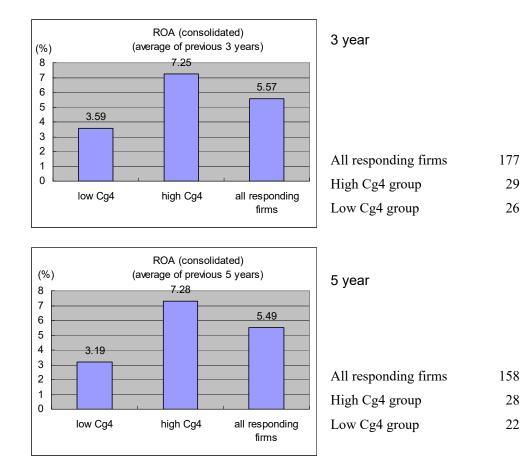
The high Cg4 group was significantly higher (10% level) than the low Cg4 group.

All responding firms	181
High Cg4 group	31
Low Cg4 group	26

(4) Cg4 and ROA and ROE

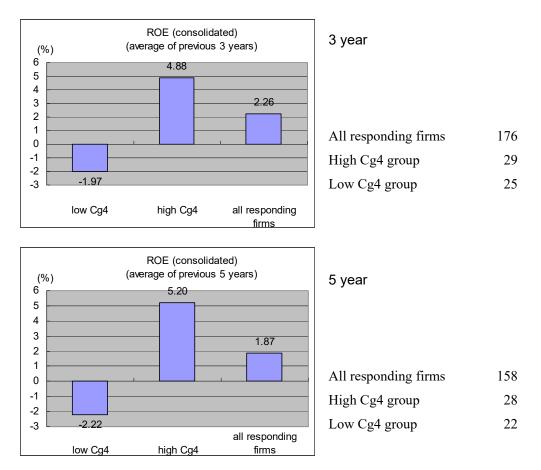
a. Cg4 and ROA (consolidated, 3 and 5 year average)

The high Cg4 group was significantly higher (1% level) than the low Cg4 group.



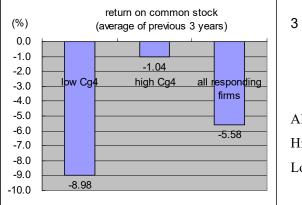
b. Cg4 and ROE (consolidated, 3 and 5 year average)

The high Cg4 group was significantly higher (1% level) than the low Cg4 group.



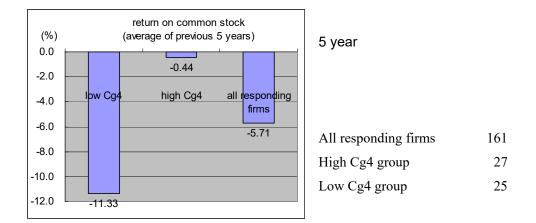
(5) Cg4 and stock returns

The high Cg4 was significantly higher (1% level) than the low Cg4 group, for both 3 and 5 years.



3 year

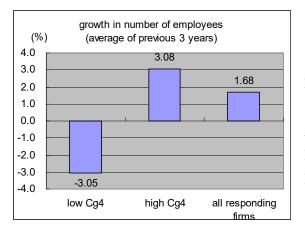
All responding firms	166
High Cg4 group	28
Low Cg4 group	25



There was no statistically significant difference in beta's for the high and low Cg4 groups.

	beta (3 year)	beta (5 year)
High Cg4 group	.892	.812
Low Cg4 group	1.019	.823
All responding firms	.839	.803

(6) Cg4 and growth in number of employees



The high Cg4 group was significantly higher (1% level) than the low Cg4 group.

All responding firms	181
High Cg4 group	31
Low Cg4 group	26

<Cg4 and firm performance>

Cg4, measuring disclosure and communication to shareholders, had a strong relationship to performance. The fact that Cg1 (measuring CEO responsibility and goal setting) and Cg4 had the strongest relationships to performance attests to the importance of the essence of corporate governance to performance. It is not enough to have only the proper form, such as a certain number of outside directors. Excellent corporate governance requires the right attitude and commitment by senior managers. The results of the JCGIndex indicate that a dedication to corporate objectives and CEO responsibility and transparency and communication to shareholders are particularly strongly related to performance.

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, ,	Comparison of	Comparison of
item	high and low Cg4 groups	high Cg4 group and all responding
	(significance levels)	firms (significance levels)
Rate of foreign ownership	1%	5%
CEO age	Х	Х
Total assets (3 year average)	1%	Х
Sales (3 years)	1%	Х
Number of employees (3 years)	10%	10%
ROA (3 years)	1%	5%
ROA (5 years)	1%	5%
ROE (3 years)	1%	Х
ROE (5 years)	1%	10%
Stock return (3 years)	1%	5%
Stock return (5 years)	1%	1%
Employment growth (3 years)	1%	Х

(Table 2-4) Summary of results for high and low Cg4 groups

An X means not statistically significant at the 10% level.

Conclusion

We analyzed the relationship between the JCGIndex and corporate performance in 288 firms over two consecutive years, and found in both cases that firms whose governance was closest to our model offered greater returns to their shareholders.

The above comparisons between high and low JCGIndex groups, however, should be interpreted with some caution. First, our measures of performance are historical and we cannot predict that the relationship will continue into the future. Second, while our sample size of 201 is not in itself small, it is only a fraction of Tokyo Stock Exchange First Section firms (approximately 1500). While the relationships between performance and other firm characteristics and the JCGIndex were clear among firms in our sample, we can only infer that these relationships are the same across all listed firms. Third, while there was an association between the JCGIndex and various firm characteristics and performance, it is impossible to establish that this was a causal relationship.

Data sources

Industry classification:

Tokyo Stock Exchange industry classifications

Financial data

Source: NEEDS (Nikkei Shinbunsha data bank) Firms covered: Tokyo Stock Exchange First Section firms (1,538 firms as of 11/11/2003) Items: Total assets, sales, number of employees, ROA, ROE (firm based and consolidated) Period: 1998-2002

Stock information

Source: Nihon Shoken Keizei Kenkyusho 2002 Kabushiki Toshi Shueki Ritsu Firms covered: Tokyo Stock Exchange First Section firms (1,538 firms as of 11/11/2003) Items: Monthly returns on individual stock and market Period: January 1998-December 2002

beta

Calculated by Fujitsu Research Institute Source: Toyo Keizai Inc., "Stock Price CD-ROM 2003"