### "GOVERNANCE" PREMIUM? EVIDENCES FROM THE NINE EMERGING MARKETS OF ASIA

### Chien-An Wang\*, Lin Lin \*\*, Ming-Yuan Li\*\*\*

### Abstract

This paper hypothesizes the relationships of corporate governance, firm performance, and cost of capital, using the firm-level sample from the nine emerging markets of Asia in 2001 and 2002. Our empirical results confirmed the relationship between the corporate governance and firm performance, measured by the stock return and the rate return on asset, is not significant. Evidence implied that the stock retuen of emergeng markets may be largely influenced by unknown but irrational factors, and their accounting reports of the companies listed in such stock exchange are not trustworthy due to window-dressing. The fundamental value and the value of corporate governance are thus not incorporated intot the re-evaluation of the prices of the related stocks. However, empirical evidence also indicated that the firms with better corporate governance can reduce their costs of capital in a defensive manner, realized when a raise of fund is required.

Keywords: Corporate Governance, Premium, Performance, Cost of Capital

\* National Chi-Nan University, Department of Banking and Finance, 1 University Rd., Puli, Nantou 545, Taiwan, ROC, TEL: 886-49-2910960 Ext.3129, FAX: 886-49-2914511

*E-mail: cawang@ncnu.edu.tw* 

\*\* National Chi-Nan University, Department of Banking and Finance, 1 University Rd., Puli, Nantou 545, Taiwan, ROC, TEL: 886-49-2910960 Ext.5046, FAX: 886-49-2914511, E-mail: linlin@ncnu.edu.tw

\*\*\* National Cheng Kung University, Taiwan, Department of Accountancy and Graduate Institute of Finance and Banking, No. 1, Ta-Hsueh Road, Tainan 701, Taiwan, TEL: 886 6 2757575 EXT 53421, FAX: 886-6-2757575 E-mail: lmyleon@mail.ncku.edu.tw

### 1. Introduction

After the Asian Financial Crisis during 1997-98 and a series of accounting scandals<sup>1</sup> in 2001, corporate governance has gradually become an important issue for the investors to evaluate a firm. Institutional investors also have started to examine the roles corporate governance should play in their investment strategies and policies. For example, the Global Investor Opinion Survey by McKinsey showed that the institutional investors consider the corporate governance of a firm more than its financial figures, such as profit performance or growth potential. In addition, Asian institutional investors are even willing to pay a premium of 25% in average to hold up the stocks of well-governed companies (Global Investor Opinion Survey by McKinsey, 2000). At the same time, the impact of corporate governance on firm performance is recently re-examined due to the doubt that good corporate governance may not necessarily ensure good firm performance but bad one can be very harmful. The World Bank (2001) also found that the countries with loose corporate governance regulations usually have low economic growth, but not vice versus. This study aims to discover whether corporate governance has an *aggressive or defensive* mechanism and wether such mechanisms are valued as part of stock returns or part of risk deduction. They are the research questions receiving limited attention in the academic literature.

In fact, motivations that corporate governance is enforced can be found in literature, including higher equity premium (Emmons and Schmid, 1999; Shleifer and Wolfenzon, 2002; Gompers, Ishii, and Metrick, 2003; Chan, Chan, Jegadeesh, and Lakonishok, 2006) and lower costs of capital (Himmelberg, Hubbard, and Love, 2002; Laeven and Majnoni, 2003; Chen, Chen, and Wei, 2004). Their results clearly support the hypothesis that well-governed companies in developed countries usually out-perform their counterparts that are poorly governed in terms of stock and operational performances. In contrast, similar researches for emerging markets are relatively few. We intend to fill this gap by analyzing the effects of corporate governance on firms' return and risk across selected major emerging markets in Asia.

In this paper, the effects of corporate governance on firms are investigated in two angles: the performance of profitability as a proxy of

<sup>&</sup>lt;sup>1</sup> They include Enron and WorldCom in the United States (U.S.), Marconi in the United Kingdom (U.K.), and most recently Royal Ahold in the Netherlands.

aggressiveness and the costs of capital as a proxy of defensiveness. The performance of profitability are measured by the stock returns and returns on asset (ROA) from a market and accounting perspective respectively, while the ratio of book value to market value (BTM) is used to measure the cost of capital. In other words, this paper tries to answer a question that whether the value of good corporate governance will be mainly reflected in the increase of a firm's capital returns (aggressiveness role), or in the control of its corporate risk (defensiveness role), or both.

As far as the aggressiveness role of corporate governance is concerned, Emmons and Schmid (1999) found that the corporate governance of firms matters in increasing a firm's profitability, measured by ROA. Gompers, Ishii, and Metrick (2003) also found good corporate governance is reliably and positively associated with future stock returns. Shleifer and Wolfenzon (2002) presented a model of an entrepreneur going public in an environment with poor legal protection of shareholders. Their model showed that better corporate governance is of more value in an economy which is more open to the world capital flows. Similar results can also be found in the study of La Porta et al. (1997ab, 1998, 1999), who claimed that the firms in the countries with better protection of minority shareholders and higher cashflow ownership by the controlling shareholder are better evalued. Moreover, the surveys conducted by McKinsey & Co. in 1999 and 2000 showed that institutional investors around the world are willing to pay a premium of more than 20% for shares to the companies of good corporate governance. Finally, these surveys also declared that the premium level in Asian emerging markets are higher than those in more matured markets, such as the U.S. and U.K.. It can be treated as an evidence of relatively poorer corporate governance for Asian companies. However, the contents of those questionnaires cannot afford further in-depth analyses of sampled Asian countries.

As to the defensiveness role of corporate governance, the findings of early papers are not yet conclusive. For example, found that market valuation of listed firms providing a better protection of credit rights is higher than those who don't, implying a lower cost of capital and a lower discount rate of future earnings that the former can better benefit from. Himmelberg, Hubbard, and Love (2002) also found that a higher share of insider ownership will result in under-investment and higher costs of capital. Chen, Chen, and Wei (2004) used a survey data from Credit Lyonnais Securities Asia (CLSA) to examine the effects of disclosure and corporate mechanisms on the cost of equity capital, results of which also reach similar conclusions regardless of employing different measurements of cost of capital.

In this paper corporate governance refers collectively to those features of the legal, regulatory environment, and characteristics of a firm's board structure. The governance rankings published by CLSA will be used to investigate the relationship of corporate governance, firm returns, and corporate risk by the stylized fact analysis and multivariate regression analysis. Details of the CLSA database will be discussed in the Data Source section. Empirical results highlight an insignificant relationship of corporate governance and firms' performance, while the firms with better corporate governance seem to have lower cost of capital. Evidence implied that the stock retuen of emergeng markets may be largely influenced by unknown but irrational factors, and their accounting reports of the companies listed in such stock exchange are not trustworthy due to window-dressing. The fundamental value and the value of corporate governance are thus not incorporated intot the re-evaluation of the prices of the related stocks. However, empirical evidence also indicated that the firms with better corporate governance can reduce their costs of capital in a defensive manner, realized when a raise of fund is required. These empirical results may encourage the managers of Asian emerging countries to strengthen and improve their status of corporate governance. Investors may also be motivated to consider corporate governance more seriously while forming their investment portfolios. Finally, it is found that corporate governance mainly contributes to the reduction of the cost of capital of a firm.

This paper will be structured as follows. Section 2 describes the sample construction process and presents the definitions and descriptive statistics of key explanatory variables. Section 3 shows the stylized fact analysis, estimation methodology, and illustrates the main results for the relationships among corporate governance, equity return, and cost of capital, following which in Section 4 conclusions will be made and results will be extensively discussed.

# 2. Data and the Descriptive Statistics of Sample

#### 2.1 Data Source

Orignal dataset derived from CLSA Emerging Markets include 495 firms in 2001 and 508 firms in 2002 across 25 emerging markets in Asia, Latin America and Europe. After the removal of those companies located in non-Asian regions and those without complete market and financial accounting figures available to Worldscope, Compustat, and Datastream respectively, the final sample consists of 326 firm-year observations. The average corporate governance rankings of these firms across countries are given in Table 1.

# **2.2 Scoring Corporate Governance from the Nine Emerging Markets of Asia**

There are quite some proxies used to capture the concept of corporate governance in literature, subject to the perspectives that the early papers took to study on particular governance practices and issues. For



example, the corporate governance rankings by the investment bank, Brunswick Warburg, are based on eight corporate governance elements with different weights.<sup>2</sup> McKinsey & Company (2002) emphasized more on the timely and broad disclosure, followed by the independence of the boards, the effective board practices, and the performance-related compensation for directors and management.

Black, Jang, and Kim (2005, 2006) chose 42 items from 123 survey questions, excluding the ones that focuse on the management's viewpoints rather than facts, or are irrelevant to corporate governance, or lead to monotomous responses<sup>3</sup>. Moreover, Klapper and Love (2002) use a total of 57 yes-no questions in a survey to generate 7 categories<sup>4</sup>. Campos, Newell, and Wilson (2002) proposed 15 major elements of good corporate governance based on the OECD's principles of corporate governance<sup>5</sup>. Because investors' responses will reflect their major concerns in the investment environments they lived, scoring the quality of corporate governance is subjective and can be controversial. There are no generally accepted standards in terms of the determination of the contents and proxies of corporate governance and their measuring weights. In this paper, CLSA scoring system is used to avoid subjectivity as the reliability of the aggregate scores that CLSA produces has been recognized internationally.

CLSA assesses the corporate governance of a firm based on 7 rating criteria, i.e., transparency (TRAN, the ability of outsiders to access the true position of a company), management discipline (DSPL, management's commitment to emphasize shareholder value and financial discipline), independence (INDP, the influence level of controlling shareholders and senior management over the decision-making of the board of directors), accountability of management to the board of directors (ACCT), responsibility (RESP, the effectiveness of the board to take necessary actions to the case of mismanagement), fairness (FAIR, the

<sup>4</sup> The seven dimensions are discipline, transparency, independence, accountability, responsibility, fairness, and social awareness. Each category has a weight of 0.15 except for the last one, which has a weight of 0.10.

treatment minority shareholders receive from majority shareholders and management0, and finally social awareness (SOCL, the company's emphasis on ethical and socially responsible behavior). Each of these 7 categories includes six to ten sub-criteria. There are 57 sub-criteria in total. They are all measured by a particular set of survey questions. Each question will be marked either 0 or 1, and will be summed up and then converted into a percentage score. The recent papers by Klapper and Love (2002), and Chen et al. (2004) all use such CLSA ranking system to study on a particular governance issue.

### < Insert [Table 1], about here >

Table 1 lists the summary statistics of corporate governance (CG) score by country and year. The average score in 2001 for the 153 firms from the emerging markets in Asia is 54.94. Among them, the governance status of Singapore is ranked at top (66.70) and Indonesia is in the bottom (38.60). In 2002, the average CG score increased to 59.03. The Singapore and Hong Kong still outperformed others. Korea also improved but China fell into the last 3 worse goverance countries (CG score was 51.35 in 2001 and 44.64 in 2002). The rank of Philippines and Indonesia does not change much. There is still a large room for their future improvement.

# 3. Stylized Fact and Empirical Modeling Analysis

# **3.1 Effects of the Equity Return, ROA, and Corporate Governance**

As discussed, we expected that there is a positive relationship betweens equity premium and corporate governance. Equity premium is priced based on the level of the uncertainty of the future values of the underlying companies and the risk attitude of investors. Shleifer and Vishny (1997) also argued that in the long run there is a significant role of corporate control in the market. They found corporate governance is strongly correlated with stock returns.

On Panel A, B of Table 2 shows the basic summary statistics of the stock return and ROA for our sample firms at the sample period respectively. Figure 1 also presents the firms' stock return with different CG regimes in each country. A positive relationship between the two only exists on the firmlevel samples of China, Hong Kong, India, and Indonesia. Although the stock return at two different CG regimes in Singapore remained negative, this negative relationship is much minor for the firms with good governance in the *bear market* as compared to the rest of the sampled firms. Therefore, this relationship in Singapore is found to more or less support the theoretical hypothesis. In general, the average stock return of firms with good governance is 1.63%, and is 2.37% for firms with bad governance. Furthermore, the t-statistics reported in Table 3

<sup>&</sup>lt;sup>2</sup> These variables includes disclosure and transparency, dilution through share issuance, asset stripping and transfer pricing, dilution through a merger or restructuring, bankruptcy, limits on foreign ownership, management attitude toward shareholders, and registrar risk.

<sup>&</sup>lt;sup>3</sup> They then classify the 42 items into four categories, each of which has an equal weight of 0.25. These four categories include shareholders' rights, board of directors in general, outside directors, and disclosure and transparency.

 $<sup>^{5}</sup>$  The OECD published a set of corporate governance standards and guidelines covering five major areas: (1) the rights of shareholders, (2) the equitable treatment of shareholders, (3) the role of stakeholders in corporate governance, (4) disclosure and transparency, and (5) the responsibilities of the board (OECD, 1999).

indicated that the relationship between corporate governance and expected market values is negative (t statistic is -0.17) but not significant.

If the proxy is the historical accounting value, the firms with higher CG seemed to have larger ROA. Figure 2 illustrated a positive relationship between the corporate governance and ROA. The firms with higher CG outperform those with lower CG. Especially in Hong Kong, the ROA of good CG firms is 8.24% while ROA is -25.37% for bad CG firms. To 10 country-firms in total the ROA of firms with good governance is 10.11% and is only 7.56% for lower CG firms. However, the *t* statistics reported in the Table 3 indicated a positive relationship between the corporate governance and historical accounting values of the firms only at 10% level of significance (t value=1.79).

# **3.2 Effects of the Cost of Capital and Corporate Govelowerrnance**

In this study we hypothesized that the cost of capital of the firms with good corporate governance will be lower cost in the process of fund-raising for future investment. Unlike most of the works on the value of corporate governance solely focused on the equity premium, this paper further examined the relationship between the corporate governance and the cost of capital of the firms, which has been ignored in literature for decades.

The lower cost of capital results in a lower risk premium. Top management usually has an advantage of possessing inside information, dishonest managers could make false reports that confuse investors and distort firm's cash flows. If such managers have privileged access to both information and control of the firm, firm value could be further reduced especially in the worst states of the economy. Ineffective corporate governance increases firms' higher exposure to systematic risk.

Weak corporate governance destroys firm value partly through higher cost of capital as discussed in literature. On the one hand, international firms that invest in countries with low levels of corporate governance should use higher internal hurdle rates, following which their industry-based estimates of firm betas should be adjusted based on a corporate governance factor reflecting the increased systematic risk. On the other hand, the stock markets in the countries of bad corporate governance can be expected to be more sensitive to the movement of global markets than would be suggested by their industry weights alone. This additional volatility may generate negative spillover effects in the real world, and there could be additional cost of capital that firms will pay for this volatility.

On Panel C of Table 2 shows the basic summary statistics of the cost of capital as the proxy by the book value to market value (BTM, %). Figure 3 shows the firms' cost of capital with different CG regimes of sampled countries. On average, the BTM ratio is 0.85 for good governance firms, and is 1.32 for bad governance firms. The results match those negative t-values in Table 3 (t-statistic equals -2.51 at significanve level of 1%). It implies that good governance firms have smaller BTM and thus they will have higher premium for seasonal equity offerings (SEOs) due to smaller funding costs.

### Insert [Table 3], [Figure 1-3] about here

### 3.3 Regression Results

In this paper, panel regression is used to analyze the 326 sample-year observations (156 firms and 2001-2002 year). Table 4 presents the basic summary statistics of all variables in the panel regretssion model. As mentioned, the dependent variable is CG score derived from CLSA reports and is composed of seven key items with equal weights of 15% for Discipline, Transparency, Independence, Accountability, Responsibility, Fairness, and the rest 10% goes to Social Awareness. The focus explanatory variables are stock returns, ROA, and cost of capital. The control variables include firm size (Ln(total asset)), debt ratio (total debt/total asset), and symmetric risk (beta coefficient derived from the market model). Two dummy variables are also considered here. One is "Economic Cycle (equals 1 if there is positive GDP growth rate for a particular year of the sampled economy, and 0 otherwise)" as the proxy of macro-business condition. Another is "Industry" dummy which is 1 if a firm is classified as new-tech industry and 0 otherwise.

Table 5 reports the results of econometric modeling. There are four models focusing on four explanatory variables, that is, stock returns, ROA, ratio of book value to market value, and finally beta coefficient. The coefficients of CG score to the cost of capital are only significant at model III and model IV among all possible settings. However, the coefficients of CG score to stock return and ROA are both insignificant. Even so, most results support the findings of stylized fact analysis at the Table 3 and Figure1, 2, 3. It is thus concluded that the firms with higher CG scores can benefit from lower costs of capital and risk premium stronhly.

### 4. Conclusion

This paper hypothesizes the relationships between corporate governance, firm performance, and cost of capital, using the firm-level sample from the nine emerging markets of Asia during 2001-2002. The contributions of such study are to establish the benchmarks of equity investments in highly volatile emerging markets. If the hupothesis of well-governed companies usually have higher equity returns and firm values with encouraging accounting figures from their firnancial statements, and that the empirical results of this cross-country comparison study also confirm the importance of corporate governance in investment



decision-making process, especially in the emerging markets.

This paper also investigates whether the firms with well-functioned corporate governance system can benefit from higher stock returns as a result of better operational performance, or just can reduce their financing costs as a defensive tool. The interesting point is that the soundness of the corporate governance of firms has recently been under a great deal of scrutiny since good governance may not improve the performance but bad one can however be very destructive. Our empirical results also partly prove it by providing evidence on an insignificant relationship between the corporate governance and firm performance. The possible reasons include the irrational investors and the prevalence of windowdressing in those emerging markets, which all make the corporate governance be less considered or valued. However, in our findings, the firms with better corporate governance have higher market-tobook ratios, implying lower symmetric risks and lower risk premium. Results also confirm those firms can benefit from a lower cost of capital while they are raising funds from the public. In other words, corporate governance can only be used as a defensive tool to reduce the risk of the firm, but is not a symbol of better corporate performance.

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### Appendices

		Panel A: CG	in 2001 (N=15	53, Mean=54.94)			
Country	Firm-Number	Rank	Mean	Medium	Std. ev.	Max.	Min.
China	9	7	51.35	50.50	6.46	67.70	45.00
Hong Kong	7	2	60.19	65.00	16.61	82.00	41.50
Indonesia	13	10	38.60	36.60	12.45	64.90	13.90
India	36	4	56.65	54.70	11.19	93.30	39.10
Korea	10	8	45.72	44.10	4.87	55.20	38.00
Malaysia	22	6	56.80	59.15	11.20	76.90	27.60
Philippines	11	9	45.04	48.80	13.46	67.90	25.80
Singapore	23	1	66.70	66.30	9.14	85.70	48.70
Taiwan	17	5	56.21	54.50	10.02	77.10	43.40
Thailand	5	3	57.86	63.10	12.66	68.90	40.00
		Panel B: CG	in 2002 (N=17	73, Mean=59.03)			
China	13	9	44.64	45.00	9.27	61.00	31.50
Hong Kong	9	2	66.00	65.40	7.43	77.7	57.00
Indonesia	15	10	38.89	40.30	9.89	58.90	17.00
India	33	5	63.25	62.20	10.73	91.40	47.50
Korea	12	7	55.73	55.50	7.33	69.60	45.40
Malaysia	25	3	63.84	64.80	10.37	76.90	33.10
Philippines	6	8	49.03	44.90	14.40	75.40	33.70
Singapore	23	1	67.40	66.90	9.03	80.50	48.70
Taiwan	26	6	60.50	59.15	10.50	90.40	42.20
Thailand	11	4	63.42	63.90	9.94	77.40	46.00

Table 1. The Basic Summary Statistics of CG Score by Country and Year

Table 2. The Basic Summary Statistics of Performance and Cost of Capital

$R_{iit} = \{$	$\left(P_{iit} - P_{iit-1}\right)$	)/ $P_{iit-1}$	* 100 % .	ROA <sub>iit</sub>	= (operating	income <sub>iit</sub>	/ total	assets <sub>iit</sub>	*100%.
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 $R_{ijt} = \{P_{ijt} - P_{ijt-1}\} P_{ijt-1} \} * 100 \% . ROA_{ijt} = \{operating \ income_{ijt} \ / \ total \ assets_{ijt} \ \} * 100\% .$ BTM: (Book value per share <sub>ijt</sub> / Market value per share <sub>ijt</sub> )\* 100\% . Total sample number=326.

Country	Firm-Number	Mean	Medium	Std. ev.	Max.	Min.
China	22	16.64	19.20	34.66	114.25	-58.71
Hong Kong	16	-6.85	-23.16	44.97	136.82	-45.83
Indonesia	28	12.54	6.58	33.50	100.73	-56.05
India	69	-1.17	-2.44	32.67	129.57	-85.83
Korea	22	22.29	6.74	53.91	208.21	-34.11
Malaysia	47	8.28	5.59	25.70	72.65	-56.03
Philippines	17	-14.30	-33.33	50.64	127.78	-66.67
Singapore	46	-13.48	-15.41	34.60	132.70	-83.26
Taiwan	43	-2.05	-12.82	45.58	121.46	-62.10
Thailand	16	14.70	3.61	50.79	152.72	-60.92
Panel B The historical acco	ounting valuation: the rate return on	asset (ROA, %	e)			
China	22	7.87	8.65	4.24	16.16	0.85
Hong Kong	16	6.99	6.27	8.14	24.02	-11.36
Indonesia	28	17.62	14.87	13.15	47.71	-11.80
India	69	12.37	11.89	9.28	31.77	-5.74
Korea	22	9.40	9.16	4.10	19.10	0.35
Malaysia	47	9.36	8.88	5.80	22.56	-1.27
Philippines	17	1.82	4.63	11.76	13.69	-31.08
Singapore	46	4.00	5.05	7.19	18.14	-21.92
Taiwan	43	5.16	4.47	6.47	18.89	-14.11
Thailand	16	10.92	10.54	8.33	23.68	-8.78
Panel C The cost of capital	(book value to market value, BTM	,%)				
China	22	4.21	3.35	2.40	10.75	0.86
Hong Kong	16	0.94	0.48	1.49	6.37	0.13
Indonesia	28	0.53	0.49	0.31	1.26	0.11
India	69	0.58	0.27	0.77	5.26	0.05
Korea	22	1.05	0.87	0.79	2.87	0.18
Malaysia	47	0.58	0.60	0.25	1.21	0.07
Philippines	17	3.20	1.73	4.70	20.00	0.32
Singapore	46	1.02	0.75	0.92	5.08	0.04
Taiwan	43	0.59	0.50	0.39	2.04	0.14
Thailand	16	0.76	0.63	0.53	2.24	0.30

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Table 3. The t-test between the CG and Performance, Cost of C	Capital
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The cut-off point of CG is based on the mean number of actual data. The above the CG average score is "Higher Reg	ime";
vis-à-vis. The standard deviation is in the parentheses. *, **, *** are significant at the 10%, 5% and 1% level, respectively	v.

Variables	Higher Regime of CG	Lower Regime of CG	t-test	
	N = 167	N = 159		
Performance (I): stock return	1.63	2.37	-0.17	
	(40.90)	(38.34)		
Performance (II): ROA	10.11	7.56	$1.79^{*}$	
	(9.58)	(8.36)		
Cost of capital: book to market	0.85	1.32	-2.51***	
value	(1.02)	(2.20)		

#### Table 4. The Basic Summary Statistics of Variables in the Panel Regretssion Model

CG score is from CLSA reports. It's calculated that the final score= Discipline(15%)+ Transp.(15%)+ Indep.(15%)+ /Cability(15%)+ Resp. (15%)+Fairness (15%)+Social (10%). The parentheses are the weight.  $R_{ijt} = \{P_{ijt} - P_{ijt-1}\} * 100\%$ .  $ROA_{ijt} = (operating income_{ijt} / total assets_{ijt}) * 100\%$ . BTM=  $(Book value per share_{ijt} / Market value per share_{ijt}) * 100\%$ . Size=Ln (total asset). Debt ratio = (total debt/total debt/total debt/total debt/total debt/total debt/total debt/total)

asset). Beta is estimated from the market model. Cycle is the dummy variable based on GDP growth rate, and denotes 1 for boom-macroeconomy and 0 for recession-macroeconomy. Industry is also the dummy variable based on SIC code, and denotes 1 for new-tech firms and 0 for otherwise.

Varaibles	Sample	Mean	Medium	Std. ev.	Max.	Min.
	number					
CG score	326	57.11	57.30	13.21	93.30	13.90
Return (%)	326	1.99	-2.01	39.63	208.21	-85.83
ROA (%)	326	8.86	8.13	9.08	47.71	-31.08
BTM (%)	326	1.08	0.62	1.71	20.00	0.04
Size (\$USD million)	326	7.10	7.11	1.45	11.15	3.54
Debt ratio (%)	326	48.20	47.31	18.36	98.33	6.18
Beta	326	0.91	0.87	0.58	2.61	-0.38
Price to earning ratio (%)	326	15.96	13.04	42.69	475.71	0.34
Cycle dummy (boom=1)	113	-	-	-	-	-
Industry dummy (new-techfirms =1)	56	-	-	-	-	-

#### Table 5. The Panel Regression Results (2001-2002)

CG score is from CLSA reports. It's calculated that the final score= Discipline(15%)+ Transp.(15%)+ Indep.(15%)+ /Cability(15%)+ Resp. (15%)+Fairness (15%)+Social (10%). The parentheses are the weight.  $R_{ijt} = \{P_{ijt} - P_{ijt-1}\} * 100\%$ .  $ROA_{ijt} = \{operating \ income_{ijt} \ / \ total \ assets_{ijt}\} * 100\%$ . BTM= $\{Book \ value \ per \ share_{ijt} \ / \ Market \ value \ per \ share_{ijt}\} * 100\%$ . Size=Ln (total asset). Debt ratio = (total debt/total asset]. Beta is estimated from the market model. Cycle is the dummy variable based on GDP growth rate, and denotes 1 for boom-macroeconomy and 0 for recession-macroeconomy. Industry is also the dummy variable based on SIC code, and denotes 1 for new-tech firms and 0 for otherwise. The t-value is in the parentheses. \*, \*\*, \*\*\* are significant at the 10%, 5% and 1% level, respectively.

Variables	Model I	Model II	Model III	Model IV
	(y=Return)	(y=ROA)	(y=BTM)	(y=BETA)
Sample number	326	326	326	326
Intercept	0.23	0.07	0.02	1.07
	(1.16)	(2.28)**	(2.25)**	(4.62)***
CG score	-0.31	0.02	-0.03	-0.65
	(-1.40)	(0.41)	(-3.90)***	(-2.19)**
Size (ln(aseet))	0.01	-0.00	0.00	-0.02
	(0.68)	(-0.67)	(4.72)***	(-0.95)
Net income	1.06	1.31	-	-
	(1.56)	(9.81)***		
The volatility of sales	-0.01	-	-	-
	(-0.32)			
Debt ratio	-0.71	-	-0.00	0.47
	(-1.33)		(-0.87)	(2.73)**
(Debt ratio) <sup>2</sup>	0.57	-	-	-
	(1.05)			
Price to earning ratio	-	-	-0.00	0.01
			(-0.80)	(0.18)
Dummy Cycle	0.19	0.06	-0.02	0.16

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				Table 5 continued
	(0.96)	(1.42)	(-2.82)**	(0.57)
CG score*Cycle	0.08	-0.07	0.03	-0.30
	(0.22)	(-1.00)	(1.90)*	(-0.62)
Dummy Industry	-0.19	-0.04	-0.00	0.68
	(-2.79)**	(-3.08)**	(-0.32)	(7.93)***
CG score*Industry	0.00	-0.00	-0.00	0.00
	(0.69)	(-1.20)	(-1.24)	(0.59)
Adjusted R <sup>2</sup>	0.09	0.33	0.15	0.18



Figure 1. The Relationship between Corporate Governance and Stock Return by Country in 2001~2002

The black color denotes the firms with higher CG regime; and the slight black color denotes the firms with lower CG regime, respectively. Their stock return marks on the top. The cut-off point of CG is based on the mean number of actual data.



Figure 2. The Relationship between Corporate Governance and ROA by Country in 2001~2002

The black color denotes the firms with higher CG regime; and the slight black color denotes the firms with lower CG regime, respectively. Their ROA marks on the top. The cut-off point of CG is based on the mean number of actual data.





Figure 3. The Corporate Governance and Cost of Capital (proxy by Book to Market Value) by Country in 2001~2002

The black color denotes the firms with higher CG regime; and the slight black color denotes the firms with lower CG regime, respectively. Their BTM marks on the top. The cut-off point of CG is based on the mean number of actual data.

