CORPORATE GOVERNANCE AND STOCK PERFORMANCE: EVIDENCE FROM CANADIAN FIRMS OVER THE PERIOD 2005 – 2009

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Abstract

This paper examines the relationship between corporate governance and stock performance using a sample of Canadian firms over the period 2005 – 2009. We measure corporate governance using the Corporate Governance Quotient index, and stock performance using three variables: one-month stock return, three-year stock return, and Tobin's Q. Overall, we find no evidence that corporate governance is associated with stock performance over our sample period.

Keywords: corporate governance, stock performance, Canada

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1. Introduction

In an influential paper, Gompers, Ishii, and Metrick (2003) develop a corporate governance index to proxy for the strength of shareholder rights at large firms from 1990 to 1999. They then relate the index to stock performance, and find that firms with better corporate governance generate abnormal returns during their sample period. They also find that firms with better corporate governance have higher valuation as measured by Tobin's Q.

Since then, a large number of articles have examined the relationship between corporate governance and stock performance, and the results are mixed. While some authors find a positive relationship (e.g., Bebchuk, Cohen, and Ferrell, 2009; Cremers and Nair, 2005), others raise concerns about the robustness of such a relationship (e.g., Core, Guay, and Rusticus, 2006; Daines, Gow, and Larcker, 2010; Johnson, Moorman, and Sorescu, 2009; Lehn, Petro, and Zhao, 2007).

A few articles have examined the relationship between corporate governance and stock performance of Canadian firms, and the results are mixed as well.[4] While Klein, Shapiro, and Young (2005) find some evidence that corporate governance is positively associated with firm value as measured by Tobin's Q, Jog and Dutta (2004) and Gupta, Kennedy, and Weaver (2009) find no such evidence. Adjaoud, Zeghal, and Andaleeb (2007) find an association between corporate governance and firm performance only when performance is measured by value-based (rather than accounting-based) measures. Bozec, Bozec, and Dia (2010) find a significant association only when there is a separation between voting rights and cash flow rights. MacAulay et al. (2010) find that the association is significant in 2003 and 2004 but no longer so between 2005 and 2007. Berthelot, Morris, and Morrill (2010) find that corporate governance is associated with both firm value and accounting results over the period 2002 – 2005.

In this paper, we examine the relationship between corporate governance and stock performance using a sample of Canadian firms over the period 2005 – 2009. We conjecture that if such a relationship exists, it would be easier for researchers to detect it during a crisis period. This is because the agency costs between controlling shareholders and minority shareholders are likely to be exacerbated during a crisis period (see, e.g., Johnson et al., 2000; Lemmon and Lins, 2003). Indeed, several papers find evidence of positive impact of corporate governance on stock performance during the 1997 – 1998 East Asian

[4] In terms of corporate governance, Canadian firms differ from U.S. firms along several dimensions. For example, many large Canadian firms are effectively controlled by families (Morck, Stangeland, and Yeung, 2000). In addition, while corporate governance is based on rules in the U.S., it is based on principles in Canada (Broshko and Li, 2006). These differences allow for a comparison of the associations between corporate governance and stock performance in these two countries.

financial crisis (e.g., Baek, Kang, and Park, 2004; Kang, Lee, and Na, 2010; and Mitton, 2002).

We measure corporate governance using the Corporate Governance Quotient index developed by the Institutional Shareholder Services. We measure stock performance in three ways: one-month stock return, three-year stock return, and Tobin's Q. We then run regressions that relate measures of stock performance to the corporate governance index over various sub-sample periods. Overall, we find no evidence that the corporate governance index is related to stock performance, regardless of how stock performance is measured. Our study extends prior research examining the relationship between corporate governance and stock performance in Canada to the recent financial crisis period.

The rest of this paper is organized as follows. Section 2 reviews related literature. Section 3 explains data sources and variables. Section 4 presents empirical results. Section 5 concludes. The Appendix contains the detailed descriptions of the variables used in this study.

2. Related literature

A large body of literature has examined the relationship between corporate governance and stock performance.[5] In recent years, researchers have developed several indices that attempt to measure the overall quality of a firm's corporate governance.[6]

A prominent corporate governance index is the one developed by Gompers, Ishii, and Metrick (2003, hereafter GIM). GIM use this index to proxy for the strength of shareholder rights at about 1,500 large firms from 1990 to 1999. The index is based on a check-and-sum of the presence of each of the twenty-four distinct corporate governance provisions that are included in the Investor Responsibility Research Center (IRRC) database. GIM argue that a higher index value indicates weaker shareholder rights. They find that an investment strategy that bought firms with the strongest shareholder rights and sold firms with the weakest shareholder rights would have earned significant abnormal returns from 1990 to 1999. They also find that firms with stronger shareholder rights have higher valuation as measured by Tobin's Q.

A number of papers have examined the robustness of the findings of GIM, and the results are mixed. Bebchuk, Cohen, and Ferrell (2009) find that six out of the twenty-four IRRC provisions are the driving force behind the findings of GIM. Cremers and Nair (2005) find that the findings of GIM could be strengthened if the role of internal governance (as measured by the presence of public pension funds) is also considered. Core, Guay, and Rusticus (2006) find no evidence that weak corporate governance causes poor stock performance. Lehn, Petro, and Zhao (2007) find some evidence that poor stock performance leads to weak corporate governance. Johnson, Moorman, and Sorescu (2009) show that portfolios sorted on GIM index would no longer generate abnormal returns once the benchmark asset-pricing model is adjusted for industry clustering. Daines, Gow, and Larcker (2010) examine the association between several commercially available corporate governance indices and firm performance. They find little evidence that these indices can predict subsequent accounting restatements or shareholder litigation. Bebchuk, Cohen, and Wang (2010) show that a trading strategy based on GIM index would have earned abnormal returns over the period 1991 – 1999, but not over the period 2000 – 2008. They argue (and present supporting evidence) that the disappearing association between corporate governance and abnormal stock returns is due to investor learning.

A few papers have examined the relationship between corporate governance and stock performance of Canadian firms, and the results are mixed as well. Jog and Dutta (2004) find no systematic relationship between corporate governance and stock performance. Klein, Shapiro, and Young (2005) find no relationship between a total governance index and firm value as measured by Tobin's Q. However, they find that several sub-categories of the total governance index are significantly related to firm value. Adjaoud, Zeghal, and Andaleeb (2007) find no relationship between corporate governance and several accounting-based measures of firm performance, but they do find significant relationships between corporate governance and value-based performance measures such as economic value added and market value added. Gupta, Kennedy, and Weaver (2009) measure corporate governance using both a total governance index constructed by the Global and Mail, and the four sub-categories that comprise the total index. They find that neither the total governance index nor any sub-category has any systematic impact on firm valuation. Bozec, Bozec, and Dia (2010) find that corporate governance is positively associated with firm valuation only when there is a separation between voting rights and cash flow rights. MacAulay et al. (2009) find an improvement in corporate governance of Canadian firms over the period 2003 – 2007. They also find a significant association between corporate governance and firm performance over the period 2003 – 2004, but not over the period 2005 – 2007. Berthelot, Morris, and Morrill (2010) examine the

[5] See Shleifer and Vishny (1997) for an excellent survey on corporate governance.

[6] See Bhagat, Bolton, and Romano (2008) for a discussion of the difficulties associated with using corporate governance indices in empirical research.

relationship between the Global and Mail's corporate governance rankings and the financial performance of a sample of Canadian firms over the period 2002 – 2005. They find that corporate governance is correlated with both firm value and accounting results.

To our knowledge, no paper has examined the relationship between corporate governance and stock performance of Canadian firms during the recent financial crisis. This is what we set to achieve in this paper. We conjecture that if a relationship between corporate governance and stock performance exists, it would be easier for researchers to detect it during a crisis period. Indeed, Lemmon and Lins (2003) find that the East Asian financial crisis negatively impacted firms' investment opportunities, and thus exacerbated the agency costs between controlling shareholders and minority shareholders. As a result, stocks of firms with higher agency costs performed worse than those of other firms. Johnson et al. (2000) show that during the East Asian financial crisis, measures of corporate governance better explain the extent of exchange rate depreciation and stock market decline than do standard macroeconomic measures. Additional evidence on the association between corporate governance and stock performance during the East Asian financial crisis can be found in Baek, Kang, and Park (2004), Kang, Lee, and Na (2010), and Mitton (2002).

3. Data and summary statistics

We start with a sample of Canadian firms that are included in the Institutional Shareholder Services (ISS) database from October 2005 to July 2009.[7] ISS rates over 8,000 companies worldwide along four dimensions: board structure and composition (40%), executive and director compensation (30%), audit issues (10%), and anti-takeover provisions (20%). It assigns two Corporate Governance Quotient (CGQ) scores to each company: one score is relative to industry peers, and the other score is relative to the pertinent market index (in our case the S&P/TSX index). We use the CGQ score relative to the market index. The score ranges from 0 to 100, with higher value indicating better corporate governance. CGQ index has been used in prior studies such as Daines, Gow, and Larcker (2010).[8]

For each quarter we divide our sample firms into 10 equal-sized portfolios based on CGQ index. The portfolio returns are value-weighted based on market capitalization of individual firms. We dub the portfolio in the lowest decile the Dictatorship Portfolio, and the one in the highest decile the Democracy Portfolio.

[Insert Table 1 about here]

Table 1 presents the number of firms in each portfolio over time. The maximum number of firms per quarter is 169 (July 2007) and the minimum is 128 (July 2009). Fluctuations in the number of firms each quarter in our sample are mainly due to de-listings, mergers and acquisitions, and bankruptcies. For simplicity, if a firm is de-listed in the middle of a quarter, we calculate its stock return as if its end-of-quarter price is equal to its last trade price.

Stock returns are the primary dependent variables that we use in examining the impact of corporate governance on firm performance. Since we are interested in both short-term and long-term impact, we use both one-month stock return and three-year stock return in our subsequent regression analysis.[9] Table 2 presents the summary statistics for one-month stock return and the related market factors that we will use in the regressions. Table 3 presents the summary statistics for three-year stock return and these related market factors. Descriptions of all the variables are provided in the Appendix.

[Insert Table 2 and 3 about here]

Table 2, Panel A shows that the mean values of the one-month stock returns of all the ten portfolios are negative, reflecting the severe financial crisis that the Canadian stock market experienced from 2007 to 2009. The highest average of the one-month stock return is obtained by the third portfolio, while the lowest average one-month stock return is obtained by the fourth portfolio. The table shows no obvious link between CGQ index and one-month stock return.

Table 2, Panel B presents the pairwise correlations between one-month stock returns and market factors. For all the portfolios, one-month stock returns are positively correlated with MRP and SMB, and negatively correlated with HML and UMD. However, in each column there does not appear to be a distinct trend when moving from the Dictatorship Portfolio to the Democracy Portfolio.

Table 3, Panel A indicates that the mean values of the three-year stock returns for all the 10 portfolios are negative. The table shows no obvious link between CGQ index and three-year stock return.

Table 3, Panel B indicates a negative correlation between CGQ index and three-year stock return, although the link is weak. This suggests that firms with weaker corporate governance actually performed better during our

[7] We access ISS database through Bloomberg.

[8] See Bhagat, Bolton, and Romano (2008) for a detailed discussion of the CGQ index.

[9] We obtain stock return and accounting data used in this study from Bloomberg.

sample period. We will further explore the relationship later using multivariate regression analysis.

We also use Tobin's Q to measure stock performance. Following Kaplan and Zingales (1997), we calculate Tobin's Q as market value of assets divided by book value of assets, where market value of assets equals market value of equity plus book value of liabilities. Later in our regression of Tobin's Q on CGQ index, we also include several control variables that are used by Shin and Stulz (2000). The descriptions of the variables are given in the Appendix.

[Insert Table 4 about here]

Table 4 presents the summary statistics for Tobin's Q and related variables. Panel A shows the means and standard deviations of the variables, and Panel B shows the correlation of each variable with Tobin's Q. As shown, the correlation between Tobin's Q and CGQ switches from negative to positive in July 2007. The log of firm age is negatively related to Tobin's Q, perhaps because maturing firms have fewer growth options. The log of book value of assets is negatively correlated with Tobin's Q.

4. Empirical results

4.1 Corporate governance and short-term stock returns

To examine whether short-term stock returns are related to corporate governance, we estimate the following four-factor model proposed by Carhart (1997):

$$R_t = \alpha_t + \beta_1 MRP_t + \beta_2 SMB_t + \beta_3 HML_t + \beta_4 UMD_t + e_t \quad (1)$$

where R_t is the one-month stock return minus the risk-free return; MRP_t is the one-month return on the market portfolio in excess of the risk-free return; and SMB_t, HML_t, and UMD_t are the one-month returns on value-weighted, zero-investment, factor-mimicking portfolios for size (small minus big), book-to-market value (high minus low), and momentum of stock returns (up minus down). These factors are specific to the Canadian market and are kindly provided to us by Professor Francouer who follows the same methodology as Kenneth French in calculating the factors for U.S. market. The intercept alpha measures the monthly abnormal return that could be achieved with passive investment in the four factor portfolios. If corporate governance matters, the alpha of portfolios with higher corporate governance scores should be higher than those with lower scores.

We estimate equation (1) using Ordinary Least Squares (OLS) regression for a long position in each individual decile of the corporate governance decile, and one regression for a long position in the Democracy Portfolio combined with a short position in the Dictatorship Portfolio. We update the constituents of each decile on a quarterly basis due to data availability. The regression results are reported in Table 5.

[Insert Table 5 about here]

As we can observe, none of the portfolios exhibits a statistically significant abnormal return. In addition, alpha displays no obvious pattern when moving from Dictatorship Portfolio to Democracy Portfolio. Thus, we find no evidence that corporate governance is related to short-term stock returns.[10]

4.2 Corporate governance and long-term stock returns

To understand whether the effect of good governance on stock returns may be more prominent in the long run, we relate three-year stock returns to the corporate governance index. In a modification of the method used by Gompers, Ishii, and Metrick (2003),[11] we use the following cross-sectional regression over eight quarters from October 2005 to July 2007:

[10] We also run regressions using market risk premium (MRP) as the only independent variable on the same data grouped into 11 portfolios (one for each decile and one for a long position in the Democracy Portfolio combined with a short position in the Dictatorship Portfolio). The results are similar to those reported in Table 5.

[11] Gompers, Ishii, and Metrick (2003) include firm size as measured by market capitalization as well as some variables exclusive to the U.S. market (such as S&P 500 inclusion) in their regression analysis. In our sample, since size and turnover are highly correlated (average correlation is 0.813 over the eight quarters), including both size and turnover would create significant multicollinearity in the regression.

$$R_t = \alpha_t + \beta_1 CGQ_t + \beta_2 Turnover_t + \beta_3 SGrowth_t + \beta_4 Yield_t + e_t \quad (2)$$

where R_t is the three-year stock return on the stock adjusted for dividends, CGQ_t is the corporate governance variable, $Turnover_t$ is the dollar trading volume for the stock in the prior month, $SGrowth_t$ is the growth in sales over the preceding three years, and $Yield_t$ is the dividend yield on the stock based on the latest year of dividend payouts. If corporate governance does have an impact on long-run stock returns, we would expect a positive and significant coefficient on CGQ_t.

The number of firms in each of the eight cross-sectional regressions varies between 98 and 139, and the regression results are presented in Table 6.

[Insert Table 6 about here]

In all the regressions, the coefficient on CGQ is not significant, indicating that corporate governance has no impact on long-term stock returns. Somewhat surprisingly, the coefficients on CGQ are all negative (although not significant), suggesting that firms with weaker corporate governance had higher risk-adjusted long-term stock returns over our sample period.

4.3 Corporate governance and tobin's q

Following Gompers, Ishii, and Metrick (2003), we also examine the impact of corporate governance on both Tobin's Q and industry-adjusted Tobin's Q, which is calculated as the Tobin's Q of a firm minus the industry-median Q for the ten industries classified by Global Industry Classification Standard (GICS). Following Shin and Stulz (2000), we control for the log of firm age and the log of total assets. Firm age is measured as the number of years since the firm's initial public offering. The economic intuition for including firm age in the regression is that older firms might have built up higher levels of intangible assets in excess of their replacement cost. Specifically, we estimate the following equation:

$$Tobin's\ Q_t = \alpha_t + \beta_1 CGQ_t + \beta_2 Age_t + \beta_3 Assets_t + e_t \quad (3)$$

We run cross-sectional regressions for each quarter between October 2005 and July 2009. The number of firms in each regression varies between 125 and 163 based on data availability. If corporate governance affects Tobin's Q, the coefficient on CGQ_t would be significant.

[Insert Table 7 and 8 about here]

Table 7 presents the regression results when the dependent variable is Tobin's Q, and Table 8 presents the regression results when the dependent variable is industry-adjusted Tobin's Q. The coefficients on CGQ are not significant, indicating that corporate governance has no effect on Tobin's Q.

5. Conclusion

Understanding the relationship between corporate governance and stock performance has been an important question in the literature. Prior studies have reported mixed results. In this paper, we examine this question using a sample of Canadian firms over the period 2005 – 2009. We run three sets of regressions, where the dependent variable is one-month stock return, three-year stock return, and Tobin's Q, respectively. The independent variables are the corporate governance index and control variables. Overall, we find no evidence that corporate governance impacts stock performance during our sample period, regardless of how performance is measured.

There are several possible explanations for our results. First, the corporate governance index used in our paper may have substantial measurement error (see Daines, Gow, and Larcker, 2010). Second, the most effective corporate governance arrangement may be firm specific and no index is able to measure the overall quality of a firm's corporate governance (see Bhagat, Bolton, and Romano, 2008). Third, in recent years investors have come to appreciate the importance of corporate governance, and firms with strong corporate governance could no longer generate abnormal stock returns (see Bebchuk, Cohen, and Wang, 2010). Finally, the link between corporate governance and stock performance may have weakened after the introduction of new corporate governance rules in Canada (see MacAulay et al., 2009). Identifying which explanation better explains our findings is a challenge for future research.

Appendix

This appendix describes variables used in our regressions.

Corporate Governance Quotient (CGQ). The relative ranking of index members from 0 to 100 based on corporate governance criteria.

Market Risk Premium (MRP). The average market return minus 90-day Canadian Treasury Bill rate.

High Minus Low (HML). The average return on a portfolio of value stocks minus the average return on a portfolio of growth stocks. Value stocks are characterized by a high book-to-market ratio, and growth stocks are characterized by a low book-to-market ratio.

Small Minus Big (SMB). The average return on a portfolio of small stocks minus the average return on a portfolio of large stocks.

Up Minus Down (UMD). The average monthly return difference between the returns on the high and low prior return portfolios.

Tobin's Q. Market value of assets divided by the book value of assets. Market value of assets is the sum of market value of equity and the book value of liabilities.

Turnover. The dollar trading volume over one month.

3-Year Sales Growth (SGrowth). The growth in gross sales over the previous three years.

Firm Age (Age). The age of the firm in years since its initial public offering.

Dividend Yield (Yield). Total dividend payment per share made in the previous year as a percentage of current stock price.

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Table 1. Sample Distribution

	2005	2006				2007				2008				2009		
	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul
1) Dictatorship	16	16	17	17	17	16	16	16	15	14	13	13	17	17	16	15
2)	16	16	17	17	17	16	16	16	15	14	13	13	17	17	15	15
3)	16	16	17	17	15	16	16	15	15	14	13	13	17	16	15	15
4)	16	15	17	17	16	16	16	15	14	13	13	13	16	16	15	15
5)	15	15	16	16	16	15	15	15	13	12	13	12	16	16	15	14
6)	15	15	16	17	16	15	15	15	14	13	13	12	16	16	15	14
7)	15	15	17	17	16	15	15	15	15	13	13	13	17	16	15	15
8)	16	16	17	17	16	16	16	15	15	14	13	13	17	16	15	15
9)	16	16	17	17	17	16	16	15	15	14	13	13	17	17	15	15
10) Democracy	16	16	17	17	17	16	16	16	15	14	13	13	17	17	16	15
Total	157	156	168	169	163	157	157	153	146	135	130	128	167	164	152	148

Notes: The sample period is from October 2005 to July 2009. For each quarter we divide the sample firms into 10 equal-sized portfolios based on CGQ index. This table reports the number of firms in each portfolio over time.

Table 2. Summary Statistics for One-Month Stock Return and Related Market Factors

Panel A: Mean and Standard Deviation

		One-month Stock Return	
		Mean	Standard Deviation
Portfolios	1) Dictatorship	-0.0027	0.0499
	2)	-0.0040	0.0503
	3)	-0.0016	0.0588
	4)	-0.0151	0.0887
	5)	-0.0139	0.0988
	6)	-0.0060	0.0568
	7)	-0.0039	0.0539
	8)	-0.0031	0.0542
	9)	-0.0123	0.0744
	10) Democracy	-0.0034	0.0678
Factors	MRP	-0.0126	0.0683
	SMB	-0.0039	0.0379
	HML	-0.0115	0.0422
	UMD	0.0146	0.0376

Panel B: Correlations with One-month Stock Return

	MRP	SMB	HML	UMD
1) Dictatorship	0.545	0.328	-0.288	-0.255
2)	0.815	0.464	-0.19	-0.395
3)	0.639	0.425	-0.354	-0.32
4)	0.779	0.434	-0.335	-0.243
5)	0.792	0.527	-0.189	-0.466
6)	0.822	0.553	-0.178	-0.364
7)	0.649	0.344	-0.198	-0.252
8)	0.789	0.478	-0.118	-0.456
9)	0.864	0.521	-0.179	-0.337
10) Democracy	0.824	0.645	-0.367	-0.412

Notes: The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix.

Table 3. Summary Statistics for Three-Year Return and Related Market Factors

Panel A: Mean and Standard Deviation

	Three-Year Return		CGQ		LN(Turnover)		SGrowth		Yield	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Oct-05	-0.112	0.821	53.750	28.432	19.069	1.428	1.906	8.781	0.012	0.015
Jan-06	-0.380	0.935	50.958	29.249	18.914	1.324	2.041	13.45	0.013	0.021
Apr-06	-0.578	1.091	50.948	29.758	19.177	1.289	1.174	1.997	0.010	0.012
Jul-06	-0.391	0.984	50.646	29.951	18.886	1.374	4.651	36.15	0.012	0.018
Oct-06	-0.277	0.948	52.565	29.041	18.940	1.400	1.478	2.557	0.012	0.021
Jan-07	-0.331	0.955	52.158	29.060	19.027	1.282	1.407	2.646	0.012	0.021
Apr-07	-0.338	0.950	52.704	29.533	19.311	1.269	1.515	3.218	0.014	0.024
Jul-07	-0.434	0.905	53.101	29.333	19.298	1.396	1.792	5.446	0.013	0.019

Panel B: Correlations with Three-Year Return

	CGQ	LN(Turnover)	SGrowth	Yield
Oct-05	-0.0289	0.1086	-0.0354	0.0437
Jan-06	-0.0787	0.1118	-0.0791	-0.0401
Apr-06	-0.1341	0.1816	0.0529	0.0957
Jul-06	-0.097	0.2509	0.0097	-0.0503
Oct-06	-0.0916	0.1584	0.1203	-0.1164
Jan-07	-0.0387	0.1009	0.1231	-0.1122
Apr-07	-0.036	0.1453	0.0921	-0.1224
Jul-07	-0.0477	0.1119	0.0228	-0.1002

Notes: The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix.

Table 4. Summary Statistics for Tobin's Q and Related Market Factors

Panel A: Mean and Standard Deviation

	Tobin's Q		CGQ		LN(Firm Age)		LN(Book Assets)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Oct-05	1.746	0.946	52.647	28.286	2.871	0.877	8.315	1.636
Jan-06	1.898	1.164	50.237	29.275	2.902	0.851	8.333	1.638
Apr-06	2.101	1.479	50.585	29.296	2.860	0.832	8.174	1.692
Jul-06	1.917	1.192	50.630	29.576	2.868	0.831	8.186	1.689
Oct-06	1.906	1.599	52.593	29.447	2.870	0.803	8.260	1.706
Jan-07	1.976	1.647	52.585	29.519	2.895	0.823	8.395	1.678
Apr-07	1.858	1.576	52.394	29.807	2.910	0.813	8.385	1.689
Jul-07	1.744	1.060	52.085	30.183	2.928	0.800	8.451	1.667
Oct-07	1.730	1.027	52.970	29.906	2.933	0.774	8.524	1.679
Jan-08	1.837	1.482	53.392	29.222	2.987	0.770	8.678	1.646
Apr-08	1.742	1.204	53.777	29.644	3.029	0.750	8.748	1.644
Jul-08	1.658	1.064	54.111	29.870	3.056	0.742	8.836	1.617
Oct-08	1.886	2.024	55.996	28.524	2.859	0.823	8.427	1.725
Jan-09	1.389	1.344	57.623	28.445	2.819	0.833	8.503	1.715
Apr-09	1.389	1.288	56.843	28.494	2.890	0.797	8.56	1.759
Jul-09	1.446	1.095	57.298	28.736	2.915	0.776	8.606	1.740

Panel B: Correlations with Tobin's Q

	CGQ	LN(Firm Age)	LN(Book Assets)
Oct-05	-0.0006	-0.1532	-0.4081
Jan-06	-0.018	-0.1617	-0.3969
Apr-06	-0.0662	-0.2007	-0.4464
Jul-06	-0.1519	-0.2015	-0.417
Oct-06	-0.1317	-0.1924	-0.3949
Jan-07	-0.122	-0.1703	-0.3858
Apr-07	-0.1245	-0.1574	-0.3685
Jul-07	-0.0644	-0.1322	-0.322
Oct-07	0.1085	-0.1115	-0.3533
Jan-08	0.1422	-0.1002	-0.253
Apr-08	0.0424	-0.116	-0.2621
Jul-08	0.0438	-0.0892	-0.256
Oct-08	0.1311	-0.151	-0.4233
Jan-09	0.0597	-0.0752	-0.3443
Apr-09	0.0498	-0.0902	-0.364
Jul-09	0.0742	-0.1236	-0.3707

Notes: The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix.

Table 5. Corporate Governance and Short-Term Stock Returns

	α	MRP	SMB	HML	UMD
1) Dictatorship	-0.0011	0.4914**	-0.5472	-0.3970*	-0.3523
2)	0.0030	0.7426**	-0.6532**	-0.2416*	-0.4087**
3)	0.0017	0.6301**	-0.6291*	-0.5453**	-0.4829*
4)	-0.0085	1.2922**	-1.1471**	-0.7027**	-0.4038
5)	0.0039	1.2587**	-0.8950*	-0.4202	-0.9074**
6)	0.0010	0.7288**	-0.2667	-0.1117	-0.2155
7)	0.0001	0.6659**	-0.6279*	-0.2727	-0.2843
8)	0.0063	0.7352**	-0.5851*	-0.1568	-0.4955**
9)	-0.0020	1.1037**	-0.6148*	-0.1880	-0.2733
10) Democracy	0.0030	0.7680**	-0.2347	-0.4575**	-0.4077*
Democracy - Dictatorship	0.0011	0.2718	0.3185	-0.0604	-0.0588

Notes: This table presents the regression results that relate one-month stock return to the CGQ index. The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix. ** and * indicate significance at the 1% and 5% levels, respectively.

Table 6. Corporate Governance and Long-Term Stock Returns

	α	CGQ	Turnover	SGrowth	Yield
Oct-05	-1.287	-0.0016	0.0651	0	1.709
Jan-06	-2.0756	-0.0032	0.1004	0	-2.7136
Apr-06	-3.5682*	-0.0063	0.1690*	0.0196	4.9097
Jul-06	-4.1874**	-0.0055	0.2187**	0.0016	-5.4619
Oct-06	-2.339	-0.0032	0.1193	0.0318	-6.1788
Jan-07	-1.7756	-0.0019	0.0825	0.0342	-5.8291
Apr-07	-2.4639	-0.0026	0.1198	0.0184	-5.5937
Jul-07	-2.0022	-0.0026	0.0919	-0.0011	-5.0054

Notes: This table presents the regression results that relate three-year stock return to the CGQ index. The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix. ** and * indicate significance at the 1% and 5% levels, respectively.

Table 7. Corporate Governance and Tobin's Q

	α	CGQ	Age	Assets
Oct-05	3.7410**	0.0008	-0.0448	-0.2297**
Jan-06	4.3265**	0.0006	-0.0649	-0.2727**
Apr-06	5.4798**	-0.0011	-0.0981	-0.3721**
Jul-06	4.5094**	-0.0032	-0.0706	-0.2721**
Oct-06	5.2783**	-0.0041	-0.1251	-0.3388**
Jan-07	5.4006**	-0.0034	-0.0937	-0.3544**
Apr-07	4.9599**	-0.0033	-0.0803	-0.3214**
Jul-07	3.5303**	0.0004	-0.0389	-0.2000**
Oct-07	3.4404**	0.0015	0.0068	-0.2122**
Jan-08	3.4773**	0.0052	-0.0484	-0.2042*
Apr-08	3.3810**	0.003	-0.0375	-0.1929**
Jul-08	3.0551**	0.0026	-0.0006	-0.1740**
Oct-08	5.4091**	0.0089	0.1028	-0.5121**
Jan-09	3.3193**	0.0029	0.1909	-0.3098**
Apr-09	3.3329**	0.0023	0.1675	-0.2989**
Jul-09	3.1738**	0.0028	0.0865	-0.2486**

Notes: This table presents the regression results that relate Tobin's Q to the CGQ index. The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix. ** and * indicate significance at the 1% and 5% levels, respectively.

Table 8. Corporate Governance and Industry-Adjusted Tobin's Q

	α	CGQ	Age	Assets
Oct-05	1.6126**	-0.0007	0.0106	-0.1727**
Jan-06	2.1552**	-0.0012	-0.0409	-0.2025**
Apr-06	3.0696**	-0.0032	-0.1085	-0.2718**
Jul-06	2.2859**	-0.0048	-0.0641	-0.1919**
Oct-06	3.1683**	-0.0048	-0.1413	-0.2669**
Jan-07	3.1898**	-0.0045	-0.1285	-0.2660**
Apr-07	2.9516**	-0.0038	-0.0879	-0.2574**
Jul-07	1.4418**	0.0002	-0.0231	-0.1339*
Oct-07	1.3210*	0.0011	0.0341	-0.1468**
Jan-08	1.4561	0.004	-0.0408	-0.1364
Apr-08	1.4059*	0.0022	-0.0461	-0.1224
Jul-08	1.1294*	0.0022	-0.0052	-0.1088
Oct-08	3.6090**	0.0074	0.0957	-0.4514**
Jan-09	2.0781**	0.0029	0.1722	-0.2894**
Apr-09	2.0722**	0.002	0.1566	-0.2788**
Jul-09	1.5876**	0.0021	0.1089	-0.2099**

Notes: This table presents the regression results that relate industry-adjusted Tobin's Q to the CGQ index. The sample period is from October 2005 to July 2009. All the variables are defined in the Appendix. ** and * indicate significance at the 1% and 5% levels, respectively.