РАЗДЕЛ 1
НАУЧНЫЕ ИССЛЕДОВАНИЯ И КОНЦЕПЦИИ

SECTION 1
ACADEMIC INVESTIGATIONS & CONCEPTS

CORPORATE GOVERNANCE AND THE DIVERGENCE OF LEARNING CHANNELS

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Abstract

We study the relation between corporate governance, market liquidity and stock price informativeness. Firms with more informative stock prices are associated with larger transaction volume, larger bid-ask spread and better corporate governance. Thisliquidity-informativeness relation is significant for firms with high antitakeover provision (bad corporate governance). However, bid-ask spread is insignificantly associated withprice informativeness for firms with less antitakeover provision (good corporate governance). This supports that firm-specific return variation better measures stock price informativeness when firm has strong corporate governance framework. Our results suggest that (i) more (less) informed trading activities associated with weak (strong) corporate governance, and (ii) corporate governance explains the cross-sectional variation in information efficiency of stock prices. Our results are consistent with theories in financial market learning that investor learn from informed trading activities associated with weak governance firms and informative disclosure from strong governance firms.

Keywords: Corporate Governance, Stock Price Informativeness, Bid-Ask Spread, Trading Volume, Market Liquidity

JEL classification:C23, C25, G12, G14, G34

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1. Introduction

Do poor governance leads to more informed trading? Recent papers argue that corporate governance matters for price informativeness. Gompers, Ishii and Metrick (2003) and Cremers and Nair (2005) report that corporate governance influences stock price through private incentives of management. Then, Ferreira and Laux (2007) find that less antitakeover provisions are associated with higher idiosyncratic risk and more informative stock price. Chung, Elder and Kim (2010) argue that governance and liquidity are linked because poor governance increases the information asymmetry between managers/controlling shareholders and outsiders. These studiessupport that corporate governance improves stock price informativeness. On the other hand, Holmstrom and Tirole (1993), Faure-Grimaud and Gromb (2004) and Almazan, Banerji and Motta (2008) show that market liquidity and trading activities affect price informativeness through the costs of performance monitoring and the managerial incentives. These two strands of literature point out two important factors of stock price informativeness: governance and trading activities. However, how does liquidity-informativeness relation change with respect to corporate governance? How can investor learn from the market when governance is weak?

We answer these questions by examining the cross-sectional relation between corporate governance, market liquidity and stock price informativeness. We adopt the aggregation of 24 antitakeover provisions by Gompers et al (2003) to proxy the firm-level corporate governance. We find that firms with more informative stock prices are associated with larger transaction volume, larger bid-ask spread and better corporate governance. This relation is stronger for firms with more antitakeover provision.However, bid-ask spread is insignificant to explain the cross-sectional informativeness for firms with less antitakeover provision. We argue that better corporate governance improves firms' price informativeness.Firms with less antitakeover (strong governance) are subject to more intensive market discipline,whose managers are under more pressure to perform better, thus, have stronger incentive to engage in informative disclosure, making their stock prices more informative and thus informed trading less attractive.

Our conjecture of corporate governance as learning channel is motivated by recent studies. Jin and Myers (2006) and Beekes and Brown (2006) suggest that the amount of private information of disclosure is positively related to level of corporate governance. This sets up our framework of information channeling that better governance leads to more informative (effective) disclosure. Information can be classified into two main types, one is insider information, and the other iscostly private information. Insider information can only be obtained by firm disclosure, while other private information can be obtained by any trader who pays the cost. When firm has low antitakeover provision, governance is strong and insiders have more incentives for effective disclosures or they are closely monitored. Besides, openness to the market for control creates incentives to collect private information as suggested in Ferreira and Laux (2007). Since insider information has been effectively disclosed, only private outside information is available to trade on. If benefits are larger than costs to collect outside information, traders including market makers would pay to obtain this information, and hence, information asymmetry is reduced. On the other hand, when firm has high antitakeover provision, governance is weak and insiders have few incentive to make effective disclosures. Then, informed traders can trade on insider information. However, high antitakeover provision reduces incentives to collect private outside information. As a result, information asymmetry is more severe since private firm-specific information is only available to informed traders. Due to adverse selection, market makers increase the spread to protect against lost on informed trading. The information channel flows through spread to reflect firm-specific informationfrom stock prices when corporate governance is poor. Our result suggests that spread is a critical component for information transmission when governance is poor.

This paper shows that corporate governance is important on the relationship between stock prices informativeness and liquidity. We contribute to the literature of information acquisition in financial markets that poor corporate governance firms may have lower liquidity in the price impact dimension. We argue that due to adverse selection, the specialists increase the spread to avoid loss to informed trading. Consequently, since the transaction price are now traded on a larger spread, price impact increases. This provides evidence in explaining why corporate governance influences firm's market liquidity. Our results support Ferreira

and Laux (2007) that firm-specific return variation is a good measure of stock price informativeness in corporate governance framework. As a firm improves their corporate governance and disclosure, shareholders may benefit from lower transaction costs, lower cost of capital and higher valuation. In addition, when a firm has poor CG, the price informativeness is significantly affected by market liquidity. We find that spread matters for informativeness only when corporate governance is weak (more antitakeover provision). Market microstructure theory posits that stock liquidity and stock price informativeness are related through informed trading activities. If informed trading is related to corporate governance, our contribution can be realized as a marginal effect of why corporate governance matters for stock price.Our results suggest that (i) more (less) informed trading activities associated with weak (strong) corporate governance, and (ii) corporate governance explains the cross-sectional variation in information efficiency of stock prices. Our results are consistent with the learning in financial markets that investors learn from (a) informed trading activities associated with weak governance firms and (b) informative disclosure from strong governance firms.

The remainder of the paper is organized as follows: Section 2 discusses the data and sample. Section 3 provides the empirical framework, results, and interpretations. Section 4 concludes.

2. Framework and Hypotheses

With less anti-takeover provision, the company subjects more to market monitoring corporate control. Companies with good performance would have their incentive to disclose information and better reflect the true value of the firm. However, the insiders from bad performing companies would have the incentive to hide the information, which may decrease the stock valuation and thus increase the chance of takeover. Therefore, we should expect, for bad companies, the informed trading would be more than good companies. On the other hand, for companies with more anti-takeover provision, both types of companieswould have little incentive to disclose information. Therefore, we expect that shares of poorly governed firms have more informed trading than the shares of the better governed firms.When there are more informed trading, the market participants would react accordingly and widen the spread. Therefore we have our main hypothesis:

Hypothesis 1: wider spread predicts a more (less) informative price when CG is poor (good).

More anti-takeover measures may impede proper disclosure of firms' information. In the opposite, fewer anti-takeover measures create incentives for traders to gather private information as suggested in Ferreira and Laux (2007). Even though the anti-takeover measures represent one perspective of corporate governance as suggested by Shleifer and Vishny (1997), we expect that the market of corporate control can directly monitor the firm and improve corporate governance. This factor is especially strong in the US market, as La Porta et al. (1999) finds that the US is one of the few markets that have relatively disperse ownership structure. We expect that with more asymmetric information, the spread becomes larger due to adverse selection by market makers. We use volume as a proxy of trading activities, and we expect higher volume enhances price informativeness.

Hypothesis 2: Informed trading increases price informativeness when CG is poor.

3. Data and Methodology

We combine the corporate governance data with CRSP and COMPUSTAT from 2nd January, 2001 to 30th December, 2005. Our sample includes non-missing values of major variables, excludes finance and utilities industries, and includes firms listed in NYSE, AMEX and NASDAQ. We include the common stocks with beginning-of-month price between $2 and $1000, and with at least 15 non-zero-volume trading days in that month. The resulting sample has 857 observations. We describe the measures of market price informativeness, the corporate governance index and the regression model in the following sub-sections.

3.1. Price Informativeness

The price informativeness (the amount of private information of stock) is measured by stock return synchronicity, first suggested by Roll (1988), developed by Morck,Yeung and Yu (2001), Durnev, Morck, and Yeung (2004) and Chen, Goldstein and Jiang (2007).[1] The stock return synchronicity is measured by the correlation between the stock returns and the returns of corresponding industry and the market. The idea is that if the price of a firm's stock is informative in the sense that firm-specific information is always reflected by informed trading, the firm-specific variation in stock price should dominate the variation driven by a common set of information in the industry or market. Thus, more informative stock price should result in lower stock synchronicity, and vice versa. Veldkamp (2006) shows that in an information market, if investors

[1] See Chen et al. (2007) for detailed review of development of the stock return synchronicity, as a measure of amount of private information in the stock price.

price an asset with a common subset of information because of high fixed costs of information production, the information of one asset affects the pricing of other assets and as such, asset prices co-move even if the asset fundamentals are uncorrelated. Following Durnev, Morck, and Yeung (2004) and Chen, Goldstein and Jiang (2007), we estimate the stock return synchronicity by the R^2 of the following model. For each firm-month observation, we regress the daily returns of a firm on the corresponding industry returns and the market returns over the 12 months immediately before the month in question:

$$R_{it} = \alpha_{0i} + \beta_{1i}R_{mt} + \beta_{2i}R_{m,t-1} + \gamma_{1i}R_{jt} + \gamma_{2i}R_{j,t-1} + \epsilon_{it}$$

where R_{it}, R_{jt}andR_{mt} are return for stock *i*, industry *j*, and the market, in trading day *t*. We use industry returns in addition to market returns to control for publicly available information that cannot be reflected by the market returns. The industry return is the value-weighted average of individual firms' returns for all firms with the same two-digit SIC code as the firm in concern. The market is the value-weighted average of daily returns of all stocks in CRSP. $i.$ We exclude the firms in question from the calculation of industry return to eliminate the spurious correlations between firm and industry returns with only a few firms.[2] In addition, we include lag period industry and market returns to control for potential autocorrelation problems due to sparse trading. We use a logistic transformation to circumvent the bounded nature of R^2 and to yield a dependent variable more conforming to the normal distribution, that gives,

$$P\_SYNCH = log\left(\frac{R_i^2}{1 - R_i^2}\right)$$

3.2. Corporate governance index

To examine the effect of corporate governance on stock price informativeness and market liquidity, we employ the corporate governance index (G Index) developed by Gompers et al. (2003).We obtain the corporate governance index from Andrew Metrick[3]. There are several reasons supporting our choice of this index. Although there area number of corporate governance indices available, G Index is most suited to analyze firms in the US market. The G Index varies with the US stock return, which is in line with our examination of price informativeness.

3.3 Regression Model

We employ random-effect panel regressions on monthly data to establish the relationship of spread and volume with price informativeness. The sample includes all firms that have at least 15 trading days in each month of 2003, so there are total 10227 firm-month observations in the dataset. The panel data model is as follows,

[2]SeeDurnev et al. (2004)
[3]http://finance.wharton.upenn.edu/~metrick/data.htm

$$P\_SYNCH_{it} = \zeta_0 + \zeta_1 SPREAD_{it} + \zeta_2 SHROUT_{it} + \zeta_3 VOL_{it} + \sum_{k=1}^{J} \delta_k INDU\_DUM_{kt} + \mu_{it},$$

where P_SYNCH isthe stock return synchronicity defined in section 3.1. Lower synchronicity implies a more informative stock prices.We follow $SPREAD_{i,t}$ is the quoted spread of firm i of month t. We first compute for each trading day the difference of closing ask price and closing bid price divided by closing midpoint of the bid and ask quote.$SHROUT_{i,t}$ is the share outstanding in logarithm of firm i of month t. $VOL_{i,t}$ is the monthly average of transaction volume in logarithmof firm i of month t. $INDU\_DUM_{k,t}$ is the industry indicator which equal to one if firm i belongs to industry k, else equal to zero.To mitigate effects of multicollinearity and endogeneity, weemploy panel random GLS regression withtoexamine the empirical relations between corporate governance, trading activities and price informativeness. Since the dynamics of the variance-covariance matrix are not the central topic to investigate in this study, we employ Huber / White / sandwich estimator for consistent covariance matrix estimator in the presence of conditional heteroskedasticity and standard errors presented in tables are adjusted for intra-firm clustering correlations.

4. Main Results

The summary statistics in Table 1 suggest that our main variables have reasonable variation of their distributions. Standard deviation (0.007) of spread is large relative to the mean (0.005), with inter-quartile range of 0.003. Standard deviation (1.446) of firm-specific illiquidity change is also large relative to the mean (-2.179), with inter-quartile range of 0.816. In the sub-sample summary statistics, weak governance firms have significantly higher mean R^2, mean price synchronicity, larger share outstanding and smaller bid-ask spread than the strong governance firms. All variables exhibit significant variations between sub-samples are included in our regressions. The correlations of main variables are displayed in Table 2. There are strong pairwise correlations between our main variables.

First column of Table 3 displays the results of panel regression of price informativeness on bid-ask spread, transaction volume and the corporate governance index with random effects. The lower price synchronicity indicates more informative price. In the full sample results, both bid-ask spread and volume are strongly negatively related to price informativeness. Volume is significant at 1% level, aligned with prior research such as Holmstrom and Tirole(1993) and Faure-Grimaud and Gromb (2004) that more trading activities decreases price synchronicity and increases price informativeness. Strikingly, we find that after controlling the transaction volume, the bid-ask spread is negatively related to price synchronicity, that is wider spread associate with more informative price. This may indicate that spread provides a channel to funnel information into stock price. This interesting phenomenon may be driven by firm-level corporate governance. Conventional wisdom may suggest that narrower spread implies higher liquidity, and therefore should improve price informativeness. In contrast, our findings suggest that the G index is positively associated with synchronicity, i.e. price is less informative for firms with weak governance. We argue that better governance should improve informativeness since there would be better disclosure under good governance.

To examine the learning channel, we split the dataset into two sub-samples according to the Gompers et al. (2003) corporate governance index. They find significant differences in yield, sales growth, capital expenditure and acquisition behavior between the strong governance and weak governance sub-samples but there are no clues on why governance may drive performance differences. Consistent with Gompers et al., we classify firms into strongest shareholder rights for firms with G Index smaller than or equals to 6, and weakest shareholders right for firms with G Index larger than or equals to 13. We attempt to explain governance can impose information to stock price using different channels by cross-sectional regressions of stock price informativeness on market liquidity in the two sub-samples and results are reported in Table 3.

There are 1289 firm-month observation from 108 companies in the strong governance sub-sample and 1316 firm-month observation from 110 companies in the weak governance sub-sample. Remarkably, for better corporate governance firms, spread turns to be insignificantly related to informativeness. There are no significant relationship between spread and price informativeness. Despite, volume is negatively significant, consistent with Ferreira and Laux (2007) that trading activities improve price informativeness. Comparing to poor corporate governance firms, the impact of spread is even larger on informativeness relative to the full sample. Therefore, spread becomes an important

factor for weakly governed firms. This may indicate an alternative channel for information transmission when information asymmetry is severe, and the price may reflect firm-specific information. The volume maintains a strong factor for price informativeness, but substantially weakens compared to the strong corporate governance firms. This implies quoted spread becomes a channel to information flow besides trading activities, and it shares a substantial role in the flow. Poor corporate governance firms may provide less informative disclosures, as shown in Beekes and Brown (2006). These firmstend to associate with managerial and insiders entrenchment problems. Probable entrenchment and tunneling may obstruct management to fairly disclose company activities. On the other hand, controllers have less incentive to disclose information when they are protected by anti-takeover provisions. Therefore, information asymmetry forces specialists in the US market to widen the spread, especially when there are no incentives to collect outside information of the firm. The transaction price thus contains more firm-specific information when it is traded. In contrast, firms with better corporate governance may effectively disclose information. With less asymmetric information, there are fewer informed trading, so that spread cannot improve price informativeness for good governance firms. These results suggest that the price impact of poor corporate governance firm may be higher, which decreases the liquidity.

Roll (1988) indicates that idiosyncratic volatility increase when there are more informed trading, so that private information are rapidly incorporated to the stock prices. In line with this idea, Ferreira and Laux (2007) argue that fewer antitakeover provisions create incentive to collect private information about the firm. They demonstrate that antitakeover provisions are a strong determinant of idiosyncratic volatility under a trading link hypothesis. In this paper, we discover that information can be channeled through informed trading to the stock price for poor corporate governance firms. We find that weakly governed firms have wider spread when price is more informative. Since these firms are often associated with unfair disclosure, it is more likely that informed traders may capitalize on firm-specific private information. Specialists are then prone to adverse selection. Therefore, when trading activities increase, it signals probable informed trading. Specialists react by widening the spread to compensate for potential loss to informed trading. Furthermore, specialists' reaction increases the price impact for the poor corporate governance firms, thus reducing their liquidity. In contrast, for stronger governed firms, company specific information is effectively disclosed to the public investors. The market makers have been equally informed so there is insignificant relationship between spread and informativeness, yet trading activities remain as a channel to information flow.

5. Conclusion

Overall, our results suggest that corporate governance matters for stock price informativeness and market liquidity. Using a sample of US firms in 2001, we find that firms with more informative stock prices are associated with large transaction volume, large bid-ask spread and better corporate governance. This relation is stronger for firms with more antitakeover provision. Strikingly, bid-ask spread is insignificant to explain the cross-sectional informativeness for firms with *less* antitakeover provision. This study provides support for Ferreira and Laux (2007) that firm-specific return variation is a good measure of stock price informativeness in corporate governance framework. Our results suggest that (i) more (less) informed trading activities associated with weak (strong) corporate governance, and (ii) corporate governance explains the cross-sectional variation in information efficiency of stock prices. Our results are consistent with the learning in financial markets that investors learn from (i) informed trading activities associated with weak governance firms and (ii) informative disclosure from strong governance firms.

Inferred from our findings, improving overall corporate governance in a market may enhance the liquidity of the market. According toLa Porta, Lopez-de-Silanes, Shleifer and Vishny (2000), emerging markets have relativelyweak governance and insufficient legal protection. Although our findings are derived from price driven markets, we conjecture that markets order driven is similar. With spread determined by bid-ask queue, adverse selection still prevails as poor corporate governance implies substantial information asymmetry. This may increase transaction costs and also cost of raising funds through stock market. Despite the importance of corporate governance, there are few measures to gauge effectiveness of governance related policies other than referring to abnormal returnsas demonstrated by Chhaochharia and Grinstein (2007). This paper provides an important factor for the stock market authorities to devise governance related policies. Further research on corporate governance, liquidity and informativeness issues can provide relevant information for policy makers to evaluate their implementedgovernance policies.

References

1. Almazan, A., Banerji, S. and Motta, T. 2008. "Attracting Attention: Cheap Managerial Talk and Costly Market Monitoring", *Journal of Finance,*Vol 63 No 3, pp. 1399-1436
2. Beekes, W. and Brown, P. 2006. "Do better-governed Australian firms make more Informative disclosures?", *Journal of Business Finance and Accounting,*Vol 33 No 3-4, pp. 422-50
3. Chen, Q., Goldstein, I. and Jiang, W. 2007. "Price informativeness and investment sensitivity to stock price", *Review of Financial Studies,*Vol 20 No 3, pp. 619-50
4. Chhaochharia ,V. and Grinstein, Y., 2007."Corporate governance and firm value: the impact of the 2002 governance rules." *The Journal of Finance*Vol 62 No 4, pp. 1789-1825.
5. Cremers, K. J. and Nair, V. B. 2005. "Governance mechanisms and equity prices", *Journal of Finance,*Vol 60 No 6, pp. 2859-94
6. Chung, K. H., Elder, J. and Kim, J.C. 2010. "Corporate Governance and Liquidity", *Journal of Financial and Quantitative Analysis*, Vol 45 No 2, pp. 265-291
7. Durnev, A., Morck, R. and Yeung B. 2004. "Value-enhancing capital budgeting and firm-specific stock return variation", *Journal of Finance,*Vol 59 No 1, pp. 65-105
8. Easley, D., Hvidkjaer, S. and O'Hara, M. 2002. "Is information risk a determinant of asset returns?", *Journal of Finance,*Vol 57 No 5, pp. 2185-2221
9. Faure-Grimaud, A. and Gromb, D. 2004. "Public trading and private incentives", *Review of Financial Studies,*Vol 17 No 4, pp. 985-1014
10. Ferreira, M. A. and Laux, P. A. 2007. "Corporate governance, idiosyncratic risk, and Information flow", *The Journal of Finance,*Vol 62 No 2, pp.951-989
11. Gompers, P., Ishii, J and Metrick, A. 2003. "Corporate governance and equity prices", *Quarterly Journal of Economics,*Vol 118 No 1, pp. 107-55
12. Holmstrom, B. and Tirole, J. 1993. "Market liquidity and performance monitoring", *Journal of Political Economy,*Vol 101, No 4, pp. 678-709
13. Jin, L. and Myers, S. C. 2006. "R-squared around the World: New Theory and New Tests", *Journal of Financial Economics,*Vol 79 No 2, pp. 257-92
14. Kyle, A. 1985. "Continuous Auctions and Insider Trading", *Econometrica,*Vol 53 No 6, pp. 1315-36
15. La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. 1999. "Corporate ownership around the world", *Journal of Finance,*Vol 54 No 2, pp. 471-517
16. La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. 2000. "Investor protection and corporate governance", *Journal of Financial Economics,*Vol 58 No 1-2, pp. 3-27
17. Morck, R., Yeung B. and Yu, W. 2001. "The information content of stock markets: why do emerging markets have synchronous stock price movements?", *Journal of Financial Economics,*Vol 58 No 1-2, pp. 215-60
18. Roll, R. 1988, "R^2", *Journal of Finance,*Vol 43 No 3, pp. 541-566
19. Shleifer, A. and Vishny, R. W. 1997. "A survey of corporate governance", *Journal of Finance,*Vol 52 No 2, pp. 737-83
20. Veldkamp, L. 2006, "Information markets and the comovement of asset prices", *Review of Economic Studies,*Vol 73 No 3, pp. 823-845

Table 1. Summary Statistics

This table reports the summary statistics of 10,227 firm-month observations in 2005. The sample consists of all listed firms in NYSE, AMEX and NASDAQ that have at least 15 trading days in each month. Monthly price informativeness is measured by the R-square from the market model of regressing the individual stock returns on market index and industry portfolio with one lag period, daily over the 12 months immediately before the month in question. The daily industry returns were calculated with over 7000 stocks, grouped by three-digit SIC code. Spread is measured by the difference between closing ask and bid quotes divided by the midpoint of the quotes, average monthly. Shares Outstanding is monthly average in logarithm. Volume is the total transaction volume monthly average in logarithm. G is the corporate governance index by (Gompers et al., 2003). Weak governance firms are those with the governance index G larger than 12. Strong governance firms are those with governance index G less than 7. Numbers in parentheses are standard deviations. ***, **, and * significant levels from 1, 5, and 10 percent respectively. The t-statistics are computed based on unequal variance of Satterthwaite test.

				Firms			t-statistics of difference of means (Weak CG – Strong CG)
	Median	Lower Quartile	Upper Quartile	Full sample mean (Standard Deviation) N =	Weak CG mean (Standard Deviation) N=1316	Strong CG mean (Standard Deviation) N=1289	
R^2	0.439	0.270	0.664	0.454 (0.263)	0.510	0.436	7.33***
Price synchronicity	-0.246	-0.994	0.681	-0.193 (1.821)	0.054	-0.314	5.85***
Spread	0.003	0.001	0.006	0.005 (0.007)	0.004	0.006	6.99***
Volume	12.904	11.817	13.864	12.870 (1.604)	12.856	12.761	1.45
Illiquidity change	-2.019	-2.975	-1.204	-2.179 (1.446)	-2.097	-2.151	0.97
Share Outstanding	10.898	10.216	11.690	11.111 (1.277)	11.197	11.107	1.85*
Governance Index	9	6	13	9.426 (4.328)	-	-	-

Table 2. Correlations of Main Variables

This table reports the correlations of the major variables over 10,227 firm-month observations in 2005. *, ** and *** are ten, five and one percent significance respectively.

	Price Informativeness	Spread	Volume
Spread	-0.249***		
Volume	0.339***	-0.338***	
Share Outstanding	0.396***	-0.222***	0.859***

Table 3. Price Informativeness and Liquidity with Corporate Governance

Panel regression of price informativeness on bid-ask spread, transaction volume, share outstanding and the corporate governance index with random effects. Monthly price informativeness is measured by the R-square from the market model of regressing the individual stock returns on market index and industry portfolio with one lag period, daily over the 12 months immediately before the month in question. The daily industry returns were calculated with over 7000 stocks, grouped by three-digit SIC code. Spread is measured by the difference between closing ask and bid quotes divided by the midpoint of the quotes, average monthly. Shares Outstanding is monthly average in logarithm. Volume is the total transaction volume monthly average in logarithm. G is the corporate governance index by (Gompers et al., 2003). Standard deviations are reported in parentheses. *, ** and *** are ten, five and one percent significance respectively.

	All Firms	**Strong Governance**	**Weak Governance**
Spread	-15.08***	-8.500	-29.59***
	(2.7894)	(6.1594)	(10.2652)
Share Outstanding	0.7263***	0.6874***	0.5165***
	(0.0446)	(0.1045)	(0.1027)
Volume	-0.1971***	-0.1634***	-0.1255*
	(0.0253)	(0.0616)	(0.0692)
G	0.0480**	-	-
	(0.0189)	-	-