# The Disparate Policy Impact of Improving Corporate Governance on Shareholder Wealth

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#### 1. Introduction

Both financial economists and regulators have paid significant attention on initiatives to improve corporate governance practices and protect minority shareholder rights around the world. Recent studies such as La Porta, Lopez de Silanes, Shleifer and Vishny (1997, 1998) recognize that there is variation in quality of legal systems and its impact on corporate financing decision and shareholder protections across countries.<sup>1</sup>

The majority of extant studies have characterized deviations of control rights from cash flow rights as the potential sources of expropriation of minority shareholders.<sup>2</sup> Through cross shareholdings, ultimate owners of publicly traded firms gain effective control with minority cash flow rights, which leads to incentives for owners to pay less attention to share value maximization than to their private gains.<sup>3</sup> Mitton (2002) suggests that the greater the divergence of cash flow/voting rights, the greater is the incentive for ultimate owners to expropriate corporate resources.

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<sup>&</sup>lt;sup>1</sup> A number of other studies also deal with the issues of legal system and corporate finance. Demirgüç-Kunt and Maksimovic (1998) and Rajan and Zingales (1998) show that industries and firms in countries with developed legal systems rely more on external financing to fund their growth. La Porta et al. (2002) further show that firms in countries with better legal protection enjoy higher market valuation, and Wurgler (2000) reports that the efficiency of capital allocation is positively related to legal protection of minority investors. Durnev and Kim (2005) recently report that firms in 27 countries with varying legal regimes with greater growth opportunities, greater needs for external financing, and more concentrated cash flow rights practice higher-quality governance and disclose more, which should call for a mandate of governance reform.

<sup>&</sup>lt;sup>2</sup> La Porta et al. (1998, 2002) and Shleifer and Vishny (1997) document significant deviation of control rights from cash flow rights in public firms of emerging economies.

<sup>&</sup>lt;sup>3</sup> See Reese and Weisbach (2002) for a detailed discussion of this issue.

There are however only a few studies on the wealth effects of corporate governance reform, especially in countries experiencing severe deviation of control rights from cash flow rights. In this paper, we examine how the equity market will react to a series of announcement events on the corporate governance reform and market opening in Korea. Korea provides an ideal field of testing the effectiveness of application of the Common Law type minority shareholder protection provisions. We find that domestic institutional shareholders which are the majority of investors for most chaebol firms favor incumbent management and react negatively to any news which are detrimental to maintaining the existing management team, while foreign investors favor any new rules to enhance the functioning of the market for corporate control.

Finally, we find that the ownership fraction of largest shareholders and market reform for opening have negative relationship. This suggests that chaebol firms with greater fraction largest shareholders are more likely to have weaker governance system. The results are also consistent with findings by Johnson, Boone, Breach, and Friedman (2000), where countries with weak corporate governance, worse economic prospects result in more expropriation by managers and thus a larger fall in asset prices.

Agency problems of ultimate owners' expropriation will be less significant in economies where managerial labor markets are competitive and market for corporate control is

active than in countries where such mechanisms are underdeveloped.<sup>4</sup> Bae et al. (2003) and Kim et al. (2005) suggest that agency problems are most prevalent to the large Korean conglomerates, *chaebol*-affiliated firms that are controlled by ultimate owners with minority cash flow rights, who are in most cases top managers of the firms.

Since the Asian financial crisis and the Korean government opened its equity market, and the foreign portfolio investment has increased dramatically. In line with this trend of market opening, the Korean government has adopted policies to improve on corporate governance for publicly traded Korean firms. We classify the Korean government's policies into two categories, legal reforms and market openings, and investigate impacts of such policy announcements on shareholders' wealth. To the extent that the impacts of policy adoptions on shareholders' wealth differ by the policy categories, the findings of this paper can shed some light on the efficacy of government policies in improving the corporate governance for countries with weak shareholder protections.

This paper is organized as follows. In Section 2, we discuss the extant literature on mergers and acquisitions and corporate governance and provide testable hypotheses. In Section

<sup>&</sup>lt;sup>4</sup> A large conglomerate business group is called a *chaebol* in Korea as opposed to *keiretsu* in Japan. The Korean government's industrial policy during the 1960s and 1970s provided exclusive government support and protection to big firms, which evolved into *chaebol*. Unlike *keiretsu*, Korean *chaebol* groups have ultimate owners, who control the affiliated firms thorough cross shareholdings. Currently, the Korea Fair Trade Commission defines a business group as a group of companies of which more than 30 percent of shares are owned by the group's controlling shareholder and its affiliated companies.

3, we discuss our methodology and describe data in the paper. Section 4 shows empirical results. Finally, Section 5 presents summary and concluding remarks.

## 2. The Literature and Hypotheses

## 2.1 The Model and Testable Hypotheses with Legal Reform in Korea

With external monitoring devices aimed at improving the corporate governance structure of *chaebols* as the focus of our study, we seek answers for the following questions:1) Is there a difference in the level of effectiveness of legal regulatory policies (LRPs) and market-oriented policies (MOPs)?; 2) If there is a difference, what are the reasons?; 3) Under the basis of this study's results, make suggestions on the nature of policy measures that should be considered for the mitigation of *Korea Discount*.

In this paper, we use the variation in the market value of stock as the proxy for the effectiveness of the policies. We use the following simple models. We should note, however, that we shall not use the same models for the case of Korea and the US. Korea's constitution is built upon a German-based civil law system and the US law is based on the common law, which is of English-origin. La Porta et al. (1998) explains how the governance structures of countries differ according to their legislative origins. Likewise, we apply different models for countries with different legislative origins, for their mechanisms resulting from monitoring activity will

also differ.

#### Model I: Applicable to Countries with Legislation of Common Law Origin:

$$\Delta V = \left[\sum_{i=1}^{n} F \times P - C - E[\Delta V] - S \times (1 - P)\right] / n$$

## Model II: Applicable to Countries with Legislation of Civil Law Origin:

$$\Delta V = \left[\sum_{i=1}^{n} F \times P - C - E[\Delta V] + S \times (1 - P)\right] / n$$

Where

 $\Delta V$ : Variation in share value (i.e., welfare change)

F: Intended policy impact (e.g., share value increase due to increase in likelihood of M&A activity)

P: Likelihood of effectiveness of policy (relevant constituents: cultural, social, political conflict of interests)

C: Cost derived from compulsory performance (e.g., opportunity cost of management, resistance from *chaebols*)

 $E[\Delta V]$ : Expected or anticipated policy impact that is already realized into the stock price.

S: Policy impact due to change in management stability. For example, if management control is strong (weak), the value of S is high (low).

If  $\Delta V > 0$  the policy is considered to be effective and have an overall positive effect on the market. If  $\Delta V < 0$  the policy is considered not only to be ineffective but have a negative impact on the economy due to the distortion of its original intention. For the case of Korea, we expect the magnitude of management resistance against LRPs, C, to be large because the ultimate controllers are forced to give up her perquisite consumptions. The value of C includes the economic loss derived from the resistance of the management from both against the policy itself and the outcome of the policy (e.g. increase in likelihood of M&A activity or

becoming a merger target).

Resistance against the enforced policy includes devising illegal measures or expedients to circumvent regulations or even filing a constitutional lawsuit against the legislation itself. This type of resistance is more common in countries of civil law origin. Resistance against M&A include activities that are purposely driven by management in order to decrease the share value, for example, issuing of bonds with warrant that will eventually cause the share values to dilute (e.g. poison pill). These activities make the firm less attractive as a merger target. This type of resistance is more common in countries of common law origin.

We also assume that for countries with weak minority shareholder protection, the effectiveness of the policies, P, will be low.

Under these conditions,  $\Delta V$  is likely to be negative for LRPs in civil law countries. However, the last variable S, the policy impact due to the change in management stability, adds disparate impact on the markets of common law and civil law countries. For Model II, for example, the increase management stability adds to the value of the stock. This means that the low value of P magnifies the positive reaction due to the strengthening of management stability. In the case of Model I, the relatively high value of P will contract the negative effects of management stability.

Our empirical study lies in testing whether the policy impact on the chaebols will be

greater than, equal to, or less than zero. We have the following set of hypotheses in this study:  $H_0$ :  $\Delta V = 0$ ,  $H_1$ :  $\Delta V > 0$ ,  $H_2$ :  $\Delta V < 0$ .

To simplify our analysis, we assume for both LRP and MOP that the intended impact of the policies are constant at F. We also assume that the magnitude of S is equal for both types of policies. The source of the actual difference in impact is the value of P. We assume that F, the policy impact that arises from the increase in M&A likelihood has a positive value. We further assume that the value of S, the impact due to an increase in management stability, brings positive market impact to civil law nations and negative impact to common law nations. The above two assumptions are in accordance with the arguments made in Jensen (1980.

Under this setting, if  $\Delta V > 0$  for Model I, we can interpret that it is due to the high value of P, because the magnitude of  $F \times P$  will be greater. On the other hand, our interpretation is more complicated for the case of Model II. Since we add the impact of S in the case of Model II, the smaller the value of P, the greater the total policy impact  $\Delta V$  will be. Therefore, there exists a tradeoff between a high P value and a low P value.

We summarize the above discussion in the following table. We interpret our empirical results based on the framework explained above.

	$F \times P$ (high desired)	C (low desired)	$S \times (1-P)$
Common Law	(+) High	(-) Low	(-) Low (low desired)

Civil Law	(+) Low	(-) High	(+) High (high desired)
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## 2.2. Disparate Wealth Effects by Government Policies

La Porta et al. (1998, 2000), and Shleifer and Vishny (1997) indicate that the severity of agency problems to which majority shareholders exploit minority shareholders differs greatly across countries, partly due to differences in ownership structure and legal systems. Claessens et al. (2000) and Johnson et al. (2000) also suggest that the agency problems are pronounced in all East Asian countries, where ownership control is rarely separated from management and significant share of corporate assets rests in the hands of a small number of families.

Furthermore, the market for corporate control in emerging economies may be underdeveloped and inefficient and, thus, these economies may suffer from a lack of market discipline through takeovers. Claessens et al. (1999) suggest that ownership concentration and inadequate corporate governance mechanisms are viable causes or may at least be partly responsible for precipitating the financial crisis, which the East Asian countries in their sample experienced in 1997. According to an IMF Staff country Report (2000), this is especially evident in Korea where *chaebol* groups, which are often owned and managed by founding families, have engaged in excessive capital investment to gain market share.

Since the Asian financial crisis, the Korean government has utilized two measures in its efforts to improve on the corporate governance. The first measure was to regulate the large conglomerates of chaebols for cross shareholdings, because the ultimate owners of chaebols effectively controlled affiliated-firms through cross shareholdings of affiliated firm. The Fair Trade Commission each year announces the lists of *chaebol*-affiliated firms and periodically announces regulations that apply to the *chaebol*-affiliated firms. The second measure is to use market forces to discipline *chaebols* unfair business activities. Accordingly, we classify the Korean government's efforts to improve on corporate governance based on these two categories.

We argue that the effectiveness of the government policies differ between the two categories of policies. When the government introduces laws to regulate chaebols, it is expected that the chaebols may resist the law challenge the changes in laws, and/or they may devise some counter measurements. Therefore, the efficacy of such law changes is questionable and therefore, weaker than the policy that uses the market forces. Therefore, we posit that the wealth effects of government policies will be weaker for cases of legal reforms than cases for relying on market forces.

## 3. Methodologies and Data

#### 3.1 Methodologies

Following Brown and Warner (1985), we employ standard event study methodology to measure the wealth effects of capital investment announcements. The daily abnormal return for a security j is estimated by:

$$AR_{jt} = R_{jt} - (ai + biR_{mt}), \qquad (3)$$

where,

 $R_{it}$  = rate of return on security j for day t,

 $R_{mt}$  = rate of return on equally-weighted Korean stock market portfolio for day t,

i and bi are estimated by using daily return from -250days to -50 days

 $AR_{jt}$  = excess return on security j on day t.

The average abnormal return (AAR) on day t is:

$$AAR_{t} = \frac{1}{n} \sum_{j=1}^{n} AR_{jt}$$
 (4)

where n is the number of observations. Cumulative average abnormal return for window period from day k to day l is:

$$CAAR(k,l) = \sum_{t=k}^{l} AAR_{t}$$
 (5)

In the cross-sectional regression analysis of the wealth effects of capital investment announcements, we first measure the cumulative announcements effects of different window periods for firm j as follows:

$$CAR_{j}(k,l) = \sum_{t=k}^{l} AR_{jt}$$
 (6)

Then, we estimate cross sectional ordinary least squares regressions of CAR<sub>i</sub> (k, l) on a

number of theoretically relevant explanatory variables. We estimate the following cross-sectional regression:

$$CAR_{i}(k, l) = f(DII, FPI, SIZE)$$
 (5)

where  $CAR_j$  (k, l) is the cumulative average abnormal return from day k to day l for firm j; DII is domestic institutional investors' shareholding; FPI,is foreign portfolio investors' shareholding position

#### 3.2 Data

There are 55 business groups in our sample. They are subject to restriction on mutual financing as of July 1, 2005, and 38 of them have an ultimate controller. In this study, we define *chaebol* as the 38 corporate groups with ultimate controllers. And 37 out of the 38 *chaebols* serve as part of our 55 samples in this study. The remaining 18 business groups are not classified as *chaebols*, but are relevant to our study, since we deal with regulatory policies that weaken the ownership structure of business groups. We excluded companies that were either listed or merged between May of 2003 and July of 2005. Therefore, we used a total of 148 companies. For identifying the events and event dates, we use the Korea Fair Trade Commission disclosure services and several news websites. Appendix 1 reports the list of events and event dates on legal reform and market opening.

We obtain data on the ownership by the largest shareholders and their affiliated

shareholders from the Korea Listed Companies Association and other financial statement variables from the Korea Investor Services (KIS) database. The data set on the list of listed companies affiliated with major business groups (or *chaebol*) comes from the Korea Fair Trade Commission. In our empirical analysis, we exclude firms in the financial sector such as banks, securities companies, insurance companies, and credit card companies. The number of firms in the final sample is 148.

The summary statistics of relevant variables used in this paper is provided in Table 1. The mean (median) ownership share by Largest Shareholder (defined as the percentage share ownership by the largest shareholder) including founders and shareholders with special interest such as family members is 0.2570 (0.2238) in Table 1. The standard deviation of largest shareholders however has a large variation of 15.98 percent. In Table 1, Domestic Institutional Shareholder (defined as the percentage share ownership by the domestic institutional shareholders) turns out to have a mean (median) value as high as 0.4175 (0.4018), while foreign shareholders have the mean (median) firm ownership of 0.1565 (0.0866). The sample firms' leverage ratio is moderate with a mean (median) value of 0.529 (0.530), while their profitability as measured by net income divided by sales is quite low with a mean (median) value of 4.10 percent (3.65 percent).

## 4. Empirical Results

The results of Pearson correlation among relevant variables of the paper in Table 2 show a big picture of how much they are linearly correlated. We find that Largest Shareholder and Domestic Institutional Shareholder have a strong positive correlation of 0.4963. Also, it is shown that Foreign Shareholder (defined as the percentage share ownership by the foreign shareholders) and Firm Size (defined as the log of book value of total assets) have a strong positive correlation of 0.5670 confirm the view that foreign investors are more likely to invest in Korean blue chip stocks. One notable finding in Table 2 is such that there is a strong positive correlation of 0.5061 between Financial Affiliates Dummy and Equity Investment Ceiling Dummy. This indicates that more than half of *chaebol* firms with financial conglomerates fall into the category that they have restriction in equity investment in affiliated firms.

Table 3 shows the results of wealth effects with a series of events related to legal reform and *chaebols*' counter-action to the reform. Our three events dates are related to the Fair Trade Act reform on restriction of voting rights by *chaebol* financial affiliates: the date that regulatory reform committee bill has been screening, the date that Fair Trade Act submitted to the National Assembly and the date Samsung files constitutional lawsuit against the associated proposed regulation. The reform is aimed at making more flexible market for corporate control and hostile takeover. Based on the extant theory of corporate control such as Jensen and Ruback (1983), we would expect that the announcement of reform will have favorable market reaction,

while Samsung's filing of constitutional lawsuit against the associated proposal should have negative reaction from the market. Contrary to the convention, we find that the cumulative average abnormal returns from the reform bill submission and screening is significantly negative, while the cumulative average abnormal returns from the Samsung's filing of constitutional lawsuit against the bill received significantly favorable market reaction in Table 3. And there are three events date related to Securities Exchange Act Reform: Strengthening of 5% Investment Disclosure Rule. This reforming requires investors to disclose their purpose when acquire over 5% stock of the firm immediately. It would help chaebol firms rather than restrict them. Again, we find that cumulative average abnormal returns around the event date is strongly positive. However, interestingly the date of bill promulgation has negative sign with weak significance. Market opening, the reform of Private Investment Act, showed huge positive returns. According to our model, market opening has exogenous characteristics to firms so that this has more probability to be acted effectively. Furthermore, this reform increased firm value through activating markets to improve corporate governance not just restricting *chaebol* firms. On the contrary, in 2005, reform of the Act on the Structural Improvement of the Financial Industry derived positive returns even this is the one restricts chaebol firms. Again, it happened on the date related to Equity Investment Ceiling System rule in 2005. We could suspect if the investors has changed their attitude to chaebol firms.

We now summarize the multiple regression results for the policies we tested. The Fair Trade Act reform that put restrictions on the voting rights of *chaebol* financial affiliates show that the *chaebol* owners are not pleased with the policy. The coefficients for largest shareholders and domestic institutional investors show a negative sign. We interpret that the largest shareholders, or ultimate owners, show a negative sign because they are reluctant to give up their perquisite consumptions. The coefficient for domestic institutional shareholders anticipate that the legal regulation will not be beneficial for the firm, perhaps either because they expect much resistance from the ultimate owners of the firm, or because they hope for stable long term capital gain. The coefficients of foreign shareholders, on the other hand, show a positive response to the regulatory change because they anticipate that the betterment of corporate governance will lead to the increase in firm value.

The securities exchange act reform that strengthened the 5% investment disclosure rule show mixed results. We must scrutinize whether the strengthening of the 5% rule will actually discourage M&A activity, or merely regulate trading activity in Korea. If this was the case, the coefficient of largest shareholders should show a positive response. However, the coefficient of the largest shareholder regressor shows a negative sign. The strengthening of the 5% rule can make the ownership transmission more difficult for current ultimate controllers, or chaebol owners. Likewise, the coefficients of the financial affiliate dummy, investment ceiling dummy,

and parent discount dummy all show a negative sign on this regression. This implies that the 5% rule isn't an effective measure to impede foreign investors from taking over Korean firms, or the rule was not established for this purpose in the first place. This interpretation is consistent with our result that the coefficient for foreign shareholders does not show statistically significant response. The coefficient for domestic institutional shareholders, however, shows a positive sign due to the policy change.

The event study results for the *private investment act reform* that vitalized the domestic private equity fund market showed that the market was in favor of it. The coefficient for the largest shareholder variable, however, shows a negative response to the new market reform. This result implies that the interests of the ultimate owners of the *chaebols* and the general public are not in alignment. This is consistent with the notion that the market for corporate control is not active in Korea.

The multiple regression results for the effects of the Fair Trade Act submission to the National Assembly is provided in Table 5. Most interestingly, we find that all four coefficients for Domestic Institutional Shareholder have a statistically significant negative sign, while three out of four coefficients for Foreign Shareholder have a statistically significant positive sign. This evidence clearly suggests that domestic institutional shareholders which are the majority of investors for most *chaebol* firms favor incumbent management and react negatively to any news

which are detrimental to maintaining the existing management team, while foreign investors favor any new rules to enhance the functioning of the market for corporate control. Table 6 shows the regression results of the effects of Samsung's filing of constitutional lawsuit. The coefficients for Foreign Shareholder in Table 6 have all correct negative sign, but they are not statistically significant, providing only weak additional evidence at this moment.

The regression results on the effects of the consensus of opinions on Security Trade

Act to improve corporate governance by protecting minority shareholders with enhanced

provisions are given in Table 10. The event date is on the symposium date of Finance and

Economy Committee at the National Assembly. We find that all coefficients for largest

shareholders turn out to be significantly negative, suggesting that *chaebol* firms with greater

fraction largest shareholders are more likely to have weaker governance system. The results are

also consistent with findings by Johnson, Boone, Breach, and Friedman (2000), where countries

with weak corporate governance, worse economic prospects result in more expropriation by

managers and thus a larger fall in asset prices.

The Equity Investment Ceiling System is the rule that limits equity investments among affiliates for firms with assets over 6 trillion Korean Won. Equity investments among affiliates are the key method that *chaebols* maintain substantial control over the entire business group. Finally, the regression results for the equity investment ceiling system are shown in Table 11

and 12 that both coefficients for domestic institutional and foreign shareholders variables are negative. It is interesting that the coefficient for the largest shareholder variable show a significant positive response on the day of the submission of repeal of the equity investment ceiling system by a member of the Hannara party.

#### 4. Concluding Remarks

In recent years, the Korean government has adopted measures to improve on corporate governance of *chaebol*-affiliated firms in particular. The first measure was to restrict cross-shareholdings through which the ultimate owners enjoy the controlling rights even with small percentage cash flow rights. This measure is intended to facilitate more active mergers and acquisitions market. To the extent that the new regulations make it more difficult for ultimate owners of *chaebols* to defend their control rights, the law will facilitate more active M&A markets in Korea.

This paper identified such economic events and measured the wealth effects of chaebol-affiliated firms, and measures the wealth effects of the potential M&A target firms around the dates associated with regulation changes. The paper finds that the wealth effects of regulation change are positive when the regulation favors more active M&A market. This finding is consistent with the empirical evidence observed in the U.S. market (Jensen and

Ruback, 1985).

The regression results show that investors reaction to regulation changes differ between domestic institutional investors and foreign investors. Foreign investors react positively for regulations that favor active M&A market, while domestic institutional investors react negatively for the same event. This evidence clearly suggests that domestic institutional shareholders which are the majority of investors for most *chaebol* firms favor incumbent management and react negatively to any news which are detrimental to maintaining the existing management team, while foreign investors favor any new rules to enhance the functioning of the market for corporate control.

Finally, we find that the ownership fraction of largest shareholders and market reform for opening have negative relationship. This suggests that *chaebol* firms with greater fraction largest shareholders are more likely to have weaker governance system. The results are also consistent with findings by Johnson, Boone, Breach, and Friedman (2000), where countries with weak corporate governance, worse economic prospects result in more expropriation by managers and thus a larger fall in asset prices.

#### Reference

- Bae, Kee-Hong, Jun-Koo Kang, Jin-Mo Kim, 2002, "Tunneling or value added? Evidence from merger by Korean business group," Journal of Finance, 57 (6) August, 2695-2740.
- Berle, A., and G. Means, 1932, The Modern Corporation and Private Property (MacMillan, New York, N.Y.)
- Brown, S. and J. Warner, 1985, "Using daily stock returns: the case of event studies," Journal of Financial Economics, Vol. 14, September, 3-31.
- Binh, K.M., Parent Discount and controlling right dispute, Korea Securities Research Institute, 2005.3
- Brown, S. and J. Warner, 1985, "Using daily stock returns: the case of event studies," *Journal of Financial Economics*, Vol. 14, September, 3-31
- Claessen, S., Djankov, S. and L.H.P. Lang, 2000, "The Separation of Ownership and Control in East Asian Corporations," *Journal of Financial Economics* 58, 81-112
- Demirgüç-Kunt, A. and V. Maksimovic, 1998, Law, finance, and firm growth, Journal of Finance 53, 2107-2137.
- Durney, A. and E. Kim, 2005, To steal or not to steal: Firm attributes, legal environment, and valuation, Journal of Finance 60, 1461-1494.
- Fama, E.F., 1980, Agency Problems and the Theory of the Firm, Journal of Political Economy, Vol.88, June 301-325
- Ferris, S., K. Kim, Pattanaporn Kitsabunnarat, 2003, "The cost (and benefits?) of diversified business groups: The case of Korean chaebols," *Journal of Banking & Finance*, 27, 251-273.
- Jensen, M.C. and Ruback, 1983, "The market for corporate control: the scientific evidence," *Journal of Financial Economics* 11, 5-50.
- Jensen, M. C., and W. H. Meckling, 1976, "Theory of the firm: managerial behavior, agency costs and ownership structure," Journal of Financial Economics, 4, 305-360
- Johnson, Simon P. Boone, A. Breach, E. Friedman, 2000, "Corporate governance in the Asian financial crisis," Journal of Financial Economics, 58, 141-186
- Kim, Wi Saeng, Esmeralda Lyn, Tae-Jun Park and Edward J. Zychowicz, 2005. "The Wealth effects of capital investment decisions: an empirical comparison of Korean chaebol-affiliated and non-chaebol firms" Journal of Business Finance and Accounting, 32 (5-6), 945-971
- Lambert, R., and D. Larcker, 1985. Golden Parachutes, Executive Decision-Making, and Shareholder Wealth, Journal of Accounting and Economics, 7 179-203

- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny, 1997, Legal determinants of external finance, Journal of Finance 52, 1131-1149.
- LaPorta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1999. Corporate Ownership Around the World, Journal of Finance 54, 129-152
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and R. Vishny, 2002, "Investor Protection and Corporate Valuation," *Journal of Finance*, June 57 (3), 1147-1170.
- Mitton, Todd, 2002, "A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis," Journal of Financial Economics, Vol. 64, 215-241
- Pei, S.F., Review of Literature & Empirical Research on Corporate Governance, Monetary Authority of Singapore Staff Paper No. 29, 2004
- Rajan, R. and L. Zingales, 1998, Financial development and growth, American Economic Review 88, 559-586.
- Reese, William and Michael Weisbach, 2002, "Protection of minority shareholder interest, cross-listing in the United States, and subsequent equity offerings, *Journal of Financial Economics*, 66, 65-104.
- Roll, Richard, 1986, "The Hubris Hypothesis of Corporate Takeovers," *Journal of Business*, Vol. 59, 197-216
- Shin, Hyun-Han and Young S. Park, 1999, "Financing constraints and internal capital markets: Evidence from Korean *chaebols*," *Journal of Corporate Finance*, 5, 169-191
- Shleifer, Andrei and Robert Vishny, 1997, "A survey of corporate governance," *Journal of Finance*, Vol. 52, No. 2, 737-783.
- Wurgler, J., 2000, Financial markets and the allocation of capital, Journal of Financial Economics 58, 187-214.

Appendix 1 List of Events on Legal Reform and Market Opening

	Fair Trade Act Reform:	Effect on
Restriction	on of Voting Rights of Chaebol Financial Affiliates	Takeover
May 28, 2004	Regulatory reform committee bill screening. <sup>5</sup>	Pro
June 23, 2004	Fair Trade Act submission to the National Assembly	Pro
June 28, 2005	Samsung files constitutional lawsuit against the associated regulation	Anti
	Securities Exchange Act Reform:	Effect on
Stre	engthening of 5% Investment Disclosure Rule	Takeover
October 2, 2004	Submission of securities exchange act by Hannara Party	Anti
January 3, 2005	Announcement by Ministry of Finance and Economy	Anti
January 17, 2005	Bill promulgation	Anti
	Private Investment Act Reform:	Effect on
	Vitalization of PEF Market	Takeover
June 30, 2004	Submission of bill to the National Assembly	Pro
July 9, 2004	Bill fails to be introduced to the National Assembly	Anti
September 1, 2004	Bill passed at the Finance and Economy Committee	Pro
September 10, 2004	Bill passed at the National Assembly	Pro
	ct on the Structural Improvement of the Financial Industry:  n on Financial Affiliates of Intra-Chaebol Ownership	Effect on Takeover
June 2, 2005	Submission of the reform bill of the 'Act on the Structural Improvement of the Financial Industry' to the National Assembly	Pro
June 30, 2005	Reform bill reaches consensus at minister-level meeting	Pro
July 1, 2005	Passed at the State Council, pending on National Assembly	Pro
December 27, 2005	Reform Act fails to be settled before end of year	Anti
	Equity Investment Ceiling System	Effect on Takeover
February 14, 2005	Equity Investment Ceiling System application to firms with over 6 trillion Korean won in assets	Pro
April 3, 2005	Submission of repeal of Equity Investment Ceiling System by member of the Hannara Party	Pro

<sup>&</sup>lt;sup>5</sup> This bill is based on the Federation of Korean Industries' opinion on the restriction of voting rights by *Chaebol* financial affiliates.

**Appendix 2** Definition of Variables

Principal Variables	Description				
Largest Shareholder	Percentage share ownership by the largest shareholder				
Domestic Institutional Shareholder	Percentage share ownership by the Domestic Institutional Shareholders				
Foreign Shareholder	Percentage share ownership by the foreign shareholders				
	Market value of common stock divided by book value of common				
Market-to-Book Ratio s	tock				
Leverage Book value of debt divided by book value of total assets					
Profitability	Net income divided by sales				
Capital Expenditure	$\{(\text{fixed assets }_{t} + \text{depreciation}_{t}) - (\text{fixed assets}_{t-1} + \text{depreciation}_{t-1})\}/$ (book value of total assets); t is the previous year of a event				
Firm Size	Log of book value of total assets				
Financial Affiliates					
Dummy 1 if the firm has financial affiliates; 0 otherwise					
<b>Equity Investment Ceiling</b>					
Dummy 1 if the firm is subject to ceiling regulation; 0 otherwise					
Parent Discount Dummy	1 if the affiliates of firm has parent discount; 0 otherwise				

This table provides a brief description of the dependent and independent variables used in this paper. Most accounting and ownership data are measured for the fiscal year 2003.

**Table 1** Summary Statistics

Variables	Mean	Std Dev	Median	Minimum	Maximum
Largest Shareholder	0.2570	0.1598	0.2238	0.0289	0.8855
Domestic Institutional Shareholder	0.4175	0.0204	0.40185	0.0000	0.9884
Foreign Shareholder	0.1565	0.1754	0.0866	0.0000	0.6671
Market-to-Book Ratio	1.2052	2.0088	0.7150	0.0000	2.12
Leverage	0.5295	0.1989	0.5300	0.048	1.161
Profitability	0.0410	0.1237	0.0365	-0.6136	0.8013
Capital Expenditure	0.0237	0.1340	0.0036	-0.2428	0.9230
Firm Size	13.91	1.4417	13.8899	10.8034	17.8492
Financial Affiliates Dummy	0.6575	0.4762	1.0000	0.0000	1.0000
Equity Investment Ceiling Dummy	0.4041	0.4924	0.0000	0.0000	1.0000
Parent Discount Dummy	0.3356	0.4738	0.0000	0.0000	1.0000

This table shows summary statistics on relevant variables. The number of observations of all variables is 148. Largest Shareholder is the percentage share ownership by the largest shareholder. Domestic Institutional Shareholder is the percentage share ownership by the Domestic Institutional Shareholders. Foreign Shareholder is the percentage share ownership by the foreign shareholders. Market-to-Book Ratio refers to the market value of common stock divided by the book value of common stock. Leverage is book value of debt divided by book value of total assets. Profitability, or profit margin, is net income divided by sales. Capital Expenditure is capital expenditure divided by book value of total assets. Firm Size is book value of total assets. Financial Affiliates Dummy is 1 if a business group has a financial affiliate as a member, and 0 otherwise. Equity Investment Ceiling Dummy is 1 if a firm is under the restriction of equity investment ceiling rule, or 0 otherwise. Parent Discount Dummy is 1 if a firm is a member of a business group in which the market value of the parent company is smaller than the market value of its shares in its affiliate company, or 0 otherwise.

**Table 2** Pearson Correlations Matrix

		1	2	3	4	5	6	7	8	9	10
1	Largest Shareholder	1.0000									
2	Domestic Institutional Shareholder	0.4963	1.0000								
3	Foreign Shareholder	-0.3006	-0.2326	1.0000							
4	Market-to-Book Ratio	0.0633	0.0454	0.2503	1.0000						
5	Leverage	0.0304	0.0209	-0.0396	0.1410	1.0000					
6	Profitability	0.1241	-0.0155	0.1412	0.0228	-0.3187	1.0000				
7	Capital Expenditure	-0.0636	-0.1009	0.1312	0.0106	-0.1058	0.1958	1.0000			
8	Firm Size	-0.2109	-0.0378	0.5670	0.1092	0.0728	0.0185	0.1140 1.0	0000		
9	Financial Affiliates Dummy	0.0296	0.2352	0.1864	-0.0177	0.1384	-0.1877	0.0047 0.2	2657 1.0	000	
10	Equity Investment Ceiling Dummy	0.1739	0.2802	-0.0554	0.0000	0.0615	-0.0631	0.0127 0.1	1341 0.5	061 1.0	0000
11	Parent Discount Dummy	0.0027	0.1325	0.0501	-0.0448	-0.0098	0.0144	0.0248 0.0	0128 0.2	684 0.0	0650

This table shows Pearson correlations of variables. Largest Shareholder is the percentage share ownership by the largest shareholder. Domestic Institutional Shareholder is the percentage share ownership by the Domestic Institutional Shareholders. Foreign Shareholder is the percentage share ownership by the foreign shareholders. Market-to-Book Ratio refers to the market value of common stock divided by the book value of common stock. Leverage is book value of debt divided by book value of total assets. Profitability, or profit margin, is net income divided by sales. Capital Expenditure is capital expenditure divided by book value of total assets. Firm Size is book value of total assets. Financial Affiliates Dummy is 1 if a business group has a financial affiliate as a member, and 0 otherwise. Equity Investment Ceiling Dummy is 1 if a firm is under the restriction of equity investment ceiling rule, or 0 otherwise. Parent Discount Dummy is 1 if a firm is a member of a business group in which the market value of the parent company is smaller than the market value of its shares in its affiliate company, or 0 otherwise.

Table3. Wealth Effects with a Series of Events related to Legal Reform and Market Opening

Fair Trade Act Reform: Restriction of Voting Rights of Chaebol Financial Affiliates					
Event	Date	CAAR	T-VALUE		
Regulatory reform committee bill screening	28May2004	-0.6861514	-0.65		
Fair Trade Act submission to the National Assembly	23June2004	-1.9272304	-2.57		
Samsung files constitutional lawsuit against the associated regulation	28June2005	3.4843209	5.23		

Securities Exchange Act Reform: Strengthening of 5% Investment Disclosure Rule							
Event Date CAAR T-VALUE							
Submission of securities exchange act by Hannara Party	2Oct2004	0.174175	0.29				
Announcement by Ministry of Finance and Economy	1.1014182	1.65					
Bill promulgation	17Jan2005	-0.6635865	-1.29				

Private Investment Act Reform						
Event Date CAAR T-VALUE						
Submission of bill to the	30.June2004	1.6673419	3.32			
National Assembly	30June2004	1.00/3419	3.32			
Bill fails to be introduced to the	01-1-2004	-0.1975649	-0.46			
National Assembly	9July2004	-0.19/3049	-0.46			
Bill passed at the National	105 an 2004	-0.6149230	0.02			
Assembly	10Sep2004	-0.0149230	-0.93			

Table3. (Cont'd) Wealth Effects with a Series of Events related to Legal Reform and Market Opening

Reform of the Act on the Structural Improvement of the Financial Industry					
Event	Date	CAAR	T-VALUE		
Submission of the reform bill					
of the 'Act on the Structural					
Improvement of the Financial	2June2005	0.7341514	1.46		
Industry' to the National					
Assembly					
Reform bill reaches consensus	30June2005	3.3665804	4.47		
at minister-level meeting	30June2003	3.3003804	4.47		
Passed at the State Council,	11,1,2005	2.8903284	3.84		
pending on National Assembly	1July2005	2.8903284	3.84		
Reform Act fails to be settled	27Dec2005	-3.4499230	-5.67		
before end of year	2/Dec2003	-3.4439230	-3.07		

Equity Investment Ceiling System					
Event	Date CAAR		T-VALUE		
Equity Investment Ceiling					
System application to firms	145 1 2005	2 0240520	5.46		
with over 6 trillion Korean won	14Feb2005	3.9349520	5.46		
in assets					
Submission of repeal of Equity					
Investment Ceiling System by	3April2005	1.8876878	1.82		
member of the Hannara Party					

Table 4 Fair Trade Act Reform:

Restriction of Voting Rights of Chaebol Financial Affiliates

< Regulatory reform committee bill screening>

Equation	(1) May282004	(2) May282004	(3) May282004	(4) May282004
Dependent Variable		Cumulative Abi	normal Return	
Intercept	20.44747*	22.99574*	19.35238*	23.33371*
	(1.72)	(1.95)	(1.65)	(1.95)
Largest Shareholder	-0.32938***	-0.34279***	-0.32927***	-0.34407***
	(-3.94)	(-4.14)	(-3.91)	(-4.12)
Institutional	0.08037	0.07593	0.09662	0.07690
Shareholder	(1.23)	(1.19)	(1.49)	(1.18)
Foreign Shareholder	0.02839	0.05701	0.04468	0.05678
	(0.36)	(0.74)	(0.57)	(0.71)
Financial Affiliate	2.58084			0.32891
	(1.09)			(0.12)
Equity Investment		4.73454**		4.62474*
Ceiling		(2.22)		(1.88)
Parent Discount			-0.28912	-0.62342
			(-0.13)	(-0.28)
M/B Ratio	0.15522	0.10285	0.08299	0.09957
	(0.29)	(0.20)	(0.15)	(0.19)
Leverage	0.03178	0.03419	0.03709	0.03378
	(0.58)	(0.63)	(0.67)	(0.62)
Profitability	0.21052**	0.20516**	0.19023**	0.20700**
	(2.28)	(2.30)	(2.10)	(2.26)
Capital Expenditure	-0.02995	-0.03383	-0.02638	-0.03319
	(-0.38)	(-0.44)	(-0.34)	(-0.43)
Size	-1.49795*	-1.69277*	-1.36511	-1.71315*
	(-1.67)	(-1.91)	(-1.53)	(-1.91)
Adjusted R <sup>2</sup>	0.0789	0.1029	0.0711	0.0903
F-Value	2.40	2.87	2.25	2.33

Table 5 Fair Trade Act Reform:

Restriction of Voting Rights of Chaebol Financial Affiliates

<Fair Trade Act Submission to the National Assembly>

Equation	(1) June232004	(2) June232004	(3) June232004	(4) June232004	
Dependent Variable	Cumulative Abnormal Return				
Intercept	16.94095*	15.23895*	16.92820*	15.64404*	
	(1.97)	(1.77)	(1.97)	(1.80)	
Largest Shareholder	0.02729	0.03347	0.02699	0.03419	
	(0.45)	(0.55)	(0.44)	(0.56)	
Institutional	-0.11639**	-0.10702**	-0.11490**	-0.11256**	
Shareholder	(-2.45)	(-2.30)	(-2.46)	(-2.37)	
Foreign Shareholder	0.10159*	0.09681*	0.10300*	0.08568	
	(1.77)	(1.72)	(1.81)	(1.47)	
Financial Affiliate	0.15885			1.73941	
	(0.09)			(0.86)	
Equity Investment		-2.04394		-2.78709	
Ceiling		(-1.31)		(-1.56)	
Parent Discount			-0.14406	-0.40245	
			(-0.09)	(-0.25)	
M/B Ratio	0.00684	-0.00355	0.00007169	0.03185	
	(0.02)	(-0.01)	(0.00)	(0.08)	
Leverage	0.00826	0.00979	0.00862	0.00683	
	(0.21)	(0.25)	(0.22)	(0.17)	
Profitability	-0.01434	-0.02195	-0.01567	-0.01095	
	(-0.21)	(-0.34)	(-0.24)	(-0.16)	
Capital Expenditure	0.00922	0.01246	0.00962	0.01200	
	(0.16)	(0.22)	(0.17)	(0.21)	
Size	-1.20876*	-1.05672	-1.20271*	-1.10414*	
	(-1.86)	(-1.63)	(-1.87)	(-1.69)	
Adjusted R <sup>2</sup>	0.0491	0.0607	0.0491	0.0521	
F-Value	1.84	2.06	1.84	1.73	

Table 6 Fair Trade Act Reform:

Restriction of Voting Rights of Chaebol Financial Affiliates

< The Effects of Samsung's Filing of Constitutional Lawsuit >

Equation	(1) 28June2005	(2)28June2005	(3) 28June2005	(4)28June2005	(5) 28June2005
Dependent Variable	Cumulative Abnormal Return				
Intercept	0.16749**	0.16005**	0.15515**	0.16665**	0.15147*
Largest	(2.17) 0.0214	(2.07) 0.02141	(2.04) 0.02997	(2.18) 0.02664	(1.94) 0.03188
Shareholder	(0.41)	(0.41)	(0.58)	(0.51)	(0.6)
Institutional	-0.05008	-0.04792	-0.06090	-0.05738	-0.05920
Shareholder	(-1.24)	(-1.15)	(-1.47)	(-1.31)	(-1.39)
Foreign	-0.00412	-0.05048	-0.05365	-0.05738	-0.05716
Shareholder	(-1.12)	(-1.13)	(-1.22)	(-1.27)	(-1.25)
Financial	0.00335				0.00144
Affiliate	(0.23)				(0.08)
Equity		-0.00647			-0.00681
Investment Ceiling		(-0.47)			(-0.4)
Parent Discount			0.02441*		0.02291
Parent Discount			(1.69)		(1.41)
Samsung				0.02489	0.00546
Dummy				(1.01)	(0.19)
M/B Ratio	-0.00412	-0.00407	-0.00363	-0.00415	-0.00357
M/D Katio	(-1.22)	(-1.20)	(-1.08)	(-1.23)	(-1.05)
Leverage	0.06475*	0.06644*	0.06273*	0.06858*	0.06333
Leverage	(1.71)	(1.78)	(1.69)	(1.84)	(1.65)
Profitability	0.01301	0.01397	0.00371	0.01720	0.00616
•	(0.24)	(0.26)	(0.07)	(0.32)	(0.11)
Capital	-0.01356**	-0.01294**	-0.01407**	-0.01351**	-0.01350**
Expenditure	(-2.24)	(-2.11)	(-2.35)	(-2.25)	(-2.19)
Size	-0.00967	-0.009	-0.00895	-0.00971	-0.00864
	(-1.6)	(-1.49)	(-1.51)	(-1.63)	(-1.41)
Adjusted R <sup>2</sup>	0.0793	0.0804	0.0981	0.0858	0.0797

Largest Shareholder is the percentage share ownership by the largest shareholder. Domestic Institutional Shareholder is the percentage share ownership by the Domestic Institutional Shareholders. Foreign Shareholder is the percentage share ownership by the foreign shareholders. Market-to-Book Ratio refers to the market value of common stock divided by the book value of common stock. Leverage is book value of debt divided by book value of total assets. Profitability, or profit margin, is net income divided by sales. Capital Expenditure is capital expenditure divided by book value of total assets. Firm Size is book value of total assets. Financial Affiliates Dummy is 1 if a business group has a financial affiliate as a member, and 0 otherwise. Equity Investment Ceiling Dummy is 1 if a firm is under the restriction of equity investment ceiling rule, or 0 otherwise. Parent Discount Dummy is 1 if a firm is a member of a business group with parent discount, or 0 otherwise. Samsung Dummy is 1 if a firm is a member of a Samsung group, or 0 otherwise

Figures are regression coefficient estimates, and t-values are reported in parentheses. \*\*\*, \*\*, and \* respectively indicate significance levels at 1%, 5%, 10% levels.

Table 7 Securities Exchange Act Reform:
Strengthening of 5% Investment Disclosure Rule

<Submission of Securities Exchange Act by Hannara Party>

Equation	(1) Oct022004	(2) Oct022004	(3) Oct022004	(4) Oct022004	
Dependent Variable	Cumulative Abnormal Return				
Intercept	-2.23223	-1.16868	-1.89807	-2.20776*	
	(-0.31)	(-0.16)	(-0.26)	(1.80)	
Largest Shareholder	-0.05893	-0.06070	-0.05724	-0.05969	
	(-1.17)	(-1.19)	(-1.13)	(-1.13)	
Institutional	0.08829**	0.07758*	0.07586*	0.08338*	
Shareholder	(2.23)	(1.98)	(1.94)	(1.94)	
Foreign Shareholder	0.04274	0.03487	0.03075	0.04977	
	(0.89)	(0.74)	(0.65)	(1.47)	
Financial Affiliate	-1.52608			-2.77071	
	(-1.07)			(0.86)	
Equity Investment		0.42967		1.56714	
Ceiling		(0.33)		(-1.56)	
Parent Discount			0.89495	1.46569	
			(0.69)	(-0.25)	
M/B Ratio	-0.25913	-0.21824	-0.20309	-0.25961	
	(-0.80)	(-0.68)	(-0.63)	(0.08)	
Leverage	-0.00001436	-0.00336	-0.00337	0.00113	
	(-0.00)	(-0.10)	(-0.10)	(0.17)	
Profitability	0.05314	0.06637	0.06558	0.04921	
	(0.96)	(1.21)	(1.20)	(-0.16)	
Capital Expenditure	-0.02234	-0.02486	-0.02548	-0.02522	
	(-0.47)	(-0.53)	(-0.54)	(0.21)	
Size	0.05215	-0.05947	-0.01417	0.03326	
	(0.10)	(-0.11)	(-0.03)	(-1.69)	
Adjusted R <sup>2</sup>	-0.0084	-0.0160	-0.0133	-0.0076	
F-Value	0.86	0.74	0.79	0.90	

Table 8 Securities Exchange Act Reform: Strengthening of 5% Investment Disclosure Rule

<a href="#">Announcement by Ministry and Economy></a>

Equation	(1) Jan032005	(2) Jan032005	(3) Jan032005	(4) Jan032005	
Dependent Variable	Cumulative Abnormal Return				
Intercept	-1.11064	-1.50171	-1.61158	-1.60645	
	(-0.16)	(-0.21)	(-0.23)	(-0.23)	
Largest Shareholder	-0.07730*	-0.07747*	-0.07577	-0.07481	
	(-1.65)	(-1.65)	(-1.60)	(-1.56)	
Institutional	0.05855	0.06130*	0.05854	0.05797	
Shareholder	(1.53)	(1.65)	(1.56)	(1.50)	
Foreign Shareholder	-0.03250	-0.03163	-0.03235	-0.03387	
	(-0.80)	(-0.78)	(-0.80)	(-0.82)	
Financial Affiliate	0.36750			0.33220	
	(0.27)			(0.21)	
Equity Investment		-0.13543		-0.31252	
Ceiling		(-0.11)		(-0.22)	
Parent Discount			0.80032	0.73242	
			(0.63)	(0.55)	
M/B Ratio	2.11427***	2.11036***	2.12858***	2.13430***	
	(6.88)	(6.88)	(6.92)	(6.87)	
Leverage	0.04306	0.04454	0.04398	0.04327	
	(1.31)	(1.36)	(1.35)	(1.31)	
Profitability	-0.00642	-0.00681	-0.00500	-0.00522	
	(-0.14)	(-0.15)	(-0.11)	(-0.12)	
Capital Expenditure	0.07750	0.07715	0.07074	0.07221	
-	(1.43)	(1.43)	(1.29)	(1.30)	
Size	-0.20940	-0.17398	-0.18235	-0.18376	
	(-0.39)	(-0.32)	(-0.35)	(-0.34)	
Adjusted R <sup>2</sup>	0.2411	0.2408	0.2429	0.2321	
F-Value	6.19	6.18	6.24	5.04	

Table 9 Securities Exchange Act Reform: Strengthening of 5% Investment Disclosure Rule

<Bill Promulgation>

Equation	(1) Jan172005	(2) Jan172005	(3) Jan172005	(4) Jan172005		
Dependent Variable	Cumulative Abnormal Return					
Intercept	-3.63954	-3.79816	-1.06557	-3.31292		
	(-0.61)	(-0.64)	(-0.18)	(-0.56)		
Largest Shareholder	0.02614	0.03453	0.02243	0.02640		
	(0.65)	(0.86)	(0.56)	(0.66)		
Institutional	0.01496	0.00981	0.00809	0.01949		
Shareholder	(0.46)	(0.31)	(0.25)	(0.61)		
Foreign Shareholder	-0.01587	-0.02762	-0.01993	-0.02148		
	(-0.46)	(-0.80)	(-0.58)	(-0.62)		
Financial Affiliate	-2.40453**			-0.76132		
	(-2.11)			(-0.57)		
Equity Investment		-2.33073**		-1.89352		
Ceiling		(-2.21)		(-1.59)		
Parent Discount			-2.72552**	-2.45896**		
			(-2.53)	(-2.21)		
M/B Ratio	-0.81148***	-0.75755***	-0.84420***	-0.83161***		
	(-3.10)	(-2.91)	(-3.24)	(-3.22)		
Leverage	0.03420	0.02898	0.02705	0.03220		
	(1.22)	(1.05)	(0.98)	(1.17)		
Profitability	0.07607**	0.07548**	0.07205*	0.07023*		
	(2.01)	(2.00)	(1.92)	(1.89)		
Capital Expenditure	-0.00280	0.00413	0.02194	0.02147		
-	(-0.06)	(0.09)	(0.47)	(0.46)		
Size	0.17890	0.17428	0.00566	0.19332		
	(0.39)	(0.38)	(0.01)	(0.43)		
Adjusted R <sup>2</sup>	0.0779	0.0807	0.0902	0.1090		
F-Value	2.38	2.43	2.62	2.64		

 Table 10
 Private Investment Act Reform:

### Vitalization of PEF Market

<Submission of Bill to the National Assembly>

Equation	(1) June302004	(2) June302004	(3) June302004	(4) June302004
Dependent Variable	Cumulative Abnormal Return			
Intercept	11.10225*	12.71385**	10.98935*	12.19908**
	(1.91)	(2.21)	(1.90)	(2.10)
Largest Shareholder	-0.08100*	-0.08692**	-0.08011*	-0.08697**
	(-1.98)	(-2.15)	(-1.96)	(-2.14)
Institutional	0.03542	0.02667	0.03325	0.03118
Shareholder	(1.11)	(0.86)	(1.06)	(0.98)
Foreign Shareholder	-0.01865	-0.01385	-0.02059	-0.00381
	(-0.48)	(-0.37)	(-0.54)	(-0.10)
Financial Affiliate	-0.11431			-1.70208
	(-0.10)			(-1.26)
Equity Investment		1.95682*		2.67010**
Ceiling		(1.88)		(2.23)
Parent Discount			0.38567	0.64168
			(0.37)	(0.60)
M/B Ratio	0.30071	0.30968	0.31077	0.27955
	(1.15)	(1.20)	(1.19)	(1.08)
Leverage	0.04909*	0.04770*	0.04874*	0.05053*
	(1.83)	(1.80)	(1.82)	(1.90)
Profitability	-0.03022	-0.02323	-0.02909	-0.03388
	(-0.67)	(-0.53)	(-0.66)	(-0.76)
Capital Expenditure	0.04031	0.03726	0.03963	0.03738
	(1.06)	(0.99)	(1.04)	(0.99)
Size	-0.81956*	-0.96311**	-0.81915*	-0.91154**
	(-1.88)	(-2.22)	(-1.89)	(-2.09)
Adjusted R <sup>2</sup>	0.0424	0.0662	0.0433	0.0639
F-Value	1.72	2.16	1.74	1.91

Table 11 Equity Investment Ceiling System
<Equity Investment Ceiling System for firms with over 6 trillion Korean won in assets>

Equation	(1) Feb142005	(2) Feb142005	(3) Feb142005	(4) Feb142005	
Dependent Variable	Cumulative Abnormal Return				
Intercept	24.82104***	24.66539***	24.70630***	24.88301	
	(3.08)	(3.06)	(3.09)	(3.04)	
Largest Shareholder	0.01675	0.01644	0.01602	0.01660	
	(0.31)	(0.30)	(0.29)	(0.30)	
Institutional	-0.07363*	-0.07236*	-0.07182*	-0.07321*	
Shareholder	(-1.66)	(-1.66)	(-1.65)	(-1.65)	
Foreign Shareholder	-0.1072**	-0.10651**	-0.10631**	-0.10758**	
	(-2.27)	(-2.26)	(-2.26)	(-2.25)	
Financial Affiliate	0.21844			0.36057	
	(0.14)			(0.20)	
Equity Investment		0.01041		-0.13942	
Ceiling		(0.01)		(-0.08)	
Parent Discount			-0.17737	-0.25956	
			(-0.12)	(-0.17)	
M/B Ratio	-0.39409	-0.39721	-0.40142	-0.39718	
	(-1.11)	(-1.12)	(-1.13)	(-1.11)	
Leverage	0.02115	0.02190	0.02200	0.02096	
	(0.56)	(0.58)	(0.58)	(0.55)	
Profitability	0.06679	0.06665	0.06627	0.06621	
	(1.30)	(1.30)	(1.29)	(1.28)	
Capital Expenditure	-0.03042	-0.03076	-0.02937	-0.02800	
	(-0.49)	(-0.49)	(-0.46)	(-0.44)	
Size	-1.22846**	-1.21383**	-1.21336**	-1.22900*	
	(-1.98)	(-1.96)	(-1.99)	(-1.96)	
Adjusted R <sup>2</sup>	0.1310	0.1309	0.1310	0.1185	
F-Value	3.46***	3.46***	3.46***	2.80	

Table 12 Equity Investment Ceiling System
<Submission of repeal of Equity Investment Ceiling System by member of the Hannara Party>

Equation	(1) April032005	(2) April032005	(3) April032005	(4) April032005	
Dependent Variable	Cumulative Abnormal Return				
Intercept	25.39102**	26.32799**	26.98662**	25.14456**	
	(2.27)	(2.35)	(2.43)	(2.22)	
Largest Shareholder	0.12647*	0.13116*	0.12965*	0.12734*	
	(1.67)	(1.72)	(1.70)	(1.66)	
Institutional	-0.09435	-0.10412*	-0.10785*	-0.09546	
Shareholder	(-1.54)	(-1.72)	(-1.78)	(-1.54)	
Foreign Shareholder	0.04641	0.03818	0.03956	0.04700	
	(0.71)	(0.58)	(0.61)	(0.71)	
Financial Affiliate	-2.17498			-2.51023	
	(-1.01)			(-0.98)	
Equity Investment		-0.82916		0.25638	
Ceiling		(-0.42)		(0.11)	
Parent Discount			0.14913	0.75169	
			(0.07)	(0.35)	
M/B Ratio	0.70770	0.74520	0.74151	0.71902	
	(1.44)	(1.51)	(0.83)	(1.44)	
Leverage	0.05120	0.04472	0.04350	0.05167	
	(0.97)	(0.85)	(0.58)	(0.97)	
Profitability	-0.21845***	-0.21773***	-0.21661***	-0.21686***	
	(-3.07)	(-3.05)	(-3.03)	(-3.03)	
Capital Expenditure	-0.15706*	-0.15264*	-0.15499*	-0.16377*	
	(-1.81)	(-1.76)	(-1.76)	(-1.84)	
Size	-1.74741**	-1.84190**	-1.90023**	-1.74081**	
	(-2.03)	(-2.14)	(-2.24)	(-2.00)	
Adjusted R <sup>2</sup>	0.1917	0.1867	0.1858	0.1806	
F-Value	4.87***	4.75***	4.73***	3.95	