

РАЗДЕЛ 2
ОРГАНИЗАЦИЯ РАБОТЫ
СОВЕТА ДИРЕКТОРОВ

SECTION 2
CORPORATE BOARD
PRACTICES



INTERNATIONAL PRIVATE BENEFITS OF CONTROL: NEW
EVIDENCE

*Nhut H. Nguyen**, *Yubo Liu***

Abstract

The 1998 Asian Financial Crisis and more recent corporate scandals in the U.S. have triggered an increased attention of researchers and policy makers on the agency problem between controlling shareholders and minority investors. One respect of this problem is the private benefits of control. In this paper, we investigate the relationship between investor protection and private benefits of control. We find consistent evidence with Dyck and Zingales (2004) that the degree of investor protection still matters in curbing private control benefits for the more recent period 1999-2007. More importantly, we find that private benefits of control have decreased significantly over time. Finally, our results show weak evidence of differential decreases in the value of control for weak and strong investor protection countries.

Keywords: Private benefits of control, Investor protection, Block premium, Mergers and Acquisitions

**Department of Accounting and Finance, The University of Auckland, Private Bag 92019, Auckland 1142, New Zealand
Tel: +64 9 3737599 Ext 83326*

***The University of Auckland*

1. Introduction

In the wake of the 1998 Asian Financial Crisis and a cascade of collapses of U.S. firms (e.g. Enron and WorldCom) in the early 21st century, governments, markets, and researchers have expressed more interests in the corporate governance practices of modern corporations. Private benefits of control, an important indicator of the quality of corporate governance systems, become increasingly noticed. They apparently play a significant role in recent U.S. corporate scandals and in how poorly firms in East Asia fair the crisis (e.g. Mitton, 2002, and Lemmon and Lins, 2003).

Introduced by Grossman and Hart (1980), private benefits of control arise when controlling shareholders exert influence on a company and gain at the expense of non-controlling shareholders. It can concern any situation in which a value,

irrespective of its origin, is not shared among shareholders proportionally to the shares owned, but its only beneficiary is the party in control (Dyck and Zingales, 2004). Thus far, literature has developed two methods to quantify private benefits of control. The first one, introduced by Barclay and Holderness (1989), is to infer private benefits from block premiums. They define the block premium as the difference between the price per share paid by the acquiring party and the price per share prevailing on the market after the block transaction. They argue that if blockholders can use their voting power to secure benefits that do not accrue to minority shareholders, blocks will trade at a premium to the post-announcement exchange price and the control premium will reflect an estimate of private benefits of control. The market price after the block trade announcement reflects the present value of all expected future cash flows that accrued

to non-controlling shareholders; whereas for the controlling shareholder, the price they offer to the target reflects their expectations of all future benefits including the present value of private benefits.

The second method is to use voting premium as a proxy for private benefits of control. It has long been recognized that private benefits of control are reflected in the prices of voting and non-voting shares of dual-class companies (e.g. Lease et al., 1983, and Levy, 1982). Non-controlling parties would never have direct access to the private benefits of control. Hence, the market value of a vote is related to the magnitude of private benefits of control. Zingales (1995) further argues that if control is valuable beyond cash flows that are shared with minority investors and if control is a function of the stipulated voting rights, the premium between differential voting shares could be used to estimate private benefits of control.

The purpose of this research is two-fold. First, we want to extend the results by Dyck and Zingales (2004) for a more recent period of 1999-2007 to see if private benefits of control are still negatively correlated with the degree of investor protection in the cross-section of countries. Secondly and more importantly, we examine the evolution of private benefits of control, and implicitly *de facto* corporate governance, following the 1998 Financial Crisis. We expect that post-crisis increasing attention to private control benefits and corporate governance lessons learnt from the crisis and corporate scandals would result in a widespread reduction in private control benefits across the globe.¹¹ We follow Dyck and Zingales (2004) and use block premiums to infer private benefits of control enjoyed by controlling shareholders. Using a sample of 2,814 transactions from 37 countries, we find consistent evidence with Dyck and Zingales (2004) that private benefits of control are more pronounced in countries with weaker investor protection. However, our cross-sectional mean block premium of 6.9percent is substantially lower than their reported mean of 14percent for the period of 1990-1999. Within our sample period of 1999-2007, we find that on average, private benefits of control decline from 11percent of a firm's equity value in 1999 to 2percent of a firm's equity value in 2007. In addition, we find weak evidence that the decline in private control benefits is significantly larger for countries with low corporate governance scores.

Evidence on the prevalence of private benefits of control is well documented in the existing literature. Barclay and Holderness (1989) reports an average control premium of 20percent from a U.S. sample of 63 block trades between 1978 and

1982. Albuquerque and Schroth (2010) find similar magnitude of block premiums for all U.S. block trades between 1990 and 2006. International evidence on control premium is provided by Dyck and Zingales (2004) and Atanasov (2005). Using a mass privatization auction data for Bulgaria, Atanasov (2005) estimates control premium from an econometric model and reports an average 85percent of firm value being extracted by majority owners as private benefits of control. Dyck and Zingales (2004) study 412 block transactions in 39 countries between 1990 and 2000. They find that, on average, corporate control is worth 14percent of the equity value of a firm, ranging from -4percent in Japan to +65percent in Brazil. They also find that the degree of investor protection is strongly correlated with the magnitude of private benefits of control.

Lease et al. (1983) is one of the first studies reporting evidence of voting premium. They use a sample of 26 firms with two classes of common stock outstanding between 1940 and 1978 and find that the class of common stock with superior voting rights generally trades at an average premium of 5.44percent over the other class of common shares. Zingales (1995) reports an average 10.5percent voting premium for 94 dual class firms between 1984 and 1990. Cross-country evidence on voting premium is found in Nenova (2003) and Doidge (2004).¹² Nenova (2003) measures the value of corporate voting rights in a sample of 661 dual-class firms in 18 countries in 1997. The author finds that the value of control ranges from about 0percent of the firm market value in Finland to 50percent in South Korea. The legal environment, law enforcement, investor protection, takeover regulations, and power-concentrating corporate charter provisions explain 68percent of the cross-country variation in the value of controlling block votes. Doidge (2004) uses a sample of 745 firms from 20 countries and reports similar variation in voting premiums across his sample countries. Interestingly, he finds that non-US firms cross-listing on U.S. exchanges have voting premiums that are 43percent lower than non-US firms that do not cross-list, which is consistent with the bonding argument (see Coffee, 1999) that more stringent regulation in the U.S. helps curb private benefits of control.¹³

¹²Studies on voting premium for individual countries include in Levy (1982) and Hauser and Lauterbach (2004) for Israeli, Horner (1988) and Kunz and Angel (1996) for Switzerland, Megginson (1990) for United Kingdom, Robinson and White (1990) for Canada, Zingales (1994), for Italy, Rydqvist (1996) for Sweden, and Chung and Kim (1999) for Korea.

¹³ An alternative explanation is that firms choose to cross-list on U.S. exchanges when private control benefits are low (see Doidge et al., 2009).

¹¹See Rajan and Zingales (1998), O'Sullivan (2000), Mitton (2002), Lemmon and Lins (2003), Jain and Rezaee (2006), Choi et al. (2007), Pathan et al. (2008), and Hutton et al. (2009).

Our paper belongs to the literature of corporate governance and its impact on various aspects of finance. La Porta et al. (1997, 1998, and 1999), Morck et al. (2000), and Durnev and Kim (2005) suggest that shareholder protection, creditor protection, law enforcement, and legal environment should be used to evaluate a country's corporate governance system. Literature has found significant correlations between investor protection and financial development and economic growth at the country, industry, and firm levels (see Rajan and Zingales, 1998, Demirguc-Kunt and Maksimovic, 2002, and Claessens and Laeven, 2003). The degree of investor protection also affects the efficiency of corporate asset allocation regarding the level of corporate cash holdings, dividend payment, and the activity and benefits of mergers and acquisitions (see La Porta et al., 2000, Dittmar et al., 2003, Rossi and Volpin, 2004, Pinkowitz et al., 2006, Bris and Cabolis, 2008, Masulis et al., 2009, and Morck et al., 2011). Moreover, foreign investors are less likely to invest in firms residing in countries with weak legal protection of outside investors and poor disclosure quality (see Leuz et al., 2010). Last but not least, investor protection affects investors' participation in domestic stock market (see La Porta et al., 1997, and Giannetti and Koskinen, 2010).

The rest of the paper proceeds as follows. Section 2 describes sample selection and descriptive statistics. Section 3 shows main results from country-level and firm-level analyses. Section 4 concludes.

2. Data and Descriptive Statistics

2.1 Data

Our initial sample from Thomson's Mergers and Acquisitions (hereafter, TMA) database (formerly known as Securities Data Corporation (SDC)) includes all completed mergers and acquisitions that are announced between January 1, 1999 and December 31, 2007. TMA provides increasing coverage of international mergers and acquisition deals. The number of deals is increasing from 21,881 in 1999 to 48,275 in 2007. We restrict our sample by the following criteria.

Firstly, since a block sale must convey a control transfer, we focus on transactions that result in acquirers moving from a position where they hold less than 20 percent of the shares to a position where they have more than 20 percent of the shares (Dyck and Zingales, 2004). The block involved in the transaction must be 10 percent or greater. Secondly, we also exclude all transactions that are identified by TMA as open market purchase, tender offers, spinoff, recapitalization, self-tenders, exchange offers, repurchases, and acquisitions of remaining interest. We also limit our targets to public firms and eliminate any cross-border deals

and cross-listing targets. Thirdly, because we wish to measure private benefits of control, we need to restrict our sample to transactions for which we can observe 1) the price paid by the acquirer to target, 2) the market price on the stock exchange two days after the announcement 3) and the percentage of target's equity owned by the acquirer after the deal is completed. TMA database provides a substantial coverage of offer prices (in USD, host currency, and Euro) and the percentage owned after transactions. However, it does not have target market prices on the day $t + 2$. We use SEDOL codes provided by TMA to match against those codes in Datastream to find the target market prices on the day $t + 2$. If there is no SEDOL code for a particular transaction, we will use the target day $t + 1$ USD price provided by TMA. Fourthly, for some transactions, TMA database and Datastream provide prices in different currencies. This issue is particularly prevalent for Euro countries because TMA typically provides prices in local currencies or USD, while prices from Datastream are in Euro dollars. For example, for all French observations, TMA gives the offer prices paid by acquirers in French Francs or USD, whereas Datastream gives market prices two days after announcements in Euro. For these cases, we search Datastream for daily EUR:USD exchange rates over the sample period and use the midpoints of daily bid-ask prices to convert TMA offer prices from USD to Euro.

Finally, we search the deal synopsis from TMA and exclude problematic transactions that do not involve control transfers or that involve the exercise of options, etc. For example, Valley National Bancorp acquired Mayflower Financial for \$17 per share. The \$17 per share price included \$15.75 in cash and 0.3605 of a 5-year warrant to purchase Valley National Bancorp stock at \$27.50 per share. In addition, following Barclay and Holderness (1989) and Dyck and Zingales (2004), we exclude transactions that have ex-ante or ex-post indications of a tender offer for the remaining interests within six months following the announcement. For example, Leif Hoegh acquired 108,287,952 ordinary shares, or an 86.24 percent interest, in Arcade Shipping from Reading & Bates for 1.8 Norwegian crowns (\$0.25 US) per share, or a total of 194.92 million crowns (\$27.19 million). Concurrently, Leif Hoegh disclosed plans to launch a tender offer for the remaining 13.76 percent stake in Arcade Shipping. The qualitative screening substantially increases our confidence that 2,814 observations in our final sample contain transfers of control and their prices are not distorted by potentially compounding information.

For the main analysis of the relation between block premiums and the quality of corporate governance across countries in this study, we use investor protection indexes from La Porta et al (1998). They include accounting standards index

(ACCTG), anti-director rights index (AD) and rule of law index (RULE).¹⁴ We also follow Morck et al. (2000) to construct an index representing the quality of government (GOVT). This government index is the simple average of three La Porta et al.'s (1998) indexes: government corruption, the risk of expropriation of private property by the government, and the risk of government repudiating contracts. In the additional analysis, we use the level of product market competition, the number of violent crimes, newspapers' diffusion and the level of tax compliance in Dyck and Zingales (2004) as alternative proxies for national corporate governance. Appendix Table A1 provides descriptions and sources of all variables used in this paper. Appendix Table A2 reports summary statistics of institutional variables.

2.2 Descriptive Statistics

Table 1 describes some statistics on block premiums for each country over the sample period. After applying the screening criteria as mentioned above, we select a total number of 2,814 deals in our study. The United States, Canada and Japan are countries with the most deals.¹⁵ Countries with the smallest number of deals include Pakistan, Peru, Brazil, Colombia and Ireland.¹⁶

We follow Dyck and Zingales (2004) to calculate a block premium as the difference between the price per share paid for the block and the target market price two days after the announcement of the block transaction, divided by the target market price after the announcement and multiplied by the proportion of cash flow rights represented in the controlling block. The mean (median) block premium across all our sample countries is 6.9percent (6.1percent). Compared to Dyck and Zingales's (2004) mean (median) of 14percent (11percent), our results suggest a significant decrease in private benefits of control across the world. In 7 out of the 37 sample countries, we find that the control premiums exceed 15 percent of equity value. These high private benefit countries include Peru, South Korea, Colombia, Egypt, Brazil, Pakistan, and the

Philippines. In 20 out of the 37 sample countries, the control premiums are less than 5 percent of equity value with Denmark having the lowest average block premium of -9.6percent.

Table 2 provides more insights into the trend of the value of control over the period 1999-2007. First, block premiums are averaged across all transactions in a year for each country. The yearly block premiums are then the simple average across all country observations in a year. Table 2 shows that the average block premium decreases from 11.4percent in 1999 to 2percent in 2007. Year 2000 and 2005 appear to have relatively low block premiums compared to those of their preceding years. A decreasing pattern of block premiums can also be seen from the yearly medians. Figure 1 plots the yearly means of block premium with a downward sloping trend line. Statistics of the trend line shows that on average, the level of private benefits across the sample countries decrease by 1.02percent a year, statistically significant at the 5percent level (t -stats = -2.69, p -value = 0.031).

3. Main results

In this section we use univariate analysis and multivariate regressions to examine if private benefits of control proxied by block premiums are higher for countries with weak corporate governance quality than for those with strong corporate governance. We also study the evolution of block premiums over time from 1999 to 2007 and investigate if there is a variation in the pattern of block premiums between groups of countries with different degree of investor protection. We conduct the analysis using both country-level average values and deal-level values. The country-level analysis would reduce the effect from countries with large proportion of deals in the sample such as the U.S., Canada and Japan. The firm-level analysis would allow us to control for some firm- and deal-level characteristics.

¹⁴ We also replace La Porta et al.'s (1998) anti-director rights index with a revised index in Spamann (2010), the results for variable AD do not change.

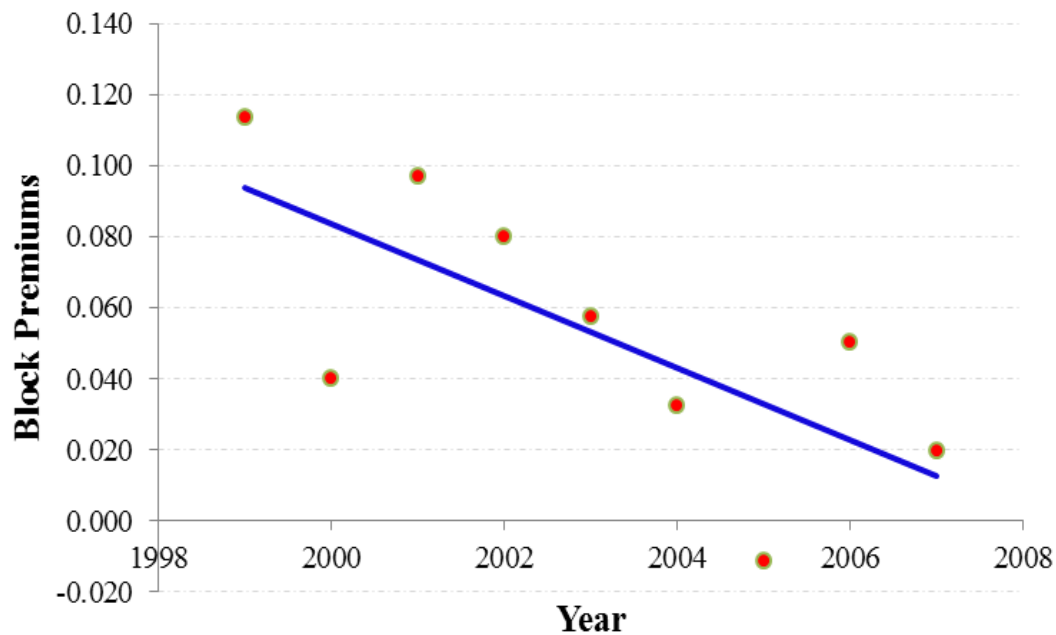
¹⁵ Our number of deals for the U.S. is significantly higher than Dyck and Zingales (2004) because (1) our period is more recent from 1999 to 2007 meaning better coverage by Thomson's Mergers and Acquisitions database, and (2) Dyck and Zingales (2004) include only the first twenty deals in a year for their analysis. We later control for the dominance of U.S. observations in our sample in the main results.

¹⁶ We do not apply the minimum of two observations per country for the sample period as in Dyck and Zingales (2004). Excluding them, i.e. Pakistan and Peru, does not change our results.

Table 1. Block Premiums by Country

This table presents descriptive statistics on block premium by country. The block premiums are computed as the difference between the price per share paid for the control block and the target market price two days after the announcement of the control transaction, divided by the target market price after the announcement and multiplied by the proportion of cash flow rights represented in the controlling block .

Country	N	Mean	Median	Std. dev.	Min	Max
Australia	81	0.021	0.020	0.142	-0.310	0.468
Belgium	11	0.015	0.015	0.023	-0.019	0.072
Brazil	2	0.190	0.190	0.135	0.095	0.286
Canada	219	0.052	0.022	0.183	-0.511	0.670
Chile	3	0.036	-0.053	0.158	-0.057	0.218
Colombia	2	0.201	0.201	0.234	0.035	0.366
Denmark	4	-0.096	-0.089	0.086	-0.206	0.001
Egypt	4	0.195	0.194	0.212	0.000	0.394
Finland	3	0.096	0.066	0.115	0.000	0.224
France	90	0.079	0.027	0.217	-0.493	0.652
Germany	30	0.002	0.005	0.163	-0.590	0.346
Greece	10	0.121	0.037	0.238	-0.060	0.666
Hong Kong	51	0.000	0.015	0.414	-0.577	0.756
India	12	0.026	0.037	0.297	-0.540	0.573
Indonesia	8	0.056	0.046	0.149	-0.206	0.321
Ireland	2	0.014	0.014	0.002	0.012	0.015
Israel	9	0.057	0.044	0.126	-0.193	0.216
Italy	14	0.098	0.015	0.181	-0.153	0.439
Japan	140	-0.002	-0.008	0.215	-0.518	0.749
Malaysia	15	0.029	0.024	0.122	-0.328	0.190
Mexico	3	0.030	0.031	0.023	0.007	0.052
Netherlands	10	0.025	0.027	0.119	-0.272	0.159
New Zealand	10	0.070	0.030	0.129	-0.036	0.418
Norway	9	0.007	0.027	0.123	-0.154	0.241
Pakistan	1	0.172	0.172	0.000	0.172	0.172
Peru	1	0.350	0.350	0.000	0.350	0.350
Philippines	10	0.162	0.046	0.241	0.000	0.776
Singapore	35	-0.051	0.021	0.203	-0.550	0.161
South Africa	17	0.032	0.040	0.083	-0.171	0.150
South Korea	4	0.277	0.315	0.353	-0.100	0.577
Spain	4	0.127	0.074	0.132	0.039	0.319
Sweden	4	0.000	0.014	0.097	-0.131	0.103
Switzerland	3	0.135	0.158	0.399	-0.275	0.522
Taiwan	11	0.042	0.044	0.179	-0.375	0.238
Thailand	9	-0.003	0.036	0.179	-0.311	0.316
United Kingdom	12	-0.070	0.011	0.176	-0.446	0.083
United States	1961	0.075	0.042	0.128	-0.469	0.862
Number/Average	2814	0.069	0.061	0.162	-0.198	0.355

Figure 1. Average Block Premiums by Year**Table 2.** Block Premiums by Year

This table presents descriptive statistics on block premiums by year. Block premiums are firstly averaged across transactions in a year for each country, and secondly, averaged across all countries to obtain a yearly average. N is the number of countries with block premium data in a year.

year	N	Mean	Median	Std. dev.	Min	Max
1999	22	0.114	0.020	0.264	-0.311	0.756
2000	15	0.040	0.061	0.088	-0.131	0.171
2001	21	0.097	0.082	0.149	-0.272	0.418
2002	21	0.080	0.048	0.122	-0.057	0.522
2003	26	0.057	0.052	0.102	-0.086	0.350
2004	21	0.032	0.024	0.103	-0.102	0.439
2005	21	-0.011	0.024	0.158	-0.590	0.201
2006	23	0.050	0.026	0.179	-0.416	0.577
2007	24	0.020	0.015	0.126	-0.299	0.363

3.1 Univariate Results

In a univariate setting, we split each investor protection proxies into two groups of countries, weak and strong investor protection, using the median as the reference point. For example, countries with accounting standards scores that are lower than the median score across all available countries are classified as having weak accounting quality. Those with scores higher than the median are grouped into strong accounting quality countries. We apply the same principle to assign countries to weak and strong anti-director rights, low and high government quality, and weak and

strong rule of law. We then divide our sample period into two sub-periods: 1999-2003 and 2004-2007.¹⁷ Block premiums are averaged by country-year before they are used in univariate tests between groups of countries or between sub-periods. All significance levels are based on the Wilcoxon signed-rank tests.

Table 3 presents the results. Panel A of Table 3 shows that private control benefits in weak accounting quality (ACCTG) countries, on average, have reduced from 9.4percent in the period 1999-

¹⁷ Using two sub-periods of 1999-2002 and 2003-2007 does not change our results.

2003 to 2.6percent in the period 2004-2007. This decrease of 6.8percent is statistically significant at the 5percent level. A similar, albeit slightly smaller, decrease in block premium is also recorded for countries with high quality of accounting standards. This decrease of 6.1percent is highly significant at the 1percent level. Panel A also shows that the value of control is generally higher for weak accounting quality countries than those with strong accounting quality (9.4percentvs 7.3percent for the period 1999-2003, and 2.6percentvs 1.2percent for the period 2004-2007). The differences, however, are not statistically significant.

Panel B of Table 3 shows a significant decrease of 7.5percent in the mean block premium for countries with high scores for anti-director rights index (AD) whereas the decrease of 3.8percent in the mean block premium for the country group of low anti-director rights index is not significant. The results from Panel B exhibit a significant 5.4percent difference in private control benefits between weak and strong anti-director rights index countries for the period 2004-2007. Panels C and D of Table 3 present the results for different country groups based on government quality (GOVT) and rule of law (RULE) indexes. The decreases in mean block premium are all statistically significant and range from 6.2percent to 7.2percent across all groups of countries. The comparisons between weak and strong investor protection countries show that the mean block premium in the former group of countries is between 6.1percent and 7.7percent significantly higher than the mean block premium in the latter group of countries.

Overall, the univariate results in Table 3 confirms Dyck and Zingales (2004) that investor protection does matter in curbing private benefits of control, i.e. acquirers pays more for control in countries with poor protection of investors and low government quality than acquirers in countries at the other end of the investor protection spectrum. This willingness of pay-for-control is worth approximately 5percent of target firm values in poor investor protection countries. The results also show strong reductions in the value of being in control. Private benefits of control are apparently wiped out entirely in countries with strong anti-director rights index, good government, and effective rule of law. Despite large reductions, private benefits of control in weak corporate governance countries are still around 5percent of target firm values.

3.2 Multivariate Results – Country Level Analysis

In this section we employ the following regression model to address the relationship between private control benefits and investor protection.

$$APBC_{c,t} = \alpha + \beta_1 Trend_t + \beta_2 CG_{c,t} + \beta_3 CG_{c,t} * Trend_t + \beta_4 Ownership_{c,t} + \varepsilon \quad (1)$$

$APBC_{c,t}$ represents the mean block premium in year t for country c . $Trend$ is a time variable with values ranging from 0 (for 1999) and 8 (for 2007). $CG_{c,t}$ represents investor protection variables including accounting standards (ACCTG), anti-director rights index (AD), government quality (GOVT), and rule of law (RULE) from La Porta et al. (1998). The interaction between $Trend$ and CG is to differentiate the evolution of control premiums between groups of countries. Dyck and Zingales (2004) show that ownership concentration is positively correlated with the magnitude of private benefits of control.¹⁸ To separate the effect of ownership concentration from the effects of external legal rules on private benefits of control we use the average concentration of ownership reported in La Porta et al. (1998) as a control variable in all regression specifications.

Table 4 presents the results of 12 different OLS regressions. All significance levels are based on White-corrected standard errors. The first four specifications are for individual investor protection proxies and trend without the interaction terms between them. The results are consistent with those reported for univariate tests in Table 3. The trend variable is always negative and highly significant at the 1percent level. Its value of -0.014 in specification (1), for example, indicates that block premiums, i.e. private benefits of control, decrease over the period of 1999-2007 by an average of 1.4percentper year. This average reduction occurs across the sample countries after controlling for their accounting quality. The trend coefficient has a similar magnitude when we use different investor protection proxies in specifications 2-4.

¹⁸Doidge et al. (2009) find evidence that when private benefits of control, measured by the difference between control rights and cash flow rights, are high non-US firms are less likely to cross-list in the U.S. because the extraction of private benefits is constrained by more stringent regulation in the U.S.

Table 3. Univariate Tests of Block Premiums

This table presents univariate tests of the mean block premiums between strong and weak investor protection countries, and between the 1999-2003 and 2004-2007 periods. All the univariate tests in this table are based on block premiums that are averaged across transactions in a country-year. Investor protection variables from La Porta et al. (1998) are divided into two groups, strong and weak, using the median as the splitting point. ACCTG is the accounting standards; AD is the anti-director rights index; GOVT is the proxy for government quality; and RULE is the rule of law index. N represents the total number of country-year observations for a group of countries. ***, ** and * represent respective significance levels of 1%, 5% and 10% based on the Wilcoxon signed-rank tests.

<u>Panel A:</u>					<u>Panel B:</u>				
	N	1999-2003	2004-2007	(2) - (1)		N	1999-2003	2004-2007	(2) - (1)
		(1)	(2)				(1)	(2)	
(a) Weak ACCTG	74	0.094	0.026	-0.068 **	(a) Weak AD	94	0.088	0.050	-0.038
(b) Strong ACCTG	112	0.073	0.012	-0.061 ***	(b) Strong AD	100	0.071	-0.004	-0.075 ***
(a) - (b)		0.021	0.014		(a) - (b)		0.017	0.054 **	
<u>Panel C:</u>					<u>Panel D:</u>				
		1999-2003	2004-2007	(2) - (1)			1999-2003	2004-2007	(2) - (1)
		(1)	(2)				(1)	(2)	
(a) Weak GOVT	78	0.125	0.063	-0.062 *	(a) Weak RULE	73	0.128	0.056	-0.072 **
(b) Strong GOVT	116	0.056	-0.014	-0.070 ***	(b) Strong RULE	121	0.058	-0.005	-0.063 ***
(a) - (b)		0.069 **	0.077 **		(a) - (b)		0.070 **	0.061 **	

Table 4. Country-Level Block Premium Regression Analysis

This table presents the regression results to investigate the evolution of block premiums and its interactions with different proxies for investor protection. The dependent variable of block premiums is the mean block premiums by country-year. Independent variables from La Porta et al. (1998) include accounting standards (ACCTG), anti-director rights index (AD), government quality (GOVT), and rule of law index (RULE). Trend is a time variable with values ranging from 0 (for 1999) to 8 (for 2007). All regression specifications has a control variable, ownership, from La Porta et al. (1998). ***, **, and * indicate respective significance levels of 1%, 5% and 10% based on White-corrected standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trend	-0.014 (-3.15) ***	-0.012 (-2.78) ***	-0.013 (-3.18) ***	-0.013 (-3.09) ***	-0.060 (-2.22) **	-0.003 (-0.31)	-0.046 (-2.11) **	-0.034 (-2.40) **	-0.057 (-2.41) **	-0.041 (-2.73) ***	-0.060 (-2.22) **	-0.006 (-0.52)
ACCTG	-0.003 (-2.35) **				-0.006 (-2.78) ***				-0.002 (-1.89) *	-0.003 (-1.75) *	-0.005 (-2.25) **	
AD		0.003 (0.40)				0.014 (0.91)			0.004 (0.42)	0.003 (0.36)		0.009 (0.57)
GOVT			-0.023 (-2.79) ***				-0.041 (-2.85) ***		-0.037 (-2.39) **		-0.013 (-0.74)	-0.018 (-1.06)
RULE				-0.014 (-2.55) **				-0.026 (-2.74) ***		-0.024 (-2.31) **	-0.003 (-0.25)	-0.004 (-0.31)
Trend*ACCTG					0.001 (1.78) *						0.001 (1.78) *	
Trend*AD						-0.003 (-0.83)						-0.002 (-0.77)
Trend*GOVT							0.004 (1.53)		0.005 (1.85) *			
Trend*RULE								0.003 (1.56)		0.004 (1.89) *		
Ownership	0.165 (2.08) **	0.168 (1.97) *	0.028 (0.32)	0.036 (0.41)	0.231 (2.17) **	0.164 (1.91) *	0.025 (0.28)	0.033 (0.38)	0.023 (0.23)	0.020 (0.20)	0.001 (0.01)	0.014 (0.14)
Intercept	0.283 (2.59) **	0.020 (0.35)	0.287 (2.98) ***	0.201 (2.74) ***	0.498 (3.02) ***	-0.016 (-0.22)	0.440 (3.17) ***	0.299 (3.10) ***	0.562 (3.40) ***	0.452 (3.34) ***	0.591 (3.34) ***	0.251 (2.03) **
Adj. R2	0.070	0.038	0.075	0.069	0.080	0.036	0.081	0.076	0.089	0.088	0.086	0.063
N	186	194	194	194	186	194	194	194	186	186	186	194

Table 5. Firm-Level Block Premium Regression Analysis

This table presents the regression results to investigate the evolution of block premiums and its interactions with different proxies for investor protection. The dependent variable is block premiums. Independent variables from La Porta et al. (1998) include accounting standards (ACCTG), anti-director rights index (AD), government quality (GOVT), and rule of law index (RULE). Trend is a time variable with values ranging from 0 (for 1999) to 8 (for 2007). Control variables include a distress variable equal 1 if earnings per share for the target are zero or negative in the year of the block trade; a major dummy taking a value of 1 if the control block include at least 50% of all shares; the proportion of ownership concentration from La Porta et al. (1998); a US dummy that equals 1 if a trade occurs in the U.S.; and industry dummies based on the 2-digit SIC codes. ***, **, and * indicate respective significance levels of 1%, 5% and 10% based on White-corrected standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trend	-0.011 (-10.14) ***	-0.011 (-10.18) ***	-0.011 (-10.30) ***	-0.011 (-10.19) ***	-0.038 (-1.70) *	-0.002 (-0.32)	-0.048 (-2.56) **	-0.027 (-2.43) **	-0.056 (-2.81) ***	-0.031 (-2.66) ***	-0.037 (-1.74) *	-0.004 (-0.55)
ACCTG	-0.002 (-2.54) **				-0.004 (-2.41) **				-0.001 (-1.15)	-0.002 (-1.39)	-0.004 (-2.07) **	
AD		-0.007 (-1.37)				0.002 (0.19)			-0.006 (-0.92)	-0.004 (-0.63)		-0.001 (-0.07)
GOVT			-0.018 (-2.73) ***				-0.038 (-3.20) ***		-0.038 (-2.92) ***		-0.023 (-1.75) *	-0.021 (-1.70) *
RULE				-0.009 (-2.05) **				-0.017 (-2.43) **		-0.014 (-1.88) *	0.008 (0.94)	0.002 (0.21)
Trend*ACCTG					0.000 (1.20)						0.000 (1.14)	
Trend*AD						-0.002 (-1.30)						-0.002 (-1.07)
Trend*GOVT							0.004 (1.95) *		0.005 (2.24) **			
Trend*RULE								0.002 (1.42)		0.002 (1.87) *		
Distress	0.002 (0.35)	0.003 (0.42)	0.002 (0.33)	0.002 (0.34)	0.001 (0.22)	0.002 (0.27)	0.002 (0.25)	0.002 (0.27)	0.002 (0.31)	0.002 (0.31)	0.001 (0.22)	0.002 (0.27)
Major	0.029 (1.15)	0.029 (1.16)	0.025 (1.00)	0.027 (1.05)	0.031 (1.24)	0.027 (1.05)	0.029 (1.17)	0.031 (1.21)	0.033 (1.32)	0.034 (1.34)	0.030 (1.18)	0.025 (0.99)
Ownership	0.025 (0.60)	0.033 (0.74)	-0.020 (-0.41)	0.002 (0.04)	0.028 (0.666)	0.026 (0.5976)	-0.021 (-0.421)	0.004 (0.0724)	-0.035 (-0.641)	-0.005 (-0.085)	-0.010 (-0.198)	-0.054 (-1.017)
US	0.041 (4.59) ***	0.045 (4.73) ***	0.036 (3.95) ***	0.044 (4.82) ***	0.041 (4.53) ***	0.042 (4.33) ***	0.034 (3.73) ***	0.043 (4.75) ***	0.040 (4.04) ***	0.045 (4.30) ***	0.032 (3.02) ***	0.037 (3.25) ***
Intercept	0.224 (3.09) ***	0.092 (2.25) **	0.248 (3.24) ***	0.152 (2.71) ***	0.392 (2.72) ***	0.083 (1.00)	0.457 (3.37) ***	0.255 (2.53) **	0.569 (3.92) ***	0.370 (3.26) ***	0.509 (3.24) ***	0.295 (2.61) ***
Industries	y	y	y	y	y	y	y	y	y	y	y	y
Adj. R2	0.058	0.056	0.058	0.057	0.058	0.056	0.059	0.057	0.060	0.058	0.059	0.058
N	2,588	2,599	2,599	2,599	2,588	2,599	2,599	2,599	2,588	2,588	2,588	2,599

The first four regression results are also consistent with Dyck and Zingales (2004) that stronger investor protection curbs private benefits better than weaker investor protection. The coefficients of accounting standards, government quality and rule of law are all negative and significant at the 5percent level or higher while the coefficient of anti-director rights index is positive but not statistically significant. The -0.003 value for accounting quality in specification 1 means that a 10-point difference in the quality of accounting reports between two countries with same ownership structure and in the same year is associated with a 3percent block premium difference between them. Specifically, acquirers in the lower accounting quality are willing to pay 3percent of target firm values higher for control than acquirers in the higher accounting quality. Similarly, the -0.023 value for government quality in specification 3 means that 2percent of target firm values is the marginal value of control that acquirers in country A are willing to pay compared to acquirers in country B if the government quality index for A is one point lower than the index for country B. If the index for rule of law in country A is one point lower than country B, the marginal value of control is 1.4percent for acquirers in country A as shown in specification 4.

As a control variable, ownership has positive coefficients across specifications 1-4, which are statistically significant in specifications 1 and 2. The results for ownership concentration are consistent with Dyck and Zingales (2004) that higher ownership concentration is associated with larger private benefits; hence, the value of a controlling block is higher.

In specifications 4-8 of Table 4, we include interactions between investor protection proxies and the trend variable. If the Asian Financial Crisis in 1998 leads to a more prevalent corporate governance reform in countries with poor protection of investor rights, we should expect larger decreases in control premium in those countries. Generally, we find weak evidence that the decrease in block premium is stronger for countries with weak protection of investors. The interaction coefficient is positive for specifications 5, 7, and 8 while it is negative for specification 6. The interaction between trend and accounting standards in specification 5 is 0.001 and marginally significant at the 10percent level. This result indicates that the yearly reduction in private control benefits is approximately 1percent larger for country A than for country B if the difference in accounting quality scores between them is 10 points.

The last 4 specifications of Table 4 present some multivariate results for different combinations of investor protection proxies and their interactions with trend. In specifications 9 and 10 we use

accounting standards and anti-director rights index as controls and examine if the evolution of the value of control differs between groups of countries based on rule of law and government quality indexes. We find that the interactions between trend and government quality and rule of law are positive and significant at the 10percent level. The results indicate that after controlling for ownership concentration, accounting quality and anti-director rights, countries with relatively low quality of government and legal rules exhibit larger reductions in private control benefits over the period 1999-2007 compared to countries with relatively high scores in those measures. In specifications 11 and 12, we use government and legal rules as controls and investigate if control values decrease at different rates for groups of countries based on accounting quality and anti-director rights indexes. The interaction between trend and accounting standards is positive and marginally significant at the 10percent level. This result means that after controlling for ownership structure, the quality of government and rule of law, countries with relatively low financial reporting quality experience larger decreases in the value of control than countries with relatively high reporting quality. The interaction between trend and anti-director rights index is negative and insignificant.

Overall, the results in Table 4 firstly are consistent with Dyck and Zingales (2004) that there is a positive correlation between private benefits of control and the stringency of corporate governance. Secondly, Table 4 shows strong evidence that the value of control has reduced over the period 1999-2007 across 37 countries in our sample. Finally, the results, albeit weak, also indicate that the reductions are stronger for countries with poor protection of investor rights.

3.3 Multivariate Results – FirmLevel Analysis

Since the value of control could be affected by firm- and deal-level characteristics as argued in Dyck and Zingales (2004), in this section we turn our analysis to firm-level regressions to control for these characteristics. We employ the following regression model to address the relationship between private control benefits and investor protection.

$$PBC_{i,t} = \gamma + \delta_1 Trend_t + \delta_2 CG_{i,t} + \delta_3 CG_{i,t} * Trend_t + \delta_4 Distress_{i,t} + \delta_5 Major_{i,t} + \delta_6 Ownership_{i,t} + \delta_7 US_{i,t} + \sum \delta_k Industry_{i,t} + v \quad (2)$$

$PBC_{i,t}$ represents the block premium for firm i in year t . $Trend$, CG and $Ownership$ are defined as in model (1) in section 3.2. $Distress$ is a dummy variable that has a value of 1 if earnings per share for firm i in year t (the year of the block transfer) are zero or negative, and zero otherwise. As argued by Dyck and Zingales (2004), when the target firm

is in financial distress the seller's bargaining power is relatively low, which will result in a low estimate of private control benefits. This variable is, therefore, expected to be negative. *Major* is a dummy variable equal 1 if a block transfer includes at least 50 percent of the target's shares outstanding, and zero otherwise.¹⁹ Since acquiring 50 percent or more equity of target firms would grant acquirers absolute control, the value of controlling block is expected to be higher (Dyck and Zingales, 2004). This variable is expected to be positively correlated with the block premium. *US* has a value of 1 for transactions in the U.S. and zero otherwise. This dummy is to control for the dominance of block transactions from the U.S. in the sample.²⁰ Model (2) also includes nine industry dummies based on 2-digit SIC codes as in Dyck and Zingales (2004, p.548).²¹

Table 5 presents 12 regression results of model (2). For the sake of brevity, we do not report the coefficients of industry dummies. Control variables of distress, major and ownership do not exhibit significant effects on the magnitude of private benefits across all 12 specifications. The US dummy is, however, positive and highly significant.

As in Table 4, the first 4 specifications examine if private control benefits are larger in countries with relatively weak protection of investor rights, and if the value of controlling blocks has decreased over the period 1999-2007. The results are consistent with the country-level results in Table 4 in both sign and magnitude of the coefficients. An annual decrease of 1.1 percent in block premium is seen from the trend coefficient across the first 4 specifications. This coefficient is highly significant with a *t*-statistics of larger than 10. Corporate governance proxies are negative and significant at the 5 percent level or more, except anti-director rights index. A ten-point difference in accounting quality, for example, is associated with an average difference of 2 percent of target equity that acquirers are willing to pay for control. Similarly, one-point difference in government quality (rule of law) is associated with an average difference of 1.8 percent (0.9 percent) of target equity for being in control.

Specifications 5-12 of Table 5 show some evidence that the decreases in private control

benefits over time are larger for countries with weak investor protection than countries with strong protection. The investor protection proxies that matter in the trend differential are government quality and rule of law, especially after controlling for accounting standards and anti-director rights index. The interaction coefficient between trend and government quality in specification 9 is 0.005 with a *t*-statistics of 2.24 indicates that the yearly reduction in private benefits of control is 0.5 percent larger for country A than for country B if country A's government quality index is 1 point lower than that index for country B. This difference is after controlling for ownership concentration, accounting quality, anti-director rights index and other variables. The yearly reduction in the value of control is 0.2 percent larger for country A than for country B if their one-point difference in investor protection is based on the rule of law index. The results in specifications 11 and 12 do not show differential reductions in block premium between high and low accounting quality countries and between countries with high and low investor rights index after the quality of government and rule of law are controlled.

Overall, the results in Table 5 are consistent with the results for country-level analysis in Table 4 that the degree of investor protection matters in curbing private benefits of control and their evolution over time.

3.4 Alternative Corporate Governance Proxies

Dyck and Zingales (2004) argue that there are alternative institutional factors that have potential effects on the extraction of private benefits of control.²² They include product market competition (COMPT), newspapers' diffusion (NEWS), number of violent crimes (CRIME) and the level of tax compliance (TAX). When product markets are more competitive, prices become more verifiable and fair; therefore, it is harder for a controlling shareholder to siphon out corporate resources without the risk of being prosecuted or incurring reputational costs. In addition, tunnelling will damage the survival ability of the firm. Hence, product market competition provides a natural constraint to the expropriation of private benefits. In addition, if bad behaviour is more likely to be publicized via newspapers and media, controlling shareholders might restrain themselves from diverting firm resources due to concern for their reputation. As a result, the value of control is lower. The extraction of private benefits of control also arguably depends on moral norms (Coffee (2001)). Using the number of violent crimes as a proxy for antagonistic behaviour of a country, we

¹⁹ The assumption that a majority of 50 percent has a constant impact on private benefits of control might be untenable in countries where private benefits of control are minimal (Dyck and Zingales (2004)).

²⁰ We also re-estimate model (2) excluding all block transactions from the U.S. as an alternative. The results are presented in appendix table A3. The results are qualitatively similar to Table 4 for all of our interested variables.

²¹ Thomson Mergers and Acquisitions database reports the identity of acquirers but not sellers. In unreported analysis, we include acquirers' identity in model (2). The results are similar to those in Table 5.

²² See also Zingales (2000), Coffee (2001), Dyck and Zingales (2002), and Stulz and Williamson (2003).

expect to see a positive relation between crime rate and the level of private benefits of control. Finally, Dyck and Zingales (2004) show evidence that the degree of tax compliance in a country is negatively correlated with the size of control benefits because the effectiveness of tax code enforcement helps restrain controlling shareholders from extracting firm resources via such activity as price transferring.

We re-estimate model (2) with the above variables as alternative proxies for corporate governance at the national level. Generally, the results in Table 6 are consistent with predictions. The alternative institutional factors have as good explanatory powers as those of investor protection proxies in Table 5; that is, the adjusted R^2 across twelve specifications in both Table 5 and 6 are similar at around 6percent.

The first four specifications of Table 6 report individual effects of the institutional factors in the presence of trend and control variables. The trend coefficient shows significant evidence that private control benefits have decreased for the period 1999-2007 at an annual rate of 1.1percent. The trend coefficient is highly significant with t -statistics of more than 9.0. Comparing across countries, the results indicate that weak legal institutions are correlated with high private benefits of control. All institutional coefficients are statistically significant with correct sign. For example, the coefficient of product market competition (COMPT) is -0.045 with a t -statistics of -2.34. This can be interpreted as follows: if the level of market competition in country A is one point lower than that in country B, acquirers in country A are willing to pay more for control of target firms than acquirers in country B. The value of private control benefits is, on average, 4.5percent of firm value higher in country A than in country B. Similarly, the coefficient of tax compliance (TAX) is -0.042 with a t -statistics of -4.87 indicating that if the one-point difference between A and B is on the level of tax compliance, private benefits of control are worth 4.2percent of target value more in country A than country B. The results for violent crime rate (CRIME) and newspapers' diffusion (NEWS) also indicate that higher crime rate and lower diffusion of newspapers are correlated with the level of private benefits of control.

Specifications 5-8 of Table 6 include the interactions between trend and institutional factors to examine if the reduction of private benefits is different between countries with low and high scores on these institutions. The evidence that private benefits of control decrease more for countries with low scores on institutional factors is weak. Only the coefficient of interacting between trend and crime rate has correct negative sign and statistically significant at the 5percent level. The result indicates that the value of control decreases

more for countries with more violent crimes recorded in 1993 than for countries with lower crime rate. The interaction coefficients between trend and competition, newspapers' diffusion and tax compliance do not have correct sign although they are statistically insignificant.

Table 6 reports some multivariate results in columns 9-12. In specifications 9 and 10, we use product market competition and tax compliance as additional control variables and investigate the decreasing value of control for countries with different crime rates and diffusion of newspapers. The first two institutional factors are more closely related to firm operation than the latter two. In specifications 11 and 12, we control for crime rate and newspapers diffusion and investigate the decreasing trend of private control benefits for countries different in the level of competition and tax compliance. The evidence is again weak with only the interaction between trend and crime rate is statistically significant at the 1percent level. Other interactions do not exhibit variation in the evolution of private benefits between strong and weak institution countries.

4. Conclusion

In this paper we aim to address the following. First, we want to see if the relationship between private benefits of control and the degree of investor protection reported in Dyck and Zingales (2004) extends to a more recent period 1999-2007. Second, we investigate how private control benefits evolve over time. Finally, if there is a trend in the value of control and the relationship between private control benefits and investor protection still holds, we study if the trend interacts with the degree of investor protection. These issues are of interest in the wake of the 1998 Asian Financial Crisis and U.S. corporate scandals that apparently trigger more attention and corporate governance reform across the world.

Table 6. Firm-Level Block Premium Regression Analysis - Alternative Legal Institutions

This table presents the regression results to investigate the evolution of block premiums and its interactions with different proxies for investor protection. The dependent variable is block premiums. Independent variables from La Porta et al. (1998) and Dyck and Zingales (2004) include competition laws (COMPT), violent crime (CRIME), newspaper circulation / population (NEWS), and tax compliance (TAX). Trend is a time variable with values ranging from 0 (for 1999) to 8 (for 2007). Control variables include a distress variable equal 1 if earnings per share for the target are zero or negative in the year of the block trade; a major dummy taking a value of 1 if the control block include at least 50% of all shares; the proportion of ownership concentration from La Porta et al. (1998); a US dummy that equals 1 if a trade occurs in the U.S.; and industry dummies based on the 2-digit SIC codes. ***, **, and * indicate respective significance levels of 1%, 5% and 10% based on White-corrected standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trend	-0.011 (-9.93) ***	-0.011 (-9.89) ***	-0.011 (-10.00) ***	-0.011 (-9.70) ***	0.030 (1.25)	-0.003 (-1.10)	-0.010 (-3.79) ***	0.005 (0.45)	-0.003 (-0.87)	-0.010 (-3.77) ***	0.027 (1.07)	0.004 (0.29)
COMPT	-0.045 (-2.34) **				-0.011 (-0.38)				-0.003 (-0.13)	0.011 (0.49)	0.028 (0.88)	
CRIME		0.000 (1.84) *				0.000 (2.85) ***			0.000 (2.03) **		0.000 (1.13)	0.000 (0.85)
NEWS			-0.013 (-4.56) ***				-0.011 (-1.98) **			-0.006 (-1.129)	-0.010 (-2.82) ***	-0.006 (-1.79) *
TAX				-0.042 (-4.87) ***				-0.025 (-1.66) *	-0.038 (-3.766) ***	-0.029 (-2.77) ***		-0.012 (-0.74)
Trend*COMPT					-0.007 (-1.57)						-0.007 (-1.51)	
Trend*CRIME						0.000 (-2.48) **			0.000 (-2.654) ***			
Trend*NEWS							-0.001 (-0.50)			0.000 (-0.398)		
Trend*TAX								-0.004 (-1.36)				-0.003 (-1.19)
Distress	0.004 (0.60)	0.003 (0.43)	0.007 (1.07)	0.004 (0.66)	0.004 (0.56)	0.003 (0.44)	0.007 (1.06)	0.004 (0.60)	0.004 (0.63)	0.006 (0.95)	0.006 (0.88)	0.005 (0.79)
Major	0.026 (1.01)	0.030 (1.15)	0.027 (1.05)	0.025 (0.96)	0.021 (0.79)	0.025 (0.96)	0.027 (1.05)	0.023 (0.88)	0.026 (0.98)	0.026 (1.00)	0.028 (1.06)	0.031 (1.17)
Ownership	0.005 (0.12)	-0.024 (-0.51)	0.017 (0.40)	-0.024 (-0.53)	0.000 (0.0043)	-0.037 (-0.772)	0.019 (0.4478)	-0.025 (-0.571)	-0.079 (-1.533)	-0.009 (-0.194)	-0.036 (-0.672)	-0.055 (-1.15)
US	0.055 (4.79) ***	-0.005 (-0.22)	0.020 (2.06) **	0.050 (5.41) ***	0.054 (4.61) ***	-0.009 (-0.38)	0.021 (2.10) **	0.049 (5.28) ***	0.023 (0.89)	0.031 (2.01) **	-0.008 (-0.31)	0.015 (0.58)
Intercept	0.348 (2.63) ***	0.093 (1.26)	0.133 (1.78) *	0.285 (3.39) ***	0.152 (0.86)	0.067 (0.89)	0.127 (1.68) *	0.214 (2.17) **	0.258 (1.85) *	0.185 (1.23)	-0.032 (-0.17)	0.175 (1.73) *
Industries	y	y	y	y	y	y	y	y	y	y	y	y
Adj. R2	0.055	0.057	0.061	0.062	0.056	0.059	0.061	0.062	0.065	0.063	0.062	0.064
N	2,562	2,555	2,562	2,562	2,562	2,555	2,562	2,562	2,555	2,562	2,555	2,555

We find evidence that the level of private benefits is negatively correlated with the degree of investor protection at both country-level and firm-level analyses. Our evidence is consistent with Dyck and Zingales (2004). However, our estimate of the mean private benefits of control across country-years shows a remarkable decrease between their period 1990-1999 and our period 1999-2007. Specifically, they report an average value of control of 14percent compared with our average of 6.9percent. Within our sample period, we find evidence of a significant decrease in the level of private benefits from an average value of 11.4percent in 1999 to 2percent in 2007. However, we find weak evidence that the decline in the value of control is larger for countries with low investor protection at the start of the period 1999-2007. This result implies that *de facto* corporate governance might have been improving more strongly in countries with poor *de jure* investor protection.

References

- Albuquerque, R. and Schroth, E. (2010), "Quantifying private benefits of control from a structural model of block trades", *Journal of Financial Economics*, Vol. 96, pp. 33-55.
- Atanasov, V. (2005), "How much value can blockholders tunnel? Evidence from the Bulgarian mass privatization auctions", *Journal of Financial Economics*, Vol. 76, pp. 191-234.
- Barclay, M. J. and Holderness, C. G. (1991), "Negotiated block trades and corporate control", *Journal of Finance*, Vol. 46, pp. 861-878.
- Bris, A. and Cabolis, C. (2008), "The value of investor protection: Firm evidence from cross-border mergers", *Review of Financial Studies*, Vol. 21 No. 2, pp. 605-648.
- Choi, J. J., Park, S. W. and Yoo, S. S. (2007), "The value of outside directors: Evidence from corporate governance reform in Korea", *Journal of Financial and Quantitative Analysis*, Vol. 42 No. 4, pp. 941-962.
- Chung, K. H. and Kim, J. (1999), "Corporate ownership and the value of a vote in an emerging market", *Journal of Corporate Finance*, Vol. 5, pp. 35-54.
- Claessens, S. and Laeven, L. (2003), "Financial development, property rights and growth", *Journal of Finance*, Vol. 58, pp. 2401-2436.
- Coffee, J. (1999), "The future as history: The prospects for global convergence in corporate governance and its implications", *Northwestern University Law Review*, Vol. 93, pp. 641-708.
- Coffee, J. (2001), "Do norms matter? A cross-country examination of private benefits of control", Mimeo, Columbia University Law School.
- Demirguc-Kunt, A. and Maksimovic, V. (2002), "Funding growth in bank-based and market-based financial systems", *Journal of Financial Economics*, Vol. 65, pp. 337-264.
- Dittmar, A., Mahrt-Smith, J. and Servaes, H. (2003), "International corporate governance and corporate cash holdings", *Journal of Financial Quantitative Analysis*, Vol. 38, pp. 111-133.
- Doidge, C. (2004) "U.S. cross-listings and the private benefits of control: Evidence from dual-class firms", *Journal of Financial Economics*, Vol. 72, pp. 519-553.
- Doidge, C., Karolyi, A., Stulz, R. M., Lins, K. V. and Miller, D. P. (2009), "Private benefits of control, ownership, and the cross-listing decision", *Journal of Finance*, Vol. 64, pp. 425-466.
- Durnev, A. and Kim, H. (2005), "To steal or not to steal: firm attributes, legal environment, and valuation", *Journal of Finance*, Vol. 60, pp. 1461-1493.
- Dyck, A. and Zingales, L. (2002), "The corporate governance role of media", in Roumeen Islam (Ed.), *The right to tell: The role of mass media in economic development*, The World Bank, Washington.
- Dyck, A. and Zingales, L. (2004), "Private benefits of control: An international comparison", *Journal of Finance*, Vol. 59 No. 2, pp. 537-600.
- Giannetti, M. and Koskinen, Y. (2010), "Investor protection, equity returns, and financial globalization", *Journal of Financial and Quantitative Analysis*, Vol. 45, No. 1, pp. 135-168.
- Grossman, S. and Hart, O. (1980), "Takeover bids, the free rider problem, and the theory of the corporation", *Bell Journal of Economics*, Vol. 11, pp. 42-69.
- Hauser, S. and Lauterbach, B. (2004), "The value of voting rights to majority shareholders: Evidence from dual-class stock unifications", *Review of Financial Studies*, Vol. 17 No. 4, pp. 1167-1184.
- Horner, M. R. (1988), "The value of the corporate voting right", *Journal of Banking and Finance*, Vol. 12, pp. 69-83.
- Hutton, A. P., Marcus, A. J. and Tehranian, H. (2009), "Opaque financial reports, R², and crash risk", *Journal of Financial Economics*, Vol. 94, pp. 67-86.
- Jain, P. K. and Rezaee, Z. (2006), "The Sarbanes-Oxley Act of 2002 and capital-market behaviour: Early evidence", *Contemporary Accounting Research*, Vol. 23 No. 3, pp. 629-654.
- Kunz, R. M. and Angel, J. J. (1996), "Factors affecting the value of the stock voting right: Evidence from the Swiss equity market", *Financial Management*, Vol. 25 No. 3, pp. 7-20.
- La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. (1999), "Corporate ownership around the world", *Journal of Finance*, Vol. 54, pp. 471-517.
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W. (2000), "Agency problems and dividend policies around the world", *Journal of Finance*, Vol. 55, pp. 1-33.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1997), "Legal determinants of external finance", *Journal of Finance*, Vol. 52, pp. 1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1998), "Law and finance", *Journal of Political Economy*, Vol. 106, pp. 1113-1155.
- Lease, R. C., McConnell, J. J. and Mikkelsen, W. H. (1983), "The market value of control in publicly traded corporations", *Journal of Financial Economics*, Vol. 11, pp. 439-471.
- Lemmon, M. L. and Lins, K. V. (2003), "Ownership structure, corporate governance, and firm value:

- Evidence from the East Asian financial crisis", *Journal of Finance*, Vol. 58 No. 4, pp. 1145-1468.
30. Leuz, C., Lins, K. V. and Warnock, F. E. (2009), "Do foreigners invest less in poorly governed firms?", *Review of Financial Studies*, Vol. 22 No. 8, pp. 3245-3285.
31. Levy, H. (1982), "Economic valuation of voting power of common stock", *Journal of Finance*, Vol. 38, pp. 79-93.
32. Masulis, R. W., Wang, C. and Xie, F. (2009), "Agency problems at dual-class companies", *Journal of Finance*, Vol. 64 No. 4, pp. 1697-1727.
33. Megginson, W. L. (1990), "Restricted voting stock, acquisition premiums, and the market value of corporate control", *The Financial Review*, Vol 25 No. 2, pp. 175-198.
34. Mitton, T. (2002), "A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis", *Journal of Financial Economics*, Vol. 64, pp.215-241.
35. Morck, R., Yavuz, D. M. and Yeung, B. (2011), "Banking system control, capital allocation, and economy performance", *Journal of Financial Economics*, Vol. 100, pp. 264-283.
36. Morck, R., Yeung, B. and Yu, W. (2000), « The information content of stock markets: Why do emerging markets have synchronous stock price movements?", *Journal of Financial Economics*, Vol. 58, pp. 215-260.
37. Nenova, T. (2003), "The value of corporate votes and control benefits: A cross-country analysis", *Journal of Financial Economics*, Vol. 68, pp. 325-351.
38. O'Sullivan, R. A. (2000), "Asian financial reform: progress, lessons and challenges", *Journal of Asian Economics*, Vol. 11, pp.1-6.
39. Pathan, S., Skully, M. and Wickramanayake, J. (2008), "Reforms in Thai bank governance: The aftermath of the Asian financial crisis", *International Review of Financial Analysis*, Vol. 17, pp. 345-362.
40. Pinkowitz, L., Stulz, R. and Williamson, R. (2006), "Does the contribution of corporate cash holdings and dividends to firm value depend on governance? A cross-country analysis", *Journal of Finance*, Vol. 61 No. 6, pp. 2725-2751.
41. Rajan, R. and Zingales, L. (1998), "Financial dependence and growth", *American Economic Review*, Vol. 88, pp. 559-586.
42. Rajan, R. G. and Zingales, L. (1998), "Which capitalism? Lessons from the East Asian Crisis", *Journal of Applied Corporate Finance*, Vol. 11 No. 3, pp. 40-48.
43. Robinson, C., Rumsey, J. and White, A. (1995), "The value of a vote in the market for corporate control.", Unpublished manuscript, York University.
44. Rossi, S. and Volpin, P. F. (2004), "Cross-country determinants of mergers and acquisitions", *Journal of Financial Economics*, Vol. 74, pp. 277-304.
45. Rydqvist, K. (1996), "Takeover bids and the relative prices of shares that differ in their voting rights", *Journal of Banking and Finance*, Vol. 20, pp. 1407-1425.
46. Stulz, R., and Williamson, R. (2003), "Culture, openness and finance", *Journal of Financial Economics*, Vol. 70, pp. 313-349.
47. Zingales, L. (1994), "The value of the voting right: A study of the Milan stock exchange experience", *Review of Financial Studies*, Vol. 7, pp. 125-148.
48. Zingales, L. (1995), "What determines the value of corporate votes?", *Quarterly Journal of Economics*, Vol. 110, pp. 1047-1073.
49. Zingales, L. (2000), "In search of new foundations", *Journal of Finance*, Vol. 55, pp. 1623-1653.

Appendix

Table A1. Descriptions and Sources of Variables

Variables	Description
Block premiums as a percentage of a firm's value of equity	The block premiums are calculated as the between the price per share paid for the control block and the target market price two days after the announcement of the control transaction, divided by the target market price and multiplied by the proportion of cash flow rights represented in the controlling block. Sources: Thomson Mergers & Acquisitions and Datastream International.
Accounting standards	"Index created by examining and rating companies' 1990 annual reports on their inclusion or omission of 90 items. These items fall into seven categories (general information, income statements, balance sheets, funds flow statement, accounting standards, stock data, and special items). A minimum of three companies in each country were studied. The companies represent a cross section of various industry groups; industrial companies represented 70 percent, and financial companies represented the remaining 30 percent." La Porta et al. (1998). La Porta et al. (1998) derived from International accounting and auditing trends, Centre for International Financial Analysis and Research.
Anti-director rights index	"An index aggregating shareholder rights formed by adding one when (1) the country allows shareholders to mail their proxy vote to the firm, (2) shareholders are not required to deposit their shares prior to the general shareholder's meeting, (3) cumulative voting or proportional representation of minorities in the board of directors is allowed, (4) an oppressed minorities mechanism is in place, (5) the minimum percentage of share capital that entitles a shareholder to call for an extraordinary shareholder's meeting is less than or equal to 10 percent (the sample median), or (6) shareholders have pre-emptive rights that can be waived only by a shareholders' vote. The index ranges from zero to six." La Porta et al. (1998). La Porta et al. (1998) based on company law or commercial code.
Corruption	"ICR's assessment of the corruption in government. Lower scores indicate that 'high government officials are likely to demand special payments' and 'illegal payments are generally expected throughout lower levels of government' in the form of 'bribes connected with import and export licenses, exchange controls, tax assessment, policy protection, or loans'. Average of the months of April and October of the monthly index between 1982 and 1995. Scale from zero to 10, with lower scores for higher levels of corruption (we changed the scale from its original range going from zero to six)." La Porta et al. (1998). La Porta et al. (1998) derived from International Country Risk guide.
Distress	A dummy variable equals 1 if earnings per share in the target are zero or negative in the year of the block transaction. Source: Datastream International.
Government quality	"Measure the extent to which a country's politicians respect private property rights" Morck et al. (2000). It is the average of three indexes from La Porta et al. (1998): government corruption, risk of expropriation and risk of repudiation of contracts by government. La Porta et al. (1998) derived from International Country Risk guide.
Major	A dummy variable that takes the value one if the control block includes 50 percent of all shares or more. It equals 0 otherwise. Source: Thomson Mergers & Acquisitions.
Newspapers' diffusion	"Circulation of daily newspaper/population. It is the number of newspapers sold per 100,000 inhabitants." Dyck and Zingales (2004). Dyck and Zingales (2004) based on UNESCO Statistical yearbook 1996, as reported in World Competitiveness Report. For Taiwan, their data based on Editors and Publishers' Association Year Book and AC Nielsen, Hong Kong. Link: www.business.vu.edu .
Ownership concentration	"The average percentage of common shares owned by the three largest shareholders in the 10 largest non-financial, privately owned domestic firms in a given country. A firm is considered privately owned if the state is not a known shareholder in it." La Porta et al. (1998). La Porta et al. (1998) based on Moody's International, CIFAR, EXTEL, World-Scope, 20-Fs, Price-Watercourse, and various country sources.
Product market competition	"Response to survey question, 'competition laws prevent unfair competition in your country?'. Higher scores suggest agreement that competition laws are effective." Dyck and Zingales (2004). Dyck and Zingales (2004) based on World Competitiveness Yearbook 1996.

Repudiation of contracts by government	"ICR's assessment of the 'risk of a modification in a contract taking the form of a repudiation, postponement, or scaling down' due to 'budget cutbacks, indigenization pressure, a change in government, or a change in government economic and social priorities'. Average of the months of April and October of the monthly index between 1982 and 1995. Scale from zero to 10, with lower the monthly index between 1982 and 1995. Scale from zero to 10, with lower scores for higher risks." La Porta et al (1998). La Porta et al. (1998) derived from International Country Risk guide.
Risk of expropriation	"ICR's assessment of the risk of 'outright confiscation' or forced nationalization. Average of the months of April and October of the monthly index between 1982 and 1995. Scale from zero to 10, with lower scores for higher risk." La Porta et al. (1998). La Porta et al. (1998) derived from International Country Risk guide.
Rule of law	"Assessment of the law and order tradition in the country produced by the country risk rating agency International Country Risk (ICR). Average of the months of April and October of the monthly index between 1982 and 1995. Scale from zero to 10, with lower scores for less tradition for law and order (we changed the scale from its original range going from zero to six)." La Porta et al. (1998). La Porta et al. (1998) derived from International Country Risk guide.
Tax compliance	"Assessment of the level of tax compliance. Scale from 0 to 6 where higher scores indicate higher compliance. Data is for 1995." La Porta et al. (1999). La Porta et al. (1999) based on the Global Competitiveness Report 1996.
US	A dummy variable equals 1 if block transactions are in the U.S. Source: Thomson Mergers & Acquisitions.
Violent crime	"It is the reported number of murders, violent crimes, or armed robberies per 100,000 population." Dyck and Zingales (2004). Dyck and Zingales (2004) based on Interpol and country data for 1993 as reported in World Competitiveness Yearbook 1995.

Table A2. Values of Investor Protection Proxies and Alternative Institutional Factors

This table presents summary statistics of the institutional variables used in the paper. Variable definitions and sources can be found in Table A1.

Country	Accounting standards (0-90)	Anti-director rights (0-6)	Government quality (0-10)	Ownership concentration	Rule of law (1-10)	Competition laws (1-7)	Newspaper circulation / 100,000 population	Violent crime / 100,000 population	Tax compliance (1-6)
Australia	75	4	8.83	0.28	10.00	5.52	3.00	57.50	4.58
Belgium	61	0	9.31	0.54	10.00	5.90	1.61	38.83	2.30
Brazil	54	3	6.75	0.57	6.32	4.90	0.40		2.14
Canada	74	5	9.54	0.24	10.00	5.37	1.60	122.30	3.77
Chile	52	5	6.53	0.45	7.02	5.40	1.00	53.70	4.20
Colombia	50	3	6.32	0.63	2.08	4.71	0.50	129.10	2.11
Denmark	62	2	9.66	0.45	10.00	5.16	3.10	46.10	3.70
Egypt	24	2	5.41	0.62	4.17	4.60	0.40		3.57
Finland	77	3	9.61	0.37	10.00	5.26	4.60	47.10	3.53
France	69	3	9.30	0.34	8.98	5.83	2.20	126.80	3.86
Germany	62	1	9.53	0.48	9.23	5.91	3.10	74.10	3.41
Greece	55	2	7.00	0.67	6.18	4.70	1.53	2.03	3.20
Hong Kong	69	5	8.54	0.54	8.22	5.85	8.00	190.80	4.56
India	57	5	6.15	0.40	4.17	5.40	0.26	4.12	4.00
Indonesia		2	5.13	0.58	3.98	4.42	0.20	4.60	2.53
Ireland		4	9.05	0.39	7.80	5.10	1.49		3.90
Israel	64	3	8.04	0.51	4.82	5.11	2.90	68.90	3.69
Italy	62	1	8.22	0.58	8.33	5.14	1.00	61.70	1.77
Japan	65	4	9.29	0.18	8.98	5.64	5.80	2.70	4.41
Malaysia	76	4	7.59	0.54	6.78	4.86	1.60	34.50	4.34
Mexico	60	1	6.20	0.64	5.35	4.93	1.00	100.80	2.46
Netherlands	64	2	9.78	0.39	10.00	5.53	3.10	122.80	3.40
New Zealand	70	4	9.66	0.48	10.00	5.40	2.20	52.30	5.00
Norway	74	4	9.86	0.36	10.00	4.96	5.90	26.90	3.96
Pakistan		5	4.49	0.37	3.03	4.60	0.21	1.18	3.80
Peru	38	3	4.97	0.56	2.50	5.05	0.80		2.66
Philippines	65	3	4.31	0.57	2.73	4.61	0.80	90.90	1.83
Singapore	78	4	8.79	0.49	8.57	5.21	3.20	45.20	5.05
South Africa	70	5	7.69	0.52	4.42	4.89	0.34	225.20	2.40
South Korea	62	2	7.40	0.23	5.35	4.90	3.90	8.50	3.29
Spain	64	4	8.43	0.51	7.80	5.07	1.00	169.60	1.91
Sweden	83	3	9.66	0.28	10.00	5.08	4.50	80.10	3.39
Switzerland	68	2	9.99	0.41	10.00	5.22	3.30	38.30	4.49
Taiwan	65	3	8.38	0.18	8.52	5.56	2.70	34.00	3.25
Thailand	64	2	6.06	0.47	6.25	4.77	0.60	70.40	3.41
United Kingdom	78	5	9.48	0.19	8.57	5.74	3.30	96.40	4.67
United States	71	5	9.20	0.20	10.00	5.96	2.12	272.50	4.47

Table A3. Firm-Level Block Premium Regression Analysis - Excluding US

This table presents the regression results to investigate the evolution of block premiums and its interactions with different proxies for investor protection. All block transactions in the U.S. are excluded. The dependent variable is block premiums. Independent variables from La Porta et al. (1998) include accounting standards (ACCTG), anti-director rights index (AD), government quality (GOVT), and rule of law index (RULE). Trend is a time variable with values ranging from 0 (for 1999) to 8 (for 2007). Control variables include a distress variable equal 1 if earnings per share for the target are zero or negative in the year of the block trade; a major dummy taking a value of 1 if the control block include at least 50% of all shares; the proportion of ownership concentration from La Porta et al. (1998); and industry dummies based on the 2-digit SIC codes. ***, **, and * indicate respective significance levels of 1%, 5% and 10% based on White-corrected standard errors.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trend	-0.008 (-2.51) **	-0.008 (-2.57) **	-0.008 (-2.72) ***	-0.008 (-2.58) **	-0.040 (-1.28)	-0.001 (-0.13)	-0.051 (-1.96) *	-0.037 (-2.24) **	-0.060 (-2.14) **	-0.043 (-2.46) **	-0.039 (-1.24)	-0.003 (-0.28)
ACCTG	-0.003 (-2.06) **				-0.005 (-1.93) *				-0.002 (-1.23)	-0.002 (-1.38)	-0.004 (-1.69) *	
AD		-0.006 (-0.80)				0.002 (0.16)			-0.003 (-0.30)	-0.001 (-0.15)		0.000 (0.00)
GOVT			-0.017 (-1.86) *				-0.040 (-2.36) **		-0.038 (-2.07) **		-0.017 (-0.92)	-0.017 (-0.97)
RULE				-0.008 (-1.70) *				-0.025 (-2.30) **		-0.022 (-1.88) *	0.005 (0.45)	0.000 (0.00)
Trend*ACCTG					0.000 (1.03)						0.000 (0.98)	
Trend*AD						-0.002 (-0.62)						-0.001 (-0.51)
Trend*GOVT							0.005 (1.70) *		0.006 (1.86) *			
Trend*RULE								0.003 (1.79) *		0.004 (2.04) **		
Distress	-0.035 (-2.18) **	-0.034 (-2.16) **	-0.035 (-2.21) **	-0.035 (-2.23) **	-0.035 (-2.18) **	-0.034 (-2.18) **	-0.034 (-2.19) **	-0.034 (-2.18) **	-0.033 (-2.07) **	-0.033 (-2.08) **	-0.034 (-2.15) **	-0.034 (-2.12) **
Major	0.025 (0.66)	0.025 (0.66)	0.022 (0.57)	0.023 (0.59)	0.027 (0.71)	0.024 (0.61)	0.025 (0.66)	0.027 (0.69)	0.029 (0.75)	0.030 (0.77)	0.026 (0.68)	0.023 (0.59)
Ownership	-0.006 (-0.10)	0.007 (0.11)	-0.043 (-0.63)	-0.028 (-0.41)	-0.002 (-0.037)	0.004 (0.0696)	-0.042 (-0.617)	-0.027 (-0.394)	-0.045 (-0.59)	-0.024 (-0.307)	-0.032 (-0.456)	-0.068 (-0.914)
Intercept	0.242 (1.32)	0.067 (0.42)	0.214 (1.17)	0.131 (0.78)	0.393 (1.68) *	0.039 (0.24)	0.422 (1.90) *	0.273 (1.48)	0.556 (2.36) **	0.427 (2.10) **	0.477 (1.92) *	0.226 (1.15)
Industries	y	y	y	y	y	y	y	y	y	y	y	y
Adj. R2	0.011	0.007	0.010	0.009	0.011	0.006	0.012	0.012	0.013	0.013	0.010	0.008
N	749	760	760	760	749	760	760	760	749	749	749	760