Multiple Large Shareholders and Corporate Risk Taking: Evidence from East Asia

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Prior literature suggests that weak external governance mechanisms negatively affect corporate risk taking (CRT). However, strong internal governance is likely to mitigate the shortcomings of external governance. In a sample of East Asian firms, we examine whether the presence and voting power of multiple large shareholders (MLS) beyond the dominant shareholder effectively manage internal governance and mitigate agency problems, as measured by their effect on CRT. In a sample of 1,686 firms from 9 countries, while the presence of a dominant shareholder is associated with a lower CRT, the presence and voting rights of the MLS are strongly associated with a higher CRT. Furthermore, the effect of the MLS on CRT is strongly positive in family dominated firms (as opposed to non-family dominated firms). We interpret these findings as evidence that in firms featuring a dominant shareholder with the power and incentives to extract private benefits of control by undertaking a conservative investment policy, the power and presence of MLS improve internal governance by mitigating agency problems between the dominant shareholder and minority shareholders and help promote a more optimal non-conservative investment policy.

INTRODUCTION

Poor investor protection environments are breeding grounds for extensive opportunities for corporate insiders to expropriate shareholders (La Porta et al., 2002; Leuz et al., 2003) in widely held firms (Jensen and Meckling, 1976; Grossman and Hart, 1980) and to expropriate minority shareholders in firms with concentrated control in the hands of a dominant shareholder (Shleifer and Vishny, 1986; Burkart, et al., 1997). Supporting these arguments, John et al. (2008) found that poor investor protection (poor external governance) and higher agency problems (poor internal governance) are significant sources of suboptimal low-risk investment decisions by managers. Evidently, large shareholders may mitigate the low risk-taking behavior of managers through efficient monitoring; yet, in firms with a dominant shareholder, "*the large shareholder either directly manages the firm or internalizes the benefits from monitoring managers, which aligns managerial interests with those of the large shareholder*" (Laeven and Levine, 2008, p.579). In this paper, we examine the link between the presence and power of multiple large shareholders (MLS) and Corporate Risk Taking (CRT) to uncover the internal governance role of the MLS and the extent to which the MLS affect the pursuit of an efficient risky investment policy. Prior literature on MLS is limited but indicates that firms with MLS have higher values (Laeven and Levine, 2008; Maury and Pajuste, 2005) and a lower cost of equity capital (Attig et al., 2008) compared with their counterparts with a dominant shareholder. Furthermore, Attig et al. (2009), using a sample of East Asian firms, uncovered that the effect of the MLS is more pronounced in the situations in which firms have higher agency problems, in which they curb the diversion of the firms' resources by playing a valuable monitoring role. Most East Asian countries have weaker institutions for protecting investors (Attig et al., 2009); accordingly, we test whether CRT is a significant function of MLS structures in East Asia.

The extensive corporate governance literature examines the role of investor protection in mitigating agency problems and in reducing the expropriation of minority shareholders (e.g., La Porta et al., 1998; Shleifer and Wolfenzon, 2002; Lombardo and Pagano, 2002; La Porta et al., 2002). La Porta et al. (2002 p. 1147) argued that "*when their rights are better protected by the law, outside investors are willing to pay more for financial assets such as equity and debt. They pay more because they recognize that, with better legal protection, more of the firm's profits would come back to them as interest or dividends as opposed to being expropriated by the entrepreneur who controls the firm. By limiting expropriation, the law raises the price that securities fetch in the marketplace.*" Consistent with this argument, the empirical literature finds that poor investor protection is associated with a negative valuation effect (La Porta et al., 2002), poor market development (La Porta et al., 2006), a higher cost of equity capital (Hail and Leuz, 2006), a lower CRT (John et al., 2008) and a greater expropriation of minority shareholders (La Porta et al., 2000).

In dispersed ownership firms (Berle and Means, 1932), weak investor protection (i.e., weak external corporate governance, institutional monitoring and securities legislation) increases the instances of expropriation of the firms' resources by managers because the dispersed minority shareholders have little ability to monitor the managers. This inefficient link between the firm and its owners increases the possibility of concentrated ownership and the presence of dominant owners with non-trivial cash flow rights in the firm's ownership structure (Burkart et al., 2003; Stulz, 2005; Morck et al., 2005). Accordingly, recent literature has reported overwhelming evidence of controlling large shareholders in firms around the world, for example, in 27 wealthy countries (La Porta et al., 1999), Western Europe (Faccio and Lang, 2002), East Asia (Claessens et al., 2000) and the USA (Holderness, 2009). These studies report that the

dominant shareholder, by using pyramids, cross-holdings and dual class share structures, often holds substantially high voting rights in relation to his/her rights to dividends. The same research also provides significant evidence of MLS, beyond the dominant shareholder, holding significant dividend and voting rights in firms from these countries.

Firms with a dominant shareholder are often subject to substantial expropriation of other minority shareholders, especially in economies with poor investor protection, as evidenced by lower firm values (Claessens et al., 2002; La Porta et al., 2002), higher costs of equity (Guedhami and Mishra, 2009; Chen et al., 2009), the poor informativeness of reported earnings and higher earnings management (Fan and Wong, 2002; Leuz et al., 2003; Haw et al., 2004) and the poor quality of financial reporting (Fan and Wong, 2005). One way the dominant shareholder (like managers) may be instrumental in reducing firm value is by investing in suboptimal, low-risk investment projects or empire-building but value-destroying corporate diversification. The possibility that a dominant shareholder (or managers in a dispersed ownership firm) may make conservative investment decisions is raised in a number of studies. First, Morck et al. (2000) argued that informed risk arbitrage is lower in countries with weaker investor protection. Two recent studies corroborate this conjecture: Durnev et al. (2004), by finding that poor investor protection is characterized by a lower level of informed risk arbitrage, poor resource allocation and low productivity growth, and John et al. (2008), by finding that poor investor protection is associated with a poor investment policy and that the firms in poor investor protection environments record lower CRT and weaker growth rates. Additionally, Paligorova (2010) documented a lower risk-taking tendency in firms featuring a dominant shareholder that did not hold the largest equity stake in several firms, and they add that this tendency is greater in countries with weaker shareholder rights and stronger creditor rights. All of these findings

4

suggest that the dominant shareholder generally has incentives and the power to choose conservative investment strategies and more so in poor shareholder protection regimes.

Why does (or does not) the dominant shareholder have incentives to pursue a suboptimal low-risk (optimal, high-risk) investment strategy? Consider a manager without an equity stake in the firm he/she manages. Such a manager's earnings depend on his/her employment. The employment risk faced by such a manager can be reduced by achieving a lower earnings volatility through diversification (Amihud and Lev, 1981; May, 1995); thus, s/he has incentives to pursue a conservative investment policy. In cases in which the firm is controlled by a dominant shareholder with a substantial equity stake, such an agency problem (i.e., between the manager and shareholders) may be alleviated. However, if the dominant shareholder does not hold ownership in a diversified portfolio of businesses (Paligorova, 2010), has the desire to transfer control to future generations in the family (Anderson et al., 2003) or has a gap between his/her controlling power and ownership stake in the firm (Laeven and Lavine, 2009), then s/he may have incentives to pursue a conservative investment policy. In other words, such a dominant shareholder's interests conflict with those of other minority shareholders, such that s/he has incentives to appoint and persuade managers to fulfill her/his self-interests. However, does the unanimous power of the dominant shareholder to pursue a conservative investment policy continue to prevail in firms with MLS? If so, do the MLS have incentives to pursue a high-risk investment strategy as opposed to the low-risk strategy of the dominant shareholder? The importance of this research question is echoed by recent findings that approximately one-third of the firms in Western Europe (Faccio and Lang, 2002; Laeven and Levine, 2008) and by the current study that approximately one-half of the firms in East Asia (excluding Japan) have more than one large shareholder in their ownership structures. Yet, it is unclear how the corporate risk-

5

taking tendency is affected if a firm has more than one large shareholder (i.e., MLS) with substantial voting rights.

Two conflicting arguments emerge at the juncture of agency theory, MLS and CRT. On the one hand, the MLS may have incentives similar to those of the dominant shareholder, and they may pursue a suboptimal, conservative investment policy. As discussed earlier, a controller (a manager or a controlling large shareholder) who enjoys large private benefits of control is more likely to select suboptimal, conservative investment strategies (John et al., 2008). A conservative investment policy makes a firm less likely to fail or become a takeover target, thus allowing the controlling party to extract pecuniary or non-pecuniary private benefits for an extended period. Like the dominant large shareholder, the MLS may have incentives to collude for corporate control to extract benefits for mutual sharing with the collusion members (e.g., Winton, 1993; Zwiebel, 1995; Kahn and Winton, 1998). In other words, the MLS may find it more beneficial to collude (to combine their votes to gain corporate control to extract private benefits) instead of paying a price to attract the votes of minority shareholders for gaining corporate control. This is more likely when the coalition holds voting rights in excess of dividend rights because "*controlling coalitions with small cash-flow rights have the incentives (small cash-flow rights) and ability (sufficient voting rights) to divert corporate resources for private gain*" (Laeven and Levine, 2008, p. 581). This argument suggests a negative association of CRT with the proxies of MLS.

However, one or more of MLS may have incentives to compete for corporate control by wooing minority shareholders. To attain and maintain such control in firms with MLS, the dominant shareholder or the MLS seeking control of the firm have incentives to pursue or vote for investment strategies that favor their voters (e.g., minority shareholders). Arguments in the

analytical literature also suggest that the MLS may be perceived as playing an efficient monitoring role by competing for corporate control (e.g., Bennedsen and Wolfenzon, 2000; Bloch and Hege, 2003). The competition for corporate control by attracting the votes of smaller shareholders is likely to shift the balance of power towards the minority shareholders. For example, Nenova (2003, p.326) posits "*a controlling shareholder competing for control is willing to pay to minority vote owners a positive price for their votes at the time of a control contest....*" Even if a blockholder is not controlling the management at the time, s/he is likely to have one or more positions on a corporate board. Such a blockholder has incentives to use such positions to not vote for investments in value-destroying (e.g., diversifying) projects in favor of investments in value-maximizing, high-quality and high-risk projects for two reasons: (i) to gain confidence and attract more votes of minority shareholders for future control and (ii) to maximize their own wealth by safeguarding it from expropriation by the dominant shareholder or managers. In fact, Bloch and Hege (2003) show that two large shareholders do not extract private benefits because they compete to attract the votes of minority shareholders to attain corporate control. In the instances in which an investment project is voted on by shareholders (e.g., an acquisition decision), despite the dominant shareholder's incentive to choose a conservative investment policy that is far from the interests of the minority shareholders, the MLS can mitigate such conflicts of interests by "*shifting the voting outcome more towards the dispersed shareholders' preferred investment policy*" (Dhillon and Rossetto, 2009, p.1).[i] Other studies, such as La Porta et al. (1999) and Pagano and Roel (1998), also argue that other large blockholders reduce the expropriation of the firm's resources by monitoring the dominant shareholder. Edmans and Manso (2010), however, question the ability of smaller multiple blockholders to monitor managers due to difficulty in achieving co-ordination among

blockholders, which is likely to generate a free rider problem, in contrast to firms dominated by one large shareholder. Yet, they argue that the same co-ordination problem gives incentives to the smaller blockholders to discipline the managers through trading. The MLS penalize the managers' sub-optimal decisions by injecting such information into the stock prices through trading, which is likely to discipline the managers and, thus, is likely to lead them to avoid value-destroying sub-optimal policies. These arguments imply that the MLS monitor (either directly through voting in board/shareholder meetings or by trading on the firm's shares) the activities of the dominant shareholder and prevent the firm from undertaking suboptimal investment decisions, suggesting a positive association of the MLS with CRT. While there is empirical evidence that MLS reduce the expropriation of corporate resources and play a monitoring role, as evident from the higher valuation of firms with MLS (Maury and Pajeste, 2005; Laeven and Levine, 2008; Attig et. al, 2009) and the lower cost of equity (Attig et al., 2008), the role of MLS in corporate risk taking is purely an empirical question, which we examine in this study.

We build on the empirical findings of John et al. (2008), Attig et al. (2008; 2009) and Claessens et al. (2002) to examine the association between CRT and the presence and voting rights of MLS in East Asia, which has relatively poor investor protection regimes that have a substantial presence and variation in the ownership and control of large blockholders. We choose non-financial firms (following John et al., 2008) from nine East Asian countries, for which we estimate ownership proxies, including the dominant shareholder and the MLS, using the data available in Claessens et al. (2000). We classify a shareholder as a large blockholder if s/he holds at least 10% voting rights, which is consistent with La Porta et al. (2002), Laeven and Levine (2008) and Attig et al. (2008; 2009). Our choice of East Asia is primarily motivated by the following facts: (i) eight of the nine East Asian countries have more than 90% of firms with at

least one large shareholder (the aggregate average is over 77% when including Japan); (ii) these economies have generally been blamed for having weak legal institutions compared with, for example, Western European economies; (iii) these economies have often been blamed for the unrestricted power of controlling shareholders and severe agency conflicts; and (iv) over 28% (over 52% when excluding Japan) of the sample firms from these countries with a dominant shareholder feature a presence of MLS in their ownership structure.

Our dependent variable is the proxy for CRT, which we measure following John et al. (2008). We start by testing how the presence and ownership of the dominant large shareholder affects CRT. As expected, we find that firms with a dominant shareholder, on average, take fewer risks after controlling for country and both country- and industry-fixed effects. However, if the dominant shareholder in a firm is a part of a group, such firms tend to take more risks consistent with the findings of Paligorova (2010). Taken together, this evidence suggests that the managerial interests are aligned with those of the dominant shareholder rather than with those of the dispersed minority shareholders. This alignment is very likely, as the dominant shareholder will have the most influence in the appointment and tenure of the firm's CEOs. Given this natural connection, we focus on uncovering how the agency problems differ in firms with MLS in the sample of firms for which the dominant shareholder holds at least 10% voting rights. First, we find strong evidence that CRT is positively associated with the presence of at least one large shareholder beyond the dominant shareholder. Secondly, we find a positive effect of the voting rights of the second-largest shareholder on CRT. This evidence suggests that the support for higher CRT (i.e., a non-conservative investment policy) is a source through which the MLS affect firm value. Third, we report that CRT increases when the number of significant large shareholders besides the dominant (*largest*) shareholder increases. CRT continues to increase

with the aggregate voting rights of the four large shareholders beyond the largest shareholder. We interpret this finding as supporting the efficient bargaining effects (Gomes and Novas, 2005) hypothesis that MLS reduce agency costs by *disapproving low-risk projects*. The effect of MLS on CRT, as discussed above, is incremental after controlling for the ownership of the dominant shareholders, firm-specific determinants and country-specific determinants, including investor protection and industry fixed effects. Apart from the effect of MLS on CRT, which is positive and significant, we find that investor protection is positively associated with CRT, which is consistent with the findings of John et al. (2008). Finally, we find that the strong positive association between CRT and MLS holds in family-controlled firms, but this association disappears in non-family firms. This finding supports the prior literature that demonstrates a widespread expropriation of minority shareholders (e.g., Bae et al., 2002; Bertrand et al., 2002; Boubakri et al., 2010; Shyu and Lee, 2009), a lack of board independence including sub-optimal monitoring (Chen and Nowland, 2010) and incentives to expropriate due to control rights in excess of cash flow rights (Shyu and Lee, 2009; Chen and Nowland, 2010) in family-controlled firms in this region. For example, both Bae et al. (2002) and Bertrand et al. (2002) uncovered extensive expropriation and tunneling in *Korean Chaebols*.

Our evidence stands up to a battery of robustness tests. First, we observe that Japan has a disproportionately large number of firms in our sample, a lower proportion of firms with a dominant shareholder and far fewer instances of ownership structures with MLS. Japan also has better investor protection than the other East Asian countries. In the tests that exclude firms from Japan, we find a stronger positive effect of MLS on CRT, suggesting that the role of the MLS is much more effective in the instances of weaker investor protection. Apart from this, our evidence

on the effect of MLS on CRT strongly holds after we correct the standard errors for country clustering.

We contribute to the literature by providing evidence that complements four streams of empirical research in corporate finance and interdisciplinary field of corporate governance: (i) the literature that examines investor protection and CRT; (ii) the limited literature focusing on ownership structure and CRT; (iii) the literature that examines agency problems in firms with MLS (this stream of research is limited to date and predominately deals with valuation effects); and (iv) the literature assessing agency problems in family-controlled firms. First, our study closely relates to John et al. (2008), who find strong investor protection associated with value-maximizing investment policy by showing its positive effect on CRT.[ii] By focusing on relatively weak investor protection regimes (East Asia) and firms with at least one dominant shareholder, we provide additional evidence that the effect of MLS on CRT is incrementally positive. Moreover, by showing the positive effect of MLS on CRT, we echo the importance of the role of internal governance embedded in ownership structures with MLS in the regimes with weak investor protection. Second, our study also closely relates to Paligorova (2010), who examined the role of the ownership of the dominant shareholder in corporate risk taking and concluded that only the diversified dominant owners pursue a non-conservative investment strategy. In addition, they found that family-controlled firms follow a conservative investment strategy. By finding a positive association between group affiliation and CRT, we support their results. We extend Paligorova (2010) in at least two ways: by showing that the MLS play a significant role in limiting the power of the dominant shareholder to pursue conservative investment strategies and by showing that the role of the MLS in pursuing non-conservative investment strategies is stronger in family-controlled firms, which are often blamed for severe agency problems. Thirdly,

we complement Laeven and Levine (2008) and Maury and Pajuste (2005) by focusing on countries with relatively poor investor protection regimes and by uncovering data that suggests that the MLS affect firm value by voting to shift the balance of power in favor of more efficient investment policies. Fourthly, our study also relates to Attig et al. (2008) and Attig et al. (2009), who respectively found that firms with MLS enjoy lower financing costs and higher valuation, especially in East Asia. We complement their findings by empirically showing that one source of lower financing costs and higher valuation associated with MLS is the contribution of the MLS in mitigating agency risk by voting to avoid suboptimal investment projects. Fifthly, we complement the literature on family control (e.g., Bae et al., 2002; Boubakri et al., 2010) by showing that the family-controlled firms in East Asia follow conservative investment policies that are generally less likely to benefit minority shareholders.

Finally, these findings have substantial policy implications, especially for the countries where financial markets are still developing. In such economies and in economies in which the dominant shareholder structures are widespread, the policy makers may encourage ownership structures featuring MLS. In particular, in economies in which markets are less developed, the policy makers may seek to promote ownership structures featuring MLS instead of ownership structures featuring a single large shareholder (SLS) in the privatization of public enterprises. However, we acknowledge that there are areas of improvement in this type of research, including those regarding the issue of endogeneity, which we attempt to address in multiple ways in this study. Laeven and Levine (2008) and Burkart et al. (2003) argued that ownership structures are endogenously formed. Accordingly, their association with CRT may be an outcome of such endogeneity. While the lack of time series data on firms with MLS and the difficulty in creating a time series of our main test variable (CRT) precludes us from using firm fixed effects or other

dynamic panel approaches to address this issue, we address this issue in multiple ways in this paper. Initially, we use some simple approaches, by choosing ownership data estimated prior to the estimation horizon of CRT and by using industry-fixed effects. Finally, we also use more advanced methods, such as instrumental variable regression, following i) Fan and Wong (2005) and Guedhami and Mishra (2009) and ii) Laeven and Levine (2009) and Paligorova (2010).

We organize the rest of the paper in five different sections. Section 2 describes the sample, discusses our proxy for CRT, describes ownership variables and identifies other control variables. Section 3 discusses the statistical properties of the data and presents the univariate analysis. Section 4 presents the baseline analysis on the dominant shareholder and CRT. Section 5 presents the main empirical evidence on the effect of MLS on CRT along with robustness tests, and Section 6 concludes this manuscript.

DATA AND METHODOLOGY

We use the sample of firms represented in Claessens et al. (2000) from nine East Asian countries, including Hong Kong, Indonesia, Japan, Malaysia, Singapore, South Korea, Taiwan and Thailand. Our initial sample include 1,686 non-financial firms for which we can estimate the proxy for CRT using data available in Worldscope databases from 1996 to 2005. We chose 1996 as the starting year of the database because the ownership structure data was recorded in 1996. For a firm to remain in our sample, we require that the firm must be covered in Claessens et al. (2000) and Worldscope databases. Apart from this, the firm must not have primary SIC codes between 6000-6900 and in the period between 1996 and 2005, there must be at least four years with non-missing observations for Earnings before Interest Taxes and Depreciation scaled by total Assets (EBITDA), to estimate the proxy for CRT. While we start with 1,686 firms that

meet our selection criteria, only 77.8% (1,312 firms) have at least one large shareholder with voting rights equal to 10% or more. Accordingly, 1,312 firms make up our sample for the main analysis on the effect of MLS.

Corporate Risk Taking (CRT)

We use CRT as the dependent variable for empirically examining the corporate governance role of MLS. We estimate our proxy for CRT following John et al. (2008) and Acharya et al. (2009). John et al. argued that if a firm invests in riskier projects and has riskier operations, it is expected to have more volatile returns on investments. Such risk taking is expected to be value maximizing as opposed to diversification. Accordingly, we develop our proxy for risk taking as the standard deviation of the market-adjusted firm-level earnings scaled by total assets. In doing so, we first subtract the country year median EBITDA from the firm level annual EBITDA. Then, we estimate the standard deviation of these adjusted EBITDA, from which we consider our proxy for CRT. We estimate this proxy from 1996 (the year we observe ownership variables) to 2005, using 10 years of annual data. Because our ownership variables are estimated for 1996, this approach allows us to clearly test the CRT behavior of the firms subsequent to the observation of MLS. Thus, this method allows us to rule out the possibility of self-selection of risky firms by investors intending to maintain large holdings.[iii] We require at least four observations of adjusted EBITDA over this period to include a firm in our sample.[iv]

Ownership Structure

We extract the main proxies for ownership structures from Claessens et al. (2000), who estimated the dividend rights of the ultimate largest shareholder and identified the voting rights for up to five ultimate large shareholders of the publicly traded firms from the nine East Asian countries. We create the following variables of interest from this dataset:

Presence1 is coded as '1' for firms that have a dominant shareholder with at least 10% voting rights and as '0' otherwise. Two competing arguments emerge on the effect of the dominant large shareholder on CRT. The dominant shareholder may monitor managers and channel their energy to the maximization of firm value. However, in general, the literature suggests that a dominant shareholder has similar incentives to that of a manager because his/her earnings stream is undiversified (Amihud and Lev, 1981; May, 1995), such that both have incentives to be risk averse and pursue conservative investment policies. It is only if the dominant shareholder has substantially diversified equity stakes in several firms that s/he may have incentives for higher risk (Paligorova, 2010). Yet, ceteris paribus, we expect the existence of a dominant shareholder to be associated with the extraction of private benefits of control by seeking a conservative investment policy.

Presence2 & Presence2345: *Presence2* is our main test variable that identifies a firm having MLS. *Presence2* is coded as '1' if the second-largest shareholder of a firm has at least 10% of the voting rights and as '0' otherwise. Although the direction of the relationship between CRT and MLS proxies is an empirical question, below, we make some predictions on these relationships. We expect the existence of the second-largest shareholder to positively affect the firm's risk-taking behavior if the efficient monitoring role of such a shareholder exceeds the possibility of collusion to extract divisible private benefits. We further expect that the desire for corporate control and the desire to prevent an expropriation of their share of wealth by the dominant shareholder provide incentives to the MLS to indulge in a non-conservative investment strategy that appeals to minority voters. In extending our analysis to the presence of large blockholders beyond the second-largest shareholder, we measure *Presence2345* as the total number of shareholders beyond the dominant owner holding 10% or more votes. The formation

of a winning coalition by other large shareholders to extract divisible private benefits of control may exacerbate agency problems, as Bennedsen and Wolfenzon (2000) postulated. Under this hypothesis, we expect *Presence2345* to be negatively associated with CRT. On the contrary, there is a possibility of bargaining for control among the large shareholders, as Gomes and Novaes (2005) postulate. The bargaining among a large number of shareholders may result in disagreement among them and potentially result in rejecting a conservative investment policy. Apart from this, disagreement among several large shareholders may prompt them to vote by their feet (by trading) in cases in which managers take sub-optimal investment decisions (Edmans and Manso, 2010), effectively disciplining managers for the choice of a poor investment strategy. These arguments suggest a positive association between *Presence2345* and CRT. Although from theory is unclear as to which hypothesis holds, the existing limited empirical literature lends support to the bargaining effects hypothesis (Attig et al., 2008).

Vote2, Vote2345, Vote2/1Ratio, Vote2345/1Ratio & High-Diff: Vote2 is the size of the voting rights of the second-largest shareholder measured as the percentage of total votes outstanding. If the size of *Vote2* is associated with a stronger monitoring power of the second-largest shareholder, then we expect it to be positively associated with CRT. Second, the ratio of *Vote2* to *Vote1*—the voting rights of the largest controlling owner—(V*ote2/1Ratio)* represents the relative power of the second-largest shareholder vis-à-vis the dominant shareholder, which we expect to be positively associated with CRT if the second-largest shareholder plays a monitoring role. Third, we construct other proxies that show the power of the second-largest shareholder or the power of the coalition of MLS to monitor the dominant shareholder. Among these proxies, we expect both the sum of the voting rights of the largest four shareholders beyond the controlling shareholder (*Vote2345*) and the ratio of *Vote2345* to *Vote1* (*Vote2345/1Ratio*) to be positively

associated with CRT. Finally, we create a proxy for the overall relative power of the largest shareholder (*High-Diff*), which is measured as the sum of the squares of the differences between the voting rights of the five largest shareholders (i.e., $(Vote1\text{-}Vote2)^2+(Vote2\text{-}Vote3)^2+(Vote3\text{-}Vote4)^2+(Vote4\text{-}Vote5)^2$). We expect *High-Diff* to be negatively associated with the CRT.

Other Controls

In our basic regressions, we follow the specifications of John et al. (2008) for the firm-level analysis by using two sets of controls: (i) country-level controls, which are *Ownership1*, *Investor Protection*, *Private Credit*, *Market Size*, *Competitive*, *Unionization and Government Spending* and (ii) firm-level controls, which are *Initial Size, Initial Profit, Initial Leverage, Initial Growth, Earnings Smoothing and N-Risk Taking*. We measure all of these variables following John et al. (2008), and they are defined in Appendix A.1.

DATA PROPERTIES AND UNIVARIATE ANALYSIS

We start by discussing the data properties and univariate results. Panel A of Table 1 shows the ownership structure properties of sample firms by country. A large proportion of firms in our sample have a dominant shareholder with voting rights of 10% or more. Over 60% of firms in Japan and 90% of firms in South Korea have a dominant shareholder, while this figure is at least 98% for the firms in the remaining seven countries. Hong Kong tops the list by exhibiting a dominant shareholder in 100% of the sample firms. These countries also exhibit an extensive presence of a second-largest shareholder. Japan, perhaps being the most developed and the largest financial market in the sample, not only has less ownership structures with a dominant shareholder, but also has the lowest proportion of firms with a second-largest shareholder (7.0% of sample firms). Six out of the nine sample countries, however, have over 57% of firms with at

17

least two large shareholders. As far as the other large shareholders are concerned, the proportion is generally less than 25% for a third large shareholder, less than 5% for a fourth large shareholder and virtually 0% for a fifth large shareholder across these countries. The exception is Thailand, where the proportion of firms with a third, fourth and fifth large shareholder is approximately 52.1%, 19.4% and 2.8%, respectively.[v]

Panel B of Table 1 presents the country average of the dependent variable (CRT), Earnings Smoothing, country averages of firm-level control variables that are winsorized at 1% in cases in which outliers exist, and other country-level variables from the existing literature. We note that the average CRT is much higher in Japan (a country with a well-developed securities market, a generally stronger investor protection and a lesser presence of the dominant shareholder structures in relation to the other sample countries) at approximately 0.09, while it ranges from 0.03 to 0.07 in other countries, with the lowest being for Taiwan, at 0.03.

Insert Table 1 about here

Table 2 presents a univariate test of the CRT by dividing the sample into two sub-samples (Japan and Other East Asian). We further divide these sub-samples into two groups (*Family* and *Non-family*) based on the type of dominant shareholder. For these four groups, we start by testing in the sub-sample of *Non-family* dominated firms whether the existence of a dominant shareholder (SLS) involves lower CRT compared with that in firms with no dominant shareholder (NONE).[vi] Indeed, we note that SLS firms, on average, exhibit slightly lower corporate risk taking. However, the difference in risk taking between these two subgroups of firms is not significant. This suggests two things: first, it is likely that in structures with a single dominant shareholder, the managerial interests are aligned with the dominant shareholder and

not with the other minority shareholders; and second, it is also likely that in *Non-Family* dominated firms, the agency conflicts between the dominant shareholder and minority shareholders are usually not more severe than those between managers and all other shareholders. We also note that Non-Family firms with ownership structures featuring MLS do not have a significantly higher level of CRT, either in Japan or in the other East Asian countries, supporting less severe agency conflicts between the dominant and minority shareholders in such firms, and thus, there is little role for MLS to play. Next, we test the difference in the average CRT between firms with ownership structures featuring MLS and those featuring SLS in which the dominant shareholder is a *Family*. As expected, we find that the average CRT is significantly higher for the family-dominated firms with MLS, both in the Japanese and Other East Asian subsamples. The firms with MLS appear to exhibit nearly 1.4 times the CRT behavior compared to firms with SLS in East Asia. In untabulated results, using firms with *Family-* and *Non-Family-*dominant shareholders, in six of the nine countries, the average CRT of firms with MLS is at least 15% more than that of firms with SLS. The observation in these univariate tests that the firms with MLS tend to have non-conservative (high CRT) investment policies echoes the findings of the existing literature, which indicates that MLS mitigate agency problems, particularly in the firms in which the dominant shareholder is a *Family* (Attig et al., 2008). We also test this conjecture below using a multivariate framework and a full set of control variables.

Insert Table 2 about here

In Table 3, we report the correlation coefficients of explanatory variables. Except for some country-level control variables, other explanatory variables do not show extreme correlations.

Insert Table 3 about here

DOMINANT SHAREHOLDER AND CORPORATE RISK TAKING

While our analysis focuses on the effect of the large shareholders beyond the dominant shareholder, we first examine the effect of the presence of a single dominant shareholder on CRT by regressing our proxy for CRT on the presence and ownership of the dominant shareholder and a set of firm- and country-specific control variables. We use robust standard errors in all of these models. Model 1 of Table 4 reports our baseline results of regressions of CRT on the presence of a dominant shareholder (*Presence1*). We observe that CRT is significantly and negatively (at the 1% level) associated with *Presence1* after controlling for all firm- and country-specific variables, consistent with John et al. (2008). In these regressions, we also add industry effects, based on 12 Fama-French industry groups. We notice that for all countries in our sample besides Japan, more than 90% of firms have a dominant shareholder. Yet, our choice to control for country–specific variables largely mitigates this concern.[vii] Consistent with the arguments in the literature (e.g., John et al., 2008; Morck et al., 2005), the negative and significant association of CRT with *Presence1* suggests that the presence of a dominant shareholder is associated with conservative investment decisions.

Insert Table 4 about here

Secondly, in Model 2 of Table 4, we split *Presence1* by the type of dominant shareholder into three groups. Given the extensive research examining family ownership, we conjecture that

the family-dominated firms have greater incentives to indulge in a conservative investment strategy, as will be discussed later. Indeed, the results in Model 2 support this conjecture that firms with a family as the dominant shareholder are associated with significantly lower risk taking; however, other subgroups also show a somehow similar tendency. Later in this section, we will further explore this issue by examining the role that MLS play in risk taking in such firms. Thirdly, John et al. (2008) and Paligorova (2010) also suggested that the dominant shareholders who hold large (undiversified) ownership may prefer a conservative investment strategy due to the high exposure of their wealth to firm risk, suggesting that the ownership of the dominant shareholder tends to negatively load with CRT. However, Paligorova (2010) found that in the cases in which the largest shareholder has large equity stakes in more than one firm, the ownership is positively associated with CRT. Therefore, in Model 3 of Table 4, we include the ownership percentage of the dominant shareholder (*Ownership1*). We find that *Ownership1* is negatively (significant at the 10% level) associated with CRT. In Model 5, however, we use a *Group Affiliation* dummy, which takes a value of 1 when the largest shareholder is affiliated with a group, and find that this dummy loads with a positive and significant coefficient. The positive association of *Group Affiliation* with CRT is consistent with Paligorova (2010) in that more diversified dominant shareholders tend to prefer high-risk investment policies. Further, in Model 4, CRT is not significantly different across the ownership levels of the type of owners, suggesting that the type of dominant owner matters (Model 2), while the level of ownership does not exhibit a significant association with CRT. Overall, our evidence supports the findings of a large strand of ownership literature that indicates that firms with a dominant shareholder are often valued less (Laeven and Levine, 2008) and have a higher cost of equity capital (Guedhami and Mishra, 2009; Attig et al., 2008), especially when a dominant shareholder holds

disproportionately greater voting rights compared with dividend rights. While the evidence presented in Table 4 is incremental over John et al. (2008), in a way, it supports the findings of Paligorova (2010), who used a different sample of firms in which the ownership and the presence of the dominant shareholder is associated with conservative investment strategies and the dominant shareholder is not group affiliated.

Turning to the control variables, in examining the effect of the dominant shareholder on CRT, in Table 4 (and in the rest of the Tables), we control for different firm-specific variables, following John et al. (2008). These control variables generally load with an expected sign. In particular, *Initial Size* loads with a negative and significant coefficient, consistent with John et al. (2008). *Initial Leverage* is positive but not consistently significant. The coefficient of *Initial Growth* is negative and highly significant, as is the coefficient of *Earnings Smoothing.* However, among the firm-level controls, *Initial Profit* and *N Risk Taking* are insignificant.

In this analysis, we also control for the effects of the quality of institutions that protect minority investors in each country. The literature suggests that minority shareholders in countries with better shareholder protection are less likely to be expropriated, and thus, the firms in such countries are generally likely to adopt an investment policy closer to the minority shareholders' interests. The prior literature widely supports this view that the firms in countries with strong investor protection are valued more (La Porta et al., 2002), have a lower cost of equity capital (Hail and Leuz, 2002) and have better reporting quality (Fan and Wong, 2005). Furthermore, La Porta et al. (2002) suggest that minority shareholders generally perceive the quality of legal institutions to be effective in restraining potential expropriation by insiders. Therefore, firms in such countries enjoy higher equity valuations. More so, the firms in the countries with strong legal institutions and the protection of outside investors tend to choose more aggressive

22

investment policies on average, as evidenced by the positive association between investor protection and CRT (John et al., 2008). Accordingly, we choose *Investor Protection* from La Porta et al. (1998) as a proxy for the protection of minority shareholders in our main analysis. Consistent with the literature and our expectations, we find, in all specifications, that *Investor Protection* loads with a positive and significant (at a better than 1% level) coefficient.

The prior literature maintains that the power of non-equity stakeholders is significant in a firm's strategic decision making and, hence, in the CRT (John et al., 2008). For example, banks (through their lending practices), governments (through their policies) and labor unions (through their power to negotiate) may substantially influence corporate investment decisions. These stakeholders, for example, banks and labor unions, may have incentives to limit CRT (e.g., in favor of a diversification strategy), as they bear huge costs in the event of bankruptcy and get relatively few benefits from the firm's high profitability. There is empirical support for these arguments, for example, Acharya et al. (2009) report that stronger credit rights are negatively associated with CRT and Morck and Nakamura (1999) report powerful banks in Japan advance creditors' interests, even at the cost of shareholder wealth. Faleye et al. (2006) find a negative effect on corporate risking of strong labor representation and Fogel et al. (2008) argue that governments may value stability and job continuation, which may imply a pressure for conservative government policy. Therefore, consistent with John et al. (2008), in Table 4, we also control for other important country-level determinants of CRT, which include the Herfindahl index representing the competitiveness of the country's business environment (*Competitive*), the size of the market measured by the log of the market capitalization (*Market Size*), the credit held by the private sector (*Private Credit*), Government Spending as a percentage of GDP (*Govt Spending*) and *Unionization*. All of these other country-level controls

are extracted from John et al. (2008). We do not control for country-fixed effects in this analysis, as investor protection and other county-level variables are fixed for each country. We find that, among these country-level controls, *Competitive, Private Credit* and *Govt Spending* load with positive and significant coefficients, while *Market Size* and *Unionization* load with negative and significant coefficients. The upshot of this section is that, in general, the dominant shareholder is associated with a conservative investment strategy. This evidence also holds for firms in which such a shareholder is a family.

MULTIPLE LARGE SHAREHOLDERS AND CORPORATE RISK TAKING

Our main interest is on the role of the large shareholders beyond the largest shareholder—the MLS. Therefore, in Table 5, we focus on the sample of firms with at least a dominant shareholder and examine the effect of the different proxies for MLS on CRT. Effectively, we compare the CRT between the firms with an SLS and MLS, leaving out the widely held firms. In all these regressions, we maintain all the firm-, industry- and country-specific controls discussed above and used in the baseline regressions in Table 4. Apart from that, we also control for the ownership of the dominant shareholder (*Ownership1*), as the prior literature and our findings above suggest that *Ownership1* is a significant determinant of CRT. In Model 1 of Table 5, we start by regressing CRT on these control variables and *Presence2*, which takes a value of 1 if a firm has the second-largest shareholder with voting rights equal to or greater than 10%. We find that *Presence2* (Model 1) loads with a positive and significant coefficient, suggesting that the presence of the second-largest shareholder is instrumental in reducing agency problems in firms with a dominant shareholder. Such agency problems may remain unabated if the dominant shareholder is the only large shareholder in the firm. In other words, the positive and significant

24

coefficient of *Presence2* suggests that, in firms with a dominant shareholder, the presence of MLS reduces agency problems and thus aligns the managerial interests with those of other minority shareholders. Next, to test whether the power of the second-largest shareholder embedded in his/her voting rights affects CRT, we include *Vote2* in Model 3. We find that the coefficient of *Vote2* is positive and significant at a 1% level. This suggests that not only the presence, but also the voting rights of the second-largest shareholder are instrumental in reducing a firm's agency problems in which a dominant shareholder (with more voting rights than the second-largest shareholders) exists. While the baseline evidence presented in Table 4 suggests that the presence of a single dominant shareholder often exacerbates a firm's agency problems, perhaps by aligning managerial interests with the dominant shareholder and away from the other minority shareholders, in this case, a firm's project risk choice largely depends on the risk preference of the dominant shareholder, who, according to existing literature, is more likely to pursue conservative investment policies if s/he has substantial dividend rights (Morck et al., 2005) and has an undiversified equity position (Paligorova, 2010). However, the evidence in Models 1 and 2 of Table 5 adds to our understanding by showing that the presence and power of the second-largest shareholder in the ownership structure mitigates such problems, perhaps by aligning managerial interests with those of him/herself and the minority shareholders and away from the dominant shareholder. In other words, the presence and power of the second-largest shareholder significantly improves corporate governance to mitigate agency problems above and beyond the effect of external corporate governance. Thus, a more optimal and non-conservative investment policy that benefits all shareholders is a likely outcome of such an alignment.

Insert Table 5 about here

Second, in Model 3, we find that the voting power of the second-largest shareholder relative to the largest shareholder (*Vote2/1*) is significantly and positively associated with CRT. These findings imply that not only the presence of MLS as observed in Model 1, but also the absolute power of the MLS (voting rights) and the power relative to the dominant shareholder constitute important internal governance mechanisms that help protect other minority shareholders by limiting '*the power of the dominant shareholder to adopt conservative investment strategies.*'

Third, the presence of a larger number of MLS beyond the dominant shareholder in Model 4 (*Presence2345*), the aggregate voting rights of MLS in Model 5 (*Voting2345*) and the relative voting power of MLS in Model 6 (*Voting2345/1*) are significantly and positively associated with CRT. This evidence provides strong support for the alignment effects hypothesis that MLS align managerial interests with those of the minority shareholders and away from those of the dominant shareholder. In a similar vein, these results also support the bargaining effects hypothesis (Gomes and Novaes, 2005), which states that the presence of a large number of blockholders mitigates agency problems because disagreement among the blockholders is likely to shift the balance of power (e.g., voting) against the projects that are likely to dilute their interests and those of the minority shareholders. This finding also supports Attig et al. (2008) who, by reporting lower cost of equity for the firms with a large number of MLS beyond the dominant shareholder, support the bargaining effects hypothesis. This evidence also provides support for the arguments of Edmans and Manso (2010) that a lack of coordination between large number of blockholders may prompt them to vote by their feet (by trading), which may effectively discipline managers by injecting information about sub-optimal policies into stock prices. Finally, in Model 7, we report a negative (consistent with the literature) but insignificant

coefficient for the relative power of the larger shareholder vs. the smaller shareholders (*High-Diff*). Overall, when this evidence is coupled with the evidence in the earlier subsection, the results indicate that CRT is an important channel through which the MLS affect shareholders' wealth. In summary, this highlights the importance of ownership structures with MLS in mitigating firms' agency problems. After controlling for the effect of *Investor Protection* and other country attributes, the presence, power and the relative power of the MLS are effective in improving the investment strategy of a firm by shifting it to optimal high-risk projects.

Identity of the Dominant Shareholder, Multiple Large Shareholders and Corporate Risk Taking

The prior literature notes numerous instances of the expropriation of minority shareholders in family-controlled firms (e.g., Fan and Wong, 2002; Bae et al., 2002; Bertrand et al., 2002; Boubakri et al., 2010). Expropriation occurs even more if the families dominate the board of directors (Yeh et al., 2001). Indeed, family control is a dominant feature of firms around the world (e.g., La Porta et al., 1999; Fogel, 2006; Bertrand et al., 2008; Villalonga and Amit, 2009), especially in countries with weak legal institutions (e.g., Burkart et al., 2003; Fogel, 2006), such as in East Asia (Claessens et al., 2000; Boubakri et al., 2010). Almost half of the sample firms in Claessens et al., (2000), over 60% of the sample firms in Boubakri et al. (2010) and over half of the firms in this study are controlled by a family or by an individual. Because families generally hold highly undiversified investments (e.g., Anderson and Reeb, 2003) and because private benefits extracted by families are not divided among other owners (unlike those by institutional blockholders) (Ellul et al., 2009), families are more likely to follow a conservative investment policy (due to their undiversified wealth) and an investment policy more likely to enhance their private benefits of control (undivided private benefits).[viii] In our analysis

in Table 4, we also show that the dominant family shareholders exhibit a lower level of CRT. In the firms with MLS, the controlling family shareholder may, therefore, have incentives to seek collusion with other large shareholders to extract private benefits for mutual sharing.[ix] Therefore, in Table 6, we separately examine the role of MLS in the firms in which the dominant shareholder is a *Family* or *Non-family*.

Insert Table 6 about here

We observe that in 1,312 sample firms with a dominant shareholder, 662 feature a family or individual as the dominant shareholder and the remaining 650 feature either the government or a 'widely held corporation or financial institution' as the dominant shareholder. Models 1 to 4 of Table 6 present the association of CRT with MLS using the *family*-controlled subsample of firms. In these models, we observe strong evidence that the presence and voting rights of the MLS significantly and positively affect CRT. Models 5 to 8 present the association of CRT with MLS in the *Non-family* controlled subsample of firms. In these models, we observe that the coefficient of presence and voting rights of the MLS are not significantly different from zero. These findings suggest that the role of the MLS is significant only in the firms in which the dominant shareholder is a *Family*, supporting the arguments that MLS significantly mitigate agency problems in the firms controlled by families. Counter-intuitively, this also suggests that the firms controlled by families have substantial agency problems, and thus, the MLS, if existent, play a significant role in mitigating such agency problems.

Furthermore, we test the effect of the identity of the second-largest shareholder in two ways (Untabulated). First, we separately repeat models 1 (*Family* dominated) and 5 (*Non-Family* dominated) of Table 6 by adding the identity of the second-largest shareholder as another

explanatory variable one at a time. We find the identity of the second-largest shareholder to be statistically insignificant in all regressions, while the coefficient of *Presence2* continues to be statistically significant (at better than 0.01 level) in the sub-set of firms controlled by a *Family* shareholder and insignificant in the sub-set controlled by a *Non-Family* shareholder. Second, we use the entire sample of 1,213 firms in which a dominant shareholder exists. In this sample, we repeat Model 1 of Table 5 by adding interaction terms *Family1*Family2*, *Family1*State2* and *Family1*Widely2* one at a time. The coefficients of all these interactions are not statistically significant at the 10% level. Overall, the results from these two exercises imply that, while the existence of the second-largest shareholder alleviates low risk taking in *Family* controlled firms, the identity of the second-largest shareholder does not significantly matter in *Non-family* controlled firms.

Robustness tests

We perform an extensive battery of sensitivity tests to test the robustness of the results presented in the earlier tables. Below, we present the results of these tests. In particular, we present the sensitivity of our results across different proxies for investor protection and samples from Non-Japan East Asia while correcting for the endogeneity of ownership structures.

Insert Table 7 about here

Proxies of Investor Protection. In our main analysis, the *Investor Protection* index from La Porta et al. (1998) is the proxy for country-level corporate governance. To test whether our results are motivated by the choice of the proxy for the country's corporate governance, we replicate Table 5 using different country-level variables that represent the quality of the country's corporate governance. In Table 7, we report results that replicate Model 1 from Table 5

29

by altering the proxies of a country's investor protection. First, in Model 1 of Table 7, we use *Anti-Director Rights*. Consistent with John et al. (2008), this proxy loads with a positive and significant coefficient. Second, in Model 2, we use *Liability Standards* (measured by burden of proof) from La Porta et al. (1998), which is also significantly and positively associated with CRT. Third, in Model 4, we find *Effective Judiciary*—a measure of the efficiency of a country's judiciary—to be positively associated with CRT. Fourth, we find that the country level of *Insider Ownership* is negatively associated with CRT in Model 5. *Insider Ownership* is a proxy for a high concentration of ownership in the hands of insiders thus represents aggregate incentives to make conservative investment decisions in a country. Finally, we use two proxies for corporate transparency—*Disclosure Level* (Model 5) and *CIFAR* (Model 6)—as were used by Bushman et al. (2004). As expected, both of these variables are significantly and positively associated with CRT. More importantly, our proxy for the presence of MLS (*Presence2*) continues to load with a positive and highly significant coefficient in all of these models, thereby reinforcing our conclusion that MLS reduce firms' agency problems above and beyond the effect of the level of investor protection that is embedded in a country's corporate governance.

Country Effects & Clustering. In all of our reported tables, we control for country effects by using several known country-specific variables. However, some unknown country-specific, fixed effects on risk taking may not be captured by using these variables. Therefore, we replicate all models in Tables 4, 5 and 6 by controlling for country dummies in place of country-specific control variables; both the signs and significance of our main test variables remain unchanged in this analysis. Furthermore, to address concerns for the potential cross-sectional correlation within countries, we replicate our baseline analysis using robust standard errors that correct for country clustering. We continue to reach similar conclusions.

Japan Influence. Japan is disproportionately represented in our sample, with almost half of the sample firms coming from this country. Therefore, one concern in our analysis, which was also suggested by Claessens et al. (2002) and Guedhami and Mishra (2009), is that these findings may be an artifact of this disproportionate representation of Japan. In our initial analysis, we mitigate this concern by using country-level controls or country-fixed effects. However, to mitigate this concern further, we have repeated our analysis after excluding all firms from Japan. In the untabulated regression results replicating our baseline specifications in Tables 4 and 5, we observe that there is indeed some effect of including Japan; yet, our earlier conclusions remain unaffected. More importantly, we find that all proxies of MLS load with an expected sign and a strongly significant coefficient, implying that the role of MLS is more effective in these eight East Asian countries.

Endogeneity of Ownership Structures. The prior literature suggests that a firm's ownership structure is an outcome of its contracting environment and firm valuation, based on the methods by which firm value is influenced. For example, Demsetz and Lehn (1985, p.1155) argued that "*the structure of corporate ownership varies systematically in ways that are consistent with value maximization.*" Himmelberg, Hubbard and Palia (1999) and several other studies corroborated Domsetz and Lehn, suggesting that a firm's contracting environment largely affects its ownership structure in ways that are consistent with value maximization. La Porta et al. (1999) also suggested that ownership structures largely depend on domestic legal environments. Likewise, Burkart et al. (2003) argued that dominant owners emerge in the environments with poor investor protection in a way that mitigates managerial agency problems. Therefore, our research is likely to suffer from two major endogeneity issues: (i) a potential omitted-variable problem and (ii) a reverse causality between ownership structure and risk

taking, such that wealthy individuals and institutions self-select high-risk, high-quality firms and serve as passive blockholders.

While the lack of time series data (particularly for ownership structures) limits us from using firm-fixed effects and dynamic panel procedures, thus limiting our ability to make stronger inferences, we have applied a number of possible measures to address this issue. First, we try our best to address the omitted-variable problem by including country-fixed effects (untabulated) and by controlling for several country-specific proxies for investor protection and economic development. Second, we further address this concern by including industry-fixed effects, in line with Laeven and Levine (2008). Third, prior literature argues that higher levels of ownership of a dominant shareholder induce a conservative investment policy due to the undiversified nature of their wealth (John et al., 2008), but in cases in which a dominant shareholder has a diversified equity stake in a group of firms, it may not be the case (Paligorova, 2010). In this paper, we also report (Model 5, Table 4) that firms with the dominant shareholder belonging to a group exhibit higher CRT. While we do not have sufficient data to fully identify the level of diversification of the wealth of the large shareholders, we attempt to address this issue in two stages: by controlling for insider ownership and by controlling for the *Group Affiliation* dummy. First, we replicate our baseline regressions by using the country-level proxy for *Inside Ownership* and find that it loads with a negative coefficient. Second, while prior evidence on the effect of the ownership of the largest shareholder is mixed, we control for this variable in all our regressions, including in Table 5 and in later ones. This mitigates the omitted-variable concern for ownership of the dominant shareholder. Third, we also replicate our Tables 5, 6 and 7 after controlling for *Group Affiliation* dummy and find that the association between MLS and CRT continues to remain the same (untabulated). This mitigates the concern that the effect of the diversification of

wealth of the largest shareholder might have affected our findings about the role of MLS on CRT.

The prior literature also relies on an instrumental variable approach to address the endogeneity of ownership structures. Because we have firms with MLS, we acknowledge that it is complicated to address the second issue of reverse causality between CRT and ownership structures (e.g., Laeven and Levine, 2008; Attig et al., 2008). While the instrumental variable approach often lacks the power (Coles et al., 2007) to examine endogeneity of ownership structure, we make several efforts to mitigate the effect of potential reverse causality in our regressions. First, we attempt to minimize this concern by estimating CRT using data subsequent to the year in which ownership structures are estimated. The ownership structures are estimated as of the year 1996, while the CRT is estimated using the annual corporate earnings over the period from 1996 to 2005. However, this does not rule out the possibility that the wealthy individuals (MLS) obtain large voting rights in high risk-taking firms after observing such firms' past risk-taking behavior. The past risk-taking behavior of the firm may have continued after the ownership structures with which MLS were formed. To mitigate this concern, we use an instrumental variable approach with two-stage least squares. In that analysis, we follow Fan and Wong (2005), Guedhami and Pittman (2006) and Guedhami and Mishra (2009) and use the initial firm size, the initial profitability, a proxy for economic development and growth (GDP Growth) and a common-law legal-origin dummy as instruments in the first stage. Then, in the second stage, we use fitted values of MLS variables from this regression as the test variable. In the untabulated results of the instrumental variable 2SLS regressions, we find that these instruments are highly correlated with MLS. Also, the CRT loads with a positive and significant coefficient with a fitted value for MLS from this regression, suggesting that endogeneity is not a

significant driving force behind our results. Finally, Laeven and Levine (2009) and Paligorova (2010) mitigate the concern for reverse causality between ownership of the dominant shareholder by using average ownership of other firms in the same industry and country. Because it is unlikely that the CRT policy of a single firm would affect the ownership structure of all firms operating in the same industry, this is expected to effectively mitigate concern that the positive association between CRT and MLS is due to the investors' tendency to seek large blocks of shares in high risk-taking firms. In using this approach, we instrument our proxies for firm-level MLS by using the median value of proxies for MLS (*Presence2*, *Vote2* and *Vote2/1*) of all other firms operating in the same industry of the same country one by one, following Campbell (1996). Our instrumental variable results are much stronger than the OLS results. This is also confirmed by the test of endogeneity, based on Durbin-Wu-Hausman Chi-square statistics and Wu-Hausman F-Statistics, for which the instrumental variable estimates of the effects of MLS are stronger than those of OLS estimates. Overall, our main findings continue to prevail when using these instrumental variable regressions.

CONCLUSION

We examine the effect of large shareholders in corporate risk taking using a sample of East Asian firms. In our initial tests, we find that the presence of a dominant shareholder is negatively associated with CRT, suggesting the alignment of managers' interests with those of the dominant shareholder. However, in the sample of firms that feature a dominant shareholder, we find that the presence of MLS is strongly and positively associated with CRT. This evidence suggests that a non-conservative (good) investment policy (high CRT) is a source by which MLS affect firm value. Furthermore, we find that the voting rights of the second-largest shareholder,

the presence of several large shareholders beyond the largest shareholder and their aggregate and relative (to the dominant shareholder) voting rights are strongly and positively associated with CRT. In additional tests, we find that the effect of MLS on CRT is more pronounced in the firms in which the dominant shareholder is a *Family*, supporting the findings in prior literature that *Family*-dominated firms have severe agency problems (e.g., Bae et al., 2002; Boubakri et al., 2010; Shyu and Lee, 2009; Chen and Nowland, 2010).

Our readers may note some limitations of the current study, which may require further consideration in future research. First, our study is limited to nine East Asian countries living out some important economies from that region and our proxy of CRT is relatively crude by its construction. Second, although we have used many corrections for endogeneity, due to the lack of time series data, we are unable to use time- or firm-fixed effects or other dynamic panel approaches, which might further correct this issue. Third, while prior research shows that higher CRT is associated with growth, it may not always be in the best interests of shareholders. We cannot fully rule out the possibility that such a relationship is motivated by managers or blockholders seeking short-term growth and short-term investments by forging more stable long-term growth investments. Finally, there are other potential internal governance mechanisms that may affect the relationships between ownership and CRT, e.g., board structure, board independence and anti-takeover provisions, which have not been examined in this study due to data limitations. We hope that future research may examine these issues.[x] Yet, our findings have implications for a large body of corporate finance and interdisciplinary field of corporate governance research and practice.

Our findings contribute to the debate relating to the effect of investor protection on investment policy (e.g., John et al., 2008). We contribute to this debate by highlighting the

importance of internal governance embedded in MLS structures beyond that of external governance. Accordingly, our findings have implications for the recent limited debate on the ownership of dominant shareholders and CRT (e.g., Paligorova, 2010), as we show that MLS play a significant role in limiting the power of the dominant shareholder to pursue a conservative investment strategy and that the role of MLS in pursuing a non-conservative investment strategy is stronger in firms with severe agency problems, such as family-controlled firms in East Asia. Likewise, our findings add to the literature that focus on the valuation effect of MLS (e.g., Maury and Pajuste, 2005; Laeven and Levine, 2008; Attig et al., 2009) by providing evidence that a channel for value improvement may be the tendency of MLS to contest in favor of efficient investment policies. Our findings also have implications for the family control literature as we show that in addition to a rampant tunneling of corporate resources (e.g., Bae et al., 2002; Bertrand et al., 2002), minority shareholders in family-controlled firms in East Asia suffered valuation consequences from conservative investment policies.

Our findings also have some policy implications. In countries where corporate ownership structures generally feature a dominant shareholder or are sought in the privatization of public enterprises, a national policy may aim at promoting ownership structures with MLS to improve internal governance in publicly traded and newly privatized corporations. Apart from this, passive small investors or pension funds pursuing to invest in corporate securities may benefit by searching for the firms featuring MLS in ownership structure, especially, if they are seeking to invest in corporate securities from institutionally less developed economies. Perhaps, MLS help create a strong board as do independent directors (e.g. see Dyaha et al., 2008) in the firms that feature a dominant shareholder thus protecting the interests of minority shareholders.

Appendix A.1

36

Variable Definitions

Variable	Definition	Source
Vote $_i$	Voting rights of the shareholder i, where i takes a value of 1 to 5.	Extracted from Claessens et al. (2000)
Ownership $_i$	Dividend rights of the shareholder i, where i takes a value of 1 to 5.	Extracted from Claessens et al. (2000)
Presence1	A dummy variable, which takes a value of 1 for firms with a dominant shareholder with at least 10% voting rights and 0 otherwise.	Claessens et al. (2000), Author Estimation
Presence2	A dummy variable, which takes a value of 1 for firms with at least two large shareholders with at least 10% voting rights and 0 otherwise.	Claessens et al. (2000), Author Estimation
Presence2345	Number of large shareholders other than the largest shareholder present in the ownership structure that have at least 10% voting rights.	Claessens et al. (2000), Author Estimation
Voting 2345	Vote2 + Vote3+ Vote4 + Vote5	Claessens et al. (2000), Author Estimation
Voting 2/1Ratio	*Vote2 ÷ Vote1*	Claessens et al. (2000), Author Estimation
Voting 2345/1Ratio	*(Vote2 + Vote3+ Vote4+ Vote5) ÷ Vote1*	Claessens et al. (2000), Author Estimation
High_ Diff	Herfindahl index of the difference between the voting rights estimated as Maximum of $Ln[(Vote1-Vote2)^2+(Vote2-Vote3)^2+(Vote3-Vote4)^2+(Vote4-Vote5)^2]$ or zero.	Claessens et al. (2000), Author Estimation
Risk Taking	The proxy for a firm's risk taking, estimated as the standard deviation of country median-adjusted annual EBIDTA from 1996 to 2005. EBITDA is estimated as Earnings before interest, taxes and depreciation (EBITD) scaled by Total Assets (TA). We require at least four observations of EBITDA to include a firm in our sample.	Author's Estimation
Earnings Smoothing	A proxy for a firm's level of earnings smoothing, estimated following John et al. (2008). We estimate standard deviations of operating income scaled by beginning total assets (OPI) and standard deviation of operating cash flow scaled by beginning total assets (OCF). Then, we estimate Earnings Smoothing (ES1) as the ratio of OPI and OCF. We subtract ES1 from 1 to obtain ES2. The higher value of ES2 resembles greater *Earnings Smoothing* in a particular firm. The operating cash flow is estimated as Operating Income less Accruals, where *Accruals= (□Current Assets-□Cash and Equivalents - □ Current Liabilities + □Debt in Current Liabilities + □Taxes Payable) - Depreciation and Amortization.*	Author's Estimation
Initial Size	Log of Total Assets for the year 1996 where available, otherwise for the earliest year available over the sample period.	Worldscope
Initial Profit	Earnings before interest tax and depreciation divided by total assets for the year 1996 where available, otherwise for the earliest year	Worldscope

	available over the sample period.	
Initial Growth	Average sales growth from 1994 to 1997.	Worldscope
Initial Leverage	Firm's book leverage estimated as book debt divided by Total Assets for the year 1996 where available, otherwise for the earliest year available over the sample period.	Worldscope
Unionization	Union membership as a percentage of the non-agricultural labor force in the International Labor Organization's World Labor Report, 1997 to 1998.	Definition from John et al. (2008), Variable from World Labor Report 1997, 1998.
N Risk Taking	Number of observations used to estimate our proxy of a firm's risk taking.	Author Estimation
Private Credit	Claims on the private sector by deposit money banks and other financial institutions as a share of GDP.	Definition from John et al. (2008) and Variable from Beck, Demirguc�худ-Kunt and Levine (2003).
Market Size	Equity market capitalization as percentage of total GDP as of 1995.	Beck, Demirguc̦-Kunt and Levine (2003).
Govt Spending	Country average of government expenditures as share of GDP from 1980 to 1995	Definition from John et al. (2008) and Variable from Demirguc̦-Kunt and Levine (2001).
Competitive	Herfindahl index estimated as the sum of the squared shares of firm sales to total sales within a given country for the period 1994 to 1997.	Definition and Variable from John et al. (2008)
Investor Protection	Principal component of disclosure, liability standards, and anti-director rights. Scale from 0 to 10.	Definition & Variable from La Porta et. al., 2006.
Anti-Director Rights	This index of anti-director rights is formed by adding one as follows: (1) the country allows shareholders to mail their proxy vote; (2) shareholders are not required to deposit their shares prior to the General Shareholders= Meeting; (3) cumulative voting or proportional representation of minorities on 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 Shareholders Meeting is less than or equal to 10% (the sample median); or (6) when shareholders have preemptive rights that can only be waived by a shareholders meeting. The range for the index is from zero to six. Source: La Porta et al. (1998).	Definition & Variable from La Porta et. al., 2006.
Liability Standards	The index of liability standards equals the arithmetic mean of (1) Liability standard for the issuer and its directors; (2) Liability standard for the distributor; and (3) Liability standard for the accountant.	Definition & Variable from La Porta et. al., 2006.
Effective Judiciary	Assessment of the efficiency and integrity of the legal environment as it affects business, particularly foreign firms@ produced by the country risk-rating agency International Country Risk (ICR). It may be taken to represent investors= assessment of conditions in the country in question. Average between 1980 and 1983. Scale from 0 to 10, with lower scores representing lower efficiency levels. Source: International Country Risk Guide.	Definition & Variable from La Porta et. al., 2006.
Inside Ownership	An index of prospectus disclosure requirements regarding the equity	Definition & Variable from La Porta et. al.,

	ownership of the Issuer's shares by its directors and key officers. Equals 1if the law or the listing rules require that the ownership of the Issuer's shares by each of its directors and key officers must be disclosed in the prospectus; equals one-half if only the aggregate number of the Issuer's shares owned by its directors and key officers must be disclosed in the prospectus; equals zero when the ownership of Issuer's shares by its directors and key officers need not be disclosed in the prospectus.	2006.
Disclosure Level	Average ranking of the answers to the following questions: A6g (R&D), B3f (capital expenditure), Ca (subsidiaries), Cb (segment-product), Cc (segment-geographic), and D1 (accounting policy). Robust standard errors are shown in parentheses. See Bushman, Robert M., Joseph D. Piotroski, and Abbie J. Smith, 2004, "What Determines Corporate Transparency?", Journal of Accounting Research,	Definition from La Porta et. al., 2006.
CIFAR	Index created by examining and rating companies' 1995 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 was studied. See Bushman, Robert M., Joseph D. Piotroski, and Abbie J. Smith, 2004, "What Determines Corporate Transparency?", Journal of Accounting Research.	Definition from La Porta et. al., 2006.

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[i] In a cross-country analysis of the firms with a dominant large shareholder, Dahya et al. (2008) find that independent boards are associated with higher valuation, more so in the countries with weak investor protection. This costs the dominant shareholder the perquisites s/he may extract from the firm. It may be argued that a blockholder (other than the dominant shareholder), who gets elected to the corporate board but does not or cannot collude to extract private benefits of control, naturally plays a monitoring role, as does an independent director making the board stronger.

[ii] Bris and Cabolis (2008) show that the cross-border mergers by firms in strong investor protection environments are often value enhancing.

[iii] If the non-dominant large shareholders choose well-governed, high risk-taking firms, there is a possibility of reverse causality between risk taking and the presence of large shareholders in the ownership structure. This possibility is mitigated to a great extent, as the ownership structure is observed at the beginning of the sample period.

[iv] We also use the standard deviation of country industry-adjusted EBITDA as another proxy for CRT. Our untabulated results are almost identical to those obtained using this measure of risk taking.

[v] According to Claessens et al. (2000), in Thailand "Often, several families will jointly own a large stake in a corporation, with one family in the alliance taking the role of primary controlling shareholder."

[vi] Japanese firms that are undivided by the dominant *Family* and *Non-family* shareholders have insignificant difference in risk taking between dispersed ownership firms vs. SLS-firms and SLS-firms vs. MLS firms. However, in non-Japan East Asia, MLS firms have significantly higher risk taking in comparison to SLS-firms.

[vii] As we discuss later, our results are robust to controlling for country dummies which help control for known as well as unknown country effects.

[viii] Although past evidence is mixed, recent literature (e.g., Boubakri et al., 2010) supports expropriation of minority shareholders in family firms. A recent example in Canada that news about the removal of the controlling stake of Franck Stronatch in Magna International pushed up Magna's share prices by about 14% (See Ottawa Citizen, May 7, 2010) also echoes these findings.

[ix] The government may play a monitoring role to increase future privatization proceeds (see Megginson and Netter, 2001). An institution has little incentive to expropriate, as its reputational capital is substantially important for its success (see Attig et al., 2008).

[x] We thank anonymous reviewers for suggesting the last two limitations.

References

Acharya, V., Y. Amihud, & L. Litov, 2009. Creditor rights and corporate risk-taking. *NBER Working Paper Series, available at SSRN: http://ssrn.com/abstract=1518762*

Amihud, Y. & B. Lev, 1981. Risk reduction as a managerial motive for conglomerate mergers. *Rand Journal of Economics* 12, 605–618.

Anderson, R., & D. Reeb, 2003. Founding-family ownership, corporate diversification, and firm leverage. *Journal of Law and Economics* 46, 653-684.

Anderson, R., D. Reeb, & S. Mansi, 2003. Founding-family ownership and the agency cost of debt. *Journal of Financial Economics* 68, 263–285.

Attig N., O. Guedhami., & D. Mishra, 2008. Multiple large shareholders, control contest and implied cost of equity. *Journal of Corporate Finance* 14, 721-737.

Attig N., S. El Ghoul, & O. Guedhami, 2009. Do multiple large shareholders play a corporate governance role? Evidence from East Asia. *Journal of Financial Research* 32, 395-422.

Bae, K-H., Kang, J-K., & Kim, J-M. 2002. Tunneling or value added? Evidence from mergers by Korean business groups. *Journal of Finance* 57, 2695–2740.

Bris, A. & C. Cabolis, 2008. The value of investor protection: Firm evidence from cross-border mergers. *Review of Financial Studies* 21, 605-648.

Bennedsen M. & D. Wolfenzon, 2000. The balance of power in closely held corporations. *Journal of Financial Economics* 58, 113-139.

Berle, A. & G. Means, 1932. The Modern Corporation and Private Property. Mc-Millan, New York.

Beck, T., A. Demirguç-Kunt, & R. Levine, 2003. Law, endowments, and finance. *Journal of Financial Economics* 70, 137-181.

Bertrand, M., S. Johnson, K. Samphantharak, & A. Schoar, 2008. Mixing family with business: a study of Thai business groups and the families behind them. *Journal of Financial Economics* 88, 466-498.

Bertrand, M., P. Mehta, & S. Mullainathan, 2002. Ferreting out tunneling: an application to Indian business groups. *Quarterly Journal of Economics* 117, 121–148.

Bloch F. & U. Hege, 2003. Multiple large shareholders and control contests. *GREQAM & HEC Working paper* .

Boubakri, N., O. Guedhmai, & D. Mishra, 2009. Family control and the implied cost of equity: Evidence before and after the asian financial crisis. *Journal of International Business Studies* 41, 451–474.

Burkart, M., F. Panunzi, & A. Shleifer, 2003. Family firms. *Journal of Finance* 58, 2167-2202.

Burkart, M., D. Gromb, & F. Panunzi, 1997. Large shareholders, monitoring, and the value of the firm. *Quarterly Journal of Economics* 112, 693-728.

Chen, K., Z. Chen, & K. Wei, 2009. Legal protection of investors, corporate governance, and the cost of equity capital. *Journal of Corporate Finance* 15, 273–289.

Chen, E. & J. Nowland, 2010. Optimal board monitoring in family-owned companies: Evidence from Asia. *Corporate Governance: An International Review* 18, 3-17.

Claessens S., S. Djankov, & L. Lang 2000. The separation of ownership and control in East Asian corporations. *Journal of Financial Economics* 58, 81-112.

Claessens S., S. Djankov, J. Fan, & L. Lang, 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance* 57, 2741-2771.

Coles, J., M. Lemmon, & F. Meschke, 2007. Structural models and endogeneity in corporate finance: the Link between managerial ownership and corporate performance. *Available at SSRN: http://ssrn.com/abstract=423510*

Dahya, J., O. Dimitrov & J. McConnell, 2008. Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics* 87, 73-100.

Demirguç-Kunt, A. & R. Levine, 2001. Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development. Cambridge, Massachusetts: MIT Press.

Dhillon, A. & S. Rossetto, 2009. Corporate control and multiple large shareholders. *Warwick University Working Paper*

Demsetz, H. & K. Lehn, 1985. The structure of corporate ownership: causes and consequences. *Journal of Political Economy* 93, 1155-1177.

Durnev, A., R. Morck & B. Yeung, 2004. Value enhancing capital budgeting and firm-specific stock return variation. *Journal of Finance* 59, 65-105.

Dyck A. & L. Zingales, 2004. Control premiums and the effectiveness of corporate governance systems. *Journal of Applied Corporate Finance* 16, 51-72.

Edmans, A. & G. Manso, 2010. Governance through trading and intervention: A theory of multiple blockholders. *Review of Financial Studies*, *In Press*.

Ellul, A., L. Guntay, & U. Lel, 2009. Blockholders, debt agency costs and legal protection. *FRB International Finance Discussion Paper No. 908, available at SSRN: http://ssrn.com/abstract=687371*.

Faccio M. & L. Lang 2002. The ultimate ownership of Western European corporations. *Journal of Financial Economics* 65, 365-395.

Fan J. & T. Wong 2005. Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research* 43, 1-38.

Fan, J., & T. Wong, 2002. Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics* 33, 401-425.

Faleye, O., V. Mehrotra, & R. Morck, 2006. When labor has a voice in corporate governance. *Journal of Financial and Quantitative Analysis* 41, 489–510.

Fogel, K., R. Morck, & B. Yeung, 2008. Big business stability and economic growth: Is what's good for General Motors good for America? *Journal of Financial Economics* 89, 83-108.

Fogel, K., 2006. Oligarchic family control, social economic outcomes, and the quality of government. *Journal of International Business Studies* 37, 603–622.

Gomes A. & W. Novaes. 2005. Sharing of control versus monitoring as corporate governance mechanisms. *Working Paper, Wharton School*

Grossman, S. & O. Hart, 1988. One-share-one-vote and the market for corporate control. *Journal of Financial Economics* 20, 175-202.

Guedhami, O., & D. Mishra, 2009. Excess control, corporate governance, and implied cost of equity: international evidence. *The Financial Review* 44, 489-524.

Guedhami, O., & J. Pittman, 2006. Ownership concentration in privatized firms: the role of disclosure standards, auditor choice, and auditing infrastructure. *Journal of Accounting Research* 44, 889-929.

Hail L. & C. Leuz 2006. International differences in cost of equity capital: Do legal institutions and securities regulations matter? *Journal of Accounting Research* 44, 485-531.

Haw, I.-M., B. Hu, L.-S. Hwang & W. Wu, 2004. Ultimate ownership, income management, and legal and extra-legal institutions. *Journal of Accounting Research* 42, 423-462.

Himmelberg, C., R. Hubbard & D. Palia, 1999. Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics* 53, 353-384.

Holderness, C., 2009. The myth of diffuse ownership in the United States. *Review of Financial Studies* 22, 1377-1408.

Jensen, M. & W. Meckling, 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305-360.

John, K., L. Litov, & B. Yeung, 2008. Corporate governance and risk-taking. *The Journal of Finance* 63, 1679-1728.

Kahn C. & A. Winton, 1998. Ownership structure, speculation, and shareholder intervention. *Journal of Finance* 53, 99-129.

La Porta, R., F. Lopez-de-Silanes & A. Shleifer, 1999. Corporate ownership around the world. *Journal of Finance* 54, 471-517.

La Porta, R., F. Lopez-de-Silanes & A. Shleifer, 2006. What works in securities laws? *Journal of Finance* 61, 1-32.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer & R. W. Vishny, 1998. Law and finance. *Journal of Political Economy* 106, 1113-1155.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer & R. W. Vishny, 2000. Investor protection and corporate governance. *Journal of Financial Economics* 58*, 3-27*.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer & R. W. Vishny, 2002. Investor protection and corporate valuation. *Journal of Finance* 57, 1147-1170.

Laeven, L. & R. Levine, 2008. Complex ownership structures and corporate valuations. *Review of Financial Studies* 21, 579-604.

Laeven, L. & R. Levine, 2009. Bank governance, regulation and risk taking. *Journal of Financial Economics* 93, 259-275.

Leuz, C., D. Nanda & P. Wysock, 2003. Earnings management and investor protection: an international comparison. *Journal of Financial Economics* 69, 505-527.

Lombardo, D., & M. Pagano, 2002. Law and equity markets: a simple model. *In: McCahery, Joseph A. (Ed.), Corporate Governance Regimes: Convergence and Diversity*. Oxford University Press, London.

Maury B. & A. Pajuste, 2005. Multiple controlling shareholders and firm value. *Journal of Banking and Finance* 29, 1813-1834.

May, D., 1995. Do managerial motives influence firm risk-reduction strategies? *Journal of Finance* 50, 1291-1308.

Megginson W. & J. Netter, 2001. From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature* 39, 321-389.

Morck R., and M. Nakamura, 1999. Banks and corporate control in Japan. *Journal of Finance* 54, 319–339.

Morck, R., B. Yeung, & W. Yu, 2000. The information content of stock markets: Why do emerging markets have synchronous stock price movements? *Journal of Financial Economics* 59, 215–38.

Morck, R., D. Wolfenzon, & B. Yeung, 2005. Corporate governance, economic entrenchment and growth. *Journal of Economic Literature* 43, 655-720.

Nenova, T., 2003. The value of corporate voting rights and control: A cross-country analysis. *Journal of Financial Economics* 68, 325-351.

Pagano M. & A. Röell, 1996.The choice of stock ownership structure: Agency costs, monitoring, and the decision to go public. *Quarterly Journal of Economics* 113, 187-225.

Paligorova, T., 2010. Corporate risk-taking and ownership structure. *Bank of Canada Working Paper*

Shleifer, A., & R. Vishny, 1986. Large shareholders and corporate control. *Journal of Political Economy* 94, 461-488.

Shleifer, A., & D. Wolfenzon, 2002. Investor protection and equity markets. *Journal of Financial Economics* 66, 3-27.

Stulz, R. 2005. The limits of financial globalization. *Journal of Finance* 60, 1595-1638.

Villalonga, B., & A. Amit, 2009. Family control of firms and industries. *Financial Management, forthcoming.*

Shyu, Y-W. & C. Lee, 2009. Excess control rights and debt maturity structure in family-controlled firms. *Corporate Governance: An International Review* 17, 611-628.

Winton A, 1993. Limitation of liability and the ownership structure of the firm. *Journal of Finance* 48, 487-512.

Yeh, Y., T. Lee, & T. Woidtke, 2001. Corporate governance and performance: The case of Taiwan. *International Review of Finance* 2, 21-48.

Zwiebel J., 1995. Block investment and partial benefits of corporate control. *Review of Economic Studies* 62, 161-185.

Table 1
Ownership, Risk Taking and Control Variables by Country

Country	HONG KONG	INDONESIA	JAPAN	MALAYSIA	PHILIPPINES	SINGAPORE	SOUTH KOREA	TAIWAN	THAILAND
Panel A: Ownership Variables by Country									
Vote 1	32.45	35.98	10.91	32.37	28.00	30.67	21.94	24.40	36.92
Vote 2	4.88	9.09	2.56	9.28	9.29	9.42	4.74	6.91	14.84
Presence1	100%	98%	60%	99%	98%	99%	90%	98%	99%
Presence2	32%	62%	7%	62%	57%	67%	24%	59%	88%
Presence3	8%	9%	1%	21%	9%	20%	1%	18%	53%
Presence4	1%	0%	0%	7%	2%	2%	0%	4%	19%
Presence5	0%	0%	0%	0%	0%	0%	0%	0%	3%
Family	72%	78%	14%	75%	54%	58%	70%	58%	61%
Panel B: Risk Taking and Control Variables by Country									
CRT x 100	5.14	6.29	9.50	5.18	6.12	4.70	4.42	3.35	5.95
Firm Size	12.58	12.09	13.68	12.40	12.35	12.32	13.49	12.91	12.40
Initial Profit	0.09	0.13	0.06	0.10	0.10	0.09	0.09	0.08	0.10
Initial Leverage	23.53	34.82	30.39	23.37	25.50	23.92	45.34	23.30	39.20
Initial Growth	0.12	-0.09	-0.08	0.01	0.09	0.06	0.02	0.09	-0.07
Earnings Smooth	-0.11	0.06	0.03	-0.11	-0.19	-0.06	0.07	-0.02	-0.12
N- Risk Taking	9.31	8.91	9.88	9.26	8.82	9.21	8.94	8.93	9.03
Investor Protection	0.85	0.51	0.42	0.73	0.81	0.77	0.36	0.55	0.37
Anti Director	5.00	2.00	4.00	4.00	3.00	4.00	2.00	3.00	2.00
Liability Standards	0.66	0.66	0.66	0.66	1.00	0.66	0.66	0.66	0.22
Effective Judiciary	10.00	2.50	10.00	9.00	4.75	10.00	6.00	6.75	3.25
Inside Ownership	1.00	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00
Disclosure	79.71		100.00	100.00	80.07	100.00	65.22	59.78	51.07
CIFAR	73.00		71.00	79.00	64.00	79.00	68.00	58.00	66.00
Private Credit	1.36	0.26	1.69	0.80	0.29	0.95	0.81	0.91	0.68
Market Size	1.28	0.05	0.73	1.07	0.21	1.23	0.25	0.49	0.26
Competitive	0.09	0.16	0.01	0.03	0.47	0.07	0.14	0.10	0.06
Unionization	18.50	2.60	18.60	11.70	22.80	13.50	9.00	27.90	3.10
Govt Spending	7.20	9.50	9.20	15.50	8.70	10.90	10.90	15.50	10.70
N	154	55	881	117	56	102	154	95	72

The table presents descriptive statistics by country for ownership variables, firm level Corporate Risk Taking (CRT), firm and country level control variables. The sample is drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we can estimate CRT. The CRT is estimated as the standard deviation of the annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by the country year median EBITDA estimated using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period.

Table 2
Univariate Test of Difference in Corporate Risk Taking and MLS Structures

Country	Variables	Non-Family					Family		
Country		OWNERSHIP			TSTAT		OWNERSHIP		TSTAT
		NONE	SLS	MLS	SLS-NONE	MLS-SLS	SLS	MLS	MLS-SLS
Other	CRT%	5.38	4.40	4.65	-0.94	0.65	4.37	5.95	4.216
	σ CRT%	4.69	2.77	3.29			2.81	5.39	
	N	22	92	153			279	259	
Japan	CRT%	9.49	9.43	9.42	-0.50	-0.03	9.73	10.03	2.449
	σ CRT%	1.37	2.20	1.89			1.62	1.17	
	N	352	350	55			117	7	

This table presents univariate test of difference in average Corporate Risk Raking (CRT) between the firms with dominant large shareholder (SLS), Multiple Large Shareholders (MLS) and disperse ownership (NONE) in family controlled and non-family controlled Japanese and Other East Asian firms. The sample is drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we can estimate CRT. The CRT is estimated as the standard deviation of the annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by the country year median EBITDA estimated using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period.

Table 3

Pairwise Correlation Coefficients

Variable	Presence1	Presence2	Initial Size	Initial Profitability	Initial Leverage	Earnings Smoothing	N-Risk Taking	Initial Growth	Investor Protection	Anti-Director	Liability Standards	Effective Judiciary	Inside Own	Discloser	CIFAR	Private Credit	Market Size	Competitive	Govt Spending
Presence2	0.33																		
Initial Size	-0.29	-0.28																	
Initial Profitability	0.11	0.16	-0.06																
Initial Leverage	-0.07	-0.04	0.27	-0.21															
Earnings Smoothing	-0.10	-0.06	0.08	-0.08	0.10														
N-Risk Taking	-0.33	-0.30	0.21	-0.07	-0.04	0.08													
Initial Growth	0.19	0.15	-0.09	0.18	-0.06	-0.08	-0.24												
Investor Protection	0.31	0.31	-0.29	0.16	-0.22	-0.11	-0.28	0.35											
Anti-Director	-0.14	-0.23	0.06	-0.12	-0.23	-0.03	0.40	0.03	0.42										
Liability Standards	-0.03	-0.16	0.03	-0.02	-0.10	0.00	0.02	0.12	0.32	0.25									
Effective Judiciary	-0.26	-0.36	0.18	-0.20	-0.15	0.02	0.51	-0.07	0.08	0.89	0.23								
Inside Own	0.42	0.44	-0.28	0.20	-0.02	-0.09	-0.56	0.38	0.62	-0.28	-0.08	-0.44							
Discloser	-0.29	-0.32	0.14	-0.14	-0.12	0.04	0.51	-0.23	-0.03	0.70	0.35	0.86	-0.70						
CIFAR	-0.01	-0.02	-0.07	0.03	-0.09	-0.02	0.18	-0.04	0.36	0.55	0.03	0.59	-0.05	0.65					
Private Credit	-0.39	-0.49	0.30	-0.26	-0.04	0.06	0.61	-0.22	-0.39	0.67	0.00	0.84	-0.75	0.67	0.18				
Market Size	0.02	-0.03	-0.06	-0.04	-0.23	-0.05	0.20	0.14	0.61	0.88	0.08	0.77	0.09	0.51	0.75	0.39			
Competitive	0.26	0.26	-0.19	0.17	0.02	-0.06	-0.47	0.24	0.40	-0.44	0.47	-0.64	0.53	-0.50	-0.38	-0.73	-0.41		
Govt Spending	0.19	0.31	-0.12	0.08	-0.04	-0.02	-0.29	0.10	0.08	-0.35	-0.11	-0.28	0.45	-0.26	-0.11	-0.48	-0.10	0.01	
Unionization	-0.16	-0.24	0.14	-0.17	-0.18	0.00	0.25	0.07	0.12	0.56	0.51	0.55	-0.25	0.27	-0.36	0.51	0.29	-0.06	-0.07
N	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686	1631	1631	1686	1686	1686	1686

The table presents the pairwise correlation coefficients of all test and control variables. The sample drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we are able to estimate CRT. The risk taking dependent variable is estimated as the standard deviation of the annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by the country year median EBITDA estimated using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period. The construction of other variables is described in Appendix A.1.

Table 4
Baseline Evidence: Dominant Shareholder and Corporate Risk Taking

Model	(1)	(2)	(3)	(4)	(5)
Presence1	-0.61***				
	(-3.99)				
Family1		-0.66***			
		(-3.15)			
State1		-0.47			
		(-1.23)			
Widely1		-0.96***			
		(-2.88)			
Ownership1			-0.01*		
			(-1.81)		
Family X Ownership1				-0.01	
				(-1.00)	
State X Ownership1				-0.01	
				(-0.87)	
Widely X Ownership1				-0.02	
				(-1.59)	
Group Affiliation					0.27*
					(1.66)
Initial size	-0.37***	-0.37***	-0.36***	-0.36***	-0.36***
	(-6.28)	(-6.21)	(-6.10)	(-5.96)	(-6.14)
Initial profit	2.61	2.69	2.72	2.75	2.61
	(0.79)	(0.81)	(0.82)	(0.82)	(0.78)
Initial leverage	0.01	0.01	0.01	0.01	0.01
	(1.35)	(1.27)	(1.35)	(1.32)	(1.36)
Initial Growth	-2.21***	-2.16***	-2.20***	-2.21***	-2.25***
	(-3.80)	(-3.71)	(-3.77)	(-3.79)	(-3.83)
Earnings Smooth	-0.76**	-0.76**	-0.76**	-0.75**	-0.75**
	(-2.53)	(-2.49)	(-2.51)	(-2.47)	(-2.47)
N-Risk Taking	-0.20	-0.20	-0.17	-0.17	-0.17
	(-0.81)	(-0.83)	(-0.68)	(-0.69)	(-0.69)
Investor Protection	23.24***	22.92***	23.88***	23.75***	22.60***
	(4.94)	(4.88)	(5.02)	(5.00)	(4.78)
Competitive	10.07***	9.65***	9.60***	9.81***	10.13***
	(2.78)	(2.68)	(2.67)	(2.72)	(2.81)
Private Credit	16.44***	15.85***	16.52***	16.54***	16.38***
	(7.26)	(6.99)	(7.37)	(7.37)	(7.27)
Market Size	-12.50***	-12.24***	-12.77***	-12.74***	-12.28***
	(-6.01)	(-5.85)	(-6.10)	(-6.09)	(-5.84)
Govt Spending	0.68***	0.65***	0.68***	0.68***	0.67***
	(3.78)	(3.64)	(3.82)	(3.80)	(3.78)
Unionization	-0.40***	-0.39***	-0.41***	-0.40***	-0.39***
	(-5.40)	(-5.27)	(-5.48)	(-5.44)	(-5.34)
Industry Effects	Yes	Yes	Yes	Yes	Yes
Constant	-10.95***	-10.19***	-11.80***	-11.94***	-11.85***
	(-2.98)	(-2.70)	(-3.27)	(-3.29)	(-3.29)
Observations	1,686	1,686	1,686	1,686	1,686
Adjusted R-squared	36.30%	36.30%	36.10%	36.00%	36.00%

The table presents baseline regressions of Corporate Risk Taking (CRT) on the presence, ownership and type of dominant shareholder for the sample of 1686 firms that have a controlling large shareholder. The sample drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we are able to estimate CRT. The CRT is estimated as the standard deviation of annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by country year median EBITDA easting using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period. Presence1 (1 if Vote1=>10, 0 otherwise) is measured as of 1996. Initial size and Initial leverage are measured as of 1996 or the earliest year for which the value is available. Initial Growth is estimated as the increase in sales over 1994 to 1997, Earnings Smoothing is estimated using data from 1996 to 2004 following John et al. (2008) and related literature, which is a measure of the extent of earnings management in the firm, and N-Risk Taking is the number of observations used in estimating the proxy of corporate risk taking. Robust t-statistics based on Huber-White sandwich standard errors are presented inside the parenthesis, ***,**,*, representing significance at the 1%, 5% and 10% levels.

Table 5
Main Evidence: Multiple Large Shareholders and Corporate Risk Taking

Model	(1)	(3)	(5)	(2)	(4)	(6)	(7)
Presence2	0.77***						
	(3.46)						
Vote2		0.06***					
		(3.25)					
Vote21			0.75**				
			(2.29)				
Presence2345				0.54***			
				(2.91)			
Vote2345					0.04***		
					(3.07)		
Vote23451						0.44**	
						(2.11)	
High-Diff							-0.09
							(-0.60)
Ownership1	-0.01	-0.01	-0.00	-0.00	-0.00	-0.00	-0.00
	(-0.61)	(-0.64)	(-0.31)	(-0.61)	(-0.58)	(-0.36)	(-0.29)
Initial size	-0.42***	-0.42***	-0.44***	-0.42***	-0.42***	-0.43***	-0.46***
	(-5.85)	(-5.87)	(-5.91)	(-5.88)	(-5.75)	(-5.97)	(-6.20)
Initial profit	1.41	1.46	1.41	1.61	1.62	1.52	1.52
	(0.41)	(0.42)	(0.40)	(0.46)	(0.47)	(0.44)	(0.43)
Initial leverage	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(1.49)	(1.60)	(1.61)	(1.51)	(1.56)	(1.60)	(1.59)
Initial Growth	-2.26***	-2.31***	-2.27***	-2.30***	-2.31***	-2.26***	-2.24***
	(-3.83)	(-3.90)	(-3.83)	(-3.88)	(-3.90)	(-3.82)	(-3.80)
Earnings Smooth	-0.91***	-0.91***	-0.93***	-0.92***	-0.90***	-0.92***	-0.93***
	(-2.65)	(-2.62)	(-2.66)	(-2.66)	(-2.60)	(-2.64)	(-2.66)
N-Risk Taking	-0.23	-0.24	-0.23	-0.25	-0.25	-0.23	-0.22
	(-0.92)	(-0.94)	(-0.89)	(-0.98)	(-0.98)	(-0.91)	(-0.85)
Investor Protection	23.11***	22.89***	23.06***	22.97***	22.01***	22.58***	22.75***
	(4.92)	(4.87)	(4.88)	(4.89)	(4.72)	(4.82)	(4.84)
Competitive	13.07***	12.37***	11.52***	13.61***	12.03***	11.29***	10.73***
	(3.68)	(3.57)	(3.32)	(3.77)	(3.46)	(3.25)	(3.04)
Private Credit	17.39***	17.08***	16.77***	17.43***	16.64***	16.51***	16.29***
	(7.57)	(7.56)	(7.41)	(7.55)	(7.42)	(7.34)	(7.25)
Market Size	-12.42***	-12.30***	-12.33***	-12.33***	-11.90***	-12.11***	-12.15***
	(-6.02)	(-5.97)	(-5.96)	(-5.97)	(-5.81)	(-5.89)	(-5.91)
Govt Spending	0.74***	0.72***	0.71***	0.74***	0.68***	0.69***	0.69***
	(4.13)	(4.07)	(4.00)	(4.13)	(3.86)	(3.90)	(3.88)
Unionization	-0.42***	-0.41***	-0.41***	-0.42***	-0.39***	-0.40***	-0.40***
	(-5.61)	(-5.48)	(-5.46)	(-5.58)	(-5.30)	(-5.39)	(-5.38)
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-12.36***	-11.99***	-11.40***	-12.39***	-11.15***	-10.87***	-9.77**
	(-3.37)	(-3.28)	(-3.08)	(-3.36)	(-3.08)	(-2.98)	(-2.56)
Observations	1,312	1,312	1,312	1,312	1,312	1,312	1,312
Adjusted R-squared	32.7%	32.8%	32.3%	32.8%	32.9%	32.4%	32.1%

The table presents baseline regressions of Corporate Risk Taking (CRT) on the presence of Multiple Large Shareholders (MLS) for the sample of 1,312 firms that have a controlling large shareholder. The sample is drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we are able to estimate CRT. The CRT is estimated as the standard deviation of annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by country year median EBITDA estimated using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period. Presence2 (1 if Vote2=>10, 0 otherwise) for the firms in which the first largest shareholder also holds at least 10% voting rights is measured as of 1996. Initial size and Initial leverage are measured as of 1996 or the earliest year for which the value is available. Initial Growth is estimated as the increase in sales over 1994 to 1997, Earnings Smoothing is estimated using data from 1996 to 2004 following John et al. (2008) and related literature, which is a measure of the extent of earnings management in the firm, and N-Risk Taking is the number of observations used in estimating the proxy of corporate risk taking. The table also includes a proxy of investor protection extracted from La Porta et al. (1998) and other country level control variables extracted from John et al. (2008). All test and control variables are defined in detail in Appendix A.1. Robust T-statistics based on Huber-White sandwich standard errors are presented inside the parenthesis, ***,**,*, representing significance at the 1%, 5% and 10% levels.

Table 6
Main Evidence: Family Control, Multiple Large Shareholders and Corporate Risk Taking

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Family				Non-family			
Presence2	1.40***				-0.08			
	(4.00)				(-0.27)			
Presence2345		0.84***				0.15		
		(3.01)				(0.61)		
Vote2			0.08***				0.01	
			(3.17)				(0.30)	
Vote2345				0.05***				0.01
				(2.93)				(0.55)
Ownership1	0.02	0.02	0.01	0.01	-0.01	-0.01	-0.01	-0.01
	(1.32)	(1.24)	(1.09)	(1.16)	(-0.80)	(-0.65)	(-0.76)	(-0.67)
Initial size	-0.57***	-0.57***	-0.58***	-0.57***	-0.31***	-0.29***	-0.30***	-0.29***
	(-5.38)	(-5.27)	(-5.37)	(-5.20)	(-3.25)	(-3.35)	(-3.18)	(-3.28)
Initial profit	-2.66	-2.61	-2.52	-2.34	8.58***	8.68***	8.55***	8.60***
	(-0.62)	(-0.59)	(-0.57)	(-0.53)	(3.69)	(3.81)	(3.68)	(3.71)
Initial leverage	0.02**	0.02*	0.02**	0.02**	0.00	0.00	0.00	0.00
	(1.99)	(1.90)	(2.09)	(1.98)	(0.68)	(0.64)	(0.65)	(0.65)
Initial Growth	-2.13***	-2.19***	-2.27***	-2.24***	-1.55*	-1.62*	-1.58*	-1.61*
	(-2.83)	(-2.92)	(-2.98)	(-2.96)	(-1.75)	(-1.82)	(-1.78)	(-1.80)
Earnings Smooth	-2.43***	-2.44***	-2.42***	-2.40***	0.34	0.34	0.34	0.34
	(-4.20)	(-4.14)	(-4.13)	(-4.06)	(1.05)	(1.04)	(1.05)	(1.06)
N-Risk Taking	-0.54	-0.52	-0.53	-0.53	-0.02	-0.03	-0.02	-0.02
	(-1.43)	(-1.39)	(-1.41)	(-1.40)	(-0.08)	(-0.12)	(-0.07)	(-0.10)
Investor Protection	25.74***	25.98***	24.96***	23.99***	12.50**	12.73**	12.91**	12.76**
	(4.34)	(4.35)	(4.17)	(4.02)	(2.20)	(2.23)	(2.22)	(2.24)
Competitive	14.35***	14.60***	13.13***	12.45***	10.34*	11.57*	10.72*	10.94*
	(3.20)	(3.16)	(2.98)	(2.83)	(1.70)	(1.94)	(1.78)	(1.84)
Private Credit	18.66***	18.60***	17.86***	17.17***	12.44***	12.96***	12.76***	12.81***
	(6.21)	(6.13)	(5.99)	(5.81)	(5.27)	(5.54)	(5.36)	(5.52)
Market Size	-13.49***	-13.54***	-13.04***	-12.61***	-8.24***	-8.34***	-8.43***	-8.35***
	(-5.04)	(-5.01)	(-4.82)	(-4.66)	(-3.26)	(-3.29)	(-3.25)	(-3.30)
Govt Spending	0.83***	0.83***	0.80***	0.74***	0.38**	0.41**	0.40**	0.40**
	(3.76)	(3.75)	(3.60)	(3.35)	(1.99)	(2.14)	(2.06)	(2.07)
Unionization	-0.45***	-0.46***	-0.43***	-0.41***	-0.25***	-0.26***	-0.26***	-0.26***
	(-4.86)	(-4.84)	(-4.60)	(-4.41)	(-3.16)	(-3.28)	(-3.21)	(-3.22)
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-11.53**	-11.61**	-10.44**	-9.19*	-5.87	-6.98	-6.61	-6.79
	(-2.48)	(-2.44)	(-2.22)	(-1.96)	(-1.08)	(-1.36)	(-1.19)	(-1.29)
Observations	662	662	662	662	650	650	650	650
Adjusted R-squared	28.10%	27.80%	27.70%	27.60%	45.90%	46.00%	45.90%	46.00%

The table presents baseline regressions of Corporate Risk Taking (CRT) on the presence of Multiple Large Shareholders (MLS) for the sample of 1,312 firms that have a controlling large shareholder by dividing them into family controlled and non-family controlled. The sample is drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we are able to estimate CRT. A firm is classified as family controlled if the largest shareholder with 10% or more voting rights is either family or individual and non-family controlled if the largest shareholder with 10% or more voting rights is other than a family or individual. The CRT is estimated as the standard deviation of annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by country year median EBITDA estimated using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period. Presence2 (1 if Vote2=>10, 0 otherwise) for the firms in which the first largest shareholder also holds at least 10% voting rights is measured as of 1996. Initial size and Initial leverage are measured as of 1996 or the earliest year for which the value is available. Initial Growth is estimated as the increase in sales over 1994 to 1997, Earning Smoothing is estimated using data from 1996 to 2004 following John et al. (2008) and related literature, which is a measure of the extend of earnings management in the firm, and N-Risk Taking is the number of observations used in estimating the proxy of corporate risk taking. The table also includes a proxy of investor protection extracted from La Porta et al. (1998) and other country level control variables extracted from John et al. (2008). All test and control variables are defined in detail in Appendix A.1. Huber-White robust t-statistics (corrected for country clustering where stated) are presented inside the parenthesis, ***,**,*, representing significance at the 1%, 5% and 10% levels.

Table 7
Robustness: Multiple Large Shareholders, Investor Protection and Corporate Risk Taking

Model	(1)	(2)	(3)	(4)	(5)	(6)
Presence2	0.78***	0.89***	0.80***	0.83***	0.74***	0.83***
	(3.57)	(3.88)	(3.60)	(3.84)	(3.09)	(3.43)
Initial Size	-0.41***	-0.45***	-0.45***	-0.42***	-0.41***	-0.42***
	(-5.74)	(-6.26)	(-6.23)	(-6.06)	(-5.76)	(-5.89)
Initial Profitability	1.39	1.57	1.73	1.76	1.59	1.46
	(0.41)	(0.44)	(0.48)	(0.51)	(0.44)	(0.40)
Initial Leverage	0.01*	0.01	0.01	0.01**	0.01**	0.01*
	(1.82)	(1.28)	(1.18)	(2.07)	(2.13)	(1.94)
Initial Growth	-1.93***	-2.43***	-2.50***	-1.55***	-1.52**	-1.75***
	(-3.30)	(-4.05)	(-4.14)	(-2.66)	(-2.51)	(-2.88)
Earnings Smoothing	-0.90***	-0.99***	-0.97***	-0.96***	-0.92***	-0.95***
	(-2.62)	(-2.81)	(-2.77)	(-2.76)	(-2.59)	(-2.66)
N-Risk Taking	-0.35	-0.17	-0.14	-0.46*	-0.45*	-0.38
	(-1.36)	(-0.67)	(-0.55)	(-1.78)	(-1.70)	(-1.44)
Anti-Director Rights	4.03***					
	(7.19)					
Liability Standards		5.44***				
		(3.49)				
Effective Judiciary			0.60**			
			(2.24)			
Inside Ownership				-7.34***		
				(-9.64)		
Disclosure Level					0.11***	
					(7.17)	
CIFAR						0.56***
						(5.25)
Competitive	12.32***	4.06	6.33	22.20***	-11.06	-18.36
	(3.54)	(0.95)	(1.14)	(5.56)	(-1.24)	(-1.51)
Private Credit	7.14***	7.08***	4.97**	7.38***	0.66	0.11
	(8.03)	(7.18)	(2.49)	(8.08)	(0.25)	(0.03)
Market Size	-9.57***	-2.48***	-4.36***	0.74	-4.86***	-9.96***
	(-9.37)	(-6.50)	(-3.69)	(1.37)	(-5.70)	(-5.09)
Govt Spending	0.43***	0.07	-0.02	0.43***	-0.44*	-0.57*
	(3.45)	(0.63)	(-0.13)	(3.60)	(-1.80)	(-1.78)
Unionization	-0.30***	-0.15***	-0.11**	-0.20***	0.08	0.41***
	(-6.10)	(-3.85)	(-2.19)	(-5.16)	(1.04)	(2.68)
Industry Effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-2.14	4.66*	6.86**	9.16***	13.11***	-16.78***
	(-0.88)	(1.96)	(2.45)	(3.75)	(2.90)	(-4.93)
Observations	1,312	1,312	1,312	1,312	1,258	1,258
Adjusted R-squared	34.80%	31.50%	31.00%	36.40%	36.30%	35.10%

The table presents robustness tests of the relationship between Corporate Risk Taking (CRT) and Multiple Large Shareholders (MLS) for the sample of 1,312 firms that have a controlling large shareholder and uses various proxies of investor protection (or lack of investor protection) in a country. The sample is drawn from non-financial firms from nine East Asian countries represented in the Claessens et al. (2000) ownership dataset for which we are able to estimate CRT. The CRT is estimated as the standard deviation of annual Earnings Before Interest Tax and Depreciation scaled by total assets (EBITDA), adjusted by country year median EBITDA estimated using data from 1996 to 2005 for the firms with a minimum of 4 observations over this period. Presence2 (1 if Vote2=>10, 0 otherwise) for the firms in which the first largest shareholder also holds at least 10% voting rights is measured as of 1996. Initial Size and Initial Leverage are measured as of 1996 or the earliest year for which the value is available. Initial Growth is estimated as the increase in sales over 1994 to 1997, Earnings Smoothing is estimated using data from 1996 to 2004 following John et al. (2008) and related literature, which is measure of the extend of earnings management in the firm, and N-Risk Taking is the number of observations used in estimating the proxy of CRT. The table also includes several proxies of investor protection extracted from La Porta et al. (1998, 2006) and other country level control variables extracted from John et al. (2008). All test and control variables are defined in detail in Appendix A.1. Robust t-statistics based on Huber-White sandwich standard errors are presented inside the parenthesis, ***,**,*, representing significance at the 1%, 5% and 10% levels.