CORPORATE CONTROL AND FIRM PERFORMANCE: DOES THE TYPE OF OWNERS MATTER?

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Abstract:

The paper extends the ownership study by examining the different types of large shareholders in relation to its impact on organizational outcome in Indonesia using a dataset consisting of 190 non-financial companies listed in Jakarta Stock Exchange in 2002. The study investigates the effect of family ownership, foreign blockholder, domestic institutional shareholders, and the board of directors on firm performance. The results confirm the different impact of different large shareholders type on firm performance. Controlling family ownership is more likely to exacerbate agency problems while the presence of foreign investor is related to superior firm performance. Domestic blockholders is insignificantly related to firm performance. However, the interaction effect between family and domestic blockholders ownership is negatively related to firm performance, offering empirical evidence to the existence of interlocking blockholders in Indonesia to deprive minority shareholders from their rights.

Keyword: Corporate Governance, Large Shareholders, Board Structure, Firm Performance

JEL Classification: G32, G35

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1. Introduction

The structure of corporate ownership has been argued as being is the most important dimension of governance mechanism as it determines the distribution of control among contracting parties. The structure forms the nature of agency conflict specific to the firm and accordingly the very purpose of corporate governance portfolio adopted by the firm (Shleifer & Vishny 1997). In the dispersed firms, agency problem is related to the conflict between insider manager and outside shareholders. In contrast, the problem stems from utility maximizing behaviour of majority shareholders that diverges from those of minority shareholders whenever the corporate ownership is concentrated.

Traditionally, the structure incorporates the level of shareholding and the type of large shareholders. The level of shareholding has been claimed as potentially helping to create the convergence of interest between those of agent and principal (Jensen & Meckling 1976). However, higher shareholding provides majority owners with sufficient voting power to entrench themselves that leads to the expropriation of minority shareholders associated with the private benefit of control (La Porta et al. 1999; La Porta et al. 2000; Claessens et al. 2002). The type of large shareholders has been associated with different demand of governance configuration that potentially that results in different organizational outcome (Johnson & Greening 1999; Dahlquist & Robertsson 2001; Jiambalvo, Rajgopal & Venkatachalam 2002; Gillan & Starks 2003). Nevertheless, literature addressing this issue fails to document the individual impact of different
shareholders types on firm performance simultaneously. Accordingly, the effect of the multiple types of large shareholders on firm performance remains an open empirical question.

The paper extends the blockholder study in relation to Indonesian context that has been proven as having a unique institutional setting. Particularly, the study investigates the effect of family ownership, foreign blockholder, domestic institutional shareholders, and the board of directors on the organizational outcome. The results confirm the different impact of different large shareholders on firm performance. Controlling family ownership is more likely to exacerbate agency problems while the presence of foreign investor is related to superior firm performance. Domestic blockholders is insignificantly related to firm performance. However, the contestability effect between family and domestic blockholders ownership is negatively related to firm performance, supporting empirical evidence to the existence of interlocking blockholders in Indonesia to deprive minority shareholders from their rights.

The study contributes to governance literature in several ways. First, the study disentangles the different types of large shareholders in relation to the organizational outcome. This procedure is more likely to provide clearer tests on the individual impact of a particular blockholders on firm performance. Second, instead of using absolute level of shareholding, the study adopts contestability indicator that produce a better measure of corporate control. However, the study suffers from measurement and interdependence issues and thus, the results should be interpreted cautiously.
The remainder of the paper is organized as follow. The next section discusses the theoretical background and hypothesis development. The following section presents results method. The analysis and finding is presented in section 4. The last section discusses and summarizes the study.

2. Theoretical background and hypothesis development

Within agency theory, ownership structures determine the distribution of corporate control that lead to the nature of agency conflict specific to the firm (Barca & Becht 2001). In the dispersed firm, agency problems stem from the divergence of interest between those of managers and those of owners, where the free riding problem associated with diffused shareholders has been quoted as leading to a weak monitoring. Shleifer and Vishny (1986) argue that large shareholders might serve as a governance mechanism as a significant ownership provides the holders with the incentive and power to vote against management actions. Accordingly, it is asserted that blockholder facilitates disciplinary action and creates the condition necessary for effective corporate governance (Smith & Walter 2006). Empirical works claim that the presence of a blockholder may mitigate the agency problem as this type of owner has the incentive to monitor and the power to discipline management (Clyde 1997; Jones, Lee & Tompkins 1997; Jiambalvo, Rajgopal & Venkatachalam 2002). Moreover, Maug (1998) argues that monitoring by large shareholders is also associated with the capital gain associated with their private information from monitoring actions, where such benefit is theoretically supported since the trade-off between liquidity and control does not exist.
However, the identity of shareholders is an important dimension of ownership structure as higher ownership by different types of shareholders has been argued as producing a different impact on the association between control of the firms and organizational outcome. In the work of Jiambalvo, Rajgopal and Venkatachalam (2002), the term ‘large owner’ refers to institutional shareholders, where their substantial ownership has been claimed as providing necessary incentive and economic rationale to collect information and monitor management. Eventually, such shareholders are expected to have a positive association with value-enhancing activities. For example, Dechow, Sloan and Sweeney (1996) argue that firms under investigation for manipulation of earnings have less outside blockholders, suggesting that better informed blockholders reduce the perceived benefit of managing accruals. Ultimately, a significant shareholding enables the institutional shareholder to oust poorly performing management, thus providing managers with incentive to perform better. In other works, the term ‘large shareholder’ refers to the family ownership that is prevalent in Asia, European, and Latin America (Lins 2002). Khan (1999) posits that family-based control, especially in Asia, has been accepted as an indisputable fact. Previous works have documented that ownership concentration negatively affects firm performance in East Asia (Claessens et al. 2002) and in developed countries (Gadhoum 2000; Ehrhardt & Nowak 2003) whenever such concentration is held by family. Morck and Yeung (2003) suggest that control by family serves as a device in pursuing the family interest that is not shared with the other shareholders. The private benefit of control associated with ownership concentration facilitates the family to divert firm resources in order to maximize their wealth and thereby deprives minority shareholders from their rights.
The role of the large shareholder as a governance mechanism also depends on the level of corporate governance of their country of origin where the firm is incorporated. Doidge (2004) argues that developed countries like the US provide strong investor protection through various regulations and market mechanisms which, in turn, force firms to adopt sound corporate governance practices. This protection facilitates continuous scrutiny by shareholders (Doidge, Karolyi & Stulz 2004) and, consequently, investing firms face performance pressure that ensures they monitor their foreign investment (Boardman, Shapiro & Vining 1997). Accordingly, it is beneficial for the host economy to sell a fraction of a company to a foreign firm that has already operated in that country with good governance practice (La Porta et al., 2000). This investment pattern is believed to bring about improvement in corporate governance of host firms, since investing firms will demand such improvement to secure their investment.

The previous discussion reveals that the types of large shareholders might produce different impacts on organizational outcome. Therefore, it is predicted that the association between family ownership, foreign and domestic large shareholders and firm performance will exhibit different pattern. The formal hypothesis is as follows

\[ H_1: \text{The association between family ownership, foreign and domestic large shareholders and firm performance will exhibit different direction and magnitude.} \]

3. Research Method
The sample is based on all industrial firms that were listed in Jakarta Stock Exchange (JSX) as at 31 December 2002, excluding banking and financial services firms as these industries have been documented as having specific governance characteristics (Campbell & Keys, 2002) and accounting standard (Lemmon and Lins, 2001). The sample also excludes the firms that were not presented in all data sources. Performance indicators are obtained from Indonesian Capital Market Directory (ICMD) manual database. The data of controlling owners is compiled from Annual Report that discloses the immediate owners and Profile of Publicly Listed Company (PPLC) and Prominent (PRO) for the ultimate owners. The data of foreign shareholder and unrelated domestic blockholders are gathered from Annual Report.

The following model is developed to analyse the relationship between board structure and firm performance. The model includes the proportion of independent director serving on the board and on audit committee as the proxies of board monitoring, assets as the proxy of firm size, and industry as control variables.

\[
\text{ROA}_{it} = \alpha + \beta_1 \text{FMLY}_{it} + \beta_2 \text{FRGN}_{it} + \beta_3 \text{DOMT}_{it} + \beta_4 \text{OUTD}_{it} + \beta_5 \text{AUDC}_{it} + \beta_6 \text{INDY}_{it} + \beta_7 \text{ASST}_{it} + \epsilon_{it}
\]

where:
- FMLY\(_{it}\): controlling family ownership of firm \(i\) at year \(t\)
- FRGN\(_{it}\): foreign ownership of firm \(i\) at year \(t\)
- DOMT\(_{it}\): domestic unrelated large shareholders ownership of firm \(i\) at year \(t\)
- OUTD\(_{it}\): the fraction of independent directors of firm \(i\) at year \(t\)
- AUDC\(_{it}\): the fraction of independent directors serving in audit committee of firm \(i\) at year \(t\)
- ASST\(_{it}\): firms size of firm \(i\) at year \(t\)
- AGE\(_{it}\): firms’ age of firm \(i\) at year \(t\)
- INDY\(_{it}\): industry group of firm \(i\) at year \(t\)

Firm performance is measured using Return on Assets 2002 as Khana and Palepu (1999) argue that using market-based indicator is inappropriate in emerging countries where illiquid and thin
trading market dictate the absence of efficient form of capital market. Return on asset is defined as the ratio of earning before interest, extraordinary item, and taxes to total asset as of 2002. The study use family as the unit of analysis and therefore we aggregate the individual shareholding of family members of controlling owners to construct controlling family ownership. Capital Market Law 1995 (article 1) states that family affiliation refers to the relationship by marriage and blood both to second degree vertically and horizontally. Controlling shareholders ownership is defined by simply accumulating the cash-flow right of their immediate ownership proportional to total number of common shares. A 20% cut-off is used in differentiating between family-controlled and non-family-controlled firm\(^1\). Foreign shareholders and domestic blockholder are defined as institutional shareholders that are independent of controlling family, with at least 5% shareholding of the firm. Foreign and domestic blockholder ownership is defined as the proportion of their shareholding to total number of outstanding shares. The fraction of independent directors is defined as the ratio of independent directors to total numbers of directors.

4. Results

4. a. Descriptive statistics

Table 1 presents descriptive statistics and the correlation of variables of interest. Overall, the correlation coefficients between independent variables are relatively low indicating that there is no presence of multicollinearity problem, except for controlling family ownership (FMLY) and foreign shareholding (FRGN). It is not surprising given that family ownership, foreign

\(^1\) See for example LaPorta, Lopes-de-Silanes, and Sheifler (1998) and Claessens, Djankov and Lang (2000). However, it should be noted that this cut-off point is best viewed as “researcher discretionary” as, to date, there is no theoretical work justifying this point.
shareholding, and domestic blockholding are mutually exclusive in nature. The average shareholding by controlling family is 57% ranging from 0% (minimum) to 98% (maximum).\(^2\) Further analysis reveals that controlling owners hold more than 50% of corporate shares in 103 firms (70% of the sample). Controlling owners are absent in only 21 firms, representing 12% of total sample. This description confirms the work of Lukviarman (2004) documenting the ownership concentration by controlling family in 70% Indonesian listed firms during 1994 to 2000. The presence of controlling shareholders is evidence in 88% of the sample (167 firms). Diffused ownership, where minority investor cumulatively own more than 80% of corporate shares, is found in only 5 firms representing 3% of total sample that supports that of Claessens, Djankov, Lang (2000) revealing the prevalence of concentrated ownership firms and that only small numbers of Indonesian firms have dispersed ownership structure.

*Insert table 1 about here ->>>*

The average foreign investor’s shareholding is 11% with 0% as the minimum and 96% as the maximum. However, only one third of firms exhibit the presence of foreign shareholders where such shareholders are absent in most listed firms (135 firms representing 71% of the sample). Foreign investors own 50% or higher of the corporate shareholding in 20 firms representing 11% of the sample. Further analysis reveals that 5% of the listed firms are jointly owned by foreign and domestic investor with 50% cumulative shareholding or higher. ADB (2001) contends that such a coalition provides foreign investor with access to local market and political connection. Domestic blockholders are found in only 11% of the sample (22 firms) with an average shareholding of 49%.

\(^2\) In all sample, the immediate owner of a firm is another company of particular business groups owned by the same controlling owners. This ownership structure, so-called pyramidal ownership, is consistent with the finding of Claessens et al (2000, 2001). In some occasion, the firm is jointly owned by several families who form the partnership to control the firms. However, this joint ownership is a floating coalition, instead of permanent coalition, where the partnership changes in other firms.
shareholding of 2.5% ranges from 0% (minimum) to 49% (maximum). Of these firms, the highest frequency falls into 5% to 20% ownership category. Eighty-eight percent of the sample (168 firms) displays the absence of domestic blockholder suggesting that the absence of external large shareholders, who are independent of controlling shareholders, is a norm in Indonesian listed firms.

Controlling family ownership exhibits a negative correlation with firm performance (ROA2), suggesting that higher family ownership is associated with lower firm performance. Foreign ownership is positively correlated with firm performances, indicating that foreign-controlled firm is more likely to have superior performance as compared to family-controlled firm. The correlation coefficient between the proportion of independent directors and firm performance is insignificant. Taken together, the findings indicate that different owners have different association with firm performance. In other words, the identity of large shareholders does matter in predicting organizational outcome.

The proportion of independent directors (IDPD) is positively correlated with domestic blockholder (DOM), suggesting that higher shareholding by domestic independent large shareholders is associated with a higher fraction of independent directors. By contrast, family ownership and foreign shareholders are insignificantly associated with the fraction of independent directors. Again, the findings reveal that different owners pursue different choices of governance mechanisms. The proportion of independent directors is positively correlated with the proportion of independent directors serving on audit committee (AUDC), indicating that an outsider dominated board tends to have a higher proportion of independent directors serving in
audit committee. However, the proportion of independent directors and audit committee are insignificantly correlated with firm performance is insignificant indicating that monitoring by independent board is less likely to mitigate agency problem in Indonesia.

4. b. Multivariate Data Analysis

Table 2 reports the results from OLS regressions linking Controlling family ownership, Foreign ownership, domestic blockholder, the representation of independent directors, audit committee, control variables and firm performance. The F-value for all specification is significant at the 1% level and the $R^2$ is ranging between 0.107 and 0.133 except for equation 3. Specification 1 reveals that corporate ownership by controlling family is related to firm performance at 1% significance level. The negative sign suggests that higher family ownership is associated with lower firm performance. The finding indicates that higher ownership by controlling family is more likely to create entrenchment effect, rather than alignment effect, that is detrimental to firm performance, and confirms the work of Gadhoum (2000) and Ehrhardt and Nowak (2003). Surprisingly, while the proportion of independent directors is insignificantly related to organizational outcome, audit committee is found to have negative relationship with firm performance. The findings indicate a higher likelihood of either the board being endogenously determined institution (Hermalin & Weisbach 1998; Hermalin & Weisbach 2003) or de facto convergence issue in the appointment of independent directors (Palepu, Khanna & Kogan 2002) or both. Firm size is related to firm performance at a marginal significance level. The positive sign suggests that the size of the firm is more likely to reflects agency problem associated with the legal and financial access constraint (Demirgüç-Kunt & Maksimovic 1998; Beck, Demirgüç-Kunt & Maksimovic 2005), rather than investment opportunity sets (Ho, Lam & Sami 2004; Hutchinson & Gull 2004).
Specification 2 shows that foreign ownership is related to firm performance at 1% confidence level. In contrast to specification 1, the positive sign suggests that foreign-controlled firm is more likely to have superior firm performance as compared to family-controlled firms. The finding provides empirical evidence that the identity of owners matters in predicting firm performance. Firm size remains positively related to firm performance while the insignificant relationship between independent directors and firm performance persists. The audit committee become insignificant predictor of firm performance. Specification 3 tells completely different story. In the absence of family ownership and foreign shareholding, the model becomes insignificantly different from zero as the F-value decreases to 1.462. Nevertheless, the findings of table 3 reveal the different effects of different type of owners on firm performance.

Although large shareholding might serve as governance mechanism, certain ownership structure may limit the effectiveness of corporate control, as it determines the power of contracting parties within an organization (Lannoo 1999). According to La Porta et al. (La Porta et al. 1999; La Porta et al. 2000), a particular level of stockholding provides the large shareholder with almost complete control over the firm’s decisions. Eventually, such structure of corporate shareholdings influences the incentive of the large shareholder to commit expropriation from the firm. Unfortunately, most firms around the world generally have controlling owners, which is entrenched and sufficiently powerful to design the contract (La Porta et al. 1999; La Porta et al. 2000). Having control of a firm, an owner can divert a fraction of profit, and not all of the profit is distributed to other shareholders, on a pro rata basis. Accordingly, the common agency
problems in most economies are related to the conflict between controlling owners and minority shareholders.

Theoretically, the disadvantage of single controlling ownership could be mitigated by certain ownership patterns. Maury and Pajuste (2005) argue that the most important dimension of control associated with large shareholders rests in its contestability, which requires the presence of multiple large shareholders. A higher contestability associated with the existence of multiple blockholders increases the marginal cost of stealing, which lessens the incentive of expropriation and, accordingly, enhances firm performance. Therefore, contestability potentially improves the alignment of interests of those contracting parties, implying that the benefit of a check and balance system would be achieved whenever control of the firm is optimally distributed among contracting parties. This perspective underlines the importance of unrelated blockholders, who have incentives to collect information and monitor management, and sufficient voting power to over-ride or oust management, as a governance mechanism. In other words, the importance of multiple large shareholders hinges upon the level of control contestability, where the higher contestability has been claimed as being positively associated with firm performance. Thus, a partial contestability might serve as a good proxy of different impact of corporate control. To test this proposition, the study reruns OLS regression using the contestability as the measure of ownership structure. The result is presented in Table 3. The F-value for all specifications is relatively high and the R2 is ranging between 0.114 and 0.125.

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3 Based on the control distribution, Gompers, Ishii and Metrick (1999) differentiate between dictatorship-firm and democracy-firm. However, this classification is based on the shareholder right to contest management decisions provided by company by law and charter. The former refers to the firm where management has an effective control and the latter refer to the case where shareholders might effectively challenge management proposals.
Specification 1 shows the contestability between family and foreign ownership is positively related to firm performance 5% significance level, suggesting that a higher firm performance would be observed in the firm where family control is challengeable. The contestability between family and domestic blockholder ownership is related to firm performance 1% significance level. The negative sign suggests that the presence of contestability between controlling family and unrelated domestic blockholder is more likely to lower firm performance. Firm size, as represented by assets, is positively related to firm performance marginally.

Specification 2 reveals that contestability between foreign and domestic blockholder is found to have a relationship with firm performance. The positive sign indicates that better firm performance would be observed with the higher contestability between those types of shareholders. Surprisingly, the contestability between family and foreign ownership becomes insignificant. Firm size remains a marginal predictor of firm performance. Specification 3 presents the persistence of contestability between foreign and domestic blockholder at 1% significance level positively. As compared to specification 1, the significance relationship between controlling family-domestic blockholder contestability with firm performance disappears. Nevertheless, the results of specifications 1 to 3 reveal that the contestability becomes beneficial with the presence of foreign investor and thus the notion that the different types of owners are more likely to have different impact on firm performance.

5. Conclusions, Discussions, and Limitations
The study finds that most Indonesian listed firms have majority owners with 20% shareholding or higher, suggesting the prevalence of ownership concentration in the hands of controlling shareholders. Consistent with this finding, the work of Claessens et al., (2000) documents the prevalence of ownership concentration by the controlling family in their dataset of East Asian firms. According to Gul and Tsui (2004), a dispersed ownership is an exception in Asian economies, although the level of ownership concentration varies across firms and countries. Literature suggests that large shareholding might serve as a governance mechanism that benefits the firms. Higher shareholding by insider has been quoted as enhancing the convergence of interests of principals and agents (Jensen & Meckling 1976) while higher ownership by outside shareholder will provide the holders with the incentive to better monitor management (Shleifer & Vishny 1986). Eventually, the continuous scrutiny by large shareholders will encourage firm performance and this benefit of large shareholders will be enjoyed by other corporate shareholders. Therefore, the shared-benefit of control associated with large shareholding might benefit the firms and minority shareholders.

However, the type of large shareholders might have a significant impact on either the incentive to monitor management or to deprive minority shareholders from their rights. The study reveals that ownership concentration by family is negatively related to firm performance, and thus indicates that the private benefit of control associated with ownership concentration facilitates the family to divert firm resources. Accordingly, the finding supports the view that ownership concentration by family is more likely to be related to the expropriation hypothesis that is detrimental to firm performance. Domestic blockholder is insignificantly related to firm performance while foreign investor is found to have a positive relationship with firm performance. The findings suggest that
foreign shareholding is more likely to have superior performance as compared to the higher
ownership by domestic large shareholders. Accordingly, the findings provide empirical support
to the notion claiming the existence of different impact of different large shareholders type.

The contestability between family and foreign ownership is positively related to firm
performance suggesting that control contest is work well with the presence of family and foreign
shareholdings. The presence of foreign and domestic large shareholding is found to help
mitigating agency problem as the contestability between those types of shareholders is positive.
However, the contestability between family and domestic blockholders is negative indicating that
the existence of interlocking corporate control between those types of large shareholders, where
the benefits are privately enjoyed and are not shared with other contracting parties. The findings
suggests that, in the case of Indonesia, foreign investors are more likely to challenge the family
and domestic blockholder control whenever they have sufficient voting power associated with
their significant shareholding. In other words, the voice strategy seems work well whenever
corporate control is contested by foreign. The results thus confirm that different types of large
shareholders produce different organizational outcome.

Several caveats are in order. First, the study uses accounting numbers to define performance
indicator that has been claimed as suffering from earning restatement. Fan and Wong (2002) and
Bhattacharya et al. (2002) find that Indonesian listed firms generously inflate their earning
statement that is partly attributable to the ownership structure. Although it is not necessarily
illegal, earning restatement might benefit one contracting parties at the expense of others. The
absence of a proper procedure to control for this problem might create a bias in investigating the
association between governance mechanisms and firm performance. Second, the study measures family ownership by aggregating their immediate shareholding that leads to the absence of separation between voting rights and cash flow rights. This procedure overlooks the competing impact of entrenchment effect and the alignment incentive effect. Zhang (2003) argues that the expropriation is more pervasive in firms with the divergence between voting rights and cash flow rights and firms that are an integral part of business groups. Accordingly, aggregating their immediate shareholding might understate the incentive of controlling owners in committing expropriation as Indonesian listed firms exhibit higher wedge between cash flow and voting right (Claessens et al., 2002). Third, the issue of concern may also come from the procedure that treats identically the level of investor protection provided by the country of origin of foreign investor. The importance of foreign investors as governance mechanism hinges upon the presumption that their countries of origin, particularly developed economies like the US, provide investor with a strong protection through various regulations and market mechanisms (Stulz, 1999, Coffee, 1999, Mitton, 2004). The greater scrutiny and monitoring by the market eventually will force the firms to ensure that they monitor their foreign investments (Boardman et al., 1997). Leuz et al. (2005) suggest that the level of investor protection differs across countries implying that the pressure of effective monitoring will vary across foreign investors. However, this study leaves such an issue unaddressed that might lead to the failure to reflecting the true performance effect of the differences of monitoring activities by such investors. Therefore, the finding of this study should be interpreted cautiously.
References:


Table 1: Descriptive Statistics and Correlations
This table presents pairwise correlations of variables. FMLY is the proportion of common share held by controlling family to total number of outstanding common share. FRGN is the proportion of common share held by foreign investor to total number of outstanding common share. DOMT is the proportion of common share held by domestic large shareholders to total number of outstanding common share. IDPD is the proportion of independent directors to total number of directors. AUDC is the proportion of independent directors serving on audit committee to total number of director serving on the committee. ASST is the natural log of total assets. INDTY is a 3-digit code based on JSX industry classification. ROA02 is the ratio of earnings before interest, taxes and extraordinary items to book value of assets as of 31 December 2002. \( a \), \( b \), and \( c \) represent significant at 1%, 5%, and 10% level respectively.

<table>
<thead>
<tr>
<th></th>
<th>FMLY</th>
<th>FRGN</th>
<th>DOMT</th>
<th>IDPD</th>
<th>AUD</th>
<th>INDTY</th>
<th>ASST</th>
<th>ROA2</th>
</tr>
</thead>
<tbody>
<tr>
<td>min</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.000</td>
<td>1.000</td>
<td>10.459</td>
<td>-0.210</td>
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<tr>
<td>max</td>
<td>0.980</td>
<td>0.970</td>
<td>0.490</td>
<td>0.750</td>
<td>3.000</td>
<td>35.000</td>
<td>17.714</td>
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<tr>
<td>mean</td>
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<td>0.114</td>
<td>0.020</td>
<td>0.377</td>
<td>2.651</td>
<td>17.090</td>
<td>13.598</td>
<td>0.058</td>
</tr>
<tr>
<td>std</td>
<td>0.253</td>
<td>0.241</td>
<td>0.069</td>
<td>0.110</td>
<td>0.725</td>
<td>10.314</td>
<td>1.345</td>
<td>0.097</td>
</tr>
</tbody>
</table>

FMLY 1.000
FRGN -0.751\(^a\) 1.000
DOMT -0.100 -0.027 1.000
IDPD -0.119 0.010 0.128\(^c\) 1.000
AUDC -0.115 -0.014 0.025 0.180\(^b\) 1.000
INDY 0.093 -0.125\(^c\) -0.003 0.005 -0.060 1.000
ASST -0.084 0.026 -0.031 0.027 0.154 -0.012 1.000
ROA2 -0.261\(^a\) 0.321\(^a\) 0.020 -0.065 -0.086 -0.078 0.129\(^c\) 1.000
Table 2: Cross-sectional OLS Regression of ROA on Board Compositions and Controlling Family Shareholding (N=190)

This table presents cross-sectional OLS regression of ROA on ownership by different type of shareholders, board compositions, and control variables. The dependent variable is ROA 2002, defined as the ratio of earnings before interest and taxes to book value of assets as of 31 December 2002. FMLY is the proportion of common share held by controlling family to total number of outstanding common share. FRGN is the proportion of common share held by foreign investor to total number of outstanding common share. DOMT is the proportion of common share held by domestic large shareholders to total number of outstanding common share. IDPD is the proportion of independent directors to total number of directors. AUDC is the proportion of independent directors serving on audit committee to total number of director serving on the committee. ASST is the natural log of total assets. INDY is a 3-digit code based on JSX industry classification. *, †, and ‡ represent significant at 1%, 5%, and 10% level respectively.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta 1</th>
<th>Beta 2</th>
<th>Beta 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
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<td>-0.031</td>
<td>-0.018</td>
</tr>
<tr>
<td>t-value</td>
<td>0.929</td>
<td>-0.429</td>
<td>-0.240</td>
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<tr>
<td>FMLY</td>
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<tr>
<td>t-value</td>
<td>-3.767</td>
<td></td>
<td></td>
</tr>
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<tr>
<td>t-value</td>
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<td>DOMT</td>
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<tr>
<td>t-value</td>
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<tr>
<td>IDPD</td>
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<tr>
<td>t-value</td>
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<td>-0.770</td>
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<td>AUDC</td>
<td>-0.017‌ †</td>
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<td>t-value</td>
<td>-1.740</td>
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<td>ASST</td>
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<td>0.010‌ †</td>
<td>0.011</td>
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<tr>
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<td>1.954</td>
<td>1.995</td>
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<tr>
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<td>-0.001</td>
<td>0.000</td>
<td>-0.001</td>
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<tr>
<td>t-value</td>
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<td>-0.621</td>
<td>-1.134</td>
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<tr>
<td>R²</td>
<td>0.107</td>
<td>0.133</td>
<td>0.038</td>
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<tr>
<td>Adj-R²</td>
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<td>0.012</td>
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Table 3: Cross-sectional OLS Regression of ROA on Board Compositions and Controlling Family Shareholding (N=190)

This table presents cross-sectional OLS regression of ROA on ownership by different type of shareholders, board compositions, and control variables. The dependent variable is ROA 2002, defined as the ratio of earnings before interest and taxes to book value of assets as of 31 December 2002. FMLFRG is the contestability between family ownership and foreign shareholding defined as the square of first different between those variables. FAMDOM is the contestability between family ownership and domestic blockholding defined as the square of first different between those variables. FRGDOM is the contestability between foreign shareholding and domestic blockholding defined as the square of first different between those variables. IDPD is the proportion of independent directors to total number of directors. AUDC is the proportion of independent directors serving on audit committee to total number of director serving on the committee. ASST is the natural log of total assets. INDY is a 3-digit code based on JSX industry classification. \(^a\), \(^b\), and \(^c\) represent significant at 1%, 5%, and 10% level respectively.

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<td>t-value</td>
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<tr>
<td>FRGDOM</td>
<td>beta</td>
<td></td>
<td>0.156(^a)</td>
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<td>ASST</td>
<td>beta</td>
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