

## **Ownership Structures and Firm Performance: Does East Asian Corporate Governance's Recovery Work?**

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*Few prior studies investigated a further link between ownership structure and firm performance in terms of post Asian Financial Crisis in 1997-1998 and explored the impact of the corporate governance recovery program. Using an agency framework, this research argued that the distribution of equity ownership among top managers and external block holders had a significant relationship with leverage and firm performance, and there was reverse causality effect between ownership structure, capital structure, and firm performance. The paper tested five hypotheses and used 532 East Asian companies' financial data in 2000-2001 (a starting period of the recovery program) of seven most affected countries. Based on statistical analysis, the study revealed the positive impacts of corporate governance recovery indicated by an increasing of cost efficiency in monitoring and controlling the management. It also supported the managerial ownership as one way to reduce conflict of interest between shareholder and manager and increase firm value.*

**JEL Codes:** G01, G32, and G34

### **1. Introduction**

The Asian economic crisis has exposed critical deficiencies in financial systems throughout Asia and has also highlighted the problem of corporate governance among South East Asian companies. The principal focus of post-crisis research has attempted to link these deficiencies to specific causes such as over-leveraged domestic financial markets, overexposure to foreign exchange risks and monopolistic market structures. Underlying all these issues are a fundamental lack of control. Poor corporate governance is indicative of this problem. Indeed, corporate governance provides at least as convincing an explanation ... as any or all the usual macroeconomic arguments.

Relating to this issue, the recent study commissioned by the Asian Development Bank (2000) reports that ownership structure determines the governance problem. It explains that the two key features of corporate ownership structure are concentration and composition. First, Asian firms are perceived to be highly concentrated, family-dominated corporations. It is possible to determine the nature of the agency problem by the degree of dispersion between management and ownership. High dispersion (low concentration) occurs when a large number of individuals, which are minority shareholders, hold the majority of ownership. The problem then is that between management and minority shareholders. Low dispersion (high concentration) is the condition of the majority of ownership that is controlled by a small number of large shareholders. The problem then is between majority and minority shareholders.

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The second part of ownership structure is its composition. Ownership composition essentially means who owns the corporation—who the shareholders are. Examples of shareholders include individuals, a family or family group, a holding company, a bank, an institutional investor or a non-financial corporation (ADB 2000, p. 7). Importantly, for governance, it must be determined if any owners form a controlling group(s).

On the other side, the Asian Crisis itself has supported previous theoretical and applied literature that has highlighted the complex nature of the relationship between ownership structure, capital structure, and firm performance. Existing literature highlights the agency problems between managers and shareholders. In an attempt to ensure the continued viability of the firm, the latter may result in a generally lower leverage ratio below the optimum level.

Meanwhile, recent studies about ownership, capital structure, and firm performance that are done in East Asia countries mainly focus on the period pre-crisis. There are such as Claessens, Djankov & Lang (2000) examine the pattern of ownership in seven East Asian countries, Claessens et al. (2002) investigate the effect of large shareholding on firm valuation, and Lemmon and Lins (2003) further link ownership structure to stock returns in these countries. None of these recent studies, however, considers the effect of ownership structure on capital structure and firm performance and the possible interaction between capital structure and firm performance. In other words, a clear understanding of the effects of ownership structure on capital structure and firm performance remains much unexplored, especially an analysis of the post-crisis period.

This condition, of course, triggers a curiosity about the effect of Asian Financial Crisis to the company performance, especially how the Asian companies react to it, in terms of improving their corporate governance practices. Research that concerned about ownership structure, capital structure, and firm performance of East Asian countries, which are affected by the crisis, is one of the research efforts in topic "corporate governance," in terms of post-crisis analysis. This research constituted former investigations in topic corporate governance, which many results of immeasurable empirical findings had revealed how a certain event (e.g. crisis, economic recession, or shock) could make a decisive change.

This paper is organized in the following manner. First, the literature review section provides background on the relationship between ownership structure and firm performance, including the current and inconclusive results of the impact of ownership structure and firm performance that underline the causes of the Asian Financial Crisis and the need to recover corporate governance practices. Research hypotheses are subsequently proposed regarding the companies' practices of managing leverage and distributing managerial ownership for the period 2000-2001. The methodology and model, including discussion of sampling frame and measures, are afterwards discussed. Eleven variables are analyzed in a multivariate regression analysis, and the results of t-test of each independent variable are provided. Finally, implications for corporate governance and ownership structure management, and future research on good corporate governance related to the comparison of several post crisis periods are presented.

## 2. Literature Review

Prior empirical findings have shown that the impact of ownership on firm performance is twofold. On the one hand, concentrated ownership can provide for better control of

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management, as size of ownership stake and the incentive to monitor are positively correlated. In turn, it should improve firm performance and equally benefit minority shareholders. On the other hand, it can come with costs for minority shareholders as the controlling owners might try to expropriate from them. This is one of a number of private control benefits enjoyed by large block holders at the expense of firm value. A number of surveys have attempted to measure these at the country level. For example, Nenova (2000) documents differing levels of private control benefits across a large cross-section of countries reflected in premiums paid for voting shares. Dyck and Zingales (2004) document similar control premia paid in European block trades. Bebchuk (1999) argues that it is rational for block holders to grab these private control benefits before managers do.

The existing literature is split concerning the effect of ownership on performance. Bebchuk and Fried (2003) and Roe (2003) argue that what, at face value, appear to be inefficient ownership structures (whether are dispersed or concentrated), are, in fact, efficient in the context of their institutional environment. Coffee (1999) argues that the current ownership arrangements are more a “product of a path-dependent history than the ‘neutral’ result of an inevitable evolution toward greater efficiency.” If this second proposition is correct, then the predominant ownership structure might not necessarily be the best performing one.

Thomsen, Pedersen & Kvis (2003) who showed that block holders might destroy corporate value when studying companies in the largest continental European countries confirm this suspicion. Nevertheless, all the above evidence clearly implies that the ownership structures matter for firm performance, whether positively or negatively.

Acemoglu (1999) has pointed out that the long-run equilibrium of economic institutions is often sub-optimal. In his research, reform of institutional arrangements, within which it includes corporate control and governance arrangements, might imply a possible loss to groups that currently hold power. It is argued that as these groups cannot be credibly compensated ex-post for their loss of power, they have an incentive to block change. The implication is that ownership structures might not adjust perfectly to changes in economic conditions or the needs of the firm. This view would predict that we would see inefficient ownership structures persist over time. As Zingales and Rajan (2003, p. 2) state, “financial systems do not .... emerge simply as a result of their superiority in a particular environment. The power of vested interest distorts the process of evolution.”

These findings are in clear contradictions to Demsetz and Lehn (1985) and the research of Demsetz and Villalonga (2001). They argue that an optimal ownership structure is achieved through private contracting between shareholders and management based on the value maximization principle. The financing costs of a concentrated ownership increase with firm size because families, and other controlling investors, cannot diversify their portfolio. Therefore, a firm has a natural incentive to move to a more diffuse ownership structure, and we should observe an optimal ownership structure where the benefits of control and financing are at equilibrium. Consequently, they argue that no relation between the two variables can be detectable, and empirically found no relationship between ownership structure and performance for a sample of US firms between 1976 and 1980.

Reflecting to the Holderness’s investigation (2003), in a reverse-causation problem, the real causation runs in the opposite direction of the assumed one. This might yield significant results, but it gives a wrong picture of the relation. An effect may not only run

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the other direction than assumed yielding a reverse-causation problem, but there may be even a multidirectional causation. The resulting endogeneity or simultaneous equations bias is very likely to exist in analyses of ownership and performance. As theory contains effects for both directions, from ownership on performance and vice versa, it supports the assumption of synchronous reciprocal determination of ownership and performance. Although the endogeneity model was already addressed by Demsetz and Lehn (1985) and is widely accepted by researchers, it is rarely modeled in empirical studies.

Since it is limited and until now, the author knows only six studies that model ownership and performance simultaneously. Therefore, the ignorance of an existing endogeneity bias has resulted in inconsistent estimates and confused directions of causation. The results of these six studies partly differ drastically from those of studies without modeled endogeneity. Consequently, the consideration of the simultaneous causation estimated by the simultaneous equations method is seen as the main advantage of this study.

Like Cho (1998) who has extended the argument of Demsetz and Lehn (1985) by examining the interdependence of managerial ownership, investment, and corporate value, in this study, we tried to develop the parallel causation of the ownership-performance relationship. In Cho's study (1998), drawing on Demsetz and Lehn (1985), simultaneous regression analysis was utilized to control for the endogeneity bias, and Cho found that ownership structure was endogenously determined by firm value (as measured by Tobin's Q). The study also reported that investment and not managerial ownership significantly influenced the corporate value. Cho (1998) concluded that managers in firms with higher Tobin's Q, or with the better-investment opportunities tend to hold a bigger fraction of their firm's shares. However, he found no evidence that managerial ownership had a causal effect on investment or corporate value.

In the light of finding new evidence in simultaneous causation, the same consideration could be applied in the two-way relationship between ownership structure and firm value. Thus, one needs to allow for the simultaneity test between ownership structure and firm performance.

This leads to the first, second, third and fourth hypothesis:

H1: Firms with a higher level of external block holdings and a higher debt ratio are likely to have higher firm performance, *ceteris paribus*.

H2: Firms with low levels of managerial share ownership and higher debt are likely to have a higher firm performance, *ceteris paribus*.

H3: Companies with higher firm performance and higher debt are likely to have a higher level of external block holdings, *ceteris paribus*.

H4: Companies with higher firm performance and higher debt are likely to have low levels of managerial share ownership, *ceteris paribus*.

The effect of general ownership concentration on performance is unclear due to the contradicting hypotheses. That is, while the concentration could lead to a better-monitoring management and consequently, to a better performance, it could also trigger managerial de-motivation with a negative effect on performance. Furthermore, the block holder could use control to consume private benefits at the expense of other shareholders and firm

performance. However, performance can also determine ownership concentration. Large shareholders use their better company knowledge to increase their share if they assume good performance or to sell it in the case of a bad firm's prospect.

For the effect of insider ownership on performance, two contradicting arguments exist. While the managerial ownership aligns the managers' incentive with shareholders' interest, it can also entrench the management against controlling and sanctioning actions. The divergence of control and cash flow rights has a negative effect on performance, since the cash flow rights form opportunity costs of opportunistic behavior and benefits for shareholder-value-oriented actions.

The effect of performance on insider ownership is assumed, if existent, as positive. The first argument is that shareholders try to use managerial stock ownership or option plans as incentive alignment; thus, they reward the management for good performance with stocks. Second, the management of well performing companies favors stock remuneration and is more likely to accept or to promote those compensation designs. Finally, the managers use their insider knowledge to perform legal forms of insider trading. They increase their share if the company is perceived as well performing and reduce it in the case of bad firm prospects.

In order to see the simultaneity of combined effect of ownership concentration and insider ownership on performance, it is arranged another hypothesis that leads to the fifth hypothesis. Therefore, the test of those combined effects on performance will be done as well as the test of capital structure effect on performance.

H5: Firms with a higher level of external block holdings, low levels of managerial share ownership and a higher debt ratio are likely to have higher firm performance, *ceteris paribus*.

This hypothesis is intended to analyze whether both levels of external block holding and managerial share ownership influence the firm performance or not. A simultaneous equations model assuming the performance as well as the different ownership forms as exogenous allows the consideration of ownership interactions and the clear separation of their effects on performance.

### 3. Methodology and Model

Two research models are developed to test five hypotheses. Since the underlying hypothesis is that firm performance is a function of the distribution of equity ownership among managers and external block holders, the company performance is regressed on some measures of ownership structure (and other control) variables. In the first analysis, the relation of each ownership measure and performance separately, the model is decomposed in two groups that contain eight equations systems A, B, C, D, E, F, G, and H as demonstrated in Table 2 until Table 5. The first model (with four equation systems: A, B, C, and D) elaborates on ownership concentration; and the second model focuses on managerial ownership (with four equation systems: E, F, G, and H).

Each model contains the relation of performance to one of the ownership forms and thus includes two equations, one covering the effects of the ownership aspect on performance and a second with performance determining ownership. In addition, leverage (debt ratio) is included in the ownership equations to reflect the possibility that creditors can act as

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external monitors, which might affect the likelihood of observing ownership structures that facilitate managerial entrenchment.

To proxy the firm performance, it is used Tobin's Q, which its approximation is developed by Chung and Pruitt (1994), and ROE (return on equity), as it can be seen below:

$$Q_{CP} = \frac{MVE_t + PS_t + BVINV_t + LTDEBT_t + CL_t - CA_t}{TA_t}$$

where  $Q_{CP}$  = Tobin's Q estimate by Chung/Pruitt (1994),  
 $MVE$  = year-end value of common stock,  
 $PS$  = liquidation value of preferred stock,  
 $BVINV$  = year-end book value of inventories,  
 $LTDEBT$  = year-end book value of long-term debt,  
 $CL$  = year-end book value of current liabilities,  
 $CA$  = year-end book value of current assets, and  
 $TA$  = book value of total assets.

The liquidation value of preferred stock is used due to difficulties in obtaining price quotes for preferred stock. It can be calculated by aggregating the preferred stock market value and dividing it by Standard & Poor's preferred stock yield index. Meanwhile, the accounting-based performance measures most common in the ownership literature are return on equity (ROE) and return on assets (ROA). They are defined as:

$$ROE = \frac{\text{Earnings after interest expenses and taxes}}{\text{Shareholders' equity}}$$

$$ROA = \frac{\text{Earnings before interest expenses and taxes}}{\text{Total assets}}$$

The ROE measures only the return on assets of the equity owners, whereas the ROA aggregates the return of equity-holders and debt-holders. Prior studies were in favor for a preference of ROE over ROA in equity ownership and performance literature. However, in this study, ROE is considered as a better proxy of the financial performance and its effect on ownership.

In addition, by modifying and adapting the work of Brailsford, Oliver & Pua (2002), debt to equity ratio is used to see the effect of leverage on firm performance and ownership structure.

Ln (D/E) = natural log transformation of Debt/Equity ratio  
EBO = percentage of ordinary shares held by the larger shareholders. Data for the top two, five, and 20 external shareholders are used as the proxy for external block ownership.  
MSO = percentage of ordinary shares owned by all executive and non-executive directors. Morck, Shleifer & Vishny (1988) and Keasey, Short & Watson (1994) use share ownership of corporate directors, amongst others to proxy for managerial share ownership.

The two variables used to control for risk are [1] SIZE = natural log (total assets). Many studies suggest that firm size is one important factor, which affects a firm's debt policy and

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therefore, risks, and [2] IND = zero-one dummy variable for industry classification, where IND = 1 if industrial company and IND = 0 if natural resources company.

The three variables used to control for agency costs are growth, free cash flow, and profitability. First, the study defined GROWTH = the annual percentage change in total assets. Titman and Wessels (1988) suggest that a firm's growth opportunities are a good proxy for the agency costs of debt, observing the "pecking order" theory (Myers & Majluf, 1984), and the agency relationship (McConnell & Servaes, 1995). Second, FCF is a direct measure of Jensen's (1986) free cash flow hypothesis predicting that firms with excessive free cash flow are likely to have higher leverage. FCF is defined in a similar manner to Lehn and Poulsen (1989), as follows,  $FCF = OYBT + DEP + AMO - TAXPAID - DIVPAID$ , where:

OYBT	= operating income before income tax
DEP	= depreciation expense
AMO	= amortization separately reported, such as goodwill
TAXPAID	= total tax paid
DIVPAID	= total dividends paid

Third, PROF = operating income before interest and taxes scaled by total assets. Indicators of a firm's profitability include ratios of operating income over sales and operating income over total assets and ratios of average earnings before interest and taxes over total assets.

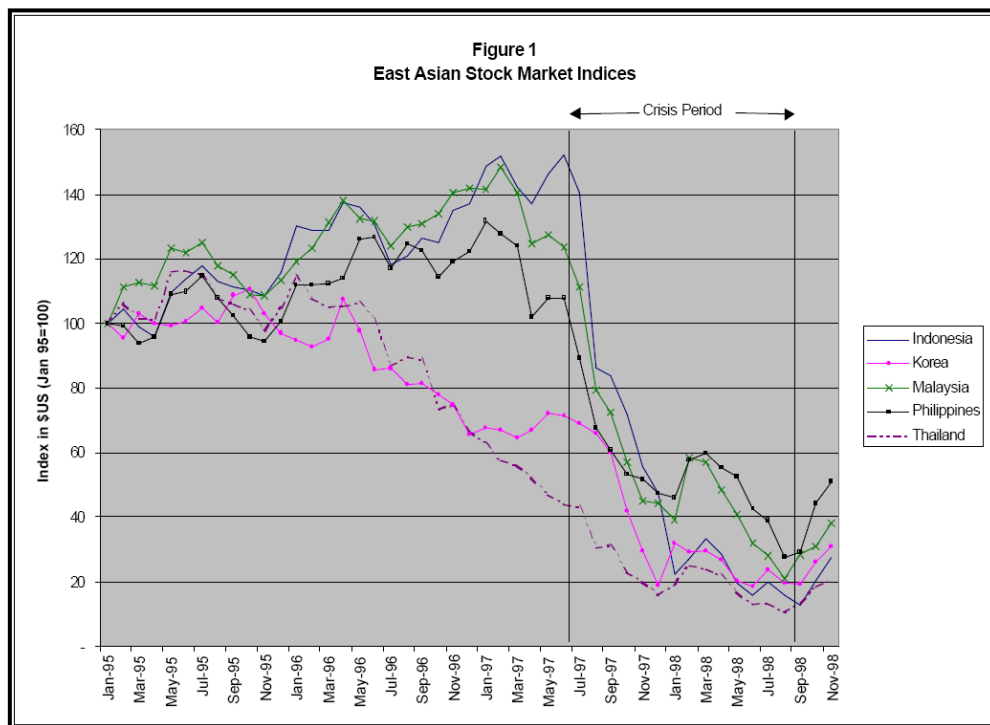
Meanwhile, the other two control variables are the asset specificity and the effect of taxes. First, we used intangible asset and defined INTA = Total Intangibles / Total Assets. Balakrishnan and Fox (1993) argue that asset specificity creates problems for debt financing due to the non-redeploy ability characteristics of specific assets. Second, to control for the effect of taxes, this study used non-debt tax shields (NDTS) = Annual Depreciation Expenses / Total Assets, which was put forward by DeAngelo and Masulis (1980).

The countries studied in this study were Indonesia, South Korea, Malaysia, the Philippines, Thailand, Hong Kong, and Taiwan, the seven countries that were involved in the East Asian Financial crisis. Although other East Asian countries (and other emerging markets outside Asia) were affected by the crisis, the five of those seven countries considered here suffered disproportionately in terms of stock market decline and currency depreciation (see Figure 1).

The reason for choosing the time horizon 2000 - 2001 was mainly that the period of post-2000 was believed as the period of recovery of the crisis. The research chose to 2-years observation due to the fact and intention to portrait the post Asian Financial Crisis environment. In addition, the two-consecutive years' observation was hoped to be able to give enough information of the relationship between ownership structure and firm performance at the time of emerging East Asian Capital Market.

The research considered the population of the study to be all non-regulated firms. The involved companies are listed on the stock market within one of East Asian Capital Market, such as Jakarta Stock Exchange (JSX – Indonesia), SET (Bangkok - Thailand), KLSE (Kuala Lumpur - Malaysia), KRX (Seoul - Korea), PSE (Manila - Philippines), SEHK (Hong Kong), and TSEC (Taipei – Taiwan), and the time period chosen.

Figure 1: East Asian Stock Market Indices during the Financial Crisis



Source: Mitton (2002)

Due to the different facts arguing for simultaneity of ownership and performance relationship, this study took the challenge to test that endogeneity, and incorporated it in the resulting model. Furthermore, this study explored this new model in order to give more information on the relationship between performance and ownership, and try to avoid the simultaneity bias happened in prior studies. This proposed model will give different angles, especially, of the substitution effect of agency devices proposed by Jensen and Meckling (1976) and Jensen (1986) that argued for an interdependence of the ownership aspects, such as block ownership, institutional ownership, and managerial ownership.

#### 4. Findings

As first ownership aspect, general ownership concentration, i.e. the existence and strength of a controlling shareholder, was analyzed. In this section, to test the effect of firm performance on capital structure, the regression models using return on equity (ROE) were excluded from the analysis. It was because the ROE measure did not have any significant variable in the estimation, due to the very small and insignificant of F-Value (0.315) and R-Square (0.086). These results made Tobin's Q the most powerful measures of performance in the East Asian countries' case. Therefore, the discussion will concentrate on this measure of performance besides the other control variables.

In this study, the available populations were 1632 companies, and the used samples were 532 companies. South Korea and Malaysia were dominant in the sample used. It means the companies in those countries had a complete financial data, or in the other words, the company could survive during the crisis, and report all their financial data to the stock market administrator. It intuitively informed us the picture of their economy during and after the Asia Financial crisis period. At the peak of the crisis period, nearly of East Asian companies should close their business, and some of them should be sold and restructured



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as a part of agreement with the IMF financial support. In the other side, the data in Table 1 revealed that Hong Kong and Indonesia were the most suffered countries during the crisis.

**Table 1: Descriptive Statistic**

<b>Summary Statistics</b>	<b>All countries</b>	<b>HK</b>	<b>IND</b>	<b>SK</b>	<b>MY</b>	<b>PH</b>	<b>TW</b>	<b>TH</b>
<b>Financial Statistics</b>								
<b>Total Assets*</b>	8,390	3,552	247	1,598	344	560	1,598	492
Maximum		80,641	2,640	51,738	3,493	3,045	11,011	5,542
Minimum		46	9	9	12	51	67	12
Median		258	94	248	158	217	545	182
Debt Ratio	0.51	0.54	0.70	0.47	0.44	0.45	0.44	0.52
Maximum		1.41	1.76	4.54	3.20	0.88	1.01	1.29
Minimum		0.00	0.02	0.00	0.00	0.00	0.06	0.00
<b>Ownership Structure</b>								
<b>External Block Ownership</b>	0.56	0.56	0.63	0.30	0.54	0.87	0.39	0.65
Maximum		0.91	0.97	0.95	0.90	1.00	0.87	0.99
Minimum		0.14	0.10	0.00	0.08	0.37	0.00	5.33
<b>Managerial Ownership</b>	0.09	0.11	0.01	0.12	0.11	0.01	0.22	0.08
Maximum		0.61	0.17	0.52	0.64	0.07	0.84	59.77
Minimum		0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Sample Inclusion</b>								
No. of firms in Worldscope	1633	179	139	486	318	73	86	106
No. of firms for final sample	532	32	39	232	139	25	19	46

Note: \* in million USD, HK: Hong Kong; IND: Indonesia; SK: South Korea; MY:Malaysia; PH: Philippines  
TW: Taiwan; TH: Thailand

Table 2 revealed a positively and significantly relation between EBO and Tobin's Q, and it could be interpreted that the East Asian companies' large owners are more capable of monitoring and controlling the management, thereby contributing to corporate performance. It means that ownership concentration has been able to increase the cost-efficiency of monitoring in the post-crisis period and due to this higher incentive has enhanced its usage. This result is consistent with the monitoring model that is theoretically proven by the models of Grossman (1976), Grossman and Hart (1980), Shleifer and Vishny (1986) and others as Bolton and von Thadden (1998), Burkart, Gromb & Panunzi. (1997), Huddart (1993), Leech (2001), and Maug (1998). Therefore, the result supported the first hypothesis.

Regarding the control variables, most of the variables' coefficients are not significant, except the debt ratio that supports the first hypothesis and NDTs. A positively and significantly relation between leverage and firm performance means that the argument of reduced agency costs by Kim and Sorensen (1986) and Jensen (1986) prevails over the

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pecking order argument by Myers and Majluf (1984) and Jensen, Solberg & Zorn(1992). According to the tax substitution theory, an increase in a firm's non-debt tax shield should be associated with decrease in debt (Hughes & Trezevant 1997).

**Table 2: The Effect of External Block Holder Ownership on Firm Performance Measures  
Model I – A & B (Tobin's Q and ROE as Dependent Variables)**

Tobin's Q				ROE			
Variable	Coefficient	T-Statistic	Sig. 2 tail	Variable	Coefficient	T-Statistic	Sig. 2 tail
Constant	-1.134	-5.015	.000	Constant	.055	.073	.942
D/E	.063	1.679***	.094	D/E	-.001	-.012	.991
EBO	.625	3.392*	.001	EBO	.118	.192	.848
D(EBO)	.081	.754	.451	D(EBO)	.031	.087	.931
SIZE	-.041	-1.366	.172	SIZE	.047	.467	.640
Industry	.057	.646	.519	Industry	-.212	-.714	.475
GrowthTA	-4.34E-005	-.068	.946	GrowthTA	9.20E-005	.043	.966
PROF	.173	.492	.623	PROF	-1.620	-1.384	.167
FCF	-4.31E-005	-.280	.779	FCF	2.02E-005	.039	.969
INTA	.773	1.348	.178	INTA	-.913	-.478	.633
NDTS	7.694	5.577*	.000	NDTS	-.084	-.018	.985
F – Value	5.249*			F – Value	0.315		
R Square	0.492			R Square	0.086		

\* p < 0.01; \*\* p < 0.05; \*\*\* p < 0.10

After assessing the effect of external block holder ownership, the next analysis is to measure the effect of managerial share ownership on firm performance. Comparing the results of Tobin's Q and ROE as the company performance (dependent variables), Tobin's Q was a more dominant measure than ROE, in context of performance in the East Asian countries.

A negatively and significantly influence of managerial ownership at low-level supports the entrenchment argument. It confirms that managerial ownership at low-level has a strong and negative effect on performance and hence should not be promoted as the agency device. This result proved the second hypothesis. Meanwhile, a positively and significantly influence of managerial ownership at high-level supports the incentive alignment argument. It means that managerial ownership at high-level reduces the conflict of interest between shareholder and manager. These findings are consistent with Morck et al. (1998)'s combined argument that suggests a non-monotonous relationship between managerial ownership and firm performance.

This non-linear relationship is also consistent with previous studies, such as Short and Keasey (1999), McConnell and Servaes (1990), and Han and Suk (1998), which strongly confirm the existence of such a relationship between managerial ownership and firm performance. At low levels of ownership, management has the incentive to pursue the firm's value maximization activities. However, at high levels of ownership, self-serving behavior detrimental to the firm's value declines as management owns a higher fraction of

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the firm's equity, and hence cannot externalize the costs of their moral hazard. Consequently, this result supports the fifth hypothesis.

Meanwhile, the negative and significant effect of size for all companies in Model I (C & D) does not suit the hypotheses of Himmelberg, Hubbard & Palia (1999) and Gugler, Muller & Yurtoglu (2003) arguing for greater scope of moral hazard in large firms. An additional reason for a positive relation of size and insider ownership is that larger firms are likely to employ a more skilled and probably wealthier management. Thus, the wealth constraint argument is moderate.

**Table 3: The Effect of Managerial Share Ownership on Firm Performance Measures Model I – C & D (Tobin's Q and ROE as Dependent Variables)**

Tobin's Q				ROE			
Variable	Coefficient	T-Statistic	Sig. 2 tail	Variable	Coefficient	T-Statistic	Sig. 2 tail
Constant	-.624	-3.014*	.003	Constant	.270	.392	.695
D/E	.085	2.278**	.023	D/E	.004	.035	.972
MSO	-2.113	-2.872*	.004	MSO	-1.604	-.656	.512
MSO <sup>2</sup>	4.527	2.974*	.003	MSO <sup>2</sup>	2.852	.564	.573
SIZE	-.056	-1.843***	.066	SIZE	.035	.342	.733
Industry	.055	.621	.535	Industry	-.202	-.683	.495
GrowthTA	.000	-.335	.738	GrowthTA	.000	.059	.953
PROF	.077	.217	.828	PROF	-1.619	-1.379	.168
FCF	-3.97E-005	-.258	.797	FCF	2.49E-005	.049	.961
INTA	.785	1.364	.173	INTA	-1.014	-.530	.596
NDTS	7.716	5.581*	.000	NDTS	-.090	-.020	.984
F – Value	4.973*			F – Value	0.355		
R Square	0.487			R Square	0.077		

\* p < 0.01; \*\* p < 0.05; \*\*\* p < 0.10

### 4.1 The reverse effect test:

The reverse effects of Tobin's Q on the ownership variables are stated in Table 4 (Model II – E & F) and Table 5 (Model II – G & H). A positively and significantly influence of Tobin's Q (independent variable) on EBO (dependent variable) can be interpreted that the East Asian companies' large owners are better informed than minority shareholders or potential investors; therefore, they use their knowledge about the firm's prospects to maximize his wealth. This result supported the third hypothesis and was in line with the profit-debt-ownership argument (Demzet & Lehn 1985). The result is also consistent with Grosfeld (2006) that found a positively and significantly relation between Tobin's Q with ownership concentration in privatized firms and new firms. Since leverage controls the agency conflicts between shareholders and managers, the need for external capital to mediate the conflict decreases. Consequently, performance decreases the leverage, which increases the ownership concentration.

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Prior study of Lins (2003) showed the same result with this study (Table 4); that is, a positive relation between large non-management block holders and firm value could indicate that monitoring of managers by substantial external block holders has lessened actual or expected managerial agency problems. Conversely, it could be the case that high company values lead to the increased ownership by these block holders.

**Table 4: The Effect of Firm Performance Measures on External Block Holder Ownership (EBO)  
Model II – E & F (EBO as the Dependent Variable)**

EBO							
Variable	Coefficient	T-Statistic	Sig. 2 tail	Variable	Coefficient	T-Statistic	Sig. 2 tail
Constant	.335	9.749	.000	Constant	.307	9.466	.000
D/E	.026	3.094*	.002	D/E	.027	3.232*	.001
TOBIN Q	.017	1.708***	.088	ROE	-.001	-.238	.812
SIZE	.010	1.453	.147	SIZE	.011	1.473	.141
Industry	-.018	-.906	.365	Industry	-.018	-.914	.361
GrowthTA	.000	-2.334**	.020	GrowthTA	.000	-2.323**	.021
PROF	-.095	-1.202	.230	PROF	-.093	-1.182	.238
FCF	-1.14E-005	-.324	.746	FCF	-1.28E-005	-.368	.713
INTA	.005	.039	.969	INTA	-.013	-.100	.920
NDTS	-.013	-.042	.967	NDTS	.128	.420	.674
F – Value	3.994			F – Value	3.662*		
R Square	0.464			R Square	0.459		

\* p < 0.01; \*\* p < 0.05; \*\*\* p < 0.10

Later, this section analyses the influence of firm performance on insider ownership, and its definition of insider is limited on managerial share ownership. In this regression model, even though both models (Model II – G & H) have a significant F-value that indicates a valid model; unfortunately, both exogenous variables of firm performance (Tobin's Q and ROE) are far from statistically significant results (t-statistic: 0.173 and -0.231, respectively). However, the sign of the performance's coefficients is consistent with some previous studies, such as Kole (1996) provided related evidence for this conjecture by showing that managers prefer equity compensation only when they expect their firms to perform well, suggesting that managerial ownership might be endogenous to compensation contracting practices. Similarly, Rajagopalan (1996) showed the relationship between executive compensation, and performance is contingent upon the firm's strategic context. More recently, Cho (1998) used the simultaneous equations' estimation technique to show, for his sample, that corporate value affected ownership structure, while the reverse relationship did not hold. Loderer and Martin (1997) found that acquisition performance and firm value affected the size of managers' stockholdings but not vice versa in their sample of acquisitions. Relatively, this regression result supports the fourth hypothesis.

In order to get more explanatory information in this result, the study explored the relationship several control variables used in the model, i.e. PROF, SIZE, and INTA. A positively and significant result of PROF (Model II – G & H) is consistent with the study of Demsetz and Lehn (1985) that produced the first in a series of papers that examine this

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issue, impose a linear model on the data and find that firm profitability is independent of insider ownership (see Table 5).

A negatively and significantly result of SIZE is consistent with the study of Bathala (1996) and Pedersen and Thomsen (1999) that state two reasons for a negative effect of size on general ownership. First, due to personal wealth constraints, a large share is easier to hold in a small firm. Second, non-diversification costs and liquidity costs increase with size. Meanwhile, the statistically significant coefficient of INTA is different from previous studies, such as Pindado and de la Torre (2004), which used INTA as a measure for discretionary power of management that will favorably influence the extent of insider ownership. This result can be interpreted that the level of intangible assets discloses information about a firm's growth opportunities and, according to Myers (1977), growth opportunities can be viewed as call options whose value depends on discretionary future investment.

**Table 5: The Effect of Firm Performance Measures on  
Managerial Share Ownership  
Model II – G & H (MSO as Dependent Variable)**

MSO							
Variable	Coefficient	T-Statistic	Sig. 2 tail	Variable	Coefficient	T-Statistic	Sig. 2 tail
Constant	.137	5.718	.000	Constant	.136	5.762	.000
D/E	.000	-.037	.970	D/E	.000	-.025	.980
TOBIN Q	.001	.173	.863	ROE	.000	-.231	.818
SIZE	-.012	-2.814*	.005	SIZE	-.012	-2.820*	.005
Industry	.014	1.141	.255	Industry	.014	1.131	.259
GrowthTA	2.64E-005	.303	.762	GrowthTA	2.58E-005	.296	.767
PROF	.087	1.815***	.070	PROF	.086	1.796***	.073
FCF	1.06E-005	.499	.618	FCF	1.06E-005	.499	.618
INTA	-.165	-2.102**	.036	INTA	-.165	-2.098**	.036
NDTS	-.020	-.103	.918	NDTS	-.012	-.063	.950
F – Value	2.226**			F – Value	2.225**		
R Square	0.437			R Square	0.429		

\* p < 0.01; \*\* p < 0.05; \*\*\* p < 0.10

Finally, a positively and significantly relation between leverage and Tobin's Q is consistent with the incentive signaling approach, which debt can be used to signal the market that firm is prospected and equity issues may be interpreted as a negative signal. Ross (1977) argues that a firm with better prospects can issue more debt than one with lower prospects, because the issue of debt by the latter will result in a higher probability of bankruptcy because of debt-servicing costs, which is a pricey outcome to management. This result is also consistent with the resource constraints approach, which argues, that in the situation, where an entrepreneur has limited resources, then the question of capital should be raised as equity or using debt, becomes an issue.

## 5. Summary and Conclusions

Generally, the multivariate regression results support the prior empirical findings. In the relationship between ownership concentration and firm performance, a positively and significantly relation between EBO and Tobin's Q can be interpreted that the East Asian companies' large owners are more capable of monitoring and controlling the management, thereby contributing to corporate performance. It indicates that ownership concentration has been able to increase the cost-efficiency of monitoring in the post-crisis period and due to this higher incentive has enhanced its usage. Accordingly, the controlling shareholder prefers to increase his utility rather by monitoring than by private benefits.

On the other side, a negatively and significantly influence of managerial ownership at low-level bears the entrenchment argument. It corroborates that managerial ownership at low-level has a strong and negative effect on performance and hence should not be promoted as the agency device. Meanwhile, a positively and significantly influence of managerial ownership at high-level supports the incentive alignment argument. It implies that managerial ownership at high-level reduces the conflict of interest between shareholder and manager.

Regarding the reverse causality, a positively and significantly influence of Tobin's Q on EBO can be interpreted that the East Asian companies' large owners are better informed than minority shareholders or potential investors, therefore, they use their knowledge about the firm's prospects to maximize his wealth. This finding is also consistent with the profit-debt-ownership argument. Since leverage controls the agency conflicts between shareholders and managers, the need for external capital to mediate the conflict decreases. Consequently, performance decreases the leverage, which increases the ownership concentration.

Meanwhile, in measuring the influence of firm performance on insider ownership, the regression model shown statistically insignificant results, even though the model has a significant F-value that indicates a valid model. The interesting result in this study is the sign of the performance's coefficients that is consistent with some previous studies, such as Kole (1996), Rajagopalan (1996), Cho (1998), and Loderer and Martin (1997). Those prior studies showed the relationship between executive compensation, and performance is contingent upon the firm's strategic context, and those supported the idea that corporate value affected ownership structure.

The results provide new evidence on the relationship between ownership structure and firm performance of East Asian companies in terms of post Asian Financial crisis analysis. This research contributes to the literature in at least four important areas. First and most important, it can contribute to the literature of determining the effective corporate strategic decisions, especially on regarding the ownership structure debate. The practical import is that ownership structure is related to the financial efficiency of a firm and hence decisions regarding the issue of equity need to consider a range of implications.

Second, the study contributes to the literature on corporate governance fields by examining the relationship between external block ownership and managerial share ownership, whether it affects the financing decision or not, later to the firm performance. Inline to the prior research, the research finds that both external block ownership and managerial share ownership affect significantly capital structure and firm performance, as

the proxy of the presence of the agency problem. It can give new insight about the effect of stock market status, which is emerging and recovering from the last financial crisis.

Fourthly, the course of the analysis has also opened research questions on ownership structure and performance, such as the need to explain the negative effect of performance and to examine the timing issues. The determination of the ownership structure is an object for future research. The consideration of differences in behaviour of stock sales versus purchases can clarify the development of ownership structures and their interaction with performance and corporate governance.

Finally, the study contributes to the literature of capital structure, ownership structure and corporate performance debate in terms of specific event and region by using data that covers seven East Asian countries during the period from the 2000 – 2001 to examine those companies and its capital structure, ownership structure and corporate performance after the Asian Financial crisis. Prior researches in this field generally have relied upon the period of pre-crisis.

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