

# Managerial Ownership and Disclosure of Intangibles in East Asia

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**Abstract.** I examine the relationship between managerial ownership and voluntary disclosure of intangibles. While disclosure of intangibles has the potential to reduce agency cost, managerial ownership provides incentives that can either decrease or intensify agency problem. Regression analysis, using the 2007 data from a sample of 459 firms from East Asia, shows no evidence to support that managerial ownership affects the quality of voluntary disclosure of intangibles.

**Keywords:** Managerial ownership, Voluntary disclosure, Intangibles, East Asia

## 1. Introduction

This paper examines the relationship between managerial ownership and voluntary disclosure of intangibles in East Asia. Firms would voluntarily disclose non-financial information about intangibles as a respond to the lack of recognition of intangibles in the financial statement. Non-financial disclosures about activities and relationships affecting the business provide a comprehensive view of company's value driving investment on intangibles, and hence can lead to a more accurate capital market valuation.

While many studies have been done to understand the nature and extent of voluntarily disclosed information on intangible (e.g. Guthrie and Petty, 2000), I fill the gap in the disclosure of intangibles literature by considering the role of managerial ownership in the governance of East Asian firms. The problematic characteristics of corporate ownership structure in East Asia, added together with ineffective corporate governance, a weak legal and underdeveloped market structure have the propensity to generate substantial agency problem. Due to the managerial incentives that arise from corporate ownership structure, the quality of voluntarily disclosed information about intangibles becomes unclear.

Based on the argument that managerial ownership provides greater incentives for opportunistic behaviour in East Asia, I posit that the quality of voluntary disclosure of intangibles to be lower for firms with greater managerial ownership. Based on the analysis on 459 firms in East Asia, the results show no evidence to indicate that managerial ownership affects the quality of voluntary disclosure of intangibles.

## 2. Related Literature and Hypothesis Development

### 2.1. Voluntary Disclosure of Intangibles

Firms have latitude in determining the extent of information to disclose beyond mandatory requirements. Voluntary disclosure is often used when financial statements are less informative about the market value of the company (Jones, 2007) such as in the case of intangibles where firms supplement the traditional financial reports with non-financial information (Amir & Lev, 1996). Using a range of frameworks to analyse voluntary reporting on intangibles, prior studies show that firms provide a variety of information relating to intangibles (e.g., Garcia-Meca & Martines, 2007). Examples of information being provided are business collaborations, work-related competencies, strategic alliances, and human capital development, which are all not suitable for inclusion in financial statements.

### 2.2. Corporate Ownership Structure in East Asia

Firms in East Asia are characterised by highly concentrated ownership (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998) with complicated pyramid structures and crossholdings that enables the ultimate owners to gain effective control over the company even without an absolute majority share of the stock (La Porta, Lopez-de-Silanes, & Shleifer, 1999). Claessens, Djankov, and Lang (2000) find more than two-third

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of their sample firms are controlled by single ultimate owners and that the divergence between ownership and control is common in East Asia. Due to the weak external corporate governance of the countries, the separation between ownership and control in firms in East Asia leads to severe agency problems. More important to this study is the lack of separation between management and control in East Asian firms. Claessens et al. (2000) find that the top management is related to the family of the controlling shareholders in about 60% of the sample firms, especially in Indonesia, Korea, Malaysia and Taiwan. Lemmon and Lins (2003) find that management groups are the largest block holders in two-thirds of their sample firms. The involvement of management in corporate control, coupled with the lack of well-governed institutional investors in East Asia, provide managers and controlling owners with the incentive and ability for opportunistic behaviour.

The proponents of agency theory argue that the structure of corporate ownership, including shares held by corporate insiders, provides differential incentives that influence financial reporting. On the one hand, greater managerial ownership bonds managers to align with the interests of shareholders (the interest-alignment effect), and hence a positive effect for the company (Warfield et al., 1995). On the other hand, greater managerial ownership creates incentives for managers to run the business in their own self-interest, which may conflict with that of shareholders (the entrenchment effect), and hence adversely affect the company (Wiwattanakantang, 2001). In the context of East Asia, there are views that the managerial entrenchment effect prevails over the interest-alignment effect. Ball, Robin and Wu (2003) suggest that the institutional structures of East Asian countries create incentives for controlling owners and managers to compromise financial reporting quality. Similarly, Fan and Wong (2002) link ownership structure in East Asia to weak information quality.

### **2.3. Managerial Ownership and Voluntary Disclosure of Intangibles**

Theoretically, managers that hold a smaller portion of company shares have more incentives to undertake opportunistic behaviour, and hence a greater need for monitoring efforts by outside shareholders. To the extent that voluntary disclosure can substitute for monitoring in reducing information asymmetry, the relation between voluntary disclosure and managerial ownership can be perceived to be negative. For example, prior studies find that voluntary disclosure such as management earnings forecasts (Nagar, Nanda, and Wysocki, 2003) become less frequent as managerial ownership increases. In contrast, Arcay and Vázquez (2005) find that voluntary disclosure is positively related to board ownership. Leung and Horwitz (2004) examine voluntary segment disclosure in Hong Kong firms and find a non-linear relation. Disclosure increases as executive director ownership rises from 1% to 25% but declines once ownership rises above 25%. A few studies report an insignificant relationship between voluntary disclosure and managerial ownership (Kelton & Yang, 2008).

The discrepancies in these studies could be related to the different types of voluntary disclosure being used. Disclosure such as management earnings forecasts may reduce information asymmetry in firms with low managerial ownership because the disclosure relates to the information about expected earnings that is typically subject to manipulation by managers. It can be argued, though, that certain types of disclosures, such as general information, might not play the same role in addressing the agency problem. In addition, none of the prior studies has considered the relation between ownership and voluntary non-financial disclosure related to intangibles. The benefits and the costs of information on intangibles are both high, making it likely that greater managerial incentives are involved in the decision to voluntarily disclose them.

Further, in the case of intangible-intensive firms, the role of managerial ownership is more intensified because managers have greater discretionary power, as they are the experts in the decision making of the firms. On the one hand, one would expect that the importance of voluntarily disclosing information of intangibles prevail over the incentive from managerial ownership because the disclosure can reduce the information asymmetry that is high in intangible intensive firms. On the other hand, due to the high proprietary cost of information on intangibles, managerial ownership may lead to the withholding of information in intangible-intensive firms. Yet, there is lack of evidence to clarify the debate surrounding the influence of managerial ownership on voluntary disclosure of intangibles. By integrating managerial ownership into the analysis involving voluntary disclosure of intangibles, I add to the understanding on corporate voluntary disclosure behaviour and the consequences of corporate ownership structure.

In addition, while prior studies in this stream of literature have been abundant, most studies have overlooked the East Asian context. The focus on a Western context can result in different findings, since the role of managerial ownership in the East Asian firms can be predicted to be different due to the differences in the institutional features of the countries. In the context of the East Asian market, I posit that managerial ownership is associated with greater incentives for managerial entrenchment rather than alignment of interest with shareholders. The lack of separation between control and management, coupled with the weak institutional features of the countries, provides greater incentives for opportunistic behaviour. As a result, the voluntary disclosure of intangibles for firms in East Asia may be perceived to be of low quality. Following that line of argument, I expect that the quality of voluntary disclosure of intangibles to be lower for firm with greater managerial ownership. The hypothesis (in alternate form) is as follows:

H1 Higher levels of managerial ownership have a negative effect on the quality of voluntary disclosure of intangibles.

### 3. Research Methodology

The sample is 459 firms from Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand. For each country, firms are randomly selected from the list of firms that have i) data in Compustat, ii) intangible assets or research and development expenditure, iii) English language version annual report, and iv) information on director ownership. The breakdown of the sample (untableted) shows that Malaysian firms represent 17.21 percent of the sample and the lowest representation is by Taiwan firms, with only 8.28 percent of the sample. The most common industries are industrial (24.40 percent) and consumer discretionary firms (19.39 percent), while firms from the energy, health care, financial, telecommunication services and utilities industries, each make up less than 5 percent of the overall sample.

The hypothesis is tested using the following model:

$$DISC_j = \alpha_1 + \alpha_2 OWN_j + \alpha_3 BV_j + \alpha_4 EARN_j + \alpha_5 SIZE_j + \alpha_6 LEV_j + \alpha_7 GROWTH_j + IND_i + COUNTRY_c + \epsilon_j$$

where DISC is disclosure score measuring the quality of voluntary non-financial information about intangibles; OWN is the aggregate percentage of equity securities by executive and non-executive directors; BV is book value of equity; EARN is earnings before extraordinary items, SIZE is total asset in its log term; LEV is percentage of total debt to total assets; GROWTH<sub>j</sub> is growth in sales; IND<sub>i</sub> takes a value of 1 when the firm belongs to that industry and zero otherwise; and COUNTRY takes a value of 1 when the firm belongs to that country and zero otherwise. These data are for the year 2007.

The dependent variable (DISC) is derived from the content analysis of annual reports. An index is used to measure the quality, which refers to the extent and the precision, of the disclosure of information on intangibles. The index, which closely follows Bukh et al. (2005), has six categories: (1) The Human Resource (HR) category; this covers workforce-based assets. (2) The Customers category; this covers the customer-based assets and the market-based assets. (3) The Information Technology (IT) category; this represents intangibles related to information technology initiatives and systems that increase company efficiency and productivity. (4) The Processes category; this highlights intangibles related to programs that increase efficiency and productivity. (5) The R&D category; this incorporates information on the program and progress of R&D, innovation and, intellectual property. (6) The Strategy category; this includes the intangible benefits from the strategic execution of companies. In order to derive voluntary information, I exclude sections that are subject to regulatory requirements, such as the directors' report and notes to the accounts. The disclosed information is scored using a 0-3 scoring system. A score of 0 is given for non-disclosure; 1 if the information is disclosed but the level of information is minimal; 2 if the information is disclosed and the level of information is average and 3, if the information is disclosed and the level of information is high.

The test variable (OWN) proxies for the relationship between the score for voluntary disclosures of intangibles and managerial ownership. A significant coefficient for  $\alpha_2$  would indicate that the quality of voluntary disclosure of intangibles is influenced by the company-level managerial ownership structures. SIZE, LEV, GROWTH, IND, and COUNTRY serve as the control variable.

### 4. Findings

## 4.1. Descriptive Statistics

Table 1 shows that the average disclosure scores for the 459 firms are 33, with a median score of 30. The mean (median) book value is \$709 (\$139) million. The mean earnings before extraordinary items is \$98 million with a median of \$14 million. The sample has mean (median) total asset of \$1,716 million (\$267) million and long term debt to total asset of 0.147 (0.111). The average sales growth is \$103 million and the median sales growth is \$0.16 million. Table 1 compares the statistics for companies with director ownership equal to, or greater than, the sample median (OWNHIGH) and companies with director ownership less than the sample median (OWNLOW). The parametric (non-parametric) analyses suggest that the differences between the two samples are statistically significant.

Table 1: Descriptive Statistics

Variable		Full Sample	OWN <sup>HIGH</sup>	OWN <sup>LOW</sup>	Differences	t-value/z-value
DISC	Mean	32.810	28.870	36.780	-7.910	4.413***
	Median	30.000	26.000	36.000	-10.000	-4.239***
BV	Mean	709.115	424.459	995.014	-570.555	4.264***
	Median	138.899	77.864	290.686	-212.823	-6.287***
EARN	Mean	98.462	47.465	149.681	-102.216	4.144***
	Median	14.465	8.475	37.150	-28.676	-5.202***
SIZE	Mean	1716.313	1108.035	2327.248	-1219.214	3.946***
	Median	266.986	154.776	614.999	-460.223	-6.186***
LEVERAGE	Mean	0.147	0.129	0.165	-0.036	2.846***
	Median	0.111	0.082	0.133	-0.051	-2.787***
GROWTH	Mean	103.924	0.352	207.948	-207.596	2.083**
	Median	0.160	0.187	0.133	0.054	-2.466**

## 4.2. Univariate Analysis

The results of Pearson and Spearman correlation matrices (untabulated) indicate that DISC is highly correlated with OWN, BV, EARN, and SIZE. DISC is found to be highly correlated with LEVERAGE only in the Spearman correlation matrices, while there is no correlation between DISC and GROWTH in both analyses. The correlations involving the DISC and OWN are negative, ranging from -0.123 (Pearson correlation) to -0.210 (Spearman correlation). However, the bi-variate correlations need to be interpreted with caution because they do not control for the influences of other variables.

## 4.3. Multivariate Analysis

Table 2 presents the results of the regression analysis that test whether the presence of high director ownership decreases the quality of voluntary disclosure about intangibles. The adjusted R-squared is 34.9 percent with an F-statistic of 12.18. The collinearity statistics (untabulated) have values between 1.20 and 4.13 indicating that multicollinearity is unlikely to be an issue in the regression.

Table 2 : Multivariate Analysis

	Coefficient	t-statistic
INTERCEPT	-5.485	-1.221
OWN BV	-0.019	-0.348
	0.000	0.15
EARN	0.000	-0.037
SIZE LEVERAGE	11.18	7.607***
GROWTH	-7.909	-1.352
Industry fixed effects	Included	0.560
Country fixed effects	Included	
Adjusted R <sup>2</sup>	0.349***	
F-Statistic	12.179	
n	459	

The coefficient for OWN, which is -0.348, is in the predicted direction. Contrary to what I expect, OWN is not significant. This result shows that OWN, which proxies for managerial ownership, is not associated with voluntary disclosure of intangibles (DISC). This indicates that there is no evidence to support the view that managerial ownership has an adverse effect on the quality of voluntary disclosure of intangibles. The

insignificant finding could be attributed to two factors. First, there are inconclusive results from prior studies regarding the relationship between managerial ownership and disclosure. Secondly, as my sample consists of intangible-intensive firms, the importance of disclosure in reducing information asymmetry could prevail over the negative effect of managerial ownership.

## 5. Conclusion

This paper incorporates the characteristic of corporate ownership structure in East Asia, in understanding corporate voluntary disclosure behaviour. While disclosure of information on intangibles could be beneficial in reducing information asymmetry, the negative influence of managerial ownership that is typical for the East Asian firms could affect the quality of the disclosure. The findings, however, show no evidence that the quality of voluntary disclosure of intangibles is affected by the proportion of shares held by directors. Future research can employ other types of ownership structure such as family ownership and government ownership, both of which are quite pertinent in East Asia. This study can be extended by differentiating between shares held by executive and non-executive directors. Cross-sectional analysis might also provide better understanding about the effect of managerial ownership on voluntary disclosure.

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