

OWNERSHIP STRUCTURE AND CORPORATE VOLUNTARY DISCLOSURE-EVIDENCE FROM TAIWAN

Grace M. Liao*, Chilin Lu**

Abstract

Compared to western markets, listed firms in East Asia typically have low levels of information transparency and do not motivate to disclose proprietary information to the public. One of the most frequently cited reasons for the low level of transparency and disclosure quality is poor corporate governance structures in this region. In this study, we explore the association between ownership structure and voluntary information disclosure in Taiwan. Annual report index data from Information Disclosure and Transparency Ranking System (IDTRS) are used as the proxy of the firm's voluntary information. The empirical results indicate that the level of information disclosure is likely to be less in "insider" or family-controlled companies.

Keywords: voluntary disclosure; family firms, Taiwan

* Lecturer/Ph D Candidate, Chung Jung Christian University, e-mail: gmliao@yahoo.com.tw

** Associate Professor, National Formosa University, e-mail: chilin@nfu.edu.tw

1. Introduction

Corporate disclosure has been the focus of an increasing research subject in recent years. Since Enron, corporate American has come under even greater scrutiny and increased regulation. E.g., Sarbanes Oxley is, at least in part, intended to enhance the role of corporate governance in safe guarding the quality of reported earnings and overall corporate disclosure.

With growing interests in the topic, recently researchers have attempted to examine directly whether and how corporate governance affects corporate disclosure quality in US, UK and Continental European countries (Meek et al., 1995; Turpin & DeZoort, 1998; Ball et al., 2003; Bushman et al., 2004; Khanna et al., 2004). In contrast, very few studies have been examined with the nature and extent of corporate disclosure in Asian countries. Accordingly, this study aims to examine the corporate disclosure in Taiwan listed companies.

Corporate disclosure deserves special attention in the Asian context because firms in these countries have less incentives for transparent disclosure than US and UK markets (Ball et al., 2003). Taiwan capital market plays an important role in Asian emerging stock market. Research made in Taiwan provides us with an opportunity to examine empirically the firm characteristics affecting corporate information disclosure in emerging economies. Further, the disclosure orientation in Asian market is also greatly influenced by the form of their ownership and

management structure (Lam et al., 1994; Mok et al., 1992). In Asian market, especially in Chinese society, listed companies are usually controlled by a family group who staff many of the senior positions and also own a large proportion of the shares. As Taiwan become one of the major international capital market, there is an increase demand from market users for more corporate disclosure for proper evaluation of firm's performance.

This study examines whether ownership structure is associated with the corporate disclosure of listed companies in Taiwan. It is also investigates whether family ownership and control of firms has an impact on the level of disclosure.

The rest of the paper is organized as follows. Section 2 discusses our hypotheses. Section 3 discusses the sample and research method. Section 4 presents the results. Section 5 concludes the paper.

2. Hypotheses development

2.1 Ownership structure and disclosure

Voluntary disclosure is greatly influenced by the form of the ownership and management structure (Chau & Gray, 2002; Gelb, 2000; Ho & Wong, 2001). Jensen and Meckling (1976) assert that when ownership and control are separated, the potential for agency costs arises because of conflicts of interests between the contracting parties (manager and shareholders). As a result, information disclosure is likely to be greater in widely held firms so that principals can effectively monitor that their economic interests are optimized

and agents can signal that they act in the best interests of the owners. There is limited researches in Asian market. Hossain et al. (1994) found that ownership structure is statistically related to the level of information voluntarily disclosed by listed Malaysian companies. Thus, the analysis leads to the following hypothesis:

H1: There is a positive association between wider ownership and the extent of voluntary disclosure.

2.2 Family ownership and voluntary disclosures

In Asian market, it seems that family-owned and –controlled companies are more in evidence than in western developed stock markets and that “insiders” control a significant proportion of listed companies (Claessens et al., 1999).

Chau and Gray (2002) argue when the ownership structure is concentrated, large institutional investors may be less concerned with voluntary disclosure, given that they have access to the information from inside. Chau and Gray have examined this relationship on Hong-Kong and Singapore firms, and found the predominance of insiders and family-controlled firms is associated with low levels of disclosures. Insiders and family-controlled firms have little motivation to disclose information in excess of mandatory requirements since the demand for public information disclosure is relatively weak in comparison with that of firms with wider share ownership. This leads to the following hypothesis:

H1: There is a negative association between family or concentrated ownership and of voluntary disclosure.

3. Research methods

3.1 Sample and data selection

Our sample encompassed all industrial listed firms included in the Taiwan Economic Journal (TEJ) database. All the 45 banking and insurance firms were excluded because they are subject to specific disclosure requirements. The final sample included 1,219 firms. The sample period was from 2005 to 2007. We selected to work on this sample period since voluntary disclosures have greatly increased in Taiwan during this time. Table 1 presents sample composition.

Table 1. Sample composition by industry (N=1,219)

Industry	Numbers
Cement	7
Food	22
Plastic	27
Textiles	56
Electric	60
Cable	30
Chemistry & Biotechnology	77
Glass	6
Paper	7
Steel	38
Rubber	11
Car	5
Electronic	711
Construction	53
Container	21
Tourism	11
Retail	18
Fuel	12
Others	64

3.2 Disclosure index

The voluntary disclosure checklist was based on the one developed by Taiwan Securities and Futures Exchange Commission (TSFEC). TSFEC developed Information Disclosure and Transparency Ranking System (IDTRS) in 2003. The items on the checklist were checked to the sample companies. (see Appendix A). Annual report index data from IDTRS were used as the proxy of the firm’s voluntary information. The items on the checklist were categorized into three information types: (a) Finance and Operation Transparency; (b) Board and Ownership Structure; (c) Mandatory or Voluntary.

The voluntary index was unweighted scoring of the disclosure items. An information disclosed will get 1 point, and 0 otherwise or not applicable (N/A) when the particular item is not included in the annual report. The voluntary disclosure index for each company is calculated as TD/MD-the number of total disclosures (TD) as a proportion of the maximum disclosure (MD). Table 2 presents index data from 2005 to 2007.

Table 2. Annual reports by disclosure index

Index	2005	2006	2007
Total disclosures	48	54	61
Finance and operation transparency	31	36	39
Board and ownership structure	17	19	21
Mandatory	32	32	34
Voluntary	16	17	19

3.3 Voluntary disclosure and ownership structure

Voluntary disclosure is greatly influenced by the form of the ownership and management structure (Chau & Gray, 2002; Gelb, 2000; Ho & Wong, 2001). The family firm versus the non-family firm distinction is employed to identify firms facing differing unresolved agency problems (Jensen and Meckling, 1976). Chau and Gray have examined this relationship on Hong-Kong and Singapore firms, and found that family-controlled firms have little motivate to disclose information in excess of mandatory requirements.

For Taiwan listed companies, there is information about the proportion of shares owned by directors and dominant shareholders, as this is a required disclosure by Taiwan Stock Exchange (TWSE). The ownership variable in this study was calculated by adding together the proportions of equity belonging to directors and to dominant shareholders to arrive at the proportion of a firm's equity owned by insiders.

Furthermore, Chen and Jaggi (2000) show that the larger the proportion of outsiders, the more effective will be the monitoring of voluntary financial disclosures.

3.4 Regression model

Prior studies have identified various attributes, such as size and performance, that affect firms' disclosures and thus, the results presented in the previous section may be influenced by these attributes. Accordingly, we estimate a multivariate OLS regression equation to

examine how the level of control party affects a firm's disclosures. The analysis of voluntary disclosure was based on the following multiple regression model:

$$DQ_t = \beta_0 + \beta_1 SIZE + \beta_2 LEV + \beta_3 AUD + \beta_4 OOWN + \beta_5 EPS$$

Where,

DQ_t =extent of voluntary disclosure scores.

β_0 =intercept.

SIZE=firm size.

LEV=leverage.

AUD=opinions of auditors.

OOWN=ownership structure.

EPS=earnings per share

4. Results and discussion

4.1 Descriptive statistics

Table 3 presents information about the sample companies in terms of the independent and control variables. The proportion of equity owned by the external compared with the insiders (directors and dominant shareholders) was 0.609, 0.610 and 0.588 from 2005 to 2007 respectively. A further analysis of the biographical details of the directors of sample companies indicated that the family relationships were among the directors and senior management staff. Based on the family relationships, a further analysis of the shareholdings among the family members revealed that more than half of the listed companies were subject to family control (i.e., one family group of shareholders own 50% or more of the issued share capital).

Table 3. Sample Characteristics

	Size ¹		LEV ²		AUD ³		Oown ⁴ (outsider)		EPS ⁵	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Year										
2005	6.630	0.386	4.227	0.456	-1	0	0.609	0.133	3.136	0.345
2006	6.830	0.391	4.439	0.418	-1	0	0.610	0.143	1.940	0.104
2007	6.584	0.389	4.369	0.389	-1	0	0.588	0.110	1.030	0.162
2005-2007	6.681	0.389	4.345	0.421	-1	0	0.534	0.129	2.035	0.204

Notes:

¹Natural logarithm of total assets.

²Total liabilities over total assets

³Auditor opinion, 2 for adverse opinion; 1 for qualified opinion; 0 for disclaimer opinion and -1 for unqualified opinion.

⁴Ratio of a firm's equity owned by outsiders to all equity of the firms.

⁵Net profit after tax and preferred stock dividend over weighted average published shares

Table 4 reports the descriptive statistics of sample companies in terms of the disclosure scores from 2005 to 2007. The voluntary mean disclosure in 2005-2007 varied from 0.58 in the case of finance and

operation transparency; 0.535 for board and ownership structure; 0.819 for mandatory information and 0.05 for voluntary information. The overall mean disclosure in 2005-2007 was at 0.567.

Table 4. Disclosure scores

	Year	Mean	S.D.	Minimum	Maximum
Finance and operation	2005	0.510	0.062	0.377	0.631
	2006	0.601	0.115	0.355	0.680
	2007	0.629	0.145	0.407	0.760
	2005-2007	0.580	0.107	0.355	0.760
Board and ownership structure	2005	0.592	0.130	0.357	0.846
	2006	0.525	0.143	0.231	0.889
	2007	0.487	0.138	0.185	0.821
	2005-2007	0.535	0.133	0.185	0.889
Mandatory	2005	0.802	0.072	0.623	0.918
	2006	0.816	0.070	0.566	0.903
	2007	0.838	0.076	0.520	0.911
	2005-2007	0.819	0.075	0.520	0.918
Voluntary	2005	0.047	0.075	0	0.357
	2006	0.053	0.060	0	0.300
	2007	0.049	0.075	0	0.500
	2005-2007	0.050	0.078	0	0.500
Total disclosures	2005	0.552	0.058	0.419	0.682
	2006	0.483	0.040	0.401	0.702
	2007	0.667	0.094	0.322	0.886
	2005-2007	0.567	0.083	0.322	0.886

Source: TSFEC

4.2 Multivariate results

Table 5 indicates that the level of overall disclosure is significant at the 0.01 level, the F value of 27.484. The adjusted coefficient of determination (R^2) for the level of overall disclosure is 50.9%. Thus, these multiple regression models are highly significant and have an explanatory power similar to those reported in earlier studies (Cook, 1991). The amount of explained variation in disclosure range from 65.3% for finance and operation transparency; 7.9% for board and ownership structure; 16.6% for mandatory information; 2.2% for voluntary information. The use of this statistical tool is based on the assumptions of no significant multicollinearity between the explanatory variables, and conditions of linearity and normality. Multicollinearity does not appear to be affecting the reported results. Hair et al. (1995) indicate that very large VIF values indicate high collinearity and a common cutoff threshold is VIF values above 10. The variance inflation factor (VIF) in all the regression tests is lower than 10 for any of the independent variables. As shown in Table 5, the coefficients for ownership structure of Taiwan listed companies are significant ($p < .01$) for total information and board & ownership structure. The coefficients are also significant ($p < .05$) for all other subgroup information. These findings are consistent with Hypothesis 1 that there is a positive association between wider ownership and the extent of voluntary

disclosure. The coefficient for EPS is significant ($p < .1$) for board & ownership structure which reveals that earning voluntary disclosures is associated with ownership structure. This finding is consistent with Chen and Jaggi's (2000). Further analysis of the shareholdings among the family members of the sample companies from 2005-2007 reveals that more one third of the listed companies are subject to family control. In order to analyze the impact of family control on voluntary disclosures, another regression model was run with the same variables as in Table 5, but with an added indicator variable for family control as shown in Table 6. As shown in Table 6, the coefficient on OOWN remains significantly positive, and the coefficient on the proportion owned by family members is negative and statistically significant ($p < .01$) for mandatory, voluntary and total information disclosures. This indicates that while concentrated ownership in general reduces disclosure that effect is particularly pronounced when the firm is family-controlled. Gray's (1988) secrecy hypothesis also argues that where a firm's shares are held by family-control, there is a preference for confidentiality and restriction of disclosure of information about the business only to those who are closely involved with its management and financing. Thus, the findings of this study support Hypothesis 2 that there is a negative association between family ownership and voluntary disclosures.

Table 5. Regression results

Independent variables ^a	Finance and operation transparency		Board and ownership structure		Mandatory information		Voluntary information		Total disclosures	
	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)
Intercept	0.595	7.965 (0.000)** *	0.275	1.565 (0.120)	0.761	7.271 (0.000)** *	0.048	1.113 (0.268)	0.526	6.186 (0.000)** *
SIZE ¹	0.1875	3.1028 (0.002)**	0.043	1.594 (0.113)	0.0003	0.017 (0.986)	-0.0006	-0.098 (0.922)	0.1288	1.9995 (0.0459)*
LEV ²	0.034	1.025 (0.307)	-0.103	-1.563 (0.120)	-0.012	-0.309 (0.758)	0.013	0.686 (0.493)	-0.004	-0.131 (0.896)
AUD ³	-0.009	-0.675 (0.501)	-0.070	-2.587 (0.011)**	-0.042	-1.808 (0.072)*	0.005	0.675 (0.501)	-0.026	-1.656 (0.100)*
OOWN ⁴	0.209	2.060 (0.004)**	0.041	3.511 (0.001)** *	0.027	2.203 (0.045)**	-0.022	-1.974 (0.050)* *	0.036	2.831 (0.005)** *
EPS ⁵	0.046	0.917 (0.359)	0.128	1.999 (0.045)*	0.015	1.076 (0.283)	-0.004	-0.391 (0.696)	0.012	1.012 (0.313)
Adjusted R ²	0.653		0.079		0.166		0.022		0.509	
F ² statistic	49.198** *		3.187***		6.106		1.574		27.484** *	

Notes: ^aThe estimated coefficients and two-tailed *p*-values (in parentheses).

¹Natural logarithm of total assets.

²Total liabilities over total assets

³Auditor opinion, 2 for adverse opinion; 1 for qualified opinion; 0 for disclaimer opinion and -1 for unqualified opinion.

⁴Ratio of a firm's equity owned by outsiders to all equity of the firms.

⁵Earnings per share.

*Significant at 0.1

**Significant at 0.05

***Significant at 0.01

Table 6. Regression results-family control

Independent variables ^a	Finance and operation transparency		Board and ownership structure		Mandatory information		Voluntary information		Total disclosures	
	Coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)	coefficient t	t-statistic (p-value)
Intercept	0.498	4.929 (0.000)** *	0.177	0.778 (0.438)	0.692	5.355 (0.000)** *	0.207	16.327 (0.000)	0.463	4.331 (0.000)** *
OOWN	0.603	8.157 (0.000)** *	0.341	1.980 (0.049)* *	0.798	7.849 (0.000)** *	-0.022	-1.974 (0.050)**	0.550	6.564 (0.000)** *
Family control	-0.006	-1.930 (0.055)*	-0.015	-1.913 (0.058)*	-0.011	-3.009 (0.003)** *	-0.067	-3.319 (0.001)** *	-0.009	-2.908 (0.004)** *
Adjusted R ²	0.665		0.099		0.214		0.068		0.538	
F ² statistic	33.234***		2.789**		5.440***		2.858**		19.952** *	

Notes: ^aThe estimated coefficients and two-tailed *p*-values (in parentheses).

*Significant at 0.1, **Significant at 0.05, ***Significant at 0.01

5. Conclusion

As the features of the emerging capitalism in East Asia is becoming more distinct, it is clear that controlling shareholders will play a key role in corporate structure and governance for the foreseeable future.

Family firms have incentive to reduce the transparency of corporate governance practices to facilitate getting family members on boards without interference from non-family shareholders. Consistent with this argument, we find that family firms tend to disclose less information than those wide shareholder firms.

The empirical findings highlight the importance

of the contextual characteristics of Taiwan. The strong prevalence of "insider" and family-controlled companies is likely to be associated with lower levels of disclosure. Insider and family-controlled companies have little motivation to disclose information in excess of mandatory requirements because the demand for public information disclosure is relatively weak in comparison with that of companies with wider share ownership. These findings have important implications for national regulatory process that regulators should consider differences of control party settings in ownership structure prior to establishing rules for corporate disclosures.

Appendix A. Disclosure checklist

A. Finance and operation transparency

1. Does annual report reveal important accounting policy?
 2. Does annual report apply GAAP aligned with local GAAP?
 3. Does annual report provide accounts in alternate internationally recognized accounting method?
 4. Does annual report reveal assets impairment?
 5. Does annual report reveal depreciation method of fixed assets?
 6. Does annual report reveal methods for assets valuation?
 7. Does annual report reveal related information for long-term and short-term investment transactions?
 8. Does annual report reveal analysis information for individual department?
 9. Does annual report reveal information of auditing firm and auditors' report?
 10. Does annual report reveal any non-audit fees paid to auditor or any other affiliated companies by auditing company?
 11. Does annual report reveal chart and ownership structure of affiliated companies?
 12. Does annual report reveal endorsement of affiliated companies, loan to others and investment in derivative financial goods?
 13. Does annual report reveal transactions of related party?
 14. Does annual report reveal information of operation?
 15. Does annual report reveal trends and environment of industry from perspective of macro economy?
 16. Does annual report reveal business development from long- and short-term perspective?
 17. Does annual report reveal details of its R&D investment plans?
 18. Does annual report reveal details of its future investment plans and R&D expenditure?
 19. Does annual report reveal R&D investment plans and milestone?
 20. Does annual report reveal details of products and service?
 21. Does annual report reveal sales and production volume and products combination?
 22. Does annual report reveal any industry-specific ratios?
 23. Does annual report reveal any industry-specific Key Performance Indicator (KPI)?
 24. Does annual report reveal historical performance indicator (ROI, ROA, ROE, etc.)?
 25. Does annual report reveal policy of risk management?
 26. Does annual report reveal organization of risk management?
 27. Does annual report reveal its accounting target and method of hedge?
 28. Does annual report reveal employee productivity?
 29. Does annual report reveal employee training?
 30. Does annual report reveal employees disclosing transparency of financial information, who got related certificate from authority?
 31. Does annual report reveal employees' behavior or ethics regulation?
 32. Does annual report reveal protection of working environment and employee safety?
 33. Does annual report reveal to implement social responsibility?
-

B. Board of directors and ownership structure

1. Does annual report reveal member of board directors, experience, shares holding and when joined the board?
 2. Does annual report reveal board information upon independence?
 3. Does annual report reveal board information upon taking a job in a company?
 4. Does annual report reveal board information upon taking part-time job in other companies?
 5. Does annual report reveal compensation details of board directors and board supervisors?
 6. Does annual report reveal remuneration of board directors and board supervisors?
 7. Does annual report reveal related compensation information of individual director and supervisor?
 8. Does annual report reveal pledge of directors, management and majority of shareholders?
 9. Does annual report reveal training of board directors and supervisors?
 10. Does annual report reveal discussion of governance?
 11. Does annual report reveal top 10 employees, who get stock option, with names and job title?
 12. Does annual report reveal name, job title, and shares of top 10 employees who get bonus?
 13. Does annual report reveal management name listing, shares holding and employee stock options shares?
 14. Does annual report reveal EPS after employee bonus and directors/supervisors compensation?
 15. Does annual report reveal EPS after employee stock bonus?
 16. Does annual report reveal names, ratio and shares of shareholders who own over 5% of share capital?
 17. Does annual report reveal top 10 shareholders with their holding shares and ratio?
 18. Does annual report reveal execution of action items of stockholders' meeting?
-

References

1. Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus standards: Properties of accounting income in four East Asia countries. *Journal of Accounting and Economics*, 36, 235-270.
2. Bushman, R., M., Piotroski, J. D., & Smith, A., J. (2004). What determines corporate transparency. *Journal of Accounting Research*, 42, 207-252.
3. Chau, G., K., & Gray, S. J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International Journal of Accounting*, 37(2), 247-265.
4. Chen, J. P., & Jaggi, B. L. (2002). The association between independent non executive directors, family control and financial disclosures. *Journal of Accounting and Public Policy*, 19(4-5), 285-310.
5. Cook, T. E. (1991). An assessment of voluntary disclosure in the annual reports of Japanese corporations. *International Journal of Accounting*, 26(3), 174-189.
6. Claessens, S., Djankov, S.; Fan, J., & Lang L. H. P. (1999). *Expropriation on minority shareholders: Evidence from East Asia*. Policy Research. Working Paper 2088, The World Bank.
7. Gelb, D. S. (2000). Managerial ownership and accounting disclosure: an empirical study. *Review of Quantitative Finance and Accounting*, 15, 169-185.
8. Gray, S. J. (1988, March). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, 24(1), 1-15. (fod027)
9. Khanna, t., Palepu, K. P., & Srinivasan, S. (2004). Disclosure practices of foreign companies interacting with US markets. *Journal of Accounting Research*, 42, 475-508.
10. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis with readings*. New York: Prentice-Hall.
11. Ho, S. M., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10, 139-156.
12. Hossain, M., Tan, L. M., & Adams, M. B. (1994). Voluntary disclosure in an emerging capital market: some empirical evidence from companies listed on the Kuala Lumpur Stock Exchange. *International Journal of Accounting*, 29(4), 334-351.
13. Jensen, J., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
14. Lam, K., Mok, H. M. K., Cheung, I., & Yam, H. C. S. (1994). Family groupings on performance of portfolio selection in the Hong Kong Stock market. *Journal of Banking and Finance*, 18(4), 725-742.
15. Meek, G. K., Robert, C. B., & Gray, S., J. (1995, Third Quarter). Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. *Journal of International Business Studies*, 555-572.
16. Mok, J. M. K., Lam, K., & Cheung, I. (1992). Family control and return covariation in Hong Kong's common stocks. *Journal of Business Finance and Accounting*, 19(2), 277-293.
17. Turpin, R.A., & DeZoort, F. T. (1998). Characteristics of firms that include an audit committee report in their annual report. *International Journal of Auditing*, 2(1), 33-48.