DOES CORPORATE GOVERNANCE AFFECT INSTITUTIONAL OWNERSHIP AND SHARE REPURCHASE DECISIONS?

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ABSTRACT

This study investigates the relevance among corporate governance mechanism, institutional ownership and share repurchase decisions. Examining 220 exchange-listed companies in Taiwan during 2004 to 2006, the main findings are as follows. First, corporate governance mechanisms affect share repurchase decisions as well as institutional investor ownership. Next, the ownership of institutional investor depends on the interaction between corporate governance mechanisms and share repurchase decisions. Additionally, the share repurchase decision is influenced by interaction between corporate governance mechanisms and ownership of institutional investors. Finally, when the company size is incorporated as a control variable, the adjusted R-square for the multiple regression is improved.

JEL: G32; G34

KEYWORDS: Corporate governance, institutional ownership, share repurchase

INTRODUCTION

This study investigates whether corporate governance can affect institutional ownership and share repurchase. On July 2000, share repurchase was allowed in Taiwan stock market¹. There were 385 exchange-listed companies declaring the implementation of share repurchase for a total of 1366 cases from 2000 to 2006. The amounts of share repurchase have increased each year; this indicates share purchase is an important financial decisions². To strengthen the transparency of information and establish the direction of corporate governance, "the code of best practice for corporate governance" was established on May 2002; this leads to investors' attention on corporate governance³.

Relatively fewer studies examine the relationship among corporate governance, institutional ownership, and share repurchase. Since share repurchase involves the interests of shareholders and stakeholders, it should be accompanied with adequate corporate governance mechanisms for mitigating their conflict. In addition, because institutional investors usually have more information and professional knowledge, they could play an important role in supervision, and would hold those stocks with well corporate governance mechanism. Therefore this study attempts to investigate a rarely discussed issue: the associations among corporate governance, share repurchase, and ownership of institutional investors.

Based on the mentioned motivations, this study will suggests four hypotheses to be verified in Section 3. This paper is organized as follows. Section 2 briefly discusses the relevant literature. Section 3 states the four hypotheses and the description of the related variables. Subsequently, the multiple regression results for these hypotheses are exhibited in Section 4. Finally, conclusions are presented in Section 5.

LITERATURE REVIEW

Numerous researchers have discussed the issue of share repurchase. Some concentrate mainly on the motivation and market reaction for share repurchases. For example, Jensen (1986) proposed reducing idle funds through share repurchase can decrease company agency cost. Ikenberry et al. (1995) found that under-pricing is the most important motivation for share repurchase; also, the declaration of share

repurchases had a positive impact on company's long-term performance. Gompers et al. (2003) suggested that share repurchases can lead to a strong controlling shareholder rights, and hence reduce agency costs. Tsai and Guo (2004) found that when the company announced share repurchase, there would be positive market reaction.

Corporate governance issue have been widely studied in recent years; however, these discussions often focused on the institutional investor's roles. For example, Brickley et al. (1988) found that on the voting of a takeover case, institutional investors and external controlling shareholders are more aggressive in voting; also, when institutional investors have very close relationship with the company, their monitoring capacities would be reduced. Hartzell and Starks (2003) found that the involvement of institutional investors could achieve the better supervision and corporate governance.

Variables Description and Hypotheses Suggested

First, this section introduces the calculation of control rights and cash flow rights. Subsequently, we present the selection of corporate governance variables. Finally, four hypotheses are suggested. Based on La Porta et al. (1999), *direct control* is defined as the right to vote registered under the name of the largest shareholder. *Indirect control* is the right to vote registered under the name of other business entities, but these entities are controlled by the largest shareholder. According to Yeh et al. (2002), the indirect control rights of the largest shareholder can be accumulated through multiple control chains, then the control rights are the sum of the smallest share right in each of the control chain. Additionally, cash flow rights are measured from multiplying mutually all the share rights ratio in control chain. If the largest shareholder owns a company through a number of control chains, the cash flow rights are the sum of the control chain.

Table 1 summarizes the symbols and definitions of various variables in this study, where these variables primarily refer to Yeh et al. (2002). The explained variables include share repurchase variable (Policy) and the ownership of institutional investors (Hold). The explanatory variables are the corporate governance variables which are classified into 5 dimensions and 17 variables. Additionally, this study uses company size (Size), debt ratio (Debt) and export ratio (Exp) as the control variables, which are referred to Falkenstein (1996), Dittmar (2000) and Lin and Shiu (2003), respectively.

Based on the motivations in Section 1, this study proposes four hypotheses, namely H1 through H4, as follows. H1 states that corporate governance would affect share repurchase. H2 states that corporate governance would affect the ownership of institutional investors. H3 states that the interactions between corporate governance and ownership of institutional investor would affect the share repurchase decision. Finally, H4 states that the interactions between corporate governance and share repurchase would affect the ownership of institutional investor would affect the share repurchase decision. Finally, H4 states that the interactions between corporate governance and share repurchase would affect the ownership of institutional investors repurchase.

EMPIRICAL RESULTS

The data were obtained mainly from the Taiwan Economic Journal (TEJ) and the "Market Observation Post System" in Taiwan Stock Exchange. Three criteria are adopted to select companies for the empirical sample. First, the companies must be the exchange-listed companies in Taiwan Stock Exchange during the sample period of 2004 to 2006. Second, they had announced share repurchase during the sample period. Third, those companies would be removed if their information were not complete in testing the four hypotheses. Accordingly, there are 220 sample companies per year, and hence the total observations equal 660 over 3 years.

This study utilizes multiple regression analysis to test these four hypotheses. Using stepwise regression, we select 5 corporate governance variables as the explanatory variables for H1 and H3 and select 6 corporate governance variables as the explanatory variables for H2 and H4. The results by the EViews software are presented in Table 2. First, the null hypotheses $\alpha_1 = ... = \alpha_5 = 0$ for Model (1),

 $\alpha_4 = ... = \alpha_9 = 0$ for Model (2), $\beta_1 = ... = \beta_5 = 0$ for Model (3), and $\gamma_4 = ... = \gamma_9 = 0$ are rejected significantly, this empirical result indicates that all four hypotheses are verified. Second, different from Gompers et al. (2003), the coefficient of X2 (ratio of stocks collateralized by major stockholders) in Model (1) is significantly positively related to share repurchase. Third, different from "the optimal leverage ratio hypothesis" in Dittmar (2000), the result demonstrates that the impact of debt ratio (Debt) on share repurchase is not significant in Model (1). Fourth, consistent with Falkenstein (1996), company size (Size) has a significantly positive impact on institutional ownership in Model (2). Fifth, both export ratio (Exp) and debt ratio (Debt) have no noticeable effects on ownership of institutional investor; this disagrees with Lin and Shiu (2003).

Table 1: Symbols and Definitions of Various Variables

Corporate Governance Variables	
A. board of directors (supervisors) composition (weight 40%)	
No. of controlling shareholders / No. of directors	
No. of professional managers / No. of directors	
No. of other shareholders as directors / No. of directors	
No. of other shareholders as supervisors / No. of supervisors	
No. of controlling shareholders as supervisor / No. of supervisors (X6)	
No. of supervisors	
B. ownership structure (weight 20%)	
ratio of cash flows owned by controlling shareholders (X1)	
controlling shareholders control rights minus their cash flow rights (X7)	
cash flow rights / control rights of controlling shareholders	
C. management style (weight 10%)	
shares owned by second largest shareholder / outstanding shares (X4)	
Is chairman also the general manager? (X8; Yes = 1 , No = 0)	
D. related party transaction (weight 20%)	
sales from related party / net sales (X9)	
account receivable from related party / equity (X5)	
account payable from related party / equity	
non-operating income from related party / net sales	
E. major shareholders involvement in stock market (weight 10%)	
No. of stocks collateralized by major stockholders / No. of outstanding shares (X2)	
long-term and short-term investment / total assets (X3)	
Shares repurchase variable	
planned number of share repurchase / outstanding shares in the beginning (Policy)	
Ownership of Institutional investor variable	
shares owned by institutional investors / outstanding shares (Hold)	
Control variables	
natural logarithm of total assets in thousands (Size)	
total debts / total assets (Debt)	
total exports / total assets (Exp)	

This table is mainly based on Yeh et al. (2002). However, the share repurchase variable and the ownership of institutional investor variable are according to Tsai and Guo (2004) and Chow et al. (1996), respectively. The related variable symbols are shown in parentheses. Performing the stepwise regression, this study chooses 9 variables from the 17 corporate governance variables as the explanatory variables, namely, X1, X2,..., and X9. Additionally, we use company size (Size), debt ratio (Debt) and export ratio (Exp) as the control variables, which are referred to Falkenstein (1996), Dittmar (2000) and Lin and Shiu (2003), respectively.

CONCLUDING COMMENTS

This study investigates the relationship between corporate governance mechanism, institutional ownership and share repurchase decisions. Examining on 220 exchange-listed companies in Taiwan

during 2004 to 2006, the main findings are as follows. First, corporate governance mechanisms affect share repurchases. Meanwhile, the influence of debt ratio on share purchase is not significant; suggesting a violation of the optimal leverage ratio hypothesis. Second, excluding the insignificant variables, corporate governance mechanism increases ownership of institutional investor. Third, the interactions between corporate governance mechanism and institutional investor ownership would affect share repurchase decisions. Fourth, the interaction between corporate governance mechanism and share repurchase decision would affect the institutional investor ownership. Finally, we find that company size has significant impact on share repurchase decisions and institutional investors ownership; whereas debt ratio and export ratio have no significant influences.

Some extensions of this work can be considered for future research. First, data can be stratified by industry or some other variable to see if the results hold in various industries. Additionally, different proxy variables for corporate governance, shares repurchase and ownership of institutional investor can be used to examine the robustness of the results.

		Explained Variables			
Explanatory	Regression	Model (1)	Model (2)	Model (3)	Model (4)
Intercept	α_0	6.1205 ***	-61.55****	5.8224***	-59.57***
X1	α_1	-0.0138		-0.0093	
X2	α_2	0.0539**		-0.0040	
X3	α ₃	0.0125^{*}		0.0437***	
X4	α_4	-0.0640*	1.1273 ****	-0.2220****	0.9679***
X5	α5	-0.0127	-0.1224	-0.0295	-0.2232**
X6	α_6		0.0982 ***		0.1174***
X7	α_7		0.4677***		0.3791***
X8	α_8		-1.5120		-4.0288**
X9	α.9		0.0835**		0.1405****
$X1 \times Hold$	β_1			-0.0002	
$X2 \times Hold$	β_2			0.0037**	
$X3 \times Hold$	β_3			0.0004	
$X4 \times Hold$	β_4			0.0011	
$X5 \times Hold$	β_5			-0.0008**	
$X4 \times Policy$	γ ₄				-0.0074
$X5 \times Policy$	γ ₅				0.0453
$X6 \times Policy$	76 76				0.0551
$X7 \times Policy$	γ7				1.2328**
$X8 \times Policy$	γ ₈				-0.0315**
$X9 \times Policy$	70 79				0.0577^{*}
Hold	δ_{H}			-0.0039	
Policy	δ_P				-0.4789
Size	δ_{S}	-0.2247**	5.2754***	-0.1944*	5.2062****
Debt	δ_D	-0.0025	0.0039	-0.0014	0.0135
Exp	δ_E	-0.0002	0.0024	0.0001	0.0024
R		0.0282	0.2426	0.0450	0.2595
Adjusted R ²		0.0163	0.2321	0.0242	0.2410
F-statistic		2.3618	23.1248	2.1690	14.0806
Prob (F-statistic)		0.0165	0.0000	0.0078	0.0000
F Test: H_0		$\alpha_1 = \ldots = \alpha_5 = 0$	$\alpha_4 = \ldots = \alpha_9 = 0$	$\beta_1 = \ldots = \beta_5 = 0$	$\gamma_4 = \ldots = \gamma_9 = 0$
F-statistic		2.8751	12.2338	2.4155	2.2901
Prob (F-statistic)		0.0141	0.0000	0.0349	0.0523

Table 2: Regression Results of Share Repurchase and Institutional Investor Ownership

This table shows the multiple regression results for examining four hypotheses. According to the stepwise regression, we select 5 corporate governance variables as the explanatory variables for H1 and H3 and select 6 corporate governance variables as the explanatory variables for H2 and H4. Models (1) through (4) are respectively used to test the hypotheses H1 through H4. ***, **, * indicate significance at the 1, 5 and 10 percent levels respectively.

ENDNOTES

¹ On July 2000, the code of "Regulations Governing Share Repurchase by Exchange-Listed and OTC-Listed Companies" was announced.

² The source is from "Compilation Table of Company Stock Buyback Data" in Market Observation Post System of Taiwan Stock Exchange.

³ In 2004 Pulse Tech scandal happened, which indicated that corporate governance mechanism for Taiwan's listed companies was defective and inadequate. Pulse Tech first purchased its own stocks to lift its stock price. Simultaneously Pulse Tech converted the oversea Euro Convertible Bonds to common stocks and then sold them for huge profits.

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