UNDERPRICING AND CORPORATE GOVERNANCE - EVIDENCE FROM TAIWAN SECURITIES MARKET

Tzong-Huei Lin*

Abstract

To enhance the corporate governance of listed firms, Taiwan prescribes that the initial public offerings (IPOs) after February 19, 2002, have to set up at least two independent directors and one independent supervisor who posses financial or accounting expertise. The corporate governance reform of Taiwan offers an opportunity to investigate the effect of corporate governance on IPOs market. Using data from Taiwan's initial public offerings (IPOs), this study documents evidence that the magnitudes of under-pricings of IPOs after 2002 are significantly smaller than those of before. This shows that the corporate governance can reduce the investors' uncertainty about the IPOs. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs. This study contributes to the literature in the following ways. First, as Ritter and Welch (2002) suggest that future progress in the IPO underpricing literature will mainly come from agency conflict explanation, this study provides evidence about the effect of corporate governance on IPOs market. Second, as for the issue about the policy implication of the SFB 2002' rules, this study provides the empirical evidence. Third, whether the government should prescribe the firms to set up independent directors? This study offers a direction for future discussion.

Keywords: under-pricing, corporate governance, initial public offerings (IPOs)

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Introduction

Since 1997, the Asian financial crisis has deeply affected the development of emerging markets in Asia. Johnson et al. (2000) find that measures of corporate governance, particularly the effectiveness of protection for minority shareholders, provide powerful explanatory ability for exchange rate depreciation and stock market decline better than do standard macroeconomic measures. In 2001 and 2002, a number of corporate scandals in the U.S. and European have shaken the investors' confidence in the global financial market.

In order to enhance the development of capital market and to encourage economic development, the Securities and Futures Bureau of Financial Supervisory Commission of Taiwan prescribes that the initial public offerings (IPOs) after February 19, 2002 have to hire at least two independent directors and one independent supervisor, among whom must be provided with financial or accounting expertise. The corporate governance reform of Taiwan offers an opportunity to investigate the effect of corporate governance on IPOs market.

Since the independent directors and independent supervisors may play a good role on monitoring the firms, outside investors will have more confidence on the IPO firms. As a result, I expect the underpricing of the IPOs after the implementation of new rules would be smaller than that of before.

Using data from Taiwan's initial public offerings (IPOs), this study documents evidence that the magnitudes of under-pricing of IPOs after 2002 are significantly smaller than those of before. This is consistent with the expectation of the hypothesis. It implies that corporate governance can play monitoring roles and enhance the confidence of the investors on IPOs. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs.

This study contributes to the literature in the following ways. First, this study provides evidence about the effect of corporate governance on IPOs market. Second, as for the issue about the policy implication of the SFB 2002' rules, this study provides the empirical evidence. Third, whether the government should prescribe the firms to set up independent directors? This study offers a direction for future discussion.

The remainder of this paper is organized as follows: section two discusses the related literature and constructs the hypotheses, section three discusses issues about research design, section four is the empirical results, and section five provides a summary and conclusion.

Literature Review and Hypotheses

Several studies documents that there exists underpricing for initial public offerings (IPOs) firms (Stoll and Curley, 1970; Logue, 1973; Reilly, 1973; Ibbotson, 1975), researchers also offer many explanations for that, such as information asymmetry or liability concerns. However, Ritter and Welch (2002) suggest that future progress in the literature will mainly come from agency conflict explanation.

Since 1997, the Asian financial crisis has deeply affected the development of emerging markets in Asia. Johnson et al. (2000) find that measures of corporate governance, particularly the effectiveness of protection for minority shareholders, provide powerful explanatory ability for exchange rate depreciation and stock market decline better than do standard macroeconomic measures. In addition, many studies have found that there exist serious shortcomings of corporate governance in East Asia (Claessens et al., 2000; and so on).

In order to enhance the development of capital market and to encourage economic development, the Securities and Futures Bureau of Financial Supervisory Commission of Taiwan prescribes that the initial public offerings (IPOs) firms after February 19, 2002 have to hire at least two independent directors and one independent supervisor, among whom must be provided with financial or accounting expertise. This offers us an opportunity to investigate the effect of corporate governance on underpricing of IPOs.

Previous literature documents the outside directors can improve firm's performance and constrain firm's earnings management (Kaplan et al., 1990; Klein, 1998; Klein, 2002). In addition, majority of Taiwanese companies are family controlled. (Claessens et al., 2000; La Porta et al., 1999, Lin, 2004; Yeh et al., 2001). I expect the corporate governance reform of Taiwan in year 2002 can increase the confidence of investors on IPOs. As a result, I expect the underpricing of the IPOs after the implementation of new rules would be smaller than that of before. Based on above arguments, I construct the first hypothesis as follows:

H1.The underpricing of the IPOs after 2002 (the implementation of new rules) would be smaller than that of before.

Jensen and Meckling (1976) state that when the percentage of shareholdings owned by owner-manager does not equal 100 %, then there will result in the problem of conflict of interest. There are many empirical literatures support the statements of Jensen and Meckling (Shleifer and Vishny, 1997; Morck et al., 1988; La Porta et al., 1999; Johnson et al., 2000; Claessens et al., 2000; Lin, 2004, and so on). In addition, the percentage of shareholdings owned by directors/supervisors may signal future prospects (Leland and Pyle, 1977). As a result, hypothesis H2 is constructed as follows:

H2. The underpricing of the IPOs will be negatively related to the percentage of shareholdings owned by directors/supervisors.

There is information asymmetry in the IPOs setting (Willenborg, 1999; Ritter and Welch, 2002). The responsibility of the auditor (underwriter) is to express the opinion about the financial statements provided by the IPOs. Previous literatures document that audit quality is positively related with the auditor size (DeAngelo, 1981; Dopuch et al., 1987; McKeown et al., 1991; Kellogg, 1984; Wilson and Grimlund, 1990; Bonner et al., 1998; Stice, 1991; Becker, et al., 1998; Lys and Watts, 1994; Reynolds and Francis, 2001). In addition, auditors (underwriters) may play the "deep pocket" role. As a result, I include the above two proxy in the empirical tests. Next section will present my sample selection and research design.

Research design

Sample selection

In this study I collect Taiwanese non-financial IPOs in the 1999-2004 sampling period. The financial institutions are deleted because they have special operating environment and are regulated by the special laws. Those observations with missing values are also deleted. Finally, the sample consists of 533 IPOs. The data source is from the database compiled by Taiwan Economic Journal Data Bank (TEJ).

Regression model

$$Ln(1+underpricing) = \beta_0 + \beta_1 After + \beta_2 Insiderhold + \beta_3 Hightec + \beta_4 Big4 + \beta_5 Underwriters + \beta_6 Size \quad (1)$$

where:

$Underpricing$ = The adjusted initial return or initial return; Initial return is defined as the difference between the first trading day that is not closed at the price limit and offer price divided by the offer price. The adjusted initial return subtracts the corresponding market return from the initial return;

$After$ =1 if the data belongs to the year 2002, 2003 or 2004, and 0 otherwise;

$Underwriter$ = 1 if the lead underwriter is one of the following underwriters: Grand Cathay Securities Corp. (GCSC), Taiwan International Securities Corp. (TISC), Yuanta Group, National Investment Trust Co., Ltd. (NITC), Chinatrust Securities, and Chiao Tung Bank, and 0 otherwise;

$Insiderholds$ = The percentage of shares owned by directors/supervisors prior to IPO;

$Hightec$ =1 if the firm belongs to the electronic industry, and 0 otherwise;

$Big4$ = 1 if the firm employs a Big 4(5) auditor, and 0 otherwise;
$Size$ =Ln(pre-IPO assets);

Results and Discussions

Table 1 presents the results of univariate t tests. From Table 1 we can see that, the coefficients of $After$, $Hightec$, $Underwriter$ are all statistically significant at less than 0.01. The underpricings of the IPOs after 2002 are significantly less than those of before. As a result, the Hypothesis H1 is supported. [See appendices, Table 1 and Table 2].

In addition to the univariate t tests, I also test the hypotheses with equation (1). The empirical results of equation (1) are presented in Table 2. From Table 2, we can find that the coefficient of $After$ is significantly negative. It means that the underpricings of the IPOs after the implementation of new rules are smaller than those of before. This supports Hypothesis H1 and is consistent with the result of univariate t tests.

Hypothesis H2 expects that the underpricing of the IPOs will be negatively related to the percentage of shareholdings owned by directors/supervisors. From Table 2, we find the coefficient of $Insiderholds$ is significantly negative. It is consistent with the expectation of hypothesis H2.

The result also shows that the coefficient of $Hightec$ is significantly positive. This implies that investors with less confidence on high-tech IPO companies.

In addition to the above tests, I also conduct some sensitivity tests. For example, I replace the adjusted return with the raw return, conduct chow test, and so on. In sum, from the results of sensitivity tests, our primary results are robust.

To sum up, using data from Taiwan's public companies, this study documents evidence that the underpricings of the IPOs after the implementation of new rules are smaller than those of before. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs.

Summary and Conclusions

At the advent of the new millennium, corporate scandals in the world have shaken the investors' confidence in the global financial market. In order to enhance the development of capital market and to encourage economic development, Taiwan prescribes that the initial public offerings (IPOs) after February 19, 2002 have to hire at least two independent directors and one independent supervisor, among whom must be provided with financial or accounting expertise. The corporate governance reform of Taiwan offers an opportunity to investigate the effect of corporate governance on IPOs market.

Using data from Taiwan's initial public offerings (IPOs), this study documents evidence that the magnitudes of under-pricing of IPOs after 2002 are significantly smaller than those of before. This is consistent with the expectation of the hypothesis. It implies that corporate governance can play monitoring roles and enhance the confidence of the investors on IPOs. The empirical evidence also indicates that the percentage of shares holdings owned by directors/supervisors is demonstrated to have negative relationship with the underpricing of the IPOs.

This study contributes to the literature in the following ways. First, as Ritter and Welch (2002) suggest that future progress in the literature will mainly come from agency conflict explanation, this study documents evidence about the relationship between corporate governance and underpricing. Second, as for the issue about the policy implication of the SFB 2002' rules, this study provides the empirical evidence. Third, whether the government should prescribe the firms to set up independent directors? This study offers a direction for future discussion.

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Appendices

Table 1. The Empirical Results of Univariate t Tests

	Underpricing			
	Value=0	Value=1	Difference	p-value
After	0.2357	0.0441	0.1716	<.0001***
Hightec	0.1311	0.1834	-0.073	<.0001***
Big4	0.1506	0.1783	-0.044	0.1086
Underwriter	0.1313	0.1925	-0.079	<.0001***

Note:The definitions of variables are as follows:

Underpricing = The adjusted initial return or initial return; Initial return is defined as the difference between the first trading day that is not closed at the price limit and offer price divided by the offer price. The adjusted initial return subtracts the corresponding market return from the initial return;

After =1 if the data belongs to the year 2002, 2003 or 2004, and 0 otherwise;

Underwriter = 1 if the lead underwriter is one of the following underwriters: Grand Cathay Securities Corp. (GCSC), Taiwan International Securities Corp. (TISC), Yuanta Group, National Investment Trust Co., Ltd. (NITC), Chinatrust Securities, and Chiao Tung Bank, and 0 otherwise;

Hightec =1 if the firm belongs to the electronic industry, and 0 otherwise;

Big4 = 1 if the firm employs a Big 4(5) auditor, and 0 otherwise;

***, **, * Coefficient statistically significant at less than 0.01, 0.05, and 0.10,respectively.

Table 2. The Empirical Results of equation (1)

$$Ln(1+underpricing) = \beta_0 + \beta_1 After + \beta_2 Insiderhold + \beta_3 Hightec + \beta_4 Big4 +$$

	Coefficient Estimate	*t statistics.*	*p-value*	R^2	*(adj. R^2)*
β_0	0.2420	8.99	<.0001***	0.1027	0.1010
β_1	-0.2018	-17.42	<.0001***		
β_2	-0.0015	-4.87	<.0001***		
β_3	0.0527	4.06	<.0001***		
β_4	0.0163	1.32	0.1879		
β_5	0.0289	2.39	0.0171**		
β_6	$-3.25*10^{-4}$	-0.24	0.8108		

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