

EQUITY AGENCY COSTS AND INTERNATIONALIZATION: THE EFFECT OF REVISED ACCOUNTING STANDARDS IN TAIWAN

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ABSTRACT

This study investigates whether the equity agency problems of firms with foreign operations mitigate after 2005, when the revised accounting standards on consolidated financial statements were implemented in Taiwan. A sample of listed Taiwanese firms announcing security offerings from 2000 to 2008 were examined. The results weakly support the hypothesis that equity agency cost problems of Taiwanese multinational corporations improved after 2005. Thus, we suggest that the Taiwanese government further increase information transparency of multinational corporations in order to be consistent with International Accounting Standards and achieve lower equity agency costs.

JEL: F23, G32

KEYWORDS: agency costs, consolidated financial statements, internationalization, information transparency

INTRODUCTION

In Taiwan, according to the original statement of financial accounting standards (SFAS) No. 7 issued in 1985, listed firms were required to prepare only annual consolidated financial reports. The consolidation requirements of affiliates were based on the 50% ownership threshold. Due to low frequencies of consolidated financial reports, investors received time-lagged information from firms. In addition, some excluded clauses of the original SFAS No. 7 enabling firms to hide their subsidiary information.

As an increasing number of Taiwanese firms internationalize, equity agency problems may become more serious. This holds especially true for firms with foreign operations due to the difficulty of monitoring foreign subsidiaries. In order to improve financial transparency and quality to the public, the Accounting Research and Development Foundation in Taiwan issued the revised version of SFAS No. 7 and implemented it in 2005. At the same time, the Financial Supervisory Commission in Taiwan issued a new regulation. The former required all subsidiaries to be included in consolidated financial statements, and modified or deleted exclusion clauses. The latter required semi-annual consolidated financial reports in addition to annual reports. Thus, the equity agency problems of multinational corporations (MNCs) are expected to have declined after the implementation of these two revised accounting standards on consolidated financial statements.

Using Taiwanese firms from 2000 to 2004 as sample, Chiang and Ko (2009) find that shareholder wealth effects of security offering announcements are unfavorable for higher equity agency costs, and especially unfavorable for higher equity agency costs of foreign-exposed multinational corporations (MNCs). This occurs because internationalization renders monitoring more difficult in comparison to domestic corporations (DCs). Therefore, it is appropriate to examine if the situation improved after the implementation of two revised accounting standards on consolidated financial statements in 2005.

This study investigates the effects of the two new rules on the equity agency costs of MNCs in Taiwan by

using Taiwanese listed firms issuing securities between 2000 and 2008. First, we use the event study methodology to compute the CARs (cumulative average abnormal returns) of firms with security offering announcements. Second, we run a multiple regression model in order to investigate the shareholder wealth effects of security offering announcements associated with the degree of internationalization and equity agency costs before and after implementations of the two new rules.

Our results show that shareholder wealth effects of equity offering announcements are unfavorable for the equity agency costs of firms with highly international operations from 2000 to 2008. However, the results weakly support the hypothesis that equity agency problems improved after 2005 when the two new rules were implemented. This may be because information disclosure is still insufficient. Thus, this study encourages governments to reconsider the contents of the two new rules and further increase the information disclosure of MNCs in order to release timely information and be consistent with the International Accounting Standards. In addition, MNCs should further increase their information transparency voluntarily in order to achieve lower equity agency costs and reduce information asymmetry, thereby reducing the cost of capital.

The framework of this study is organized as follows. Section 2 provides a literature review. Section 3 details on the data, variables, and methodologies. Section 4 presents the results and Section 5 provides the discussion. Finally, Section 6 concludes this study.

LITERATURE REVIEW

There are no equity agency costs in a 100% owner-managed firm. However, as a firm's ownership structure changes and ownership separates from control, managers may not act in the owners' best interests increasing equity agency problems (Berle and Means, 1932). Jensen and Meckling (1976) divide agency costs into three parts: monitoring costs, bonding costs and residual costs. Barnea, Haugen and Senbet (1981) identify other sources of agency costs including information asymmetry and second-best decision-making. Later, Jensen (1986) investigates agency problem due to free cash flows. While there has been much research on agency costs, most of them focus on the effect to DCs.

Several studies examine equity agency costs for MNCs. Hofstede (1980) surveys 100,000 employees of a large MNC distributed across forty national cultures. He finds that some national cultures show enormous potential for conflict between the values of parent and foreign subsidiary managers. According to Fosberg and Madura (1991), even if managers at MNC headquarters aim to maximize shareholder wealth, foreign subsidiary managers may not do so. Instead, foreign country characteristics such as geographic distance from the headquarters, language and culture differences complicate monitoring of foreign subsidiary managers. Riahi-Belkaoui and Picur (2001) indicate that complexity of operations increases the information gap and presents opportunities for MNCs to manipulate earnings.

Duru and Reeb (2002) provide evidence that forecasting earnings becomes more difficult when a firm becomes more geographically diversified. Wright, Madura, and Wiant (2002) demonstrate valuation effects associated with equity offering announcements are more negative for firms with higher degrees of international business, supporting the concept that agency costs are more pronounced for firms with higher degree of international business. Doukas and Pantzalis (2003) argue that MNCs are susceptible to higher agency costs. Chiang and Ko (2009) provide evidence that lower frequencies of consolidated financial statements also increase information asymmetries, especially for MNCs.

In addition, Hart (1995) provides evidence that one possible reason for agency problems results from the information asymmetry. Healy and Palepu (2001) indicate that disclosure generally improves transparency and thus reduces information problems. Jo and Kim (2007) demonstrate that firms with extensive disclosure are less likely to face information problems, leading to less earnings management

and better post-issue performance. According to Lee, Mande, and Son (2008), timely disclosures reduce information asymmetry between managers and shareholders as well as the associated monitoring costs. Aggarwal and Kyaw (2009) indicate that national transparency regimes are increasingly important factors in firm valuation and national financial development. In addition, Botosan (1997) finds that the cost of capital is negatively associated with the level of voluntary disclosure. Gietmann and Trombetta (2003) demonstrate that disclosure policy is important because it impacts the cost of external finance. According to Yu (2005), a firm's disclosure quality and transparency influence its credit spreads.

Some studies focus on the effects of consolidation financial statements. SFAS 94 (1987) in the US requires consolidation of all majority-owned subsidiaries, including those of non-homogeneous operations, large minority interests, or foreign locations. Comiskey, McEwen and Mulford (1987) find the market incorporates unconsolidated subsidiary's debt in its assessment of the parent's risk. Khurana (1991) demonstrates that the issuance of SFAS 94 was associated with significant negative excess returns and consistent with the cash-flow effects hypothesis. Harris, Lang and Moller (1997), using German listed firms as a sample, provide evidence that consolidated financial statements are more value relevant than unconsolidated statements. Abad et al. (2000), using Spanish data, also supports higher value relevance of consolidated information.

DATA AND METHODOLOGY

The sample of this study consists of 734 Taiwanese firms with bond offering announcements and 352 Taiwanese firms with equity offering announcements from 2000-2008, as shown in Table 1. The data were collected from the Taiwan Economic Journal databank (TEJ) and the website of the Taiwan Securities & Futures Information Center.

Table 1: Distribution of Samples by Year

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Equity offerings	52	24	49	51	35	34	39	45	23
Bond offerings	64	62	121	167	149	37	50	50	34

Data Source: Taiwan Economic Journal Databank

The variables used in this study are described as followings: Degree of Internationalization (*FS*, *FA*, *NOC*). In this study, MNCs are defined as firms whose foreign sales ratio or foreign assets ratio is more than 10%, and all others are defined as DCs. Three proxies are used to measure the degree of internationalization: *FS*: foreign sales ratio = foreign sales/total sales, *FA*: foreign assets ratio = foreign assets /total assets, *NOC*: the numbers of countries in which a firm operates

Equity Agency Costs (AD). Following Ang, Col, and Lin (2000) and Fleming, Heaney, and McCosker (2005), we use the discretionary expense ratio to measure how effectively a firm controls operating expenses and captures the impact of agency costs such as excessive perquisite consumption. Discretionary expenses consist for all other operating expenses, and excluding corporate wages, salaries and other labor-related items, interest expense, rent, leasing and hiring expenses, purchases, depreciation and bad debts written off. *AD*: discretionary expenses ratio = discretionary expenses / total assets

Firm Size (size). Larger firms are likely to have more agency conflicts and need more monitoring. Thus, larger firms face greater agency costs (Jensen and Meckling, 1976). *Size*: firm size = log (total assets)

Capital Expenditure Ratio (cap). The capital expenditure ratio is an important factor for the growth of a firm and accounts for the possible influence of investments on ownership. Firms may spend too much on capital expenditures and the over-investments may increase agency costs (Griner and Gordon, 1995).

cap: capital expenditure ratio = capital expenditures / total assets.

Leverage Ratio (lev). According to Agrawal and Knoeber (1996), debt financing can induce monitoring by lenders, thereby reducing equity agency costs. Jensen and Meckling (1976) stress the importance of debt financing in limiting managerial discretion over the use of free cash flows. On the contrary, too many lenders would result in agency problems between lenders and owners, decreasing a firm's value. *lev*: leverage ratio = debts/total assets

Insider Ownership (in) According to Jensen and Meckling (1976), as the manager's equity ownership increases, managers and shareholders are likely to have the same goals and managers will not waste a firm's resources, therefore increasing a firm's value (the convergence of interest hypothesis). However, Jensen and Ruback (1983) argue that entrenched managers will destroy firm value by designing favorable compensation arrangements for themselves and retaining their jobs even if they should be replaced (the entrenchment hypothesis). *in*: insider ownership = the percent of shares owned by insiders

Blockholder Ownership (bh) and *Institutional Ownership (inst)*. Agrawal and Mandelker (1990) provide evidence for the active monitoring hypothesis, suggesting that when equity ownership is concentrated among blockholders or institutions, it is more attractive for them to monitor firms and increase firm values. In Taiwan, blockholders are defined as those who own more than 10% of a firm's total shares outstanding. *bh*: blockholder ownership = the percent of shares owned by a blockholder. *inst*: institutional ownership = the percent of shares owned by institutional investors

Tables 2, panels A and B, present descriptive statistics and correlation matrix for bond and equity offering announcement samples, respectively. The descriptive statistics of the variables are not very different between the sample of bond and equity offerings. In addition, the correlation among variables is low, and multicollinearity does not appear to be a problem in the second stage of the multiple regression analysis.

A standard event study procedure was used to analyze cumulative average abnormal returns (CARs) associated with bond and equity offerings announcements. We utilized a market model to calculate abnormal returns for each firm using daily stock returns. With the announcement day defined as day 0, the OLS market model coefficients were estimated in a pre-announcement period (day -150 to day -26). The Taiwanese value-weighted stock index was used as a proxy for market returns. Then, abnormal returns were averaged across firms to calculate the average abnormal returns. The two-day CARs calculated from day -1 to day 0 were the sum of the average abnormal returns. Then, the test of significance was conducted using the standard Brown and Warner (1985) test statistic with the null hypothesis of no abnormal performance.

After calculating the CARs as the dependent variables, multiple regression analysis was conducted to explain stock market reactions to the announcement of security offerings (shareholder wealth effects) with particular attention paid to variables of internationalization, equity agency costs and interaction between the two. The four hypotheses are as follows. First, we investigate whether the shareholder wealth effects of security offering announcements are more unfavorable for MNCs than DCs after the two revised accounting standards on consolidated financial statements were implemented in 2005.

Hypothesis 1: The unfavorable shareholder wealth effects of the security offering announcements of MNCs were mitigated after 2005.

$$\begin{aligned} \text{CAR} = & \alpha + \beta_1(D) + \beta_2(\text{SIZE}) + \beta_3(\text{CAP}) + \beta_4(\text{LEV}) + \beta_5(\text{IN}) \\ & + \beta_6(\text{BLOCK}) + \beta_7(\text{INST}) + \beta_8(D * \text{DE}) + \varepsilon \end{aligned} \quad (1)$$

where D = 1 if MNCs and D = 0 if DCs; DE = 0 if time period is 2000 to 2004, while DE =1 if 2005 to

2008. Significantly negative β_8 means that the shareholder wealth effects of security offering announcements are unfavorable for MNCs after 2005. We expect that β_8 is not significantly negative.

Table 2: Descriptive statistics and correlation matrix of variables for firms with equity and bond offering announcements

	Mean	Standard Deviation	FAR	FSR	FNO	D	AD	SIZE	CAP	LEV	IN	BLOCK	INST
Panel A: equity offerings													
FAR	0.0933	0.1380	1.000										
FSR	0.5142	0.3813	0.4152	1.000									
FNO	1.872	1.8423	0.4499	0.6040	1.000								
D	0.7288	0.4465	0.3958	0.8174	0.5085	1.000							
AD	0.4054	2.7898	-0.0677	-0.1402	-0.0519	-0.1696	1.000						
SIZE	9.992	0.8233	-0.1720	-0.1380	0.0390	-0.2589	0.0115	1.000					
CAP	0.0911	0.1985	0.0109	0.0898	-0.0304	0.1968	-0.0391	-0.2204	1.000				
LEV	0.5311	0.2096	-0.3171	-0.3127	-0.3061	-0.3961	-0.0785	0.3530	0.0504	1.000			
IN	0.3868	0.2740	-0.0623	-0.3034	-0.1898	-0.2735	0.1378	0.1723	-0.0454	0.1774	1.000		
BLOCK	0.0245	0.0910	-0.0397	-0.1475	-0.1038	-0.2131	-0.0121	-0.0398	-0.0448	0.0196	-0.1502	1.000	
INST	0.3414	0.2340	-0.2142	-0.1632	-0.0964	-0.2474	-0.0050	0.5060	-0.2148	0.1399	0.4264	0.0810	1.000
Panel B: Bond Offerings													
FAR	0.1490	0.1877	1.000										
FSR	0.5597	0.3549	0.2012	1.000									
FNO	2.788	2.477	0.0642	0.0657	1.000								
D	0.8540	0.3544	0.3082	0.6511	0.1153	1.000							
AD	0.3286	2.5917	-0.0720	-0.1441	-0.0667	-0.2221	1.000						
SIZE	10.398	0.7831	-0.3037	-0.2609	0.1237	-0.3697	-0.0326	1.000					
CAP	0.1645	0.1815	-0.2050	-0.0970	0.0123	0.1996	-0.0740	0.1165	1.000				
LEV	0.4522	0.1818	-0.3393	-0.2723	-0.0806	-0.6286	-0.0470	0.3983	-0.2948	1.000			
IN	0.2209	0.1285	-0.1966	-0.1962	-0.0069	-0.3798	0.0281	0.1517	0.0241	0.2859	1.000		
BLOCK	0.0050	0.0238	-0.0153	0.0304	0.0775	-0.1025	-0.0215	0.0752	-0.0730	0.0636	-0.0142	1.000	
INST	0.4761	0.2124	-0.1201	-0.1592	0.0339	-0.2539	-0.0577	0.5893	-0.0123	0.1829	0.3837	0.0443	1.000

Note: FAR is the foreign assets ratio, FSR is the foreign sales ratio, FNO is the number of countries in which a firm operates, D is the dummy variable of internationalization (D=1 if MNCs, D=0 if DCs, MNCs are defined as firms whose foreign sales ratio or foreign assets ratio are more than 10%), AD is the discretionary expenses ratio, SIZE is the logarithm of total assets, CAP is the capital expenditure ratio, LEV is the leverage ratio, IN is the insider ownership, BLOCK is the blockholder ownership, and INST is the institutional ownership.

Second, we investigate if the shareholder wealth effects of security offering announcements are more

unfavorable for firms with higher degrees of international operations after the two revised accounting standards on consolidated financial statements were implemented in 2005.

Hypothesis 2: The unfavorable shareholder wealth effects of security offering announcements for firms with higher degrees of international operations were mitigated after 2005.

$$\begin{aligned} \text{CAR} = & \alpha + \beta_1(\text{DOI}) + \beta_2(\text{SIZE}) + \beta_3(\text{CAP}) + \beta_4(\text{LEV}) + \beta_5(\text{IN}) \\ & + \beta_6(\text{BLOCK}) + \beta_7(\text{INST}) + \beta_8(\text{DOI} * \text{DE}) + \varepsilon \end{aligned} \quad (2)$$

where DOI = FSR, FAR, FNO. If β_8 is significantly negative, then the shareholder wealth effects of security offering announcements are more unfavorable for highly foreign-exposed than less foreign-exposed MNCs after 2005. We expect that β_8 is not significantly negative.

Third, we investigate whether shareholder wealth effects of security offering announcements are more unfavorable for the equity agency costs of MNCs after the two revised accounting standards on consolidated financial statements were implemented in 2005.

Hypothesis 3: The unfavorable shareholder wealth effects of security offering announcements associated with the equity agency costs of MNCs decrease after 2005.

$$\begin{aligned} \text{CAR} = & \alpha + \beta_1(\text{AD}) + \beta_2(\text{AD} * \text{D}) + \beta_3(\text{SIZE}) + \beta_4(\text{CAP}) + \beta_5(\text{LEV}) \\ & + \beta_6(\text{IN}) + \beta_7(\text{BLOCK}) + \beta_8(\text{INST}) + \beta_9(\text{AD} * \text{D} * \text{DE}) + \varepsilon \end{aligned} \quad (3)$$

If β_9 is significantly negative, then the shareholder wealth effects of security offering announcements are more unfavorable for the equity agency costs of MNCs than for those of DCs after 2005. We expect that β_9 is not significantly negative.

Fourth, we investigate if the shareholder wealth effects of security offering announcements are more unfavorable for equity agency costs of highly foreign-exposed firms after the two revised accounting standards on consolidated financial statements were implemented in 2005.

Hypothesis 4: The difference of shareholder wealth effects of the security offering announcements associated with the equity agency costs for highly foreign-exposed firms decrease after 2005.

$$\begin{aligned} \text{CAR} = & \alpha + \beta_1(\text{AD}) + \beta_2(\text{AD} * \text{DOI}) + \beta_3(\text{SIZE}) + \beta_4(\text{CAP}) + \beta_5(\text{LEV}) \\ & + \beta_6(\text{IN}) + \beta_7(\text{BLOCK}) + \beta_8(\text{INST}) + \beta_9(\text{AD} * \text{DOI} * \text{DE}) + \varepsilon \end{aligned} \quad (4)$$

If β_9 is significantly negative, then the shareholder wealth effects of security offering announcements are more unfavorable for the equity agency costs of the highly foreign-exposed firms than for those of less foreign-exposed firms after 2005. We expect that β_9 is not significantly negative. Standard errors in the above models are corrected for autocorrelation and heteroscedasticity using the Newey-West method (1987).

RESULTS

We first present the results of equity offering announcements in Panel A of Table 3. As shown in Model 1, the coefficient of D is negative, and the coefficient of D*DE is weakly positive. The results indicate

that the shareholder wealth effects of equity offering announcements are unfavorable for MNCs from 2000 to 2008. However, the unfavorable degree improves a little after 2005. In Model 2, the coefficients of DOI (ie. FSR, FAR, FNO) are all negative, and the coefficients of DOI*DE are weakly positive. The results indicate that shareholder wealth effects of equity offering announcements are unfavorable for firms with highly international operations from 2000 to 2008. However, unfavorable degree improves a little after 2005. Thus, Hypotheses 1 and 2 are weakly supported.

In Model 3, the coefficients of AD*D is negative, and the coefficient of AD*D*DE is insignificantly positive. The results indicate that the shareholder wealth effects of equity offering announcements are unfavorable for the equity agency costs of MNCs from 2000 to 2008, and the equity agency problem does not worsen after 2005. In Model 4, the coefficients of AD*DOI (ie. AD*FAR, AD*FAR, AD*FNO) are all negative, and the coefficients of AD*DOI*DE are weakly positive. The results indicate that the shareholder wealth effects of equity offering announcements are unfavorable for equity agency costs of firms with highly international operations from 2000 to 2008. However, equity agency problems improve a little after 2005. Thus, Hypotheses 3 and 4 are weakly supported. With regard to the control variables, the coefficients of firm size and blockholder are positive. All other variables are found to be insignificant, indicating that insiders, bondholders, and institutions are inefficient monitors.

We then present the results for bond offering announcements in Panel B of Table 3. As shown in Model 1, the coefficient of D is negative, and the coefficient of D*DE is significantly positive. The results indicate that the shareholder wealth effects of equity offering announcements are unfavorable for MNCs from 2000 to 2008. However, the unfavorable degree improves after 2005. In Model 2, the coefficients of DOI (ie. FSR, FAR, FNO) are all negative, and the coefficients of DOI*DE are weakly positive. The results indicate shareholder wealth effects of equity offering announcements are unfavorable for firms with highly international operations from 2000 to 2008. However, the unfavorable degree improves a little after 2005. Thus, Hypotheses 1 and 2 are weakly supported.

In Model 3, the coefficients of AD*D is negative, and the coefficient of AD*D*DE is weakly positive. The results indicate the shareholder wealth effects of equity offering announcements are unfavorable for equity agency costs of MNCs from 2000 to 2008, and equity agency problems improve a little after 2005. In Model 4, the coefficients of AD*DOI (ie. AD*FAR, AD*FAR, AD*FNO) are all negative, and the coefficients of AD*DOI*DE are weakly positive. The results indicate that shareholder wealth effects of equity offering announcements are unfavorable for equity agency costs of firms with highly international operations from 2000 to 2008. However, equity agency problems improve a little after 2005. Thus, Hypotheses 3 and 4 are weakly supported. With regard to the control variables, the coefficient of firm size is positive. All other variables are insignificant, indicating that insiders, bondholders, blockholders and institutions are inefficient monitors.

DISCUSSION

The results above demonstrate that problems regarding the equity agency costs of Taiwanese MNCs declined only slightly after the implementation of the two new rules in 2005. Therefore, investors should still consider information asymmetry to some extent. This result may be due to the fact that the information disclosure is still insufficient.

Based on the empirical results this study suggests that Taiwanese governments reconsider the content of the two new rules and further increase the information disclosure of MNCs in order to release more timely information and to be consistent with the International Accounting Standards. In addition, we suggest that MNCs further increase their information transparency voluntarily in order to achieve lower equity agency costs and help investors monitor management, thereby reducing information asymmetry and the cost of capital. For example, MNCs can announce quarterly consolidated financial statements

voluntarily or release earnings reports sooner than the mandatory date.

Table 3: The Results of Equity and Bond Offering Announcement

CAR	Model 1 D	Model 2.1 FSR	Model 2.2 FAR	Model 2.3 FNO	Model 3 AD*D	Model 4.1 AD*FSR	Model 4.2 AD*FAR	Model 4.3 AD*FNO
Panel A: Equity Offerings								
Intercept	-1.289 (-1.061)	0.5872 (0.7661)	0.0127 (0.2098)	0.0828* (-1.800)	-1.3937 (-1.110)	-1.4387 (-1.168)	-1.2586 (-1.022)	-1.0685 (-0.862)
D/DOI	-0.6848* (-1.9961)	-0.3612 (-1.2611)	-2.105* (-1.8356)	-2.215* (-1.9213)				
AD					-1.086* (-1.952)	-0.1223 (-1.287)	-1.182* (-2.400)	-0.1971* (-2.495)
AD*D/AD*DOI					-2.102*** (-2.924)	-1.919* (-1.824)	-2.212** (-2.440)	-2.010** (-2.949)
SIZE	0.1763 (1.404)	0.2070* (1.653)	0.1873 (1.484)	0.1953* (1.844)	0.2304* (1.943)	0.2200* (1.839)	0.1968* (1.684)	0.1815 (1.508)
CAP	0.8457 (1.460)	0.7204 (1.240)	0.715 (1.199)	0.6972 (1.156)	0.8969 (1.5141)	0.7837 (1.318)	0.8323 (1.418)	0.8198 (1.355)
LEV	-0.1517 (-0.3177)	0.0983 (0.1951)	0.3393 (0.6563)	0.3048 (0.5949)	-0.2527 (-0.5111)	-0.0848 (-0.163)	0.033 (0.0607)	0.0308 (0.059)
IN	0.1915 (0.5043)	0.3659 (0.9562)	0.4539 (1.185)	0.4364 (1.137)	0.1549 (0.346)	0.1874 (0.4164)	0.2122 (0.5306)	0.2453 (0.5946)
BLOCK	2.847** (2.552)	3.371*** (2.852)	3.469*** (2.887)	3.502*** (2.900)	2.910*** (2.764)	3.210*** (2.911)	3.244*** (2.867)	3.397*** (3.065)
INST	-0.5635 (-1.105)	-0.5333 (-1.029)	-0.4843 (-0.9383)	-0.4835 (-0.9234)	-0.4624 (-0.8533)	-0.3742 (-0.6835)	-0.3334 (-0.6312)	-0.2728 (-0.5016)
D*DE/DOI*DE	0.3467* (1.901)	0.3882 (1.473)	1.045* (1.651)	1.048* (1.690)				
AD*D*DE/AD*DOI*DE					0.0339 (0.4499)	0.0845 (1.379)	0.104* (1.765)	0.103* (1.807)
Adjusted R ²	0.0412	0.0207	0.0156	0.0166	0.0361	0.0214	0.0259	0.0241
F-value	1.763*	1.867*	1.649*	1.690*	2.229**	1.717*	1.873*	1.811*
Panel B: Bond Offerings								
Intercept	-0.028 (-1.161)	1.748* (1.792)	1.700 (1.445)	1.390 (1.241)	1.805 (1.551)	1.441 (1.483)	1.367 (1.178)	1.067 (0.9521)
D/DOI	-1.371** (-2.036)	-1.370* (-2.273)	-1.593* (-1.810)	-2.295* (-1.858)				
AD					-1.251* (-1.948)	-1.199* (-1.883)	-0.3156 (-3.039)	-0.2656 (-0.176)
AD*D/AD*DOI					-1.041* (-1.753)	-1.064* (-1.841)	-1.116** (-2.406)	-1.462** (-2.780)
SIZE	0.2091* (1.958)	0.1613* (1.722)	0.1832 (1.561)	0.152* (1.824)	0.0245 (0.1799)	0.1663* (1.920)	0.0302 (0.2275)	0.1861* (1.895)
CAP	0.2513 (0.5732)	-0.1633 (-0.5309)	0.1375 (0.354)	0.2117 (0.5471)	0.2663 (0.6067)	0.0211 (0.064)	0.1493 (0.3424)	0.1539 (0.3752)
LEV	0.5142 (1.153)	0.4310 (1.221)	0.6773 (1.502)	0.6853 (1.566)	0.5332 (1.1456)	0.5218 (1.383)	0.8102 (1.652)	0.733 (1.627)
IN	-0.6506 (-1.132)	-0.6248 (-1.238)	-0.4911 (-0.9087)	-0.5013 (-0.9303)	-0.5518 (-0.9401)	-0.6367 (-1.2306)	-0.3949 (-0.7283)	-0.5177 (-0.9666)
BLOCK	1.402 (1.272)	0.9186 (0.9724)	1.000 (0.9667)	1.084 (1.038)	1.114* (1.9947)	0.8871 (0.8973)	-0.8408 (-0.7842)	0.9726 (0.8905)
INST	0.0466 (0.1167)	-0.0632 (-0.1703)	0.0428 (0.11)	0.0588 (0.1508)	-0.0411 (-0.1024)	-0.072 (-0.1913)	-0.0434 (-0.1094)	0.0518 (0.1339)
D*DE/DOI*DE	1.367* (1.860)	0.8432 (1.235)	1.001* (1.823)	0.1057 (0.5889)				
AD*D*DE/AD*DOI*DE					0.9312* (1.979)	0.0542 (1.233)	0.9508* (1.907)	0.1484 (1.145)
Adjusted R ²	0.0323	0.0284	0.0402	0.0226	0.0676	0.0862	0.0268	0.0357
F-value	1.923*	1.803*	1.981*	1.769*	1.735*	1.973*	1.774*	1.896*

D is MNC dummy, *D* = 1 if MNCs, *D* = 0 if DCs; *DOI* is degree of internationalization, including *FSR*(foreign sales ratio), *FAR*(foreign assets ratio), and *FNO*(the numbers of countries where a firm operates); *AD* is agency cost; *SIZE* is firm size; *CAP* is capital expenditure ratio; *LEV* is leverage; *IN* is insider ownership; *BLOCK* is blockholder ownership; *INST* is institutional ownership; *DE* is time period dummy, *DE* = 1 if 2005 to 2008. *, **, *** indicates significance at the 0.1, 0.5, and 0.01. The figure in the () is the *t*-value.

In this study, insiders, bondholders and institutions are found to be inefficient monitors. Khurana, Pereira, and Martin (2006) note that disclosure plays a governance role in improving investors' ability to monitor and better evaluate managerial performance. Lee, Mande, and Son (2008) indicate that greater complexity of MNC operations decreases the ability of the board of directors to monitor management effectively. Thus, further information transparency provides more incentives for them to be efficient monitors.

CONCLUSION

This study examines the effect of the revised accounting standards on consolidated financial statements using a sample of listed Taiwanese firms announcing security offerings from 2000 to 2008. Our results weakly support the hypothesis that the equity agency costs problems of MNCs declined after implementation of the revised accounting standards on consolidated financial statements. Thus, this study encourages governments to reconsider the content of the two new rules and further increase the information disclosure requirements of MNCs. In addition, MNCs are suggested to further increase their information transparency in order to achieve lower equity agency costs and help reduce information asymmetry, thereby enabling firms to raise capital on the best available terms.

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