

# **MANDATORY RESTATEMENTS, FAMILY DOMINANCE AND INTERNAL AUDITOR TURNOVER**

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## **ABSTRACT**

*Internal auditors are a key governance element to help assure good financial reporting quality. Hence, internal auditors should be responsible for false financial reporting. This paper examines whether family dominance affects the relationship between mandatory restatements and internal auditor turnover before issuing stricter regulations on internal auditors. The findings show that family shareholding can negatively affect the relationship between mandatory restatements (the restatement severity) and internal auditor turnover. Family directorship only positively affects the relationship between the restatement severity and internal auditor turnover. Our findings have important policy implications for security regulators since public firms establish an internal audit unit.*

**JEL:** K22, M41, M43, M49

**KEYWORDS:** Restatements, Internal Auditors, Family, Turnover

## **INTRODUCTION**

Traditionally, internal audit has been regarded as an essential mechanism to assure financial reporting quality. It assists in the improvement of corporate governance and enhances total value of firms. Internal auditors are authorized to oversight and uncover fraudulent financial reporting (Gramling et al., 2013). Institute of Internal Auditors (IIA) defines and notes that “internal audit is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.” Internal audit is a monitoring control mechanism in corporate governance and thus internal auditors have responsibilities to help prevent and detect financial reporting fraud (Marston et al., 1989; Christopher, 2012).

Due to the outbreak of major accounting scandals in the United States, the Sarbanes-Oxley Act was passed in 2002. The goal was to improve corporate governance and strengthen the accountabilities of particular persons who are responsible for assuring financial reporting quality. Internal auditors also receive concerns and their governance roles have become increasingly important (Schneider, 2008). Past restatement studies have widely examined the impact of restatements and the roles of the CEO, CFO, outside directors and external auditors (Land, 2010; Ma et al., 2015). The findings generally show that persons involved in assuring financial reporting quality should be responsible for restatement events. The possible impacts of restatements to these persons include increased litigation (Schmidt, 2012) and the reduction of compensation (Wang et al., 2013). They even face dismissal (Desai et al., 2006) and reputation damage in the labor markets. Prior studies lack sufficient empirical evidence on how internal auditors play their roles in assuring financial reporting quality and whether they would be responsible for fraudulent financial reporting (Prawitt et al., 2009). Hence, it is necessary to examine whether internal auditors should be punished such as facing dismissal in the face of restatements.

Most Taiwanese firms are dominated by family members (Yeh and Woidtke, 2005; Xiaoxiang et al., 2013). Family literature asserts that on the one hand, family members are likely to have self-interest behavior. On the other hand, they are also likely to make decisions considering shareholders' interest. Hence, family members may intervene in firms' punishment for internal auditors via their shareholding or directorship to affect internal auditor turnover in the announcement of restatements. Past research rarely focuses on the uniqueness of restatements and often ignores to examine the severity of restatements. The nature of the restatements between voluntary restatements and mandatory restatements is different. The punishment for internal auditors should be high in the case of mandatory restatements and increase with the mandatory restatement severity. Accordingly, this paper examines whether family dominance (family shareholding and family directorship) would affect internal auditor turnover in the reveal of mandatory restatements. Further, this paper also examines the above relationship in the case of the restatement severity. Particularly, this paper examines the above relationship before issuing stricter regulations on internal auditors in Taiwan.

The findings show that family shareholding can negatively affect the relationship between mandatory restatements (the restatement severity) and internal auditor turnover whereas family directorship only positively affects the relationship between the restatement severity and internal auditor turnover. Our findings indicate that family members holding shares tend to deter internal auditor turnover in the reveal of mandatory restatements and also deter their turnover when the restatement severity increase. Before stricter regulations on the functions of internal audit and the independence and professional skill of internal auditors in Taiwan were amended, it is likely that internal auditors do not avoid interest conflicts from having personal connections with family members and thus family members holding firm shares would be favor of retaining these internal auditors via their influence when mandatory restatements are announced and the restatement severity increases. However, family members serving directors prefer internal auditor to leave only when mandatory restatement severity increases. This may because that family members serving directors are authorized to assure financial reporting. When the restatement severity increase, family members face much pressure from the public and thus would prefer internal auditor turnover.

A majority of studies have documented the positive relationship between restatements and the turnover of particular firm members such as the CEO. However, internal auditors receive little concern in restatement literature. Particularly, family members have significant influence in most Taiwanese firms and thus they are likely to affect how restating firms punish internal auditors. Restatement literature rarely focuses on mandatory restatements, little examines the punishment effect of restatements on the internal auditors and ignores family influence in the above relationship. Our research contributes to extend past restatement studies by focusing on how family dominance affects the relationship between mandatory restatements and internal auditor turnover. Particularly, this paper further examines the above relationship by focusing on the restatement severity. Besides, since Taiwanese regulations began to strengthen the functions of internal audit and the independence and professional skill of internal auditors from 2007, this paper also aims to understand before stricter requirement on internal auditors, whether family dominance would intervene internal auditor turnover in the reveal of mandatory restatements. Our results support the continuing improvement of Taiwanese regulations on enhancing the independence and professional skill of internal auditors. Our findings have important implications for Taiwanese security regulations. The remainder of this paper is as follows. Section 2 presents the literature review and hypothesis development. Section 3 presents the research design. Section 4 discusses the results. Finally, conclusions, limitations and future directions are presented in Section 5.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### Mandatory Restatements, Family Dominance and Internal Auditor Turnover

Firm members related to financial reporting quality should be punished for the material financial reporting misstatement. Restatement studies have widely examined the impact of restatements to these persons.

These findings show that these persons such as the CEO, the CFO or outside directors are likely to face compensation reduction (including salaries and bonuses), turnover and possible litigation (Collins et al., 2008). For example, Collins et al. (2008) examine the association among restatements, class-action securities litigation, CFO turnover and their bonus compensation. The findings indicate that CFO turnover and bonus compensation would only be affected by restatements in the case when the restatement firm is the target of a class-action suit. Youssef and Khan (2018) investigate whether CEO would choose the timing of restatements to disclose so as to balance the cost and benefits related to their compensation package. Their findings show a negative relationship between options exercised and lags in restatements. Liu and Yu (2018) turn the attention to examine the relationship between restatement occurrence and the compensation of audit committee. They focus on the incentive entrenchment and alignment of stock-based compensation of audit committee and examine how to alleviate restatement occurrence. One of their findings show that equity-based compensation of audit committee is negatively related to restatement likelihood. Except for examining the reduction of the compensation of the persons involving in financial reporting failure, some restatement studies examine whether these persons would thus lose their jobs and even damage their reputation in the labor markets. For example, Wang and Chou (2011) examine the impact of restatement characteristics and subsequent earnings management on post-sox executive turnover. Their findings show that CEO or CFO turnover increases with higher restatement severity of restatement firms. Lee et al. (2013) examine the relationship among option repricing, management turnover and restatements. Their evidence shows that restatements are positively related to management turnover.

In Taiwan, most firms are family firms. Family members often can significantly affect firms' decisions. Family dominance can be examined from family shareholding and family directorship, respectively. When family members have high shareholding, they are likely to achieve their benefits via their ownership influence (Yeh and Woitke, 2005). Hence, when internal auditors have personal connections with family members, family members may prevent the turnover of internal auditors so as to avoid losing family benefits. Based on the above, this paper develops the hypothesis 1a. On the other hand, family members serving directors may prefer internal auditor turnover so as to protect the interest of minority shareholders since directors are authorized to assure financial reporting quality. According to Taiwanese regulations, public firms shall establish an internal audit unit and appoint qualified persons in an appropriate number as full-time internal auditors. Any appointment or dismissal of chief internal auditor of public firms shall be approved by directors. Hence, this paper develops hypothesis 1b.

*Hypothesis 1: Family shareholding weakens the relation between mandatory restatements and internal auditor turnover.*

*Hypothesis 2: Family directorship strengthens the relation between mandatory restatements and internal auditor turnover.*

### Research Design

This paper examines the relationship among mandatory restatements, family dominance and internal auditor turnover. Using Taiwanese firms as our sample, this paper examines the firms announcing mandatory financial restatements during 1998-2006. The major reason are as follows. In our sample period, many countries do not require firms to set up internal audit unit (most are outsourcing). In Taiwan, Regulations Governing Establishment of Internal Control Systems by Public Companies begins to significantly strengthen the regulations of internal audit from 2007, including the functions of internal audit, the professional skill (such as enhancing training hours) and the independence of internal auditors (such as obeying conflict of interest avoidance). Based on the above, the accountabilities of Taiwanese internal auditors for financial reporting quality have significantly increased after strengthening internal audit functions and the professional skill and the independence of internal auditors. Since this paper aims to examine whether family dominance can affect internal auditor turnover in the reveal of mandatory

restatements before issuing stricter regulations on internal auditors, this paper examines the sample firms before 2007.

### Data and Sample Selection

Mandatory restatement sample was gathered from the Taiwan Economic Journal (TEJ) database. The data for internal auditor turnover was gathered from a website search – the Market Observation Post System in two years before the year of mandatory restatement announcement (year-2), in one year before the year of mandatory restatement announcement (year-1), in the year of mandatory restatement announcement (year 0), in one year after the year of mandatory restatement announcement (year +1) and in two years after the year of mandatory restatement announcement (year +2). The data on financial restatements, family variables and control variables were mainly collected from TEJ database.

### Variables Definitions

Mandatory restatement variable is *MREST*. *MREST* is a dummy variable that equals to 1 if financial restatements are mandatory restatements and 0 if the firm was not required to restate financial statements. Mandatory restatement severity variable is *REMGN*. *REMGN* is the absolute value of restatement magnitude scaled by sales. Internal auditor turnover variable is *ITURN*. In the logistic regression models, *ITURN* is a dummy variable that equals to 1 if there is any internal auditor turnover and 0 otherwise. In the ordered logistic regression models, *ITURN* is a continuous variable that measure the frequency of internal auditor turnover. Family dominance is measured by family shareholding and family directorship. FH measures family shareholding. FD measures family directorship, which refers to the percentage of family members as firm directors.

### Others

In consistent with prior literature (Desai et al., 2006), this paper uses the following control variables. *FM* measures the percentage of family members as firm executives. *CCON* refers to the extent of shareholding concentration of big shareholders (using the Herfindahl index: the sum of the squares of shareholding by big shareholders in a firm to measure). The return of assets (*ROA*) and stock returns (*STOCK*) are used to measure firm performance. *ROA* refers to operating income after depreciation scaled by average assets. *STOCK* refers to raw buy-and-hold returns. *SIZE* refers to the natural log of market capitalization. *LEV* refers to the leverage ratio, the ratio of total liabilities divided by total assets. *GROWTH* refers to the sales growth rate, the average annual sales growth rate for 2 years prior to the year of the restatement announcement.

### Research Models

$$\begin{aligned}
 ITURN_{i,t} &= \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMREST_{i,t} & (1) \\
 &+ \beta_5 FDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} \\
 &+ \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon
 \end{aligned}$$

$$\begin{aligned}
 ITURN_{i,t} &= \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FHD_{i,t} + \beta_3 FDD_{i,t} + \beta_4 FHDMREST_{i,t} & (2) \\
 &+ \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} \\
 &+ \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon
 \end{aligned}$$

$$ITURN_{i,t} = \alpha_0 + \beta_1 REMGN_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMGN_{i,t} \quad (3)$$

$$+ \beta_5 FDMGN_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} \\ + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon$$

*ITURN* is measured for different years around the year of mandatory restatement announcement, including two years before the year of mandatory restatement year (year+2), one year before the year of mandatory restatement announcement (year-1), the year of mandatory restatement announcement (year 0), one year after the year of mandatory restatement announcement (year-1) and two years after the year of mandatory restatement announcement (year-2). Research model (1) adopts the logistic regression model (non-dummy family variables) to examine the relationship among mandatory restatements, family dominance and internal auditor turnover. The number of the sample firms is 74. Research model (2) adopts the logistic regression model (dummy family variables) to examine the relationship among mandatory restatements, family dominance and internal auditor turnover. The number of the sample firms is 74. Research model (3) adopts the ordinal logistic regression model (non-dummy family variables) to examine the relationship among mandatory restatement severity (measured by restatement magnitude), family dominance and internal auditor turnover. The number of the sample firms is 37.

## RESULTS AND ANALYSIS

Table 1 documents the relationship among mandatory restatements, family dominance and internal turnover around the years of mandatory restatement announcement. The coefficient of *MREST* is only significantly in year +2. When furthering examining the interaction effect of mandatory restatements and family dominance, the results show that *FHMREST* is significantly negative in year 0 and year +2. This suggests that family shareholding is likely to negatively affect the relationship between mandatory restatements and internal auditor turnover. However, the results indicate that the coefficient of *FDDMREST* is not significantly positive no matter the observed year is. It appears that family directorship does not significantly positively affect the relationship between mandatory restatements and internal auditor turnover. In order to further confirm the above relationship, firstly, this paper replace non-dummy family variables with dummy family variables in logistic regression models. The results are shown in Table 2.

Table 1: Mandatory Restatements and Internal Auditor Turnover – Non-Dummy Family Variables (N=74)

		Year -2	Year -1	Year 0	Year +1	Year +2
Var.	Pred Sign	ITURN	ITURN	ITURN	ITURN	ITURN
CONSTANT		3.175	0.943	-4.395	-3.527	1.324
<i>MREST</i>	+	-0.567	1.046	3.410	1.768	5.335*
<i>FH</i>	+/-	0.003	0.002	-0.074	-0.008	-0.023
<i>FD</i>	+/-	0.157	0.653	2.996	1.658	0.011
<i>FHMREST</i>	-	0.042	0.012	-0.123***	-0.014	-0.216**
<i>FDDMREST</i>	+	1.018	0.392	-0.098	-2.031	-4.660
<i>FE</i>	+/-	-4.437	-3.411	5.403**	-1.287	1.133
<i>CCON</i>	+/-	-0.066	-0.058	0.303***	0.046	0.005
<i>ROA</i>	-	-0.120*	0.008	-0.066*	-0.063**	-0.043
<i>STOCK</i>	-	0.006	0.006	0.015*	-0.008	0.004
<i>SIZE</i>	+/-	-0.643***	-0.575**	-0.468	0.005	-0.068
<i>LEV</i>	+/-	-3.611*	-1.662	-1.553	0.947	-5.389**
<i>GROWTH</i>	+/-	0.011	0.008	-0.04*	0.002	-0.003
LR stat.		19.98	17.61	20.30	22.66	19.13
Probability		0.0675	0.1281	0.0617*	0.0308**	0.0853
Pseudo-R <sup>2</sup>		0.2587	0.2384	0.4928	0.2040	0.2684

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (*ITURN*) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the logistic regression estimates of the equation (1):  $ITURN_{i,t} = \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMREST_{i,t} + \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon$ .

Table 2 shows that *FHMREST* is significantly negative in year -1 and year 0. Secondly, this paper adopts the suggestions of Greene (1999) to use logistic regression methods to examine internal auditor turnover. Greene (1999) indicates that using logistic regression methods to calculate the marginal effects of independent variables can provide better implications on more economic meaning of coefficients. Table 3 shows the marginal effects (dy/dx) of dependent variables, the corresponding z-statistics and the percentage

increase in the estimated probability of internal auditor turnover around the years of mandatory restatements. The results show that the marginal effect of *FHDMREST* is significantly negative in the logistic regression of internal auditor turnover in year +2. However, the results do not show that the marginal effect of *FDDMREST* is significantly positive in any observed years.

Table 2: Mandatory Restatements and Internal Auditor Turnover -Dummy Family Variables (N=74)

Var.	Pred Sign	Year -2	Year -1	Year 0	Year+1	Year +2
		ITURN	ITURN	ITURN	ITURN	ITURN
CONSTANT		2.613	-1.353	-0.970	-3.351	0.864
MREST	+	-0.086	0.951	1.480	0.777	0.737
FHD	+/-	1.340	-1.264	0.613	2.518*	0.162
FDD	+/-	0.270	1.951	-0.380	-1.092*	0.065
FHDMREST	-	2.327	-2.730**	-2.412*	-1.442	-1.598
FDDMREST	+	-0.984	2.432	0.234	0.717	-0.880
FE	+/-	-3.808	-4.162*	2.153	-1.495	0.768
CCON	+/-	-0.088	0.080*	0.094*	-0.013	-0.048
ROA	-	-0.147**	0.000	-0.063*	-0.071***	-0.041
STOCK	-	0.003	-0.007	0.005	-0.007	0.003
SIZE	+/-	-0.682***	-0.131	-0.459*	0.056	-0.076
LEV	+/-	-3.237**	-0.482	-1.159	1.168	-4.164**
GROWTH	+/-	0.013*	-0.011*	-0.025	0.004	0.004
LR stat.		23.49	23.46	24.89	17.25	18.22
Probability		0.0239**	0.0240**	0.0153**	0.1403	0.1091
Pseudo-R <sup>2</sup>		0.3393	0.2287	0.3539	0.2675	0.1472

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (ITURN) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the logistic regression estimates of the equation (2):  $ITURN_{i,t} = \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FH_{i,t} + \beta_3 FDD_{i,t} + \beta_4 FHDMREST_{i,t} + \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \epsilon$ .

Table 3. Mandatory Restatements and Internal Auditor Turnover – Marginal Effect (N=74)

Vari.	Pred Sign	Year -2		Year -1		Year 0		Year +1		Year +2	
		ITURN		ITURN		ITURN		ITURN		ITURN	
		dy/dx	z	dy/dx	Z	dy/dx	z	dy/dx	z	dy/dx	z
MREST	+	-0.023	-0.180	0.052	0.420	0.163	0.690	0.280	0.910	0.314	0.870
FH	+/-	0.000	0.090	0.000	0.050	-0.003	-1.430*	-0.001	-0.320	-0.001	-0.540
FD	+/-	0.006	0.060	0.031	0.230	0.103	0.990	0.262	0.730	0.000	0.000
FHMREST	-	0.002	0.770	0.001	0.270	-0.004	-1.270	-0.002	-0.440	-0.007	-2.040**
FDMREST	+	0.041	0.320	0.019	0.120	-0.003	-0.030	-0.321	-0.750	-0.140	-0.860
MDIR	+/-	-0.179	-1.030	-0.163	-0.870	0.186	1.330*	-0.204	-0.650	0.034	0.370
CCON	+/-	-0.003	-1.070	-0.003	-0.990	0.010	1.540*	0.007	0.970	0.000	0.080
ROA	-	-0.005	-1.640	0.000	0.290	-0.002	-0.910	-0.010	-2.110**	-0.001	-0.720
STOCK	-	0.000	0.590	0.000	0.730	0.001	1.250	-0.001	-1.080	0.000	0.650
SIZE	+/-	-0.026	-1.290*	-0.028	-1.460*	-0.016	-1.070	0.001	0.020	-0.002	-0.330
LEV	+/-	-0.146	-1.300*	-0.079	-0.770	-0.053	-0.760	0.150	0.600	-0.162	-1.020
GROWT H	+/-	0.000	1.470*	0.000	1.080	-0.001	-1.920**	0.000	0.540	0.000	-0.480
LR stat.		19.98		17.61		20.30		22.66		19.13	
Probability		0.0675		0.1281		0.0617		0.0308		0.0850	
Pseudo-R <sup>2</sup>		0.2587		0.2384		0.4928		0.2040		0.2684	

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (ITURN) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the logistic regression of the equation (1):  $ITURN_{i,t} = \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FH_{i,t} + \beta_3 FDD_{i,t} + \beta_4 FHDMREST_{i,t} + \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \epsilon$ .

In summary, the above findings show that family holdings can negatively affect the relationship between mandatory restatements and internal auditor turnover around the years of the restatement announcement year whereas family directorship does not have any significant effect on the relationship between mandatory restatements and internal auditor turnover. H1 generally receives support whereas H2 is not supported. Land (2010) suggest that the severity of earnings restatements may affect the relationship between restatements and CEO turnover. Therefore, this paper also further examines whether family dominance affects the relationship between mandatory restatement severity and internal auditor turnover. Table 4 shows that the coefficient of *FHMGN* is significantly negative in year 0 and year +1. The results show that family shareholding negatively affects the relationship between mandatory restatement severity and internal auditor turnover. In addition, the results indicate that *FDMGN* positively affects the relationship between mandatory restatement severity and internal auditor turnover in year -2 and year +1. The results indicate that family directorship positively affects the relationship between mandatory restatement severity and internal auditor turnover.

Table 4: Restatement Severity and Internal Auditor Turnover - Ordered Logistic Regression (N=37)

Model		Year -2	Year -1	Year 0	Year +1	Year +2
Var.	Pred Sign	ITURN	ITURN	ITURN	ITURN	ITURN
<i>REMGN</i>	+	0.032	0.065	25.634***	0.141*	0.126**
<i>FH</i>	+/-	-0.014	-0.026	-0.968**	0.057	-0.008
<i>FD</i>	+/-	-11.189**	1.793	34.481**	0.449	2.720
<i>FHMGN</i>	-	-0.008	0.054	-0.245*	-0.005*	-0.001
<i>FDMGN</i>	+	0.383**	-0.002	0.003	0.112*	-0.015
<i>FE</i>	+/-	9.233*	-10.566***	-18.865***	-29.386***	-34.906***
<i>CCON</i>	+/-	0.045	0.103	1.597**	0.003	0.007
<i>ROA</i>	-	0.035	-0.019	-0.171**	-0.045*	-0.044
<i>STOCK</i>	-	0.067***	0.006	-0.016	-0.009	0.003
<i>SIZE</i>	+/-	-1.567**	0.188	-3.317*	-0.723	-0.739*
<i>LEV</i>	+/-	7.070**	-0.596	-20.930**	1.488	0.365
<i>GROWTH</i>	+/-	-0.007*	0.012**	-0.191	0.010*	0.015***
LR stat.		37.96	213.67	415.92	270.17	233.29
Probability		0.0000***	0.0000***	0.0000***	0.0000***	0.0000***
Pseudo-R <sup>2</sup>		0.5125	0.1958	0.6724	0.2705	0.2130

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (*ITURN*) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the ordered logistic regression estimates of the equation (3):  $ITURN_{i,t} = \alpha_0 + \beta_1 REMGN_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMGN_{i,t} + \beta_5 FDMGN_{i,t} + \beta_6 FE_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \epsilon$ .

## CONCLUSION

It is widely recognized that internal audit is one of key factors in achieving good corporate governance. (Goodwin-Stewart and Kent, 2006; Christopher, 2012). Internal audit function is vital to firms (Gramling et al., 2013). Internal auditors help prevent the occurrence of financial reporting fraud and thus can assure financial reporting quality (Achneider, 2009; Carey and Simnett, 2006). Despite of the importance of internal audit for firms, prior literature lacks enough empirical evidence on how internal auditors affect financial reporting quality. Whether internal auditors would be required to be responsible for the material financial reporting failure (Prawitt et al., 2009) such as restatements is necessary to be examined. Past restatement literature has documented that particular persons involving in assuring financial reporting quality such as the CEO, the CFO, outside directors, external auditors and audit committee members would be punished for restatements (Land, 2010; Xiaoxiang et al., 2013). They are likely to face the reduction of compensation (including salaries and bonuses), lawsuits, the dismissal and even lose their reputation in the labor markets. However, past studies do not show strong evidence about whether restatements lead to the punishment of internal auditors such as internal auditor turnover. Furthermore, family dominance can be

examined via family shareholding and family directorship. Family members may exert their influence to intervene internal auditor turnover in restating firms via their shareholding or directorship. This suggests that family dominance is likely to affect internal auditor turnover in restating firms. From 2007, Taiwanese regulations have been significantly improved internal audit functions and the independence and professional skill of internal auditors. Hence, this paper examines our sample firms before 2007 so as to understand how family dominance affect the relationship between restatements and internal auditor turnover before issuing stricter regulations on internal auditors.

Considering the unique nature of restatements, this paper focuses on mandatory restatements to examine the relationship among mandatory restatements, family dominance (family shareholding and family directorship) and internal auditor turnover. The findings show that only family shareholding can negatively affect the relationship between mandatory restatements and internal auditor turnover in particular years. The findings do not show that family directorship can affect the above relationship. Several studies have documented that the punishment effect for the particular persons involving in restatements will increase with restatement severity (Wang and Chou, 2011). Hence, this paper also further examines the above relationship in the case of the restatement severity. When further examining the restatement severity, the findings show that family shareholding can negatively affect the relationship between the restatement severity and internal auditor turnover whereas family directorship can positively affect the relationship between the restatement severity and internal auditor turnover in particular years.

To some extent, family dominance can intervene internal auditor turnover in the outbreak of mandatory restatements. Family members are likely to exert their influence to affect the turnover of internal auditors in the reveal of restatements. If family members hold firm shares, they are likely to seek their benefits via their influence (Yeh and Woidtke, 2005) by deterring internal auditor turnover because internal auditors may have personal connections with family members before issuing stricter regulations on internal auditors in Taiwan. There are similar findings in the case of the restatement severity. However, family directorship only positively affects the relationship between the restatement severity and internal auditor turnover. This shows family members serving directors would be favor of internal auditor turnover because they are authorized to assure financial reporting quality and would bear more outside pressure when the restatement severity increase. This paper is limited to examine the years before 2007 because regulations on internal audit functions and the independence and the professional skill of internal auditors were significantly improved from 2007. Future research can examine the moderating effect of family dominance from 2007 so as to provide the understanding on whether family dominance can still affect the above relationship when strengthening internal audit functions and the independence and the professional skill of internal auditors. Besides, future research can also use other governance indicators to examine the moderating effect of mandatory restatements and internal auditor turnover such as board seats so as to provide more understanding on how corporate governance affects internal auditor turnover in restating firms.

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## **ACKNOWLEDGMENTS**

We thank the National Science Council in Taiwan, R.O.C. for the grant support (grant no. 107-2635-H-126 -002 -). We also thank the Editor Terrance Jalbert, the Editor Mercedes Jalbert and two reviewers for precious comments.

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