РАЗДЕЛ 2
КОРПОРАТИВНАЯ СОБСТВЕННОСТЬ

SECTION 2
CORPORATE OWNERSHIP

THE GOVERNANCE EFFECT OF INSTITUTIONAL STAKEHOLDERS ON FAMILY-CONTROLLED COMPANIES' EARNINGS MANAGEMENT

Hsiang-tsai Chiang,* Li-jen He**, Chih-Hung Lai***

Abstract

The characteristics of institutional investors are that they hold massive funds and possess investment expertise; therefore, these investors are expected to have an influence on corporate governance. This study explores the supervising effect of active and passive institutional investors on company's earnings management in Taiwan, and whether the supervising effect differs between family and non family-controlled companies or not.
The empirical results show that institutional investors are significantly related to earnings management in both family and non family-controlled companies. Moreover, active investors have more impact on earnings management than passive ones in family-controlled companies. Institutional investors, especially active investors, have been shown to have significant governance effect; therefore, companies are encouraged to attract institutional investors to enhance corporate governance.

Keywords: Institutional Investors, Real Activities Earnings Management, Family-controlled Company

**Feng-Chia University. No.100 Wenhua Rd. Seatwen District, Taichung 407, Taiwan*
Tel.: 886-4-24517250 Ext. 4230
Fax: 886-4-24510666
Email: htchiang@mail.fcu.edu.tw
***Asia University, Taiwan*
****Feng-Chia University, Taiwan*

INTRODUCTION

Accounting scandals broke out one after another in various enterprises, under the guise of related party transactions, and accounting fraud was perpetrated through benefit transactions between the parent and subsidiary companies of Enron and WorldCom in the United States. In Taiwan there were also instances of false accounts receivable, inflated revenue, and emptied cases among Emperor, New Disc Science Technology Co, Procomp Electronics, and Rebar Corp. The occurrence of these major cases exposed the lack of supervising mechanisms in enterprise management and resulted in heavy investor losses. In order to reduce the behavior of surplus manipulation of enterprises and to restore investor confidence and stable operations in the capital markets, the Organization for Economic Co-operation and Development (OECD), the World Bank, and other international organizations advocated supervising mechanisms to strengthen corporate governance effectively. Therefore, the

related issue of supervising mechanisms that could enhance the effectiveness of corporate governance gained momentum and received considerable attention in countries around the world, and became an important topic of academic research.

In the institutional framework of internal and external corporate governance put forward by the World Bank (1999), the main core of the internal mechanism became the responsibility of the board of directors, whose duty is to oversee management in order to reduce agency problems. But different from other countries, most companies in Taiwan are family run and therefore the equity is controlled by families. According to the studies of Claessen, Djankov, and Lang (2000), listed companies tend to have controlling shareholders, and the board of directors has a strong family flavor and generally the companies are family controlled. Yeh, Lee and Woidtke (2001) point out that families control 76% of listed companies in Taiwan, and families control 66.45% of boards; therefore there is the phenomenon of a high overlap between ownership and right of operation; and the job functions of the board of directors are suspect (Fama and Jensen, 1983). Therefore, considering the important role family businesses assume in corporate governance in Taiwan, external supervising mechanisms such as institutional investors, established regulations, and accounting and auditing standards become very important to reduce the process of earnings management that governed by directors, supervisors, and management.

In recent years, with the relaxation of official policy through the Taiwan Securities authorities' cancellation of the licensing system for "Foreign Institutional Investors," and changing it to "once registered permanent" helped make the ratio of institutional investors grow year by year in the securities market and they eventually became the main participants in the capital markets. Compared to retail, corporate investors hold huge funds and are rich in material resources and expertise. Therefore, their impact on the management of the investment company is better than that of retail. However, the empirical results of Ryan and Schneider (2002) suggest that legal supervision can effectively curb speculation of an enterprise; therefore, no matter whether it is in the market or the supervision of the company, the influence of corporate investors also becomes very important, and is the cause of the research motivation of institutional investors in this study.

Past studies in the literature on whether institutional investors have supervising capacity are not consistent. Some scholars believe the major reason for the inconsistency in the empirical results is caused by the improper use of the variable of institutional investors. Many past studies of institutional investors consider institutional investors as a single variable, but actually the motivations of different types of institutional investors to monitor the company are not the same (Parthiban, Kochhar, and Levitas, 1998), if we consider them as a whole, and they may dilute the supervisory capacity of different types of investors. This study considers this factor from the perspectives of past scholars; we divide institutional investors into different groups according to their characteristics, and then further investigate the effect to curb the company's earnings management.

In this research, according to the classification method proposed by Almazam, Hartzell and Starks (2005), we divide institutional investors into "active" and "passive" categories, and consider the actual situation in our country, so this research examine whether active investors have a better monitoring effect than passive investors in Taiwan. Furthermore, we consider the feature of family controlled firms in Taiwan to establish whether active investors have a better monitoring effect than passive investors. The problem is the one this study wants to research. This research is the first study aimed at monitoring the effect of investors in Taiwan's family businesses, and further divides investors into two groups: active and passive investors. The results of this study can serve as a reference for company management when they plan ownership structure; stakeholders can also use this study to predict the monitoring effect on earnings management by the ownership structure of the company's active and passive investors.

The first part of the paper is motivation and background of the research issue, including literature review. Then we used linear regression model to test the hypotheses, and ends with discussions of the results and suggestions.

Literature Review

Earnings Management

Healy and Wahlen (1999) thought earnings management is management changing financial reports through the judgment and structure of transactions in the reports and misleading stakeholders about the company's business performance, or affecting contract results based on accounting numbers. Under the Generally Accepted Accounting Principles (GAAP), company managers have the discretion to process earnings management through discretionary accrual projects, and can then operate the profit on financial reports. Because discretionary accruals projects are not easily found by the reporting user compared to the change of accounting methods, it is more commonly used for the company's earnings management. In view of this, in past research on earnings management, most scholars have conducted related research by using accrual manipulation as a proxy variable for earnings management. Therefore, more and more

managers began to reduce the use of accrual projects and changed to implement earnings management through the manipulation of real activities (Graham, Harvey, and Ralgopal (2005); Roychowdhury (2006); Eldenburg, Gunny, Hee, and Soderstrom (2008).

Bruns and Merchant (1990) found these managers tended to implement earnings management through real activities manipulation but not accrual projects. The survey results of Graham, Harvey, and Rajgopal (2005) also indicate that 79.9% of business managers reach their earnings target by reducing R&D expenses, advertising costs, and maintenance expenditure, while 55.3% of managers delay new investment plans in order to reach their earnings target. Roychowdhury (2006), based on Dechow, Kothari, and Watts (1998), built an empirical model of real activities manipulation to verify that companies record less positive profit using real activities manipulation to avoid company losses. Because managers generally use real activities manipulation, this research uses real activities manipulation as a proxy variable for earnings management.

Relation between institutional investors' supervision and the degree of earnings management

The issue in past research concerning the supervisory ability of institutional investors was highlighted in the "efficiency supervision hypothesis" made by Pound (1988). This scholar thought institutional investors had more professional talent, knowledge, and resources than other investors. And they have a higher number of shares in individual enterprises than general retail. To reduce investment risk and protect their interests, they have more motivation to monitor management than general shareholders and require its investment of enterprise revealed more related information to estimate the operating performance and value of the company to reduce agency problems.

Graves and Waddock(1990) who investigated the role of institutional investors, find that if institutional investors have higher shareholding and are not satisfied with the company's performance, then they will tend to be involved in company control or make strategic alliances to handle the problem of corporate governance and strategy. We found that the original role of institutional investors is only concerned with the performance of the investment company but now changes to ownership, which has an important influence on corporate decision making. Many scholars have undertaken empirical research on institutional investors' ability to supervise in a multiparty-oriented context. Such as from the point view of earnings management (Bushee, 1998; Chung, Firth, and Kim, 2002), voluntarily exposing the accuracy of information (Noe, 1990; Ajinkya, Bhojraj and Sengupta, 2005), company performance (McConnell and Servaes, 1990; Ward and Brown, 2009). These results indicate that institutional investors have supervising capability; it also means that when institutional investors have higher shareholding, there is less possibility of managers proceeding with earnings management by using discretionary accrual projects; company managers will announce information and forecast profit more specifically, with less error and not too optimistically. From the point of view of company performance, they can increase company performance. The literature listed above has the same research results as Agrawal and Mandelker (1990), this indicates that institutional investors play an important role in supervision and management of the company.

However, because institutional investors have to provide performance results to their customers every quarter, and because they face intense performance-ranking competition between the same businesses, they experience heavy pressure on short-term profit. This makes them more serious about the current performance of the investment company, which in turn exerts pressure on the company managers. Company managers bear the performance pressure from institutional investors; profit motivation itself, therefore, makes them more serious about short-term profit. This, in turn, drives them to reach their short-term performance targets by using accounting decisions and sacrificing the long-term value of the company (Jones, 1991; Laverty, 1996), and this relates differently to the increase in company value as a result of institutional investors' supervision. In the study of our country, scholars have pointed out that in Taiwan's stock market, institutional investors do not have supervision effect on managers' self-interest behavior. Instead, they play a speculators' role of short profit sightedness and have less motivation to monitor the company's managers, which is totally different from the "efficiency supervision hypothesis" made by Pound (1988).

Because institutional investors take a larger portion of shareholding and have richer resources than small shareholders, they will reduce their investment risk and have more motivation to monitor the company managers' behavior. Therefore, when investors have more shareholding in a company, there is less likelihood of the company proceeding with earnings management. Another point of view is that when a company performs poorly, institutional investors will put pressure on the company's managers through the investment holdings (Shleifer and Vishny, 1986; Holderness and Sheehan, 1988), and due to the company's earnings and share price performance, this will affect managers' salaries (Matsunaga and

Park , 2001), thus increasing the earnings management motivations of company managers (Jones, 1991; Laverty, 1996), According to Chung, Firth, and Kim (2002) and Koh (2007), the empirical results all indicate that when a company's institutional investors have a higher portion of shareholding they can exert more pressure on a company's manager to use discretionary accrual projects to proceed with earnings management, and this supports the first viewpoint. Zhong, Gribbin and Zheng (2007) supports the second viewpoint: the results indicate shareholdings of external large shareholders have a positive relation with discretionary accrual projects of the profit-reducing company. From the point of view of the literature above, we find the ratio of institutional investors' shareholdings will affect earnings management.

Relationship between Family Business and Earnings Management

Fan and Wong (2002) and Yeh, Ko, and Su (2003) point out that in listed companies in the Taiwan stock market, just like in most East Asian countries, the board of directors has a strong family flavor, and it is very common for family members be officers or on management level. Yeh, Ko, and Su (2003) analyzed the family holding characteristics in the Taiwan stock market, and found that of 208 listed companies 158 matched the definition of family holdings, a ratio of 76%. And their study found that family-owned groups control 78% of listed companies on the Taiwan Stock Exchange. In 57.6% of these family-controlled companies, the family owned more than half of the board seats. It can be seen that family business is an important characteristic in the Taiwan stock market; therefore, studies which target Taiwan-listed companies as a research object should consider this characteristic.

There are two ways of examining whether family businesses apply earnings management more than non-family businesses. The first is from the angle of the supervision mechanism and remuneration system; a family businesses compared to non-family businesses will not proceed with earnings management and lead to better earnings quality. Ali, Chen and Radhakrishnan (2007) supports this viewpoint; the reason is that family businesses do not have a serious problem in the separation of management rights and ownership; therefore, they can supervise management more directly. Furthermore, when the family business decides the salaries of its managers, it will not be totally according to accounting numbers, so the likelihood of manipulating accounting numbers will be lower. Furthermore, non-family businesses will have more serious agency problems of hidden behavior and hidden information than family businesses. To lower the agency problem, a non-family business may pay salaries according to an observed performance measure index (Healy and Palepu, 2001), and this could cause managers to have the motivation to manipulate accounting numbers.

Another angle considers the entrenchment effect and ownership structure. A family business may proceed with earnings management more than a non-family business and have poor earnings quality. Past literature (Shleifer and Vishny, 1997) has indicated that controlling shareholders or large shareholders will compromise the interests of minority shareholders because of personal incentives. Due to the existence of the entrenchment effect and the need to avoid external supervision by controlling or large shareholders, they will proceed with earnings management and damage earnings quality (Haw, Hu, Hwang and Wu, 2004).

In sum, there is no common conclusion as to whether a family business will be more possible to manipulate earnings or not. However, according to the empirical results of domestic literature, most support the viewpoint that, compared to a non-family business, a Taiwan family business will be more possible to manage their earnings. That is, the negative entrenchment effect is larger than the positive effect brought about by the supervision mechanism in Taiwan family business. Giannetti and Simonov's (2004) study points out that when a company's controlling shareholders have more incentive to deprive external investors, foreign investors will not be willing to invest in this company. La Porta, Lopez-de-Silanes and Shleifer (1999) and Claessens, Djankov, and Lang (2000) found that a company's controlling shareholders will increase the control rights of the company by using a pyramid structure, cross-shareholdings, and family control. This causes a deviation in the right to vote and cash flow rights which make it a greater incentive to negatively influence the interests of minority shareholders. Therefore, institutional investors should not invest in family-controlled companies. However, if institutional investors still choose to invest their money in a family business and not a non-family business, they will have greater incentive to monitor family companies. Accordingly, this study proposes the following hypotheses:

H1: Compared to a non-family business, institutional ownership of a family business has a significant relationship with the degree of real activities earnings management.

H1a: Compared to a non-family business, institutional ownership of a family business has a significant positive relationship with abnormal operating cash flows.

H1b: Compared to a non-family business, institutional ownership of a family business has

a significant negative relationship with abnormal production costs.

H1c Compared to a non-family business, institutional ownership of a family business has a significant positive relationship with abnormal discretionary spending.

Different types of supervision mechanisms of institutional investors

The above research related to institutional investors. Most of the research considers institutional investors as a single variable to discuss related issues, but in fact different types of institutional investors have different effects on companies to monitor, therefore, considered as a whole, they may be diluted on the statistical results. Bushee (1998) and Bushee and Noe (2000) divides institutional investors into two types: short-term traders (Transient) and those investing over a long holding period (Quasi-indexers). Koh (2007) also divided institutional investors into these two categories, then discussed the relative issue of earnings management. The empirical results indicate that investors with long-term holdings are limited by the manipulation of accrual items of companies that want to reach an earnings threshold. This also means that long-term investors are more concerned about a company's value than its short-term performance; therefore, they have huge motivation to monitor managers' behavior and the decisions they make. Brickley, Lease, and Smith (1988) proposes another classification of investors. They thinks the presence or lack of a relationship between institutional investors and a company's business might decide the effect of the degree of decision making and monitoring ability from institutional investors in the company. Therefore, they divided institutional investors into two categories: "pressure sensitive" and "pressure resistant." "Pressure sensitive" investors means they have more direct interest in a relation with a company. As these types of institutional investors are likely to be affected by a manager's behavior and decisions, they cannot monitor the company's managers effectively. However, the "pressure resistant" investors are investors not easy influenced by top managers' behavior. These include public pension funds, mutual funds, and charitable foundations. The reason is that they do not need to take any benefits from company managers, and therefore can be more actively involved in corporate governance and supervise the managers of the company. The empirical results are the same as that which the research hypothesizes, in that in supervising company managers, "pressure resistant" investors are more efficient than "pressure sensitive" investors. Borokhovich, Brunarski and Parrino (2000) also supports the results of the study.

However, in recent studies (Almazam, Hartzell and Starks, 2005; Chen, Harford and LI, 2007; and Barabanov, and Ozocak, 2008), institutional investors have been divided into active and passive supervisors. Active supervisors include investment consultant companies and mutual funds because these types of investors do not have business dealings with the investment company and are more concerned with short-term performance; therefore, they are active investors, also called independent investors. Passive supervisors include trust departments of banks, insurance companies and funds because they have business dealings with investment companies and are more concerned with the long-term value of a company. These passive investors are also known as gray investors. Almazam, Hartzell and Starks (2005) in research on supervision from institutional investors to top managers also divided institutional investors into active and passive supervisors, and their empirical results found that "active" institutional investors have a significant effect on top managers' salaries, while "passive" institutional investors do not. Other similar classification literatures have made the same finding. From this viewpoint, we find that active investors play an important supervisory role in corporate governance compared to passive investment supervisors. In view of this, the study considers that different types of investors have different supervision ability, and according to Almazam, Hartzell and Starks (2005) classification of empirical results, we expect that among institutional investors who invest in family business, active supervised investors have a better supervision effect compared to passive supervised investors. Therefore, this research proposes Hypothesis II as follows:

H2：Compared to passive investors, the shareholding ratio of active investors in family business has a significant relationship with the degree of real activities earnings management.

H2a：Compared to passive investors, the shareholding ratio of active investors in family business has a significant positive relationship with abnormal operating cash flows.

H2b： Compared to passive investors, the shareholding ratio of active investors in family business has significant negative relationship with abnormal production costs.

H2c：Compared to passive investors, the shareholding ratio of active investors in family business has a significant positive relationship with abnormal discretionary spending.

Research Data and Empirical Model

Scope of the study and data sources

Considering the time at which Taiwan corporate governance began to attract attention, as well as the time at which the Government relaxed foreign investment in the Taiwan stock market, this study surveyed Taiwan listed companies from 2002 to 2008 as research objects. However, when this research calculates the variable of real activities manipulation, it requires the date of the current year and past two years, so the actual study period of this research is from 2000 to 2008.

The main data of this study come from each module database of the Taiwan Economic Journal (TEJ). However, in order to ensure the accuracy and integrity of the database, when we organize sample data, we use the listed companies' annual reports posted on the Market Observation Post System as secondary data.

Sample Selection

The original total number of samples for this study was 5,013; however, because of the special industrial nature of the financial and construction industries, we excluded these two industrial sectors from the research sample. Furthermore, if a sample company had lost data in a sample year, we also excluded it. After deleting the financial industry (258) and construction industry (259) during the study period each year and accounting for data loss (136), the final number of samples came to 4,360. The detailed distribution of the samples for each research year is listed in the table below.

Table 1. Distribution of Samples

	2002	2003	2004	2005	2006	2007	2008	Total
Sample Number	690	702	706	712	722	739	742	5013
Financial	(36)	(37)	(37)	(37)	(37)	(37)	(37)	(258)
Construction	(37)	(37)	(37)	(37)	(37)	(37)	(37)	(259)
Data loss	(17)	(19)	(18)	(17)	(14)	(24)	(27)	(136)
Final sample number	600	609	614	621	634	641	641	4360

Empirical Mode

First, this study processed the inspection of Hypothesis 1 by using Module I to explore the relationship between institutional investors' shareholdings and manipulating real activities. Then, it further divided institutional investors' shareholdings into two types: active and passive investors' shareholdings and processed the inspection of Hypothesis 2 by using Module II.

$$REM_t = \alpha + \beta_1 INT\_Total_t + \beta_2 SIZE_t + \beta_3 LEV_t + \beta_4 CFO_t \quad (I)$$

$$REM_t = \alpha + \beta_1 ACINT_t + \beta_2 INACINT_t + \beta_3 SIZE_t + \beta_4 LEV_t + \beta_5 CFO_t \quad (II)$$

Variable definition:

REM: Real activities of earnings management (TOTAL_REM) = abnormal operating cash flows (AB_CFO), abnormal production costs + (AB_PROD) + abnormal discretionary expenditures (AB_DISEXP)

ACINT: The holding ratio of active investors = Holding ratio at the end of the year of other investors in our country + Holding ratio at the end of the year of foreign investors.

INACINT: The holding ratio of passive investors = Holding ratio at the end of the year of financial institutions in our country + Holding ratio at the end of this year of trust funds in our country.

INT_Total: Holding ratio of overall investors = Holding ratio of active investors (ACINT) + Holding ratio of passive investors (INACINT) = Holding ratio at the end of the year of other investors in our country + Holding ratio at the end of the year of foreign investors + Holding ratio at the end of the year of financial institutions in our country + Holding ratio at the end of the year of trust funds in our country.

In terms of the dependent variables, according to Dechow, Kothari, and Watts (1998), this research proposes the real activity earnings management model, which uses real activities manipulation of abnormal operating cash flows, abnormal production costs, and abnormal discretionary expenditures as alternative variables for earnings management.

Real activities of earnings management (TOTAL_REM) = abnormal operating cash flows (AB_CFO), abnormal production costs + (AB_PROD) + abnormal discretionary expenditures (AB_DISEXP)

Abnormal operating cash flows (AB_CFO)

AB_CFO = actual CFO －Normal CFO

AB_CFO = Present Year Actual CFO －Normal CFO

Normal CFO analysis is conducted by using the regression equation derivation by Roychowdhury (2006) and uses the following regression equation to estimate:

$$\frac{CFO_t}{A_{t-1}} = \alpha_1\left(\frac{1}{A_{t-1}}\right) + \beta_1\left(\frac{S_t}{A_{t-1}}\right) + \beta_2\left(\frac{\Delta S_t}{A_{t-1}}\right) + \varepsilon_t \quad (3)$$

Among them:

CFO_t ：Operating cash flow of year t

A_{t-1} ：Total assets of t-1 year

S_t ：Sales revenue of t year t

ΔS_t ：Sales revenue of t year minus sales revenue of t-1 year

Abnormal production costs (AB_PROD)

AB_PROD = Present Year Actual PROD − Normal PROD

Normal PROD analysis is also conducted by using the regression equation derivation by Roychowdhury (2006), and the following regression equation to estimate:

$$\frac{PROD_t}{A_{t-1}} = \alpha_0\left(\frac{1}{A_{t-1}}\right) + \beta_1\left(\frac{S_t}{A_{t-1}}\right) + \beta_2\left(\frac{\Delta S_t}{A_{t-1}}\right) + \beta_3\left(\frac{\Delta S_{t-1}}{A_{t-1}}\right) + \varepsilon_t$$

Among them

$PROD_t$ ：Production cost of t year ，by using cost of goods sold (COGS)+inventory change number (ΔINV) to estimate

Therefore,, needs to estimate normal COGS and normal ΔINV , module as follow：

$$\frac{COGS_t}{A_{t-1}} = \alpha_1\left(\frac{1}{A_{t-1}}\right) + \beta_1\left(\frac{S_t}{A_{t-1}}\right) + \varepsilon_t$$

This means normal COGS is the linear function of present sales revenue.

$$\frac{\Delta INV_t}{A_{t-1}} = \alpha_1\left(\frac{1}{A_{t-1}}\right) + \beta_1\left(\frac{\Delta S_t}{A_{t-1}}\right) + \beta_2\left(\frac{\Delta S_{t-1}}{A_{t-1}}\right) + \varepsilon_t$$

This means normal ΔINV is the linear function of present changes in sales revenue and previous changes in sales revenue

Abnormal discretionary expenditures (AB_DISEXP)

AB- DISEXP = Present year actual DISEXP − Normal DISEXP

Normal DISEXP analysis is conducted by using the regression equation derivation by Roychowdhury (2006) and the following regression equation to estimate:

$$\frac{DISEXP_t}{A_{t-1}} = \alpha_0\left(\frac{1}{A_{t-1}}\right) + \beta_1\left(\frac{S_{t-1}}{A_{t-1}}\right) + \varepsilon_t$$

Among them:

$DISEXP_t$ ：Discretionary expenditures of t year，is Advertising costs + R&D costs + Selling and Administrative costs

For our argument, this study is based on the classification of Almazam, Hartzell and Starks (2005), and considers the actual situation in our country. It defines institutional investors including domestic financial institutions, trust funds, and corporate juridical persons – as passive investors. National government agencies, other legal entities, and foreign (overseas) legal persons are classified as "active investors." However, this research will exclude the holdings of corporate juridical persons when calculating the holdings ratio of passive investors. The main consideration is that most listed companies in Taiwan have the characteristics of cross holding of parent and subsidiary companies. So, the corporate juridical person is almost a relative enterprise of a group or family, and the purpose of cross holdings will first consider the profit of the whole group and family. Therefore, this research believes corporate juridical persons will not monitor the investment company and exclude it. When calculating the holdings ratio of active investors, we consider the investment characteristics of government agencies, such as the fact that sometimes an investment company serves to stabilize the stock market, but not because of that company's good operating performance. Furthermore, government institutions usually target the weighted stocks of companies or companies with small stock price volatility to invest in. Therefore, the supervising capacity of a government institution can only be researched in a few companies and cannot generally be used for all listed companies. Therefore, we excluded government institutions. The following formula measures the holding ratio of active and passive investors:

The holding ratio of active investors (ACINT) = Holding ratio at the end of the year of other investors in our country + Holding ratio at the end of the year of foreign investors.

The holding ratio of passive investors (INACINT) = Holding ratio at the end of the year of financial institutions in our country + Holding ratio at the end of this year of trust funds in our country.

Holding ratio of overall investors (INT_Total) = Holding ratio of active investors (ACINT) + Holding ratio of passive investors (INACINT) = Holding ratio at the end of the year of other investors in our country + Holding ratio at the end of the year of foreign investors + Holding ratio at

the end of the year of financial institutions in our country + Holding ratio at the end of the year of trust funds in our country.

For control variables, the study refers to existing literature and takes three variables: company size (SIZE), measure by natural logarithm of total assets at the end of the year (Watts and Zimmerman, 1986); debt ratio (LEV), measured by the ratio of total liabilities divided by total assets (Dechow, Sloan and Sweeney, 1996); cash flow of operating activities (CFO), measured by cash flow of operating activities divided by sales revenue at the beginning of the period (Dechow, Sloan and Sweeney, 1995). Moreover, since Taiwan's high-tech industry has always been a representation industry of listed companies, and past literature also points out that it will affect the degree of earnings management if it is checked by the Big Four accounting firms, this study uses the high-tech industry (HITEC) and whether it is checked by the Big Four accounting firms as a control variable.

ANALYSIS OF RESULTS

Descriptive Statistics

Before progressing to the empirical research, this study divided the total samples into family businesses and non-family businesses; this study also divided the descriptive statistics into two parts, which are listed in Table 1. For non-family businesses, the part of the dependent variable, the average number of abnormal operating cash flows is -0.0093; the average number of the abnormal production cost is 0.0052; the average number of abnormal discretionary spending is 0.0044. For the part of the independent variables, the average number of corporate total shareholding ratios is 0.1537; the average number of the holding ratio of active monitoring investors is 0.1093; and the average number of the holding ratio of passive monitoring investors is 0.0444. This indicates that the average holding ratio of non-family business investors is 15.37%, the holding ratio of active monitoring investors is 10.93%, and the holding ratio of passive monitoring investors is 4.44%. However, the description statistics of family businesses as introduced above will not be repeated here. Comparing the descriptive statistics of the two samples, we find that investors'total holding ratio of non-family businesses (0.1537>0.1145), the holding ratio of active monitoring investors (0.1093>0.0801), and the holding ratio of passive monitoring investors (0.0444>0.0344) are higher than those of family businesses. This reveals the phenomenon that institutional investors may not be willing to invest in family businesses.

Table II. Descriptive Statistics

Variable Name	Sample of Non-Family Business					Samples of Family Business				
	Item	Minimum	Maximum	Average	Standard Deviation	Item	Minimum	Maximum	Average	Standard Deviation
TOTAL_REM	1346	-.6966	.6394	.0019	.0854	2881	-.6477	.5904	-.0015	.0780
AB-CFO	1346	-.7110	.7716	-.0073	.1068	2881	-.9118	.7621	.0036	.0984
AB-PROD	1346	-.6551	.6767	.0061	.1131	2881	-1.1302	.6466	-.0038	.1090
AB-DISEXP	1346	-.2200	.7283	.0030	.0692	2881	-.2076	.5523	-.0013	.0588
ACINT	1346	.0000	.8191	.1435	.1610	2881	.0000	.9584	.0976	.1361
INACINT	1346	.0018	.7028	.1697	.1153	2881	.0000	.9999	.3137	.2080
INT_Total	1346	.0022	.8539	.3132	.1971	2881	.0000	.9999	.4113	.2330
Ln(size)	1346	12.8023	20.2904	15.8113	1.2763	2881	12.5849	20.0916	15.5654	1.2394
LEV	1346	.0187	.9859	.3867	.1647	2881	.0196	.9684	.3792	.1612
CFOt	1346	-16.4030	1.4059	.0826	.6007	2881	-4.5893	5.9605	.1243	.2623
HITEC	1346	.0000	1.0000	.6612	.4735	2881	.0000	1.0000	.4172	.4932
BIG4	1346	.0000	1.0000	.8655	.3413	2881	.0000	1.0000	.8497	.3574

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0.

Collinearity Analysis

In order to avoid the situation of a highly linear correlation in the argument causing an error in the empirical results, before the process of the regression estimation of this study, we used Peel forest correlation coefficients (Pearson Correlation) to analyze the correlation between variables.

Tables III and IV list the correlation coefficient between the independent variables of this study. We find only a high correlation between the investors' holding ratio and the active monitoring investors holding ratio (0.909 per cent). The other correlation coefficient between the independent variables is not very high. However, because the holding ratio of investors is constructed by active monitoring investors and passive monitoring investors, we know the correlation is high, and the regression model in this study does not test the two types of holding ratio together. Therefore, the two regression models in this study will not have a collinearity problem between variables.

Table III. Correlation Coefficient Table of Non-Family Sample

	TOTAL_REM	AB-CFO	AB-PROD	AB-DISEXP	ACINT	INACINT	INT_Total	Ln(size)	Debt	CFOt	HITEC	BIG4
TOTAL_REM	1	.618**	.066*	.173**	.058*	.056*	.080**	.070*	-.046	.181**	.025	.043
		.000	.016	.000	.033	.041	.003	.010	.089	.000	.356	.111
AB-CFO		1	-.586**	.177**	.204**	.078**	.212**	.044	-.286**	.316**	-.014	.099**
			.000	.000	.000	.004	.000	.103	.000	.000	.614	.000
AB-PROD			1	-.649**	-.132**	-.074**	-.151**	.043	.257**	-.180**	.073**	-.067*
				.000	.000	.006	.000	.119	.000	.000	.008	.014
AB-DISEXP				1	-.028	.070*	.018	-.052	-.036	.030	-.067*	.010
					.313	.011	.506	.057	.189	.273	.015	.724
ACINT					1	-.009	.811**	.548**	-.134**	.132**	.137**	.163**
						.735	.000	.000	.000	.000	.000	.000
INACINT						1	.577**	.051	.033	-.101**	-.158**	.084**
							.000	.061	.231	.000	.000	.002
INT_Total							1	.477**	-.090**	.049	.020	.182**
								.000	.001	.071	.471	.000
Ln(SIZE)								1	.018	.142**	.020	.146**
									.509	.000	.470	.000
LEV									1	-.156**	-.122**	-.144**
										.000	.000	.000
CFOt										1	.085**	.094**
											.002	.001
HITEC											1	.206**
												.000
BIG4												1

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0

When significance level is 0.01 (two-tailed), related to significant. When significance level is 0.05 (two-tailed), related to significant.

Table IV. Correlation Coefficient Table of Family Sample

	TOTAL_REM	AB_CFO	AB_PROD	AB_DISEXP	ACINT	INACINT	INT_Total	Ln(size)	Debt	CFOt	HITEC	BIG4
TOTAL_REM	1	.526**	.145**	.179**	.086**	.058**	.102**	.111**	-.010	.197**	-.034	.014
		.000	.000	.000	.000	.002	.000	.000	.607	.000	.064	.460
		2881	2881	2881	2881	2881	2881	2881	2881	2881	2881	2881
REM_CFO		1	-.637**	.204**	.142**	.074**	.150**	.023	-.278**	.375**	.047*	.087**
			.000	.000	.000	.000	.000	.227	.000	.000	.011	.000
			2881	2881	2881	2881	2881	2881	2881	2881	2881	2881
REM_PROD			1	-.596**	-.093**	.004	-.051**	.069**	.258**	-.215**	-.074**	-.087**
				.000	.000	.843	.006	.000	.000	.000	.000	.000
				2881	2881	2881	2881	2881	2881	2881	2881	2881
REM_DISEXP				1	.048**	-.055**	-.021	-.018	-.025	.032	.013	.034
					.010	.003	.270	.340	.177	.090	.485	.069
					2881	2881	2881	2881	2881	2881	2881	2881
ACINT					1	-.133**	.466**	.432**	-.147**	.124**	.028	.131**
						.000	.000	.000	.000	.000	.132	.000
						2881	2881	2881	2881	2881	2881	2881
INACINT						1	.815**	.193**	.095**	.100**	-.087**	.126**
							.000	.000	.000	.000	.000	.000
							2881	2881	2881	2881	2881	2881
INT_Total							1	.425**	-.001	.162**	-.062**	.189**
								.000	.939	.000	.001	.000
								2881	2881	2881	2881	2881
Ln(SIZE)								1	.120**	.094**	-.024	.116**
									.000	.000	.193	.000
									2881	2881	2881	2881
LEVt									1	-.190**	-.057**	-.046*
										.000	.002	.014
										2881	2881	2881
CFOt										1	.038*	.084**
											.042	.000
											2881	2881
HITEC											1	.200**
												.000
												2881
BIG4												1

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0

When significance level is 0.01 (two-tailed), related to significant. When significance level is 0.05 (two-tailed), related to significant.

Analysis of Result of Multiple Regressions

Result of institutional holding ratio's affect on earnings management

According to the linear regression empirical results of Table V and VI, when we use total actual earning management (TOTAL_REM) and abnormal production cost (AB_PROD) as dependent variables, whether in a family or non-family business, the institutional holding ratio is significantly related to earnings management, and using abnormal operating cash flow (AB_CFO) as a dependent variable, the institutional holding ratio is significantly related to earnings management. The empirical results are consistent, as the inference with the proxy variables of the institutional holding ratio and earnings management, that is institutional investors' holding ratio, has a significantly positive effect on total real activities earnings management, abnormal operating cash flow, and abnormal discretionary spending. This has a negative significant impact on abnormal production cost, which means that irrespective of whether the business is a family or non-family one, institutional investors have the monitoring ability to invest in the company and can inhibit corporate managers from using real activities manipulation for earnings management.

Table V

Model：$REM_t = \alpha + \beta_1 INT\_TOTAL_t + \beta_2 LnSIZE_t + \beta_3 LEV_t + \beta_4 CFO_t + \beta_5 HITEC_t + \beta_6 BIG4_t + \varepsilon$				
Dependent variable Variable	TOTAL_REM	AB_CFO	AB_PROD	AB_DISEXP
Intercept	-.025	.144	-.245	.077
	(.433)	(.000)***	(.000)***	(.003)***
INT_TOTAL	.061	.222	-.195	.051
	(.048)**	(.000)***	(.000)***	(.103)
LnSIZE	.015	-.101	.157	-.082
	(.637)	(000)***	(.000)***	(.009)***
LEV	-.012	-.224	.221	-.030
	(.668)	(000)***	(.000)***	(.282)
CFO	.172	.288	-.166	.039
	(.000)***	(000)***	(.000)***	(.162)
HITEC	.005	-.074	.121	-.077
	(.849)	(003)***	(.000)***	(.006)***
BIG4	.011	.029	-.032	.020
	(.691)	(.250)	(.233)	(.476)
R^2	0.038	0.202	0.134	0.013
Adj. R^2	0.034	0.198	0.130	0.008

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0.

*indicate when α＝0.10 is significant；**indicate when α＝0.05 is significant；***indicate when α＝0.01 is significant。

Table VI. Estimate result of institutional investors holding ratio to earnings management in family business

Model：$REM_t = \alpha + \beta_1 INT\_TOTAL_t + \beta_2 LnSIZE_t + \beta_3 LEV_t + \beta_4 CFO_t + \beta_5 HITEC_t + \beta_6 BIG4_t + \varepsilon$				
Dependent Variable	**TOTAL_REM**	**AB_CFO**	**AB_PROD**	**AB_DISEXP**
Intercept	**-.086**	**.047**	**-.139**	**.006**
	(.000)	**(.031)****	**(.000)*****	**(.681)**
INT_TOTAL	**.040**	**.107**	**-.053**	**-.028**
	(.054)*	**(.000)**	**(.008)*****	**(.190)**
LnSIZE	**.075**	**-.030**	**.087**	**-.011**
	(.000)***	**(.109)**	**(.000)*****	**(.591)**
LEV	**.015**	**-.211**	**.210**	**-.016**
	(.432)	**(000)*****	**(.000)*****	**(.399)**
CFO	**.188**	**.318**	**-.168**	**.031**
	(.000)***	**(000)*****	**(.000)*****	**(.109)**
HITEC	**-.034**	**.023**	**-.046**	**.002**
	(.066)*	**(.180)**	**(.011)****	**(.935)**
BIG4	**-.011**	**.030**	**-.054**	**.037**
	(.575)	**(.087)***	**(.003)*****	**(.059)***
R^2	**.050**	**.197**	**0.107**	**0.003**
Adj. R^2	**.048**	**.195**	**0.105**	**0.001**

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0.
*indicate when α＝0.10 is significant；**indicate when α＝0.05 is significant；***indicate when α＝0.01 is significant。

Result of the holding ratio of active institutional investors and passive institutional investors to earnings management

After testing Hypothesis I, this research divided institutional investors' holding ratio into two types: active institutional investors and passive institutional investors, further testing Hypothesis II: compared to passive institutional investors, active institutional investors' holding ratio of family business has a significant relationship with the degree of earnings management.

The linear regression empirical results of non-family businesses listed in Table VII, display a number in parentheses, which is the p value of the relative degree of argument and the dependent variable. The results indicate that the p value of active institutional investors' holding ratio to abnormal operating cash flow and abnormal production cost is 0.000, which is significantly related in the 1% confidence level. The p value of passive institutional investors' holding ratio to total real activities earnings management (TOTAL_REM) is 0.007; the p value of abnormal operating cash flow (AB-CFO) is 0.000; the p value of abnormal production cost (AB_PROD) is 0.000; and the p value of abnormal discretionary expenditures (AB_DISEXP) is 0.017. Active institutional investors are significantly related to four earnings management. From the empirical results, the monitoring effect of passive institutional investors in non-family business is positively significant, with total earnings management and three sub items of earnings management, compared to the active monitoring investors, who have a significant effect on only two sub items of earnings management. Therefore, overall, passive institutional investors have better monitoring effect compared to active institutional investors in non-family businesses.

On the other hand, the results of family businesses is listed in Table VIII, which displays the p value of the relative degree of argument and dependent variable in parenthesis. The regression results indicate that the p value of active institutional investors' holding ratio to real activities earnings management (TOTAL_REM) is 0.046; the p value of abnormal operating cash flow (AB-CFO) is 0.000; the p value of abnormal production cost (AB_PROD) is 0.000; and the p value of abnormal discretionary expenditures (AB_DISEXP) is 0.026. Active institutional investors are significantly related to four earnings management. The p value of passive institutional investors to abnormal operating cash flow (AB-CFO) is 0.000, and the p value of abnormal discretionary expenditures (AB_DISEXP) is 0.015. The results of passive institutional investors indicate that only two items are significantly related to the dependent variable of earnings management. Due to the monitoring effect of active institutional investors in family businesses, they are significantly related to total earnings management, and three sub items of earnings management, compared to passive monitoring investors who have a significant effect on only two sub items of earnings management. Therefore, the results of this study indicate that active institutional investors have a better monitoring effect than passive institutional investors in family businesses.

Table VII. Estimate result of active institutional investors and passive institutional investors holding ratio to earnings management in non-family business

Model：$REM_t = \alpha + \beta_1 ACINT_t + \beta_2 INACINT_t + \beta_3 LnSIZE_t + \beta_4 LEV_t + \beta_5 CFO_t + \beta_6 HITEC_t + \beta_7 BIG4_t + \varepsilon$				
Dependent variable	TOTAL_REM	AB_CFO	AB_PROD	AB_DISEXP
Intercept	-.046	.161	-.267	.060
	(.166)	(.000)***	(.000)***	(.029)**
ACINT	.011	.205	-.188	.004
	(.739)	(.000)***	(.000)***	(.901)

INACINT	.074	.107	-.085	.066
	(.007)***	(.000)***	(.000)***	(.017)**
LnSIZE	.034	-.113	.172	-.064
	(.301)	(000)***	(.000)***	(.052)*
LEV	-.017	-.221	.217	-.035
	(.538)	(000)***	(.000)***	(.213)
CFO	.177	.285	-.162	.044
	(.000)***	(000)***	(.000)***	(.118)
HITEC	.016	-.081	.129	-.067
	(.571)	(002)***	(.000)***	(.019)**
BIG4	.008	.031	-.034	.017
	(.774)	(.222)	(.202)	(.543)
R^2	.041	.202	.135	.015
Adj. R^2	.036	.198	.131	.010

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0.

*indicate when α＝0.10 is significant；**indicate when α＝0.05 is significant；***indicate when α＝0.01 is significant。

Table VIII. Estimate result of active institutional investors and passive institutional investors holding ratio to earnings management in family business

Model：$REM_t = \alpha + \beta_1 ACINT_t + \beta_2 INACINT_t + \beta_3 LnSIZE_t + \beta_4 LEV_t + \beta_5 CFO_t + \beta_6 HITEC_t + \beta_7 BIG4_t + \varepsilon$

Dependent variable	TOTAL_REM	AB_CFO	AB_PROD	AB_DISEXP
Intercept	-..079	.063	-.164	.022
	(.000)***	(.006)***	(.000)***	(.144)
ACINT	.043	.099	-.085	.049
	(.046)**	(.000)***	(.000)***	(.026)**
INACINT	.028	.082	-.027	-.049
	(.148)	(.000)***	(.148)	(.015)**
LnSIZE	.067	-.044	.108	-.036
	(.002)***	(.025)***	(.000)***	(.098)
LEV	.019	-.203	.198	-.002
	(.318)	(000)***	(.000)***	(.933)
CFO	.188	.317	-.168	.031
	(.000)***	(000)***	(.000)***	(.112)
HITEC	-.035	.021	-.043	-.002
	(.058)*	(.220)	(.017)	(.922)
BIG4	-.011	.029	-.053	.036
	(.563)	(.094)	(.004)***	(.067)*
R^2	.051	.198	.110	.008
Adj. R^2	.048	.196	.108	.005

Variable defined: TOTAL_REM: Total of abnormal real activities earnings management; AB-CFO: Abnormal Operating Cash Flow, actual operating cash flow minus estimated operating cash flow; AB_PROD: abnormal production cost, actual production cost minus estimated production costs ; AB_DISEXP: abnormal discretionary expenditures, actual discretionary expenditures minus estimated discretionary expenditures ; ACINT: Holding ratio of active monitoring investors, total holding ratio of other investors in our country and foreign investors(include foreign financial institutions and foreign investors) ; INACINT: holding ratio of passive monitoring investors, total holding ratio of domestic financial institutions and trust found ; INT_TOTAL: total holding ratio of investors, holding ratio of active investors + holding ratio of passive investors; SIZE: company size, take the natural logarithm of the total assets; LEV: the debt ratio, total liabilities ratio in total assets; CFO: operating cash flows divided by opening sales revenue; HITEC: dummy variables of high-tech industry, 1 for the high-tech industry, another is 0; BIG4: dummy various of if it is check by the big four accounting firms, 1 for the checked by big four accounting firms, another is 0.

*indicate when α＝0.10 is significant；**indicate when α＝0.05 is significant；***indicate when α＝0.01 is significant。

CONCLUSION

The relaxation of the law by securities authorities enabled institutional investors' holding ratio in the stock market to increase every year and helped them become major players in capital markets. Compared to retail, these investors have huge amounts of capital and human and material resources. Therefore, their role in company supervision has gradually gained the public's attention. They have also caught the attention of academics and scholars, who want to know whether the intervention of institutional investors results in better corporate governance. However, there is no unanimity in the research results about the intervention of institutional investors in corporate governance. This research thinks the key point is that the characteristics of institutional investors will provide different strengths of monitoring. Therefore, this research references the classification of Almazam, Hartzell and Starks (2005) and divides institutional investors into two different types, active and passive institutional investors. Our study also investigates the effect of these two types of institutional investors on earnings management and considers the characteristics of family businesses in Taiwan. The empirical result of this study are listed as follows:

The research results indicate that irrespective of whether the business is a family business or a non-family business, institutional investors have monitoring ability and can inhibit company management from manipulating real activities. Overall, passive institutional investors have better supervision compared to active institutional investors in non-family businesses. And active institutional investors have better supervision compared to passive institutional investors in family businesses. These results can offer companies the insight to further consider planning their ownership structure.

In summary, the empirical results of this research support that institutional investors can inhibit Taiwan companies from engaging in real earnings management. They also support the policy of the Taiwan securities authorities relaxing the laws relating to investment by "foreign professional investment institutions." In order to promote Taiwan, institutional investors need to play an important role in the supervision of corporate governance. Therefore, the results of this research can be directed to the competent authority to make relevant policies in the future.

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