## Corporate Governance and Financial Crisis—A Empirical Study of Taiwanese Listed Companies

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#### **Abstract**

This study mainly examines the association between corporate governance and financial crises of firms cross-listed in Taiwan. Using Logistic regression analysis, it takes Taiwan listed companies and the firms cross-listed in Taiwan from 2009 to 2019 as the research objects, to discuss corporate governance and corporate financial crisis and predict the possibility of the company's future financial crisis.

The empirical results reveal that the corporate governance mechanism of the firms cross-listed in Taiwan had no significant correlation between the change of financial controller and the future financial crisis of accounting firm and the possibility, while the number of internal audit changes, the shareholding ratio of major shareholders, and the size of the company were positively correlated with the possibility of future financial crisis. Additionally, the deviation of shareholders' earnings, and the chairman, also as the general manager, and return on assets growth rate, were negatively correlated with the possibility of future financial crisis. And the accountant neither found abnormalities on the financial statements of the first listed company in Taiwan nor offered no advice. It indicates a fact that the accountant's audit was not a rigorous review.

The results of this audit confirm that the corporate governance mechanism of the first listed company has an important influence on the management and the operating performance of the company. It may also serve as a basis for external investors and the government to judge the financial soundness of the first listed company.

Keywords: Corporate governance, Financial crisis, Majority shareholding

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#### INTRODUCTION

In order to attract high-quality overseas companies and emerging companies to list in Taiwan, the government adopted the "123 Program to Promote Overseas Companies to List in Taiwan" in 2008, providing a platform for corporate transactions and fundraising with very simplified relevant regulations. However, the complex shareholding structure of the first listed company in Taiwan, the taxation, political and economic environment and compliance with laws and regulations of the country where it is registered and the country where it is mainly operated are generally questioned compared to the transparency of domestic corporate information.

In recent years, the first listed companies in Taiwan, such as Regeneration, Shengyue, Lvyue, Taodi and Kangyou, have successively suffered from inaccurate financial information, transfer of shares by major shareholders, and successive resignations of management teams and accounting directors. Defects in corporate governance of first listed companies. These incidents not only disrupted the financial order of the capital market, but also caused investors to lose trust in the financial statements of the first listed company in Taiwan and the audit report of the certified accountant, deepening the information asymmetry between investors and companies. Therefore, in order to avoid the disorder of the securities market and prevent the small and the gradual, the first listed company in Taiwan is the research objective to deeply explore the correlation between corporate governance and financial crisis.

Considering the interests of other stakeholders, it protects the rights and interests of shareholders, allowing company operators to maximize corporate value by improving operational performance. From the company's standpoint, corporate governance means that the company establishes the most appropriate mechanism to maximize the value of the company, provided that it conforms to the norms of laws and contracts. The actual decision-making body of the company is the board of directors, which needs to consider the interests of all shareholders and stakeholders in all aspects to create long-term interests for the company. On the other hand, when discussing corporate governance from a public policy standpoint, since the development of an enterprise depends on the support of all aspects of society, an enterprise should use social resources to develop and thrive, and should also fulfill its social responsibilities.

In terms of internal governance, from the perspective of the company, it is a governance model based on the board of directors, management authorities, shareholders and other company insiders, which promotes shareholders to participate in decision-making and knows the company's operating performance, and empowers directors and supervisors to exercise their powers independently ability. In short, it defines the contractual relationship between the shareholders of the company and the management authority, and mainly solves the problem of coordination of interests between the company's internal supervision and incentives. Specifically, internal auditing refers to assisting management and the board of directors to achieve established objectives by assessing and improving risk management, control and governance processes. Previous studies, such as Krishnan (2005), explored the relationship between the quality of audit committees and the quality of internal control, using the lack of internal control revealed by the company when changing accountants as a proxy variable for the quality of internal control, the results found that independent audit committees and financial experts The quality of the audit committee has less problems of lack of internal control. Kinney and McDaniel (1989) used the correction of previous quarterly earnings as a proxy variable of internal control, and they argued that the restatement of financial statements implied the destruction of the company's internal control system, and found that company size was negatively correlated with profitability and restatement of financial statements. Defond and Jiamblavo (1991) used firm size as a proxy variable of firm's internal control strength and found that firm's previous year adjustment was weakly negatively correlated with firm size. Changes in senior executives create uncertainty about a company's future performance, and investors often reflect their expectations of a new management team directly on the stock price. According to common-sense theory, if executives have poor business performance, the board tends to hire professional managers to improve company performance, so it has a positive relationship with stock prices. For example, Hotchkiss (1995) pointed out that after a company goes bankrupt, if there is no change of managers after the reorganization, it will usually face a second bankruptcy crisis. If the company changes managers, the company's operating performance may improve. The vicious circle theory suggests that changing managers may lead to poor performance of the company, tension and division of the internal members of the company, so that the company's operating performance will not increase but decrease, and when performance deteriorates, managers will change again. It occurs continuously and has a negative impact on the company's operating performance. Finally, the scapegoat theory holds that managers' changes are not related to company performance, and the replaced managers are just scapegoats for poor company performance (McGuire, Schneeweis and Naroff, 1988; Zajac, 1990).

In terms of external governance, it is mainly a governance model based on the external market. Government agencies establish laws that can effectively regulate corporate behavior, urge companies to follow and establish good corporate governance, and organize through different systems such as accountants, financial institutions, investment companies, etc. Supervision and participation to ensure that the company's management can fully disclose the company's operating performance and financial information, so as to protect the rights and interests of the majority of market investors.

This research will focus on "Research on the Correlation between Corporate Governance and Financial Crisis", mainly to examine the correlation between the corporate governance mechanism and financial crisis of the first listed OTC companies in Taiwan, and hope that through a complete corporate governance mechanism, it can be solved and reduced The company has a financial crisis due to agency problems and can predict the financial crisis.

#### LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

In the past, most of the researches discussed the company's crisis events from the financial aspect, but in the long run, the cause of the enterprise's crisis was that the enterprise itself was eliminated because its operating performance did not demonstrate its inability to withstand market competition. In recent years, in addition to the basic financial early warning mechanism, corporate governance variables have been added to do correlation research, in order to predict in time before the crisis occurs, protect the rights and interests of the investing public and reduce the losses of creditors.

Lin Yuling and Huang Jianhua (2009) used the company's financial variables or corporate governance variables in the previous year to measure financial crisis prediction, and the results of the study found that its predictability was very effective in observing the occurrence of a company's financial crisis. In the decision-making of

corporate management authorities, senior executives play a key role. As the so-called "one piece affects the whole body", the occurrence of the Boda case in 2004 caused a great crisis in the Taiwan stock market. The company hit a record four years at that time. The records of five financial executives have been changed in China. The frequent changes of financial executives in the company in a short period of time by the investing public shows that the financial executives do not trust the company, and they inevitably doubt whether there is a potential crisis in its corporate governance.

The company's internal audit plays the role of the gatekeeper, assisting the board of directors and management to check and confirm whether the company complies with the internal control system, and to provide timely suggestions for improvement and measure the performance of the company's operations. Therefore, under the normal operation of the enterprise, the number of changes in internal audit is not frequent. Therefore, it can be inferred that if the number of internal audit changes is high, the term of internal audit is short, and the development of the internal control system is relatively unstable, major internal control deficiencies are likely to occur, reflecting poor corporate governance. Therefore, the hypothesis is established as follows:

H1: The number of changes in the financial director is significantly and positively related to the possibility of the company's future financial crisis.

H2: The number of internal audit transactions is significantly and positively related to the possibility of the company's future financial crisis positive.

McConnell and Servaes (1995) found that major shareholders play an important role in corporate organizations and play a role in supervising the enterprise. The shareholding ratio of major shareholders is closely related to the quality of business performance. Due to the pyramid-style shareholding structure or cross-shareholding method, the controlling shareholder's operating control power exceeds the earnings distribution right at his disposal, and the controlling shareholder will cover up by manipulating earnings in pursuit of the goal of maximizing its own interests. The company's operating performance is poor and the rights and interests of minority shareholders are violated. Therefore, the hypothesis is established as follows:

H3: The shareholding ratio of major shareholders is positively related to the possibility of the company's future financial crisis to relationship.

H4: The deviation of share earnings is significantly and positively related to the possibility of the company's future financial crisis.

When the chairman and the general manager are the same person, it is related to the company's business performance. Most studies have pointed out that when the supervisor and the decision maker belong to the same person, it is easy to cause the suspicion of the player and the referee. Since the management rights and ownership cannot be separated, Loss of supervisory function, which in turn will affect the company's operating performance. Therefore, the hypothesis is established as follows:

H5: The chairman concurrently serves as the general manager and the company is significantly and positively related to financial crisis possibility.

Accountants usually play an important role in corporate governance and are external governance. They regularly review the company's financial and internal control process, and timely provide specific improvement or fraud prevention suggestions for abnormal or missing matters. Qi Wujun and Zhang Yushan (2009) studied the correlation between corporate governance and accountants' audit opinions, measured from the perspective

of accountants' professional judgment and independence, and took the financial crisis companies from 1997 to 2008 as the research object. In the process, the number of senior managers' changes and the financing ratio of related parties will be considered as factors; in terms of independence, the research result is whether the chairman's concurrent role as general manager will affect the accountant's assumption of continued operation. There is no significant correlation between the doubts and the inspection opinions. Therefore, the accountant issued a doubtful opinion on continuing operation, which is still quite useful for predicting financial crisis. The Knapp (1991) study pointed out that the quality of audit committees in assessing audit quality will be affected by the size of the accounting firm and the length of the accountant's tenure. Based on the above, the hypothesis is established as follows:

H6: If the accountant issues an adverse audit opinion, there is a positive relationship with the possibility of the company's future financial crisis.

H7: The size of the accounting firm is related to the possibility of the company's future financial crisis negative relationship.

This research will use corporate governance variables: the number of changes of financial directors, the number of changes in internal audit, the shareholding ratio of major shareholders, the deviation of share earnings, the chairman and general manager, the audit opinions of accountants and the size of the accounting firm to infer the future financial crisis of the company. possibility.

#### RESEARCH DESIGN AND IMPLEMENTATION

The data source for this research is the "Taiwan Economic Times Database (TEJ)", and the research objects are listed on Taiwan's OTC and overseas listed companies in Taiwan. Considering the research period, industry category, calendar system, sample form and research method, select the data that matches the period from 2009 to 2019, delete the industries with special shareholding structure, and exclude the non-chronological companies. After 11 years, after deleting the missing values, extract a total of 1,742 (14,326) reference values, and classify them into three groups, namely 116 first listed OTC companies (686 transactions) and 1,626 listed OTC companies (13,640 transactions), 1,742 first listed companies and listed OTC companies from overseas (14,326 transactions).

#### VARIABLE DEFINITIONS

#### 1. Dependent Variable

In this study, financial crisis (FAL) was used as a dependent variable, also known as an explained variable. When a financial crisis occurs that means the company is facing operational difficulties, the worst-case scenario may be a stock exchange-managed stock or eventual delisting. In this study, the Tobin Q ratio in TEJ will be used as the identification index. In other words, if the Tobin Q ratio is less than 1, it means that the company has poor operating performance, and the company in financial crisis is 1; Normal company is 0.

## 2. Independent Variable

Since the main purpose of the corporate governance mechanism is to prevent the conflict of interests between operators and investors, the party with the power advantage will make decisions that are unfavorable to the company, causing turbulence in the capital market. Therefore, the possibility of a company's financial crisis should also include relevant factors such as the changes of the financial director and the internal audit on behalf of the company's internal control functions, the shareholding ratio of the major shareholders of the board of directors, the deviation of share earnings, and whether the chairman of the board is also the general manager. However, this study will take corporate governance as the explanatory variable and conduct Logistic regression analysis.

## (1) Internal governance

- i. The number of changes in the financial officer (CFO): the number of changes in the company's financial officer within three years is used as a measure. When the chief financial officer changes frequently, indicating that the company's internal control system is lacking, the possibility of financial crisis is extremely high.
- ii. Number of Internal Audit Transactions (ICO): The number of internal audit transactions of the company within three years. The main function of internal audit is to supervise and ensure the effective performance of the company's internal control. In other words, when the internal audit changes are too frequent, it means that the company's internal control system cannot be effectively supervised and implemented. When the internal control is lacking, the company may also fall into financial crisis.
- iii. Major shareholder shareholding (TSE) ratio (BHS): The relevant changes in the shareholding ratio of shareholders who hold more than 10% of the shares

but do not serve as directors or supervisors as required by the competent authority shall be regularly announced on the exchange. Generally speaking, major shareholders and directors and supervisors are internal shareholders of the company, and they are more familiar with the actual operating conditions of the company than outsiders. By observing changes in the shareholding ratio of major shareholders, it can be inferred whether the company has signs of financial crisis.

- iv. Share-earnings deviation difference (DEV): Using La Prota et al. (2002) research, it measures the degree of deviation between the shareholding ratio that can be controlled by the ultimate controller of an enterprise and the right to distribute earnings, that is, share control rights earnings distribution rights. When the deviation of the share surplus is larger, it means that the controlling shareholder has a great incentive to infringe the rights and interests of other shareholders.
- v. The chairman concurrently serves as the general manager (DUAL): a dummy variable is set up, which is set to 1 when the chairman and the general manager are the same person, and 0 otherwise.

## (2) External governance

- i. 1. Accountant's Opinion (OPN): The accountant expresses his professional opinion on the company under audit, so it is an important reference for users of the financial statements to measure the company's financial position. Therefore, when the accountant expresses an unfavorable audit opinion, it means that the company The financial situation is abnormal and the situation that damages the interested parties occurs. If the audit opinion of the accountant is an unqualified opinion or a revised unqualified opinion with doubts about discontinuing operation, it is 0, and the rest is 1.
- ii. 2. Accounting firm (AUD): Measured as 0 for the Big Four accounting firms to be hired, and 1 for the rest.

#### 3. Control Variable

When studying the correlation between corporate governance and financial crisis, most scholars believe that the larger the company scale, the less likely it is to have financial crisis. Therefore, when measuring the correlation between corporate governance and financial crisis, the company size is set as a control variable, with The company's total assets take the natural logarithm value as the proxy variable of company size (SIZE) and the total asset return growth rate as the control variable.

## **REGRESSION MODELS**

This study uses the Logistic regression model to test the relationship between the internal and external supervision mechanism and the company's future financial crisis. The model is as follows:

1. Examining the correlation between the accountant's opinion and the company's financial crisis.

$$FALQ = \alpha + \beta_1 OPN + \beta_2 AUD + \beta_3 SIZE + \beta_4 ROAG + \epsilon$$

2. Assess the correlation between the corporate governance mechanism and the company's financial crisis

# $FALQ = \alpha + \beta_1 CFO + \beta_2 ICO + \beta_3 CFICO + \beta_4 BHS + \beta_5 DEV + \beta_6 DUAL \\ + \beta_7 SIZE + \beta_8 ROAG + \epsilon$

3. Verify the relevance of corporate governance mechanisms and accountants' opinions to the company's financial crisis

FALQ = 
$$\alpha+\beta_1$$
CFO+ $\beta_2$ ICO+ $\beta_3$ CFICO+ $\beta_4$ BHS+ $\beta_5$ DEV+
$$\beta_6$$
DUAL+ $\beta_7$ OPN+ $\beta_8$ AUD+ $\beta_9$ SIZE+ $\beta_{10}$ ROAG + $\epsilon$ RESULT ANALYSIS

## 1. Descriptive Statistics

This research takes Taiwan listed companies and overseas listed companies in Taiwan as the research objects, and explores the relationship between their corporate governance and financial crisis. The sample data is sourced from the Taiwan Economic News (TEJ) database. The data from 2009 to 2019 are selected, special industries with shareholding structure, non-calendar system and missing data are excluded, and they are classified into three groups, respectively Taiwan's first listed companies and listed OTC companies (12,626 samples), listed OTC companies (12,051 samples), and Taiwan's first listed companies (575 samples). The contingencies of this study are financial crisis (FALQ); the independent variables are nine variables in two aspects of the company's internal and external governance: the number of changes in financial executives (CFO), the number of changes in internal audit (ICO), the number of financial executives and internal Auditing Simultaneous Change Effect (CFICO), Major Shareholders' Shareholding Ratio (BHS), Equity Earnings Deviation (DEV), Chairman and General Manager (DUAL), Accountant's Opinion (OPN), Accounting Firm Scale (AUD) and Control The variable company size (SIZE), and the relevant research variable descriptive statistics were analyzed separately for the aforementioned three groups. The relevant information is shown in Table 4-1.

## 1. Narrative Statistical Analysis

- (1) In terms of the average number of financial crisis (FALQ), the overall sample is 0.535, and the first listed OTC company in Taiwan is 0.374, which shows that the financial crisis rate of the first listed OTC company in Taiwan is lower than that of the entire sample. The first listed OTC companies have been listed one after another since 2008. Compared with listed OTC companies, the sample number is lower than that of listed OTC companies.
- (2) In terms of the average number of changes in the number of financial executives (CFO), the overall sample is 0.487, and the first listed OTC company is 0.464. Although the average difference between the two groups is 0.023, the analysis of the occurrence of financial executive changes in the two groups is 0.464. The numbers were 4,162 and 205, respectively, accounting for 32.96% and 35.65% of the sample of individual groups. Therefore, the ratio of financial executive changes in the first listed OTC enterprises in Taiwan is higher than that of the whole group.
- (3) In terms of the average number of internal audit operations (ICO), the overall sample was 0.578, and the first listed OTC company was 0.680. The number of internal audit transactions in the two groups was 4,844 and 297 respectively. The proportions of the samples in individual groups are 38.37% and 51.65% respectively, so the internal audit changes of the first listed OTC companies in

Taiwan are higher than that of the whole group.

- (4) The average number of simultaneous transaction effects (CFICO) for financial executives and internal audits is 0.487 for the entire sample, and 0.395 for the first listed OTC companies in Taiwan. The number of simultaneous transaction effects of financial executives and internal audits in the two groups is analyzed respectively. There are 2,124 transactions and 130 transactions, accounting for 16.82% and 22.61% of the sample of individual groups respectively. Similarly, the effect of simultaneous changes in financial executives and internal audits is higher than that of the entire group.
- (5) In terms of the shareholding ratio of major shareholders (BHS), the average of the whole sample of 3.212 is less than the average of 6.909 of the sample of the first listed OTC companies in Taiwan, and the standard deviation of the first listed OTC companies in Taiwan is also greater than that of the entire sample, showing that The equity concentration of the first listed OTC companies in Taiwan is skewed to the right.
- (6) In terms of the deviation of share earnings (DEV), the average of the whole group is 6.188, and the median is 1.240. It is inferred that the control rights in the sample companies are higher than the cash flow rights and the average deviation is high, which proves that La Porta's argument is deviated. One share, one power situation exists.
- (7) In terms of chairman concurrently serving as general manager (DUAL), the average of the entire group is 0.347 and the median is 0, indicating that about 30% of listed companies in Taiwan have a chairman serving as general manager.
- (8) Regarding the audit opinion (OPN) of accountants, all sample values in the group of first listed OTC companies in Taiwan are 0, and the audit opinion of accountants on the first listed OTC companies in Taiwan is unqualified or discontinued Amendment unqualified opinion for operational concerns.
- (9) In terms of the size of accounting firms (AUD), nearly 90% of all sample companies have hired the Big Four accounting firms as auditing accounting firms.
- (10). In terms of company size (SIZE), the average of the whole sample is 15.274 and the median is 15.073, which shows that the size of listed companies in Taiwan is below the average, and most of the companies are small.
- (11) In terms of the growth rate of return on total assets (ROAG), the average of both the entire sample group and the first listed OTC companies in Taiwan is lower than the standard deviation, reflecting that companies have significant differences in asset utilization efficiency.

Table 4-1 Descriptive Statistics

| group             | Variable | N     | mean   | Median | Standard Deviation | Variance  | minimum    | maximum  |
|-------------------|----------|-------|--------|--------|--------------------|-----------|------------|----------|
|                   | FALQ     | 12626 | 0.535  | 1.000  | 0.499              | 0.249     | 0.000      | 1.000    |
|                   | CFO      | 12626 | 0.487  | 0.000  | 0.863              | 0.744     | 0.000      | 9.000    |
|                   | ICO      | 12626 | 0.578  | 0.000  | 0.900              | 0.811     | 0.000      | 7.000    |
|                   | CFICO    | 12626 | 0.487  | 0.000  | 1.939              | 3.760     | 0.000      | 63.000   |
| Wh                | BHS      | 12626 | 3.212  | 0.000  | 8.600              | 73.956    | 0.000      | 70.580   |
| Whole group       | DEV      | 12626 | 6.188  | 1.240  | 11.577             | 134.034   | 0.000      | 99.780   |
| roup              | DUAL     | 12626 | 0.347  | 0.000  | 0.476              | 0.227     | 0.000      | 1.000    |
|                   | OPN      | 12626 | 0.001  | 0.000  | 0.028              | 0.001     | 0.000      | 1.000    |
|                   | AUD      | 12626 | 0.127  | 0.000  | 0.333              | 0.111     | 0.000      | 1.000    |
|                   | SIZE     | 12626 | 15.274 | 15.073 | 1.449              | 2.099     | 9.795      | 21.949   |
|                   | ROAG     | 12626 | 0.105  | 0.325  | 103.740            | 10761.961 | -11495.490 | 1530.560 |
|                   | FALQ     | 12051 | 0.543  | 1.000  | 0.498              | 0.248     | 0.000      | 1.000    |
|                   | CFO      | 12051 | 0.486  | 0.000  | 0.869              | 0.756     | 0.000      | 9.000    |
|                   | ICO      | 12051 | 0.573  | 0.000  | 0.905              | 0.819     | 0.000      | 7.000    |
| Г                 | CFICO    | 12051 | 0.490  | 0.000  | 1.975              | 3.900     | 0.000      | 63.000   |
| isted             | BHS      | 12051 | 3.035  | 0.000  | 8.248              | 68.037    | 0.000      | 70.580   |
| com               | DEV      | 12051 | 6.288  | 1.280  | 11.652             | 135.775   | 0.000      | 99.780   |
| Listed companies  | DUAL     | 12051 | 0.346  | 0.000  | 0.476              | 0.226     | 0.000      | 1.000    |
| S                 | OPN      | 12051 | 0.001  | 0.000  | 0.029              | 0.001     | 0.000      | 1.000    |
|                   | AUD      | 12051 | 0.132  | 0.000  | 0.339              | 0.115     | 0.000      | 1.000    |
|                   | SIZE     | 12051 | 15.272 | 15.066 | 1.455              | 2.118     | 9.795      | 21.949   |
|                   | ROAG     | 12051 | 0.058  | 0.300  | 106.167            | 11271.375 | -11495.490 | 1530.560 |
|                   | FALQ     | 575   | 0.374  | 0.000  | 0.484              | 0.235     | 0.000      | 1.000    |
|                   | CFO      | 575   | 0.464  | 0.000  | 0.731              | 0.535     | 0.000      | 5.000    |
|                   | ICO      | 575   | 0.680  | 1.000  | 0.782              | 0.612     | 0.000      | 4.000    |
|                   | CFICO    | 575   | 0.395  | 0.000  | 0.927              | 0.860     | 0.000      | 6.000    |
| The first listed  | BHS      | 575   | 6.909  | 0.000  | 13.565             | 184.002   | 0.000      | 61.890   |
| company           |          | 575   | 4.100  | 0.520  | 9.650              | 93.130    | 0.000      | 56.290   |
| in Taiwan<br>(KY) | DUAL     | 575   | 0.353  | 0.000  | 0.478              | 0.229     | 0.000      | 1.000    |
|                   | OPN      | 575   | 0.000  | 0.000  | 0.000              | 0.000     | 0.000      | 0.000    |
|                   | AUD      | 575   | 0.030  | 0.000  | 0.170              | 0.029     | 0.000      | 1.000    |
|                   | SIZE     | 575   | 15.323 | 15.208 | 1.300              | 1.690     | 12.149     | 20.025   |
|                   | ROAG     | 575   | 1.091  | 0.900  | 9.249              | 85.548    | -71.570    | 121.100  |

Note: The variables are defined as follows: FALQ: financial crisis; CFO: number of changes of financial executives; ICO: internalNumber of changes in departmental audit; CFICO: the correlation between the change of the financial director and the change of internal audit; BHS: shareholding ratio of major shareholders; DEV: deviation of share earnings; DUAL: chairman concurrently serving as general manager; OPN: accountant's opinion; AUD: accounting firm Scale; SIZE: company size; ROAG: growth rate of return on total assets.

### 2. Correlation Analyses

In order to avoid errors in the Logistic regression analysis process, resulting in low accuracy of model explanatory power, it is necessary to check whether there is collinearity between variables. In terms of the correlation coefficient, the positive and negative values indicate that the direction of the correlation is not the meaning of the degree of correlation; the degree of correlation, the absolute value of which is less than 0.3 is low correlation; the absolute value is between 0.3 and 0.6 is moderate correlation; an absolute value between 0.6 and 1 indicates a high correlation; an absolute value equal to 1 indicates a complete correlation. In this study, Pearson's correlation coefficient matrix was conducted for the first listed OTC enterprises in Taiwan, the listed OTC enterprises, the listed OTC enterprises, and the first listed OTC enterprises in Taiwan to check whether the variables have collinearity. As listed in Table 4-2 to Table 4-4.

According to the analysis of the correlation coefficient of the first listed OTC companies and listed OTC companies in Table 4-2, it is known that the financial crisis (FALQ) and the number of changes in the financial officer (CFO) in the Pearson correlation coefficient test are low negative correlation; financial crisis (FALQ) ) and the number of internal audit changes (ICO) in the Pearson correlation coefficient test was a low degree of negative correlation; financial crisis (FALQ) and the financial executive and internal audit simultaneous transaction effect (CFICO) in the Pearson correlation coefficient test was a low degree of negative correlation; financial crisis (FALQ) and major shareholder shareholding ratio (BHS) were tested as low negative correlation in Pearson correlation coefficient; financial crisis (FALQ) and equity earnings deviation (DEV) were tested as low negative correlation in Pearson correlation coefficient; financial crisis (The Pearson correlation coefficient test of FALQ) and the chairman and general manager (DUAL) were low positive correlation; the financial crisis (FALQ) and the accountant's audit opinion (OPN) were low positive correlation in the Pearson correlation coefficient test; financial crisis (FALQ) The Pearson correlation coefficient test is low positive correlation with accounting firm size (AUD); financial crisis (FALQ) and firm size (SIZE) are low positive correlation test in Pearson correlation coefficient; financial crisis (FALQ) and total asset return The rate of growth (ROAG) showed a low degree of negative correlation in the Pearson correlation coefficient test. It shows that the variables in this group do not have serious collinearity problems.

According to the analysis of the correlation coefficient of listed companies in Table 4-3, the Pearson correlation coefficient test shows that the financial crisis (FALO) and the number of changes in the financial officer (CFO) have a low degree of negative correlation; ) in the Pearson correlation coefficient test is a low degree of negative correlation; financial crisis (FALQ) and the financial executive and internal audit simultaneous change effect (CFICO) in the Pearson correlation coefficient test is a low degree of negative correlation; financial crisis (FALQ) and major shareholder holdings The ratio (BHS) was tested as a low degree of negative correlation in the Pearson correlation coefficient; the financial crisis (FALQ) and the deviation of share earnings (DEV) were tested as a low degree of negative correlation in the Pearson correlation coefficient; (DUAL) in the Pearson correlation coefficient test was low positive correlation; financial crisis (FALQ) and accountant audit opinion (OPN) in the Pearson correlation coefficient test was low positive correlation; financial crisis (FALQ) and accounting firm size (AUD) The Pearson correlation coefficient test is low positive correlation; the financial crisis (FALQ) and company size (SIZE) are low positive correlation in the Pearson correlation coefficient test; financial crisis (FALQ) and the

growth rate of return on total assets (ROAG) are correlated in Pearson The coefficient test showed a low degree of negative correlation. It shows that the variables in this group do not have serious collinearity problems.

According to the analysis of the correlation coefficient of the first listed over-thecounter enterprises in Taiwan in Table 4-4, it is known that the financial crisis (FALQ) and the number of changes in the financial officer (CFO) have a low positive correlation in the Pearson correlation coefficient test; financial crisis (FALQ) and internal The number of audit transactions (ICO) was tested as a low degree of positive correlation in the Pearson correlation coefficient; financial crisis (FALO) and the financial executive and internal audit simultaneous transaction effect (CFICO) were tested as a low degree of positive correlation in the Pearson correlation coefficient test; financial crisis (FALQ) The Pearson correlation coefficient test is low positive correlation with the shareholding ratio of major shareholders (BHS); the financial crisis (FALQ) and the deviation of share earnings (DEV) are low negative correlation in the Pearson correlation coefficient test; financial crisis (FALQ) and The Pearson correlation coefficient test of chairman and general manager (DUAL) is low negative correlation; financial crisis (FALQ) and accounting firm size (AUD) are low positive correlation test in Pearson correlation coefficient; financial crisis (FALQ) and company The size (SIZE) showed a low degree of positive correlation in the Pearson correlation coefficient test; the financial crisis (FALQ) and the growth rate of return on total assets (ROAG) showed a low degree of negative correlation in the Pearson correlation coefficient test.

Table 4-2 Correlation coefficient analysis table of first listed companies and listed companies in Taiwan

|       | FALQ  | CFO      | ICO      | CFICO    | BHS          | DEV      | DUAL         | OPN         | AUD          | SIZE     | ROAG    |
|-------|-------|----------|----------|----------|--------------|----------|--------------|-------------|--------------|----------|---------|
| FALQ  | 1.000 | -0.047** | -0.031** | -0.031** | -0.038**     | -0.040** | 0.026**      | 0.021*      | 0.056**      | 0.184**  | -0.018* |
|       |       | 0.000    | 0.001    | 0.000    | 0.000        | 0.000    | 0.004        | 0.021       | 0.000        | 0.000    | 0.048   |
| CFO   |       | 1.000    | 0.265**  | 0.622**  | 0.058**      | 0.000    | $0.030^{**}$ | $0.020^{*}$ | 0.009        | -0.111** | 0.011   |
|       |       |          | 0.000    | 0.000    | 0.000        | 0.987    | 0.001        | 0.025       | 0.303        | 0.000    | 0.200   |
| ICO   |       |          | 1.000    | 0.559**  | 0.040**      | -0.010   | $0.042^{**}$ | 0.010       | 0.005        | -0.137** | 0.008   |
|       |       |          |          | 0.000    | 0.000        | 0.273    | 0.000        | 0.257       | 0.592        | 0.000    | 0.340   |
| CFICO |       |          |          | 1.000    | $0.064^{**}$ | -0.021*  | $0.032^{**}$ | $0.018^{*}$ | $0.040^{**}$ | -0.124** | 0.007   |
|       |       |          |          |          | 0.000        | 0.018    | 0.000        | 0.048       | 0.000        | 0.000    | 0.439   |
| BHS   |       |          |          |          | 1.000        | -0.003   | -0.039**     | 0.006       | 0.033**      | -0.078** | -0.008  |
|       |       |          |          |          |              | 0.717    | 0.000        | 0.526       | 0.000        | 0.000    | 0.396   |
| DEV   |       |          |          |          |              | 1.000    | -0.135**     | -0.013      | -0.093**     | 0.042**  | 0.007   |
|       |       |          |          |          |              |          | 0.000        | 0.130       | 0.000        | 0.000    | 0.458   |
| DUAL  |       |          |          |          |              |          | 1.000        | 0.003       | $0.046^{**}$ | -0.131** | -0.012  |
|       |       |          |          |          |              |          |              | 0.723       | 0.000        | 0.000    | 0.184   |
| OPN   |       |          |          |          |              |          |              | 1.000       | 0.015        | 0.006    | -0.001  |
|       |       |          |          |          |              |          |              |             | 0.101        | 0.490    | 0.917   |
| AUD   |       |          |          |          |              |          |              |             | 1.000        | -0.120** | 0.007   |
|       |       |          |          |          |              |          |              |             |              | 0.000    | 0.462   |
| SIZE  |       |          |          |          |              |          |              |             |              | 1.000    | 0.010   |
|       |       |          |          |          |              |          |              |             |              |          | 0.258   |
| ROAG  |       |          |          |          |              |          |              |             |              |          | 1.000   |

Note: \*\*Correlation is significant at level 0.01 (two-tailed); \*correlation is significant at level 0.05 (two-tailed).

Table 4-3 Correlation coefficient analysis table of listed companies

|       |       |          | Table 4      | -3 Correland | on coemicien | i anaiysis tat | oie of fisted c | ompanies    |              |              |        |
|-------|-------|----------|--------------|--------------|--------------|----------------|-----------------|-------------|--------------|--------------|--------|
|       | FALQ  | CFO      | ICO          | CFICO        | BHS          | DEV            | DUAL            | OPN         | AUD          | SIZE         | ROAG   |
| FALQ  | 1.000 | -0.047** | -0.035**     | -0.034**     | -0.046**     | -0.041**       | $0.032^{**}$    | $0.021^{*}$ | 0.052**      | $0.184^{**}$ | -0.017 |
|       |       | 0.000    | 0.000        | 0.000        | 0.000        | 0.000          | 0.000           | 0.023       | 0.000        | 0.000        | 0.057  |
| CFO   |       | 1.000    | $0.269^{**}$ | 0.624**      | 0.062**      | 0.002          | $0.030^{**}$    | $0.020^{*}$ | 0.008        | -0.111**     | 0.011  |
|       |       |          | 0.000        | 0.000        | 0.000        | 0.801          | 0.001           | 0.025       | 0.371        | 0.000        | 0.208  |
| ICO   |       |          | 1.000        | $0.562^{**}$ | 0.041**      | -0.005         | $0.045^{**}$    | 0.010       | 0.006        | -0.140**     | 0.008  |
|       |       |          |              | 0.000        | 0.000        | 0.593          | 0.000           | 0.253       | 0.520        | 0.000        | 0.354  |
| CFICO |       |          |              | 1.000        | $0.068^{**}$ | -0.020*        | 0.033**         | 0.018       | 0.039**      | -0.125**     | 0.007  |
|       |       |          |              |              | 0.000        | 0.030          | 0.000           | 0.053       | 0.000        | 0.000        | 0.450  |
| BHS   |       |          |              |              | 1.000        | -0.009         | -0.033**        | 0.007       | $0.040^{**}$ | -0.073**     | -0.008 |
|       |       |          |              |              |              | 0.333          | 0.000           | 0.466       | 0.000        | 0.000        | 0.377  |
| DEV   |       |          |              |              |              | 1.000          | -0.135**        | -0.014      | -0.097**     | $0.048^{**}$ | 0.007  |
|       |       |          |              |              |              |                | 0.000           | 0.126       | 0.000        | 0.000        | 0.458  |
| DUAL  |       |          |              |              |              |                | 1.000           | 0.003       | 0.049**      | -0.138**     | -0.012 |
|       |       |          |              |              |              |                |                 | 0.722       | 0.000        | 0.000        | 0.187  |
| OPN   |       |          |              |              |              |                |                 | 1.000       | 0.014        | 0.006        | -0.001 |
|       |       |          |              |              |              |                |                 |             | 0.116        | 0.489        | 0.920  |
| AUD   |       |          |              |              |              |                |                 |             | 1.000        | -0.122**     | 0.007  |
|       |       |          |              |              |              |                |                 |             |              | 0.000        | 0.465  |
| SIZE  |       |          |              |              |              |                |                 |             |              | 1.000        | 0.010  |
|       |       |          |              |              |              |                |                 |             |              |              | 0.256  |
| ROAG  |       |          |              |              |              |                |                 |             |              |              | 1.000  |
|       |       |          |              |              |              |                |                 |             |              |              |        |

Note: \*\*Correlation is significant at level 0.01 (two-tailed); \*correlation is significant at level 0.05 (two-tailed).

Table 4- 4 Correlation coefficient analysis table of first listed OTC companies in Taiwan

|       |       | 10010 | COII CIGII C | COTITOTOTIC CITE | ily bib tacie of | III DU II DUU G | Te companie | J III I WI I WIII |          |          |
|-------|-------|-------|--------------|------------------|------------------|-----------------|-------------|-------------------|----------|----------|
|       | FALQ  | CFO   | ICO          | CFICO            | BHS              | DEV             | DUAL        | AUD               | SIZE     | ROAG     |
| FALQ  | 1.000 | 0.001 | 0.119**      | $0.094^{*}$      | 0.154**          | -0.095*         | -0.097*     | 0.035             | 0.216**  | -0.134** |
|       |       | 0.984 | 0.004        | 0.025            | 0.000            | 0.022           | 0.020       | 0.404             | 0.000    | 0.001    |
| CFO   |       | 1.000 | 0.138**      | 0.657**          | -0.011           | -0.078          | 0.039       | 0.058             | -0.107** | 0.043    |
|       |       |       | 0.001        | 0.000            | 0.798            | 0.063           | 0.356       | 0.167             | 0.010    | 0.308    |
| ICO   |       |       | 1.000        | $0.487^{**}$     | -0.008           | -0.122**        | -0.033      | 0.032             | -0.076   | 0.039    |
|       |       |       |              | 0.000            | 0.851            | 0.003           | 0.433       | 0.443             | 0.069    | 0.352    |
| CFICO |       |       |              | 1.000            | 0.003            | -0.110**        | -0.032      | 0.059             | -0.058   | -0.010   |
|       |       |       |              |                  | 0.938            | 0.008           | 0.444       | 0.160             | 0.168    | 0.814    |
| BHS   |       |       |              |                  | 1.000            | 0.144**         | -0.122**    | 0.043             | -0.173** | -0.032   |
|       |       |       |              |                  |                  | 0.001           | 0.003       | 0.304             | 0.000    | 0.444    |
| DEV   |       |       |              |                  |                  | 1.000           | -0.152**    | -0.058            | -0.105*  | 0.012    |
|       |       |       |              |                  |                  |                 | 0.000       | 0.168             | 0.012    | 0.766    |
| DUAL  |       |       |              |                  |                  |                 | 1.000       | -0.086*           | 0.034    | -0.023   |
|       |       |       |              |                  |                  |                 |             | 0.039             | 0.409    | 0.576    |
| AUD   |       |       |              |                  |                  |                 |             | 1.000             | -0.011   | 0.036    |
|       |       |       |              |                  |                  |                 |             |                   | 0.796    | 0.389    |
| SIZE  |       |       |              |                  |                  |                 |             |                   | 1.000    | -0.026   |
|       |       |       |              |                  |                  |                 |             |                   |          | 0.535    |
| ROAG  |       |       |              |                  |                  |                 |             |                   |          | 1.000    |
|       |       |       |              |                  |                  |                 |             |                   |          |          |

Note: \*\*Correlation is significant at level 0.01 (two-tailed); \*correlation is significant at level 0.05 (two-tailed).

In this section, Logistic regression analysis is carried out on whether there are companies in financial crisis in the aforementioned three groups, and a financial crisis early warning model is constructed. Logistic regression analysis table of internal and external governance.

According to Table 4-5 Corporate Governance-External Governance Logistic Regression Analysis Table (Model 1), there is no significant correlation between the audit opinions of accountants and the company's future financial crisis, especially when the audit opinions issued by the accountants in the first OTC company group in Taiwan The audit opinions were all unqualified opinions or unqualified unqualified opinions with doubts about discontinuation of operation, indicating that the audit opinions of the accountants were poor in explaining the financial crisis. There is a significant positive correlation between the size of the auditing accounting firm employed by the company and the company's future financial crisis, indicating that the auditing accounting firm hired by the company is a non-Big Four accounting firm. the higher the ratio.

According to Table 4-6 Corporate Governance-Internal Governance Logistic Regression Analysis Table (Model 2), this research tests whether the change of the financial director, the change of the internal audit and the simultaneous change of the financial director and the internal audit will affect the financial crisis of the company in the next year, For the entire sample group and the group of listed companies, the number of changes in the financial director within three years has a significant negative correlation with the company's future financial crisis. The reason for the analysis should be that companies will improve their financial health and business performance through the change of financial directors. Increase investors' willingness to invest and reduce the consequences of information asymmetry. As for the first listed OTC companies in Taiwan, it is irrelevant. Since they have not been listed on the Taiwan capital market for a long time and their main place of operation is not in Taiwan, the investing public does not have much information about this type of companies, and the financial executive knows the company best. Due to its own financial status and operating performance, the first OTC company to come to Taiwan may hide the information of the financial director's changes in order to avoid giving market investors the stereotype of financial crisis due to frequent changes in its own financial director. However, in terms of the number of internal audit changes within three years and the company's future financial crisis, there is a significant positive correlation in the first OTC enterprise group in Taiwan, while the overall sample group and OTC listed enterprise group are not correlated. As mentioned above, the first OTC companies to come to Taiwan have been listed in Taiwan for a short period of time and mainly operate overseas. In order to comply with Taiwan's regulations and establish a complete internal control system, their internal auditors change frequently. In terms of the effect of simultaneous changes of financial executives and internal audits, neither the overall sample group, the listed OTC enterprise group nor the first listed OTC enterprise group in Taiwan has a significant impact. Many studies have not found consistent results in terms of the shareholding ratio of major shareholders and the company's future financial crisis. The overall sample group and the group of listed companies are negatively correlated. When the shareholding ratio of major shareholders is high, the major shareholders based on self-interest factors It will spend more time and cost monitoring the company's business performance to avoid losing all investment; the first listed company group in Taiwan is positively correlated. Based on the argument that the major shareholder wants to have control over the

company's decision-making The more the share ratio, the more motivated to seize the company's assets, and then interfere with the company's business decision-making, affecting the business performance of the company. There is a negative correlation between the deviation of share surplus and the company's future financial crisis. Since most companies in Taiwan are family-owned companies, most of the controlling shareholders are family members. It is hoped that the company can continue to operate and emphasize the inheritance of ownership. Family members will focus more on the company's reputation and business performance, actively supervise its managers, and reduce the occurrence of financial crises. In terms of the chairman's concurrent role as general manager and the company's future financial crisis, the overall sample group and the listed OTC enterprise group are positively correlated, indicating that most companies with the chairman concurrently serving as the general manager are more likely to experience financial crisis; There is a negative correlation in the first OTC company group. The analysis should be that the management level of the first OTC company to come to Taiwan has a high shareholding rate. In order to pursue and maintain their own interests and the overall interests of the company, the management level maximizes the interests of the management authority and the company. At the same time, the management is responsible for the financial crisis in order to achieve this common goal and avoid the loss of the enterprise.

According to Table 4-7 Corporate Governance-Internal and External Governance Logistic Regression Analysis Table (Model 3), and the analysis of Summary Tables 4-5 and 4-6, and the research results of the first OTC companies in Taiwan, the threeyear There is no significant correlation between the number of changes in the internal financial director and the company's future financial crisis, the number of internal audit changes in three years is positively correlated with the company's future financial crisis, and there is no significant correlation between the financial director and the internal audit at the same time. With the right to control the company, the higher the shareholding ratio of major shareholders, the more likely it will affect the company's decision-making and infringe on the rights and interests of other minority shareholders, causing the company to have the possibility of financial crisis. Most Taiwanese are family-owned enterprises, and most of them have the chairman as the general manager. Based on the theory of sustainable business management and the goal of maintaining the interests of the family and the company, they attach importance to the reputation and business performance of the family, and other controlling shareholders of the family will actively supervise the management. The authorities avoided a loss of their own wealth. In terms of company size, it shows that the larger the company is, the higher the possibility of financial crisis; in addition, the growth rate of return on total assets shows that the better the efficiency of the company's use of assets, the lower the possibility of financial crisis. In terms of external governance, the audit opinion issued by the accountant on the first listed OTC company in Taiwan is an unqualified opinion or a revised unqualified opinion with doubts about discontinuing operations, which shows that the audit opinion of the accountant has the ability to explain the financial crisis in this group. not good. However, the scale of the accounting firm employed has no significant relationship with the company's future financial crisis.

Table 4- 5 Corporate Governance-External Governance Logistic Regression Analysis Table (Model 1)

Dependent variable: FALQ

|                   | Variable code             | Expected direction | В          | S.E.  | Wald    | df    | P     | Exp(B) |
|-------------------|---------------------------|--------------------|------------|-------|---------|-------|-------|--------|
|                   | OPN                       | +                  | 1.844 *    | 1.061 | 3.022   | 1.000 | 0.082 | 6.323  |
|                   | AUD                       | _                  | 0.507 ***  | 0.056 | 80.778  | 1.000 | 0.000 | 1.660  |
|                   | SIZE                      | _                  | 0.283 ***  | 0.014 | 438.480 | 1.000 | 0.000 | 1.328  |
| whole sample      | ROAG                      | _                  | -0.020 *** | 0.002 | 76.815  | 1.000 | 0.000 | 0.980  |
| samp              | SAMPLE                    | 12,626             |            |       |         |       |       |        |
| ole               | CHI-SQUARE                | 621.442            |            |       |         |       |       |        |
|                   | SIGNIFICANCE              | 0.000              |            |       |         |       |       |        |
|                   | Nagelkerke R <sup>2</sup> | 0.064              |            |       |         |       |       |        |
|                   | OPN                       | +                  | 1.818 *    | 1.060 | 2.939   | 1.000 | 0.086 | 6.159  |
|                   | AUD                       | _                  | 0.479 ***  | 0.057 | 71.074  | 1.000 | 0.000 | 1.615  |
| Ľ.                | SIZE                      | _                  | 0.282 ***  | 0.014 | 416.097 | 1.000 | 0.000 | 1.326  |
| Listed companies  | ROAG                      | _                  | -0.020 *** | 0.002 | 68.148  | 1.000 | 0.000 | 0.981  |
| ompa              | SAMPLE                    | 12,051             |            |       |         |       |       |        |
| nies              | CHI-SQUARE                | 580.410            |            |       |         |       |       |        |
|                   | SIGNIFICANCE              | 0.000              |            |       |         |       |       |        |
|                   | Nagelkerke R <sup>2</sup> | 0.063              |            |       |         |       |       |        |
|                   | AUD                       | _                  | 0.554      | 0.510 | 1.182   | 1.000 | 0.277 | 1.740  |
|                   | SIZE                      | _                  | 0.361 ***  | 0.071 | 25.867  | 1.000 | 0.000 | 1.435  |
| The first         | ROAG                      | _                  | -0.045 *** | 0.013 | 11.237  | 1.000 | 0.001 | 0.956  |
| listed company    | SAMPLE                    | 575                |            |       |         |       |       |        |
| in Taiwan<br>(KY) | CHI-SQUARE                | 41.246             |            |       |         |       |       |        |
|                   | SIGNIFICANCE              | 0.000              |            |       |         |       |       |        |
|                   | Nagelkerke R <sup>2</sup> | 0.094              |            |       |         |       |       |        |

Note: The variables are defined as follows: OPN: Opinion of accountants; AUD: Size of accounting firm; SIZE: Size of company; ROAG: Growth rate of return on total assets. \*: p<0.1, \*\*: p<0.05, \*\*\*: p<0.01, all are two-tailed tests.

Table 4- 6 Corporate Governance-Internal Governance Logistic Regression Analysis Table (Model 2)

Dependent variable: FALQ

|                      | Variable code             | Expected | B          | S.E.  | Wald    | df    | P     | Exp(B) |
|----------------------|---------------------------|----------|------------|-------|---------|-------|-------|--------|
| -                    | CFO                       | +        | -0.072 *** | 0.028 | 6.722   | 1.000 | 0.010 | 0.931  |
|                      | ICO                       | +        | -0.009     | 0.025 | 0.129   | 1.000 | 0.719 | 0.991  |
|                      | CFICO                     | +        | 0.015      | 0.015 | 1.067   | 1.000 | 0.302 | 1.015  |
|                      | BHS                       | +        | -0.005 **  | 0.002 | 5.048   | 1.000 | 0.025 | 0.995  |
| <u>₹</u>             | DEV                       | +        | -0.007 *** | 0.002 | 21.304  | 1.000 | 0.000 | 0.993  |
| whole sample         | DUAL                      | +        | 0.197 ***  | 0.039 | 25.357  | 1.000 | 0.000 | 1.218  |
| san                  | SIZE                      | _        | 0.276 ***  | 0.014 | 404.883 | 1.000 | 0.000 | 1.318  |
| ηple                 | ROAG                      | _        | -0.020 *** | 0.002 | 71.220  | 1.000 | 0.000 | 0.980  |
|                      | SAMPLE                    | 12,626   |            |       |         |       |       |        |
|                      | CHI-SQUARE                | 600.916  |            |       |         |       |       |        |
|                      | SIGNIFICANCE              | 0.000    |            |       |         |       |       |        |
|                      | Nagelkerke R <sup>2</sup> | 0.062    |            |       |         |       |       |        |
|                      | CFO                       | +        | -0.063 **  | 0.028 | 5.042   | 1.000 | 0.025 | 0.939  |
|                      | ICO                       | +        | -0.015     | 0.025 | 0.359   | 1.000 | 0.549 | 0.985  |
|                      | CFICO                     | +        | 0.012      | 0.015 | 0.611   | 1.000 | 0.434 | 1.012  |
| Н                    | BHS                       | +        | -0.007 *** | 0.002 | 10.035  | 1.000 | 0.002 | 0.993  |
| iste                 | DEV                       | +        | -0.008 *** | 0.002 | 21.625  | 1.000 | 0.000 | 0.992  |
| d cc                 | DUAL                      | +        | 0.230 ***  | 0.040 | 32.773  | 1.000 | 0.000 | 1.259  |
| dmo                  | SIZE                      | _        | 0.277 ***  | 0.014 | 387.644 | 1.000 | 0.000 | 1.319  |
| Listed companies     | ROAG                      | _        | -0.019 *** | 0.002 | 62.717  | 1.000 | 0.000 | 0.981  |
| S                    | SAMPLE                    | 12,051   |            |       |         |       |       |        |
|                      | CHI-SQUARE                | 583.091  |            |       |         |       |       |        |
|                      | SIGNIFICANCE              | 0.000    |            |       |         |       |       |        |
|                      | Nagelkerke R <sup>2</sup> | 0.063    |            |       |         |       |       |        |
|                      | CFO                       | +        | -0.145     | 0.200 | 0.525   | 1.000 | 0.469 | 0.865  |
|                      | ICO                       | +        | 0.313 **   | 0.143 | 4.761   | 1.000 | 0.029 | 1.367  |
|                      | CFICO                     | +        | 0.168      | 0.164 | 1.041   | 1.000 | 0.307 | 1.183  |
|                      | BHS                       | +        | 0.033 ***  | 0.007 | 21.007  | 1.000 | 0.000 | 1.034  |
| The first            | DEV                       | +        | -0.026 **  | 0.011 | 5.414   | 1.000 | 0.020 | 0.974  |
| listed               | DUAL                      | +        | -0.492 **  | 0.201 | 5.984   | 1.000 | 0.014 | 0.611  |
| company<br>in Taiwan | SIZE                      | _        | 0.447 ***  | 0.078 | 33.121  | 1.000 | 0.000 | 1.563  |
| (KY)                 | ROAG                      | _        | -0.048 *** | 0.013 | 13.286  | 1.000 | 0.000 | 0.953  |
|                      | SAMPLE                    | 575      |            |       |         |       |       |        |
|                      | CHI-SQUARE                | 86.972   |            |       |         |       |       |        |
|                      | SIGNIFICANCE              | 0.000    |            |       |         |       |       |        |
|                      | Nagelkerke R <sup>2</sup> | 0.191    |            |       |         |       |       |        |

Note: The definitions of each variable are as follows: CFO: the number of changes of the treasurer; ICO: the number of changes of the internal audit; CFICO: the correlation between the changes of the treasurer and the internal audit; BHS: the shareholding ratio of major shareholders; DEV: the deviation of the share earnings; DUAL: The chairman also serves as the general manager; SIZE: company size; ROAG: growth rate of return on total assets.

Note: \*: p<0.1, \*\*: p<0.05, \*\*\*: p<0.01, all are two-tailed tests.

Table 4- 7 Corporate Governance-Internal and External Governance Logistic Regression Analysis Table (Model 3)

Dependent variable: FALQ

| -                 | variable code             | Expected | B          | S.E.  | Wald    | df    | P     | Exp(B) |
|-------------------|---------------------------|----------|------------|-------|---------|-------|-------|--------|
| -                 | CFO                       | +        | -0.065 **  | 0.028 | 5.535   |       | 0.019 | 0.937  |
|                   | ICO                       | +        | -0.002     | 0.025 | 0.005   | 1.000 | 0.942 | 0.998  |
|                   | CFICO                     | +        | 0.010      | 0.015 | 0.422   | 1.000 | 0.516 | 1.010  |
|                   | BHS                       | +        | -0.005 **  | 0.002 | 6.050   | 1.000 | 0.014 | 0.995  |
|                   | DEV                       | +        | -0.006 *** | 0.002 | 15.017  | 1.000 | 0.000 | 0.994  |
| w <u>ł</u>        | DUAL                      | +        | 0.191 ***  | 0.039 | 23.681  | 1.000 | 0.000 | 1.211  |
| 10le              | OPN                       | +        | 1.864 *    | 1.064 | 3.070   | 1.000 | 0.080 | 6.452  |
| whole sample      | AUD                       | _        | 0.482 ***  | 0.057 | 72.003  | 1.000 | 0.000 | 1.619  |
| nple              | SIZE                      | _        | 0.289 ***  | 0.014 | 435.040 | 1.000 | 0.000 | 1.335  |
|                   | ROAG                      | _        | -0.020 *** | 0.002 | 73.192  | 1.000 | 0.000 | 0.980  |
|                   | SAMPLE                    | 12,626   |            |       |         |       |       |        |
|                   | CHI-SQUARE                | 679.923  |            |       |         |       |       |        |
|                   | SIGNIFICANCE              | 0.000    |            |       |         |       |       |        |
|                   | Nagelkerke R <sup>2</sup> | 0.070    |            |       |         |       |       |        |
|                   | CFO                       | +        | -0.057 **  | 0.028 | 4.074   | 1.000 | 0.044 | 0.945  |
|                   | ICO                       | +        | -0.009     | 0.025 | 0.119   | 1.000 | 0.730 | 0.991  |
|                   | CFICO                     | +        | 0.006      | 0.015 | 0.188   | 1.000 | 0.665 | 1.006  |
|                   | BHS                       | +        | -0.008 *** | 0.002 | 11.768  | 1.000 | 0.001 | 0.992  |
| $\vdash$          | DEV                       | +        | -0.006 *** | 0.002 | 15.477  | 1.000 | 0.000 | 0.994  |
| Listed companies  | DUAL                      | +        | 0.224 ***  | 0.040 | 30.786  | 1.000 | 0.000 | 1.251  |
| d cc              | OPN                       | +        | 1.852 *    | 1.065 | 3.022   | 1.000 | 0.082 | 6.371  |
| mp                | AUD                       | _        | 0.455 ***  | 0.057 | 62.884  | 1.000 | 0.000 | 1.576  |
| ani               | SIZE                      | _        | 0.289 ***  | 0.014 | 415.090 | 1.000 | 0.000 | 1.335  |
| SS                | ROAG                      | _        | -0.019 *** | 0.002 | 64.448  | 1.000 | 0.000 | 0.981  |
|                   | SAMPLE                    | 12,051   |            |       |         |       |       |        |
|                   | CHI-SQUARE                | 652.554  |            |       |         |       |       |        |
|                   | SIGNIFICANCE              | 0.000    |            |       |         |       |       |        |
|                   | Nagelkerke R <sup>2</sup> | 0.070    |            |       |         |       |       |        |
|                   | CFO                       | +        | -0.148     | 0.201 | 0.546   | 1.000 | 0.460 | 0.862  |
|                   | ICO                       | +        | 0.313 **   | 0.143 | 4.784   | 1.000 | 0.029 | 1.368  |
|                   | CFICO                     | +        | 0.167      | 0.164 | 1.036   | 1.000 | 0.309 | 1.182  |
|                   | BHS                       | +        | 0.033 ***  | 0.007 | 20.785  | 1.000 | 0.000 | 1.034  |
|                   | DEV                       | +        | -0.026 **  | 0.011 | 5.270   | 1.000 | 0.022 | 0.974  |
| The first         | DUAL                      | +        | -0.485 **  | 0.202 | 5.796   | 1.000 | 0.016 | 0.615  |
| listed company in | AUD                       | _        | 0.233      | 0.544 | 0.183   | 1.000 | 0.669 | 1.262  |
| Taiwan (KY)       | SIZE                      | _        | 0.447 ***  | 0.078 | 33.134  | 1.000 | 0.000 | 1.563  |
| ( )               | ROAG                      | _        | -0.049 *** | 0.013 | 13.372  | 1.000 | 0.000 | 0.953  |
|                   | SAMPLE number             | 575      |            |       |         |       |       |        |
|                   | CHI-SQUARE                | 87.153   |            |       |         |       |       |        |
|                   | SIGNIFICANCE              | 0.000    |            |       |         |       |       |        |
|                   | Nagelkerke R <sup>2</sup> | 0.192    |            |       |         |       |       |        |

Note: The definitions of the variables are as follows: CFO: the number of changes of the treasurer; ICO: the number of changes of the internal audit; CFICO: the correlation between the changes of the treasurer and the internal audit; BHS: the shareholding ratio of major shareholders; DEV: the deviation of share earnings; DUAL: The chairman concurrently serves as the general manager; OPN: the opinion of the accountant; AUD: the size of the accounting firm; SIZE: the size of the company; ROAG: the growth rate of the return on total assets. Note: \*: p<0.1, \*\*: p<0.05, \*\*\*: p<0.01, all are two-tailed tests.

#### CONCLUSION AND SUGGESTIONS

In 2008, the global financial crisis broke out, and Taiwan was not immune at that time. In order to encourage Taiwanese businessmen to return to invest in Taiwan, the government made it easier for them to be listed on the OTC market, and because of this incentive, it was easier to raise funds in the capital market. However, since 2020, the first OTC company to come to Taiwan, the gifted student-Kangyou, has had a financial crisis, which has severely damaged the Taiwan investment market and reduced the willingness of Taiwanese businessmen to return to Taiwan to invest. Why came to Taiwan's first listed OTC company from the initial stage of listing to the landmine stocks that everyone avoids today? From Kangyou and the recent events of Taodi and Yingrui, it can be seen that there have been problems in the corporate governance of the first listed OTC enterprises in Taiwan.

In order to understand the correlation between the corporate governance and financial crisis of the first listed OTC companies in Taiwan, this research takes Taiwan listed OTC companies from 2009 to 2019 as the research object. There is no significant correlation. The shareholding ratio of major shareholders, the number of internal audit changes, and the size of the company have a positive relationship with the possibility of a company's financial crisis in the future. As domestic laws require that the annual reports of publicly issued companies must be checked and certified by accountants, in this research, the accountants have no reservations about the audit opinions presented by the first listed OTC companies in Taiwan and the revised unqualified opinions that have doubts about non-continued operations., indicating that the accountant's audit is only in form but not substantive, so the accountant's audit opinion has no significant effect on the ability of financial crisis early warning. Many studies have pointed out that the reason why enterprises change accountants or accounting firms is that when the audit opinions of accountants do not meet the expectations of the management authorities or the enterprises are involved in financial crisis, the accountants refuse to conduct audits in order to protect their own reputation, so that enterprises need to change accountants or accounting firms. In particular, the first listed OTC companies in Taiwan are companies with low financial information transparency, and special attention should be paid to whether the company frequently changes accountants or accounting firms.

This research is limited by the fact that the first listed OTC companies to come to Taiwan have a relatively short period of listing in Taiwan, and the main operating headquarters, manufacturing and trading customers are almost not located in Taiwan, and their information disclosure is not as good as that of listed companies in my country. Many financial information and the internal operation status of the company cannot be known by external personnel in a timely manner, and the audit by accountants is too loose, which makes it difficult for Taiwanese regulators to supervise and audit. In practice, there are still many corporate governance-related issues for in-depth research and analysis. It is suggested that the future research direction may expand the annual scope of information on the first listed OTC companies in Taiwan, and consider the professionalism, background and Whether there is a correlation between the background of the management authority and the company's financial crisis; in terms of audit quality, industry experts, accountants' tenure, or accountants' audit fees or whether accountants are frequently replaced can also be discussed in depth. In order to assist the government to formulate market-compliant and reasonable laws, help enterprises to build a complete corporate governance mechanism, thereby enhancing international competitiveness and maintaining a sound capital market.

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