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The impact of female CFOs on the quality of financial statements

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ABSTRACT

By using data of Chinese listed companies from 2010 to 2016 from CSMAR, this research paper explores the influences of female CFOs on the quality of financial statements. This paper uses transparency as an indicator of the quality of financial statements. This paper uses the information disclosure rating of listed companies from the Shenzhen Stock Exchange to measure transparency. The results show that female CFOs have a significant and positive relationship with transparency, after controlling other factors that prior papers have shown to be associated with transparency. Therefore, this paper suggests that companies with female CFOs have a higher quality of financial statements than those companies with male CFOs.

Keywords: CFO gender; corporate transparency; quality of financial statement.

JEL Classification: G34; G41; J16; M41.

I. INTRODUCTION

The objective of this paper is to examine the relationship between female CFOs and the quality of financial statements. This paper is inspired by (1) the proportion of senior management in the Asia-pacific region is rising, particularly in countries such as China and Singapore, where close to or more than a quarter of CFOs are women (TCSG 3000, The Credit Suisse Research Institute 2016), and (2) due to the occurrence of fraudulent financial statements of Enron and other enterprises, the quality of financial statements has become one of the focuses on academic research. Due to the short development time of the Chinese market, the research on this aspect is not as sufficient as that of foreign countries. I use 1743 firms as the sample from 2010 to 2016 to test my hypothesis.

Since the 80 s, with the continuous development of economic globalization, the global number of financial scandals repeated outbreaks, many internal managers or shareholders take advantage of internal rights cover up bad financial information, through the false statement to obtain benefits, which makes the external investors do not have access to all the real-time financial information, and thus in the incomplete information symmetry is relatively weak position in the market. However, because of the false and insufficient financial information, it is difficult to find financial fraud. Therefore, more and more scholars and investors pay attention to the quality of corporate financial statements. Information disclosure is a very important point. Information disclosure is not timely cannot help investors to obtain useful information, because the value of information lies in its timeliness, but for internal staff to take advantage of the time difference for profiteering and timely hedging to provide conditions; Incomplete information disclosure will mislead investors to make wrong investment judgments; The untruth of information disclosure violates the fair principle of market economy and destroys the normal order of the market. The nonstandard information disclosure will lead to investors unable to conduct financial analysis and evaluation. With the continuous

development and improvement of the national economy and system, different regions have customized different standards for measuring financial disclosure. At this point, there has been a large number of foreign pieces of literature on information disclosure. Before 1990, China's stock market did not exist in more formal accounting information disclosure and audit. After the establishment of the Shanghai Stock Exchange and Shenzhen Stock Exchange, Chinese listed companies officially disclosed accounting information to the outside world, but the disclosure of the information is very little. It was in April 1993 that the CSRC, drawing on the experience of mature markets, promulgated and implemented a series of information disclosure systems. It stipulates that listed companies must provide interim reports and annual reports to the CSRC and the stock exchange, in which the annual reports must be audited by certified public accountants and the contents of the reports are standardized. Since China only became aware of the problem after 1990, the research in this area is not sufficient and the system is not perfect and standardized. Therefore, there are still many problems in the information disclosure of Chinese listed companies. While the CSRC and the stock exchange have encouraged companies to improve disclosure, they have developed guidelines for measuring transparency, such as the Shenzhen Stock Exchange's disclosure rating. Since 2001, the Shenzhen Stock Exchange has made evaluation criteria according to the information disclosure rules of listed companies, tracked the information disclosure behaviors of listed companies throughout the year, and made a comprehensive evaluation of their information transparency. The key quality characteristics of information disclosure include compliance, authenticity, timeliness, and comparability.

Due to the fraudulent financial statements of Enron and other enterprises, the authenticity of accounting information has attracted the attention of regulators and scholars. At the same time, they also noticed the influence of CFOs on the quality of financial statements, while earlier studies mainly focused on the influence of CFOs on the quality of earnings management

of enterprises. For example, Dowdell and Krishnan (2004) find that earnings management of companies with affiliated CFOs was better than that of companies without affiliating CFOs. Now, with the development and improvement of the information disclosure system, investors begin to pay attention to transparency, an indicator of the quality of financial statements. CFOs employed by early public companies were mostly men, and the proportion of female executives was already low. With the development of education and equal opportunities, more and more women can receive education, and the proportion of female executives is rising, especially in the Asia-pacific region. China is a prominent example of this, with a higher proportion of female executives than many European countries due to rapid economic growth, new industries, and demographic changes. The characteristics of female CFOs that distinguish them from male CFOs also bring researchers new research directions.

This paper takes the listed companies in Shenzhen Stock Exchange from 2010 to 2016 as samples to empirically test the correlation between female CFOs and the quality of financial reports. The rating results about information disclosure of listed companies by Shenzhen stock exchange is taken as a substitute variable for the quality of financial reports. I found a significant positive correlation between female CFOs and the quality of financial reporting.

The main contributions of this paper are as follows: (1) it studies the relationship between female senior executives and the quality of financial reports from the perspective of CFO, making up for the lack of research on the role of female CFO in the financial field; (2) different from the voluntary information disclosure data used in previous studies, this paper measures corporate transparency with the information disclosure assessment results published by Shenzhen Stock Exchange, providing more direct and reliable empirical evidence on corporate governance and corporate transparency.

II. LITERATURE REVIEW

Due to Cendant, Enron, WorldCom, and other major instances of fraudulent financial

reporting, law enforcement, and researchers noted the fact that the CFO oversees the entire process of preparing the company's financial statements. Compared with other executives, they have a more direct impact on the company's accounting policy choices and the reporting results. Spurred by such recognition, the SEC and the watershed Sarbanes-Oxley Act (SOA) required CFO's and CEO's certifications in the financial reporting process and results to ensure accuracy and completeness. This legislative focus has led to research into the relationship between the characteristics of CFOs and the quality of financial reporting (Dichev et al, 2013; Geiger et al, 2008; Geiger and North, 2006).

Past studies show that female CFOs are defined as the chief financial officers who are more conservation in financing choice than male CFOs. Female CFOs are more sensitive to risk and more risk-averse (Francis, 2015; Cohn, 1975; Riley, 1992). They are also more careful about decision making (Huang and Kisgen, 2013).

Quality of financial reporting is defined in two ways. The first category is user needs. Under this point, the quality of financial reporting is defined as the high usefulness of the financial information to the users of that information. The user is broadly defined as major investors and creditors. The second category is shareholder/investor protection. In this way, the quality of financial statements is defined as that it provides shareholders/investors with full and transparent financial information which will not mislead users (Jonas et al, 2000).

Some researchers indicated that female CFOs have a positive correlation with the quality of the financial statement. The accrual estimation errors are smaller and total absolute anomalies and current accruals are lower in the financial statements of female CFOs' companies (Barua et al, 2010). Another research reported that female CFOs make fewer acquisitions and debt issues than male CFOs. Moreover, announcement returns of acquisition made by companies that have female CFOs are higher than those made by companies with male CFOs. Another deal offered the opposite. Debt issues have high announcement returns

for companies that have female CFOs (Huang and Kisgen, 2013). Francis and his team indicated that an increase in accounting conservatism following male to female CFO transition (Francis et al, 2015). Arun indicated that female executives have a positive correlation with earnings management in companies in the UK (Arun et al, 2009).

On the contrary, there are also some papers which suggested that female CFOs have a negative correlation with the quality of financial statement. Gavious and his partners (2012) found a significant negative correlation between female executives and earnings management was found. Past researches suggest that female CFOs are more carefulness and more risk-averse. This draws forth the idea that female CFOs more likely to be compliant with SOA. Therefore, I make a hypothesis that companies with female CFOs are accompanied by the high quality of financial statements.

At last, based on the information above in the literature review, this paper proposes one hypothesis:

H1: Companies with female CFOs have a higher quality of financial statements than companies that have male CFOs.

III. RESEARCH DESIGN

Earnings quality is often used to measure the quality of financial statements. However, this method has some defects and subjectivity. Earnings quality is defined as the degree of earnings management in the process of earnings generation. The improvement of the degree of earnings management reduces the quality of earnings. Earnings management is defined as the manipulation of accounting earnings figures. Earnings management is the process that executives make decisions in making financial statements or business contracts to modify financial reports, thereby, to mislead stakeholders about the underlying companies' economic implications or to impact contractual incomes that lie with numbers on the financial statements (Healy and Wahlen, 1999). The motivation of earnings management can be divided into

contract motivation, political motivation, tax motivation, and capital market motivation. From the perspective of contract motivation, since the principal must measure and motivate the agent's business activities and performance with accounting information, especially the earnings in the accounting report, to ensure the maximum consistency between the agent's behavior goals and the principal's behavioral goals, the agent has the motivation to use accounting policy to choose earnings management (Minghai et al, 2001). This means that managers tend to choose among a range of accounting policies that maximize their utility or the company's market value. There is an ethical risk which will lead to the company's accounting earnings cannot reflect the real earnings, thus affecting the quality of earnings. On the other hand, earnings quality can only reflect the degree of enterprise earnings management, which is a part of the quality of enterprise financial statements and cannot reflect all the characteristics of the quality of accounting information.

From “Shareholder/Investor Protection”, in this context, the quality of financial reporting is full and transparent financial information that is not designed to obfuscate or mislead the users (Jonas and Blanchet, 2000). The SEC's specific explanation of high quality is comparability, transparency and full disclosure. Since then, SEC chairman Levitt has repeatedly publicly reiterated the issue of high-quality accounting standards and used transparency as a core concept. The Basel Committee on banking supervision (1998) defines transparency as the public disclosure of reliable and timely information. It also points out that disclosure itself does not necessarily lead to transparency. To achieve transparency, timely, accurate, relevant and sufficient qualitative and quantitative information disclosure must be provided (Minghai et al, 2001). Based on the above definition of transparency, I think full disclosure can enhance the transparency of accounting information. This study uses transparency to measure the quality of financial reporting.

Previous research has shown that the structure and composition of boards can affect

transparency (Ajinkya et al, 2005; Beasley and Salterio, 2001; Chiang and He, 2010). The board of directors plays an important role in monitoring and voluntary disclosure of corporate decisions. Transparency will be promoted if boards take the public interest and related decisions seriously. Therefore, I control the size of the board, determined by the total number of directors; the proportion of shares held by directors, supervisors, and senior executives. Previous studies have suggested that the establishment of independent directors or audit committees has a positive effect on transparency (Li et al, 2012; Samahaa et al, 2015; Wang et al, 2016; Osterland, 2004). Therefore, I use the proportion of independent directors on the board as a percentage of the total number of directors. Since the purpose of establishing independent directors is to supervise them in the public interest, companies with a larger proportion of independent directors have a positive impact on transparency. Besides, the audit committee is an important institutional arrangement in the superior company's internal control, mainly responsible for the company's financial statement disclosure and internal control process supervision. Its main purpose is to promote the provision of effective financial statements and thus to have an impact on transparency. I also control the number of four committees, as measured by the number of committees established by the company.

The transparency is calculated by following the model:

$$FQ_{it} = \alpha_0 + \alpha_1 FEMALECFO_{it} + \alpha_2 ROE_{it} + \alpha_3 FSIZE_{it} + \alpha_4 LEV_{it} + \alpha_5 INDE_{it} + \alpha_6 TOP_{it} + \alpha_7 FC_{it} + \alpha_8 MSR_{it} + \alpha_9 BSIZE_{it} + \alpha_{10} \sum YEAR_t + \alpha_{11} \sum INDUSTRY_j + \varepsilon_{it}$$

Where FQ1 represents the transparency measured by information disclosure rating from the Shenzhen Stock Exchange. There are 4 different classes named A, B, C, D. 4 if the firm is rated A-class each fiscal year, 3 if the firm is rated B-class each fiscal year, 2 if the firm is rated C-class each fiscal year, 1 if the firm is rated D-class each fiscal year; FQ2 also represents the

transparency measured by information disclosure rating. 1 if the firm is rated A-class or B-class each fiscal year, 0 if firm is rated C-class or D-class each fiscal year; FEMALECFO represents the gender difference of CFO of firm each fiscal year, 1 if the CFO of company is female, 0 if the CFO of company is male; ROE represents the ratio of net profit to shareholders' equity each fiscal year; FSIZE represents the firm size measured by the natural logarithm of total asset each fiscal year; LEV represents the debt-to-assets ratio each fiscal year; INDE represents the proportion of independent directors on the whole board of directors each fiscal year; TOP represents the share ratio of the largest shareholder each fiscal year; FC represents the number of four committees (audit committee, nominations committee, compensation committee, strategy committee) established by companies; MSR represents the share ratio of the senior management, which including directors, supervisors and executives; BSIZE represents the total amount of directors each fiscal year; YEAR is years of sample; INDUSTRY represents the sample' industries, according to the classification standard of China Securities Regulatory Commission (proposed financial industry), there are 12 primary industries; ε represents error term.

IV. EMPIRICAL RESULTS

Sample

This paper measures the quality of financial reports by information disclosure rating, which comes from the Shenzhen Stock Exchange. Shenzhen Stock Exchange began to conduct an annual rating on information disclosure of Shenzhen listed companies in 2001 and revised the assessment method in 2008, 2011 and 2013, among which the revision in 2011 changed significantly due to the addition of quantitative indicators. Generally, in the second year from June to July, the Shenzhen Stock Exchange will announce results that used the new standards to rate last year's financial statements of the company. Therefore, to exclude the impact of major changes in indicators on the rating results of financial reports, this paper selected all non-

ST listed companies in Shenzhen Stock Exchange from 2010 to 2016 as the initial samples. In this paper, the initial samples were screened as follows: (1) financial listed companies were deleted; (2) delete the listed company with missing data about the gender of CFOs and information disclosure rating. Finally, 9610 observations were obtained, and 1743 firms were selected.

In this paper, the disclosure rating of listed companies was obtained from the website of the Shenzhen Stock Exchange. The gender of CFO was obtained from CSMAR, and other financial data and corporate governance data were also obtained from CSMAR.

Distribution of information disclosure ratings

Table 1 shows the distribution and summary of data about information disclosure ratings of companies with female CFOs and the rest companies with male CFOs from 2010 to 2016. The rating is A, B, C and D which represent the information disclosure rating from Shenzhen Stock Exchange. I can find: (1) from 2010 to 2016, the information disclosure ratings of listed companies were 18.89 percent, 68.65 percent, 11.01 percent and 1.45 percent from A to D, respectively, and most listed companies were rated at or above B; (2) the information disclosure ratings of female CFOs of listed company were 19.98 percent, 67.82 percent, 10.87 percent and 1.33 percent from A to D, respectively, the information disclosure ratings of male CFO of listed company were 18.37 percent, 69.04 percent, 11.08 percent and 1.51 percent from A to D, respectively. The ratio of female CFOs' A rate was slightly higher than that of men CFOs, their C and D rate was slightly lower than that of male CFOs; (3) from 2010 to 2016, the proportion of samples which has female CFOs were 28.86 percent, 30.59 percent, 31.84 percent, 31.71 percent, 32.45 percent, and 32.52 percent. These figures are rising and far higher than the proportion of female CFOs in many developed countries (TCSG 3000, The Credit Suisse Research Institute 2016).

Table 1 Distribution of information disclosure ratings

	Female					Male					Total
	D	C	B	A	Total	D	C	B	A	Total	
2010	1	47	191	47	286	8	108	493	96	705	991
%	0.35	16.43	66.78	16.43	28.86	1.13	15.32	69.93	13.62	71.14	10.31
2011	4	42	265	68	379	10	101	602	147	860	1239
%	1.06	11.08	69.92	17.94	30.59	1.16	11.74	70.00	17.09	39.41	12.90
2012	3	52	298	80	433	10	105	673	139	927	1360
%	0.69	12.01	68.82	18.48	31.84	1.08	11.33	72.60	14.99	68.16	14.15
2013	3	30	313	85	431	7	100	639	182	928	1359
%	0.70	6.96	72.62	19.72	31.71	0.75	10.78	68.86	19.61	69.29	14.14
2014	8	45	305	107	465	15	74	680	199	968	1433
%	1.72	9.68	65.59	23.01	32.45	1.55	7.64	70.25	20.56	67.55	14.91
2015	11	58	329	106	504	17	121	694	214	1046	1550
%	2.18	11.51	65.28	21.03	32.52	1.63	11.57	66.35	20.46	67.48	16.13
2016	11	60	383	121	575	32	115	732	224	1103	1678
%	1.91	10.43	66.61	21.04	34.27	2.90	10.43	66.36	20.31	65.73	17.46
Total	41	334	2084	614	3073	99	724	4513	1201	6537	9610
%	1.33	10.87	67.82	19.98	31.98	1.51	11.08	69.04	18.37	68.02	100.00

Note: A, B, C, and D are the information disclosure ratings published by Shenzhen Stock Exchange.

Descriptive Statistics

Table 2 presents the descriptive statistics of all the variables from 2010 to 2016. The gender of CFOs is a dummy variable. Female CFOs are 1. Male CFOs are 0. The mean of female CFOs is 0.321. In terms of the sexual composition of the CFO, 32.1 percent of samples have female CFOs. The standard deviation of firm size is 1.113, which means that the difference in the size of the observed sample was small. The mean of the proportion of independent directors is 0.374, and the standard deviation is 0.055. It indicates that the number

of independent directors of most listed companies in Shenzhen Stock Exchange conforms to the provisions that independent directors of listed companies account for at least 1/3 of the board of directors. The mean of the share proportion of the largest shareholder is 34.296 percent, which indicates that the sample companies are mainly companies controlled by major shareholders. The mean of the number of four committees built by companies is 3.884, suggesting that most companies have four committees, including the audit committee, the compensation committee, the nominations committee, and the strategic committee. The information disclosure rating has two variables: FQ1 and FQ2. FQ1 is an ordinal variable. A-class is excellent and equals to 4. B-class is good and equals to 3. C-class is the pass and equals to 2. D-class is the fail and equals to 1. FQ2 is dummy variable, 1 if the firm is rated with A or B, 0 if the firm is rated with C or D. The mean of FQ1, is 3.05 and the mean of FQ2 is 0.875, suggesting that most companies have good transparency.

Table 2 Descriptive Statistics

Variable	Number of observations	Mean	Standard deviation	Min	Max
FEMALECFO	9610	0.32	0.466	0	1
FQ1	9610	3.05	.596	1	4
FQ2	9610	.875	.33	0	1
FSIZE	9610	21.607	1.113	13.763	26.248
LEV	9610	0.389	0.51	-0.195	29.698
TOP	9610	0.3427	0.1445	0.0362	0.8999
ROE	9557	0.096	2.506	-72.146	204.69
MSR	9603	0.161	0.206	0	0.891
BSIZE	9583	8.504	1.627	0	18
FC	9610	3.884	.393	0	4
INDE	9582	0.374	0.055	0.182	0.714

Note: FQ1 = information disclosure rating, ordinal variable, A equals to 4, B equals to 3, C equals to 2, D equals to 1. FQ2= information disclosure rating, dummy variable, 1 if the firm is rated with A-class or B-class, 0 if the firm is rated with C-class or D-class. FEMALECFO = gender of CFOs, dummy variable, 1 if the CFO of the firm is female, 0 otherwise. FSIZE = firm size. INDE = the proportion of independent directors on board. FC = the number of committees set up by listed companies. BSIZE = board size. MSR = the shareholding of senior management. ROE = return on equity. TOP = the shareholding of the largest shareholder. LEV = leverage.

Correlation Analysis

Table 3 presents the strength of the relationships among independent, dependent and control variables. FQ1 correlates positively with FEMALECFO, which means that companies with female CFOs are more transparent. FQ1 is negatively related to INDE, ROE, and LEV and correlates positively with FSIZE, FC, BSIZE, MSR, and TOP. FSIZE is negatively associated with INDE, indicating that large companies do not have many initiatives to introduce independent directors. FEMALECFO is negatively associated with BSIZE and positively associated with INDE, which indicate that companies with female CFOs have fewer

directors, but a higher proportion of independent directors on board. FEMALECFO is negatively associated with LEV, which means that companies with female CFOs have a lower debt to equity ratio. Female CFOs usually make a less risky decision. FEMALECFO is negatively associated with FSIZE, suggesting that larger companies tend to hire male CFOs. The correlation coefficients of the main variables were all less than 0.5. There is no serious multicollinearity between the variables of the regression model.

Table 3 Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) FQ1	1.000									
(2) FEMALECFO	0.017*	1.000								
(3) FSIZE	0.189***	-0.065***	1.000							
(4) INDE	-0.042***	0.020*	-0.033***	1.000						
(5) FC	0.036***	0.052***	0.019*	0.001	1.000					
(6) BSIZE	0.078***	-0.047***	0.244***	-0.520***	0.024**	1.000				
(7) MSR	0.033***	0.047***	-0.291***	0.088***	0.019*	-0.158***	1.000			
(8) ROE	-0.008	-0.003	-0.038***	-0.001	-0.039***	-0.002	-0.006	1.000		
(9) TOP	0.092***	-0.024**	0.118***	0.030***	-0.002	-0.027***	-0.059***	-0.026**	1.000	
(10) LEV	-0.092***	-0.047***	0.078***	-0.015	-0.037***	0.055***	-0.173***	0.001	-0.019*	1.000

Note: FQ1 = information disclosure rating, ordinal variable, A equals to 4, B equals to 3, C equals to 2, D equals to 1. FEMALECFO = gender of CFOs, dummy variable, 1 if the CFO of firm is female, 0 otherwise. FSIZE = firm size. INDE = the proportion of independent directors on board. FC = the number of committees set up by listed companies. BSIZE = board size. MSR = the shareholding of senior management. ROE = return on equity. TOP = the shareholding of the largest shareholder. LEV = leverage.

*** p<0.01, ** p<0.05, * p<0.1

Regression Analysis

Table 4 presents the results of regression analysis by using transparency measured by the information disclosure ratings: FQ1 and FQ2. Model (1) uses FQ1 as the dependent variables and Model (2) uses FQ2 as the dependent variables. FEMALECFO is the independent variable. Among the control variables, in Model (1), FC, TOP, MSR and FSIZE are significantly and positively ($p < 0.01$) related to FQ1, which indicate the more committees the company sets up, the larger the shareholding of the largest shareholder, the larger the shareholding of the senior management and the larger the scale, the higher the transparency of the company will be. In Model (2), FC ($p < 0.05$), TOP ($p < 0.01$), MSR ($p < 0.01$) and FSIZE ($p < 0.01$) also have significant and positive relationship with transparency. TOP's result is consistent with the tunneling behavior of shareholders. Gao and Song (2007) find a significant negative correlation between the external guarantee of listed companies and the shareholding ratio of the largest shareholder. This means that the higher the shareholding ratio of the largest shareholder, the less tunneling, which leads to the lower motivation for listed companies to hide corporate information. Therefore, with the increase in the shareholding ratio of the largest shareholder, the benefit synergy effect makes the company's transparency increase. The result of FC shows that the existence of the four committees under the board of directors is conducive to strengthening the internal control of the company, as well as the increasing independence of the committee. The four committees are no longer formally independent, and they are less and less disturbed by the board of directors in Chinese listed companies. From the perspective of MSR, the most basic feature of modern companies is the separation of ownership and management rights, which leads to the agency problem to some extent, which may harm the interests of the company due to the pursuit of agents' interests. However, as an incentive measure, the management shareholding can effectively reduce the agency cost generated under the separation of the two rights, so that the interests of the agent and the principal tend to be

consistent. Consequently, management is encouraged to provide higher quality accounting earnings to investors or voluntarily disclose more reliable and more private information to improve corporate information transparency. In terms of the firm size, larger companies are more visible, they are usually more focused and spend more time maintaining and improving their reputation and their internal governance more effective. In Model (1), LEV and INDE are significantly and negatively ($p < 0.01$) related to FQ1. The results are consisting of Model (2), which means that high leverage and a high proportion of independent directors will reduce transparency. In China, high leverage is often a sign of poor corporate performance. Due to poor performance, listed companies usually choose to fabricate profits, false statements and other disclosure of untrue accounting information to cover up the fact. Moreover, INDE's result is consisting of Eng and Mak (2003). However, it can be concluded from previous papers (Akhtaruddin and Haron, 2010; Mak et al, 2011; Alhazaimeh et al, 2014), that the higher the proportion of independent directors is, the stronger the supervisory function of the board of directors over the management and controlling shareholders will be. This is because there is no interesting relationship between independent directors and shareholders, and they are not easily affected by the wish of shareholders so that some bills of the board of directors are not passed into reality. Thus, to a certain extent, forming the check and balance to the controlling shareholder. Additionally, the company's fraud will also be restrained. Finally, transparency will be improved. I think the reason for the contradiction between the result and the theory is that the independent directors of Chinese listed companies have not played an effective supervision role. Although the proportion of independent directors has basically reached the requirement stipulated by the CSRC, the independent director system of listed companies is still not satisfactory at this stage. BSIZE is significantly positively related to transparency in Model (1) but is insignificantly positively related to transparency in Model (2). In prior studies (Beasley and Salterio, 2001; Chiang and He, 2010; Sila et al, 2016), a bigger board prefers to

make less risky decisions. The ROE has no insignificant relationship with transparency in Model (1) and Model (2). Model (1) shows that the coefficient of FEMALECFO is significantly and positively ($p < 0.1$) related to FQ1. In Model (2), FEMALECFO is significantly and positively ($p < 0.1$) related to FQ2. Model (2) shows results that are the same as Model (1). These indicate that Chinese female CFOs play a significant positive role in improving the quality of financial reporting. Therefore, the empirical results support the Hypothesis. In combination with the above analysis, it is possible that female CFOs are held back from playing a role in large, controlled, and controlled companies with good internal controls. Therefore, the empirical results support the Hypothesis.

Table 4 Regression results

	(1)	(2)
VARIABLES	FQ1	FQ2
LEV	-0.703***	-0.291***
	(-19.930)	(-13.269)
ROE	0.002	-0.001
	(0.984)	(-0.772)
TOP	0.003***	0.001***
	(6.492)	(4.940)
MSR	0.126***	0.101***
	(4.288)	(5.989)
BSIZE	0.011**	0.002
	(2.442)	(0.793)
FC	0.045***	0.024**
	(3.019)	(2.522)
INDE	-0.345***	-0.253***
	(-2.665)	(-3.310)
FSIZE	0.166***	0.054***
	(24.088)	(13.609)
FEMALECFO	0.023*	0.000*
	(1.822)	(0.029)
Constant	-0.531***	-0.256***
	(-3.376)	(-2.726)
Observations	9,523	9,523
R-squared	0.091	0.044
Year FE	YES	YES
Industry FE	YES	YES

Pseudo R-sq

Robust t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: FQ1 = information disclosure rating, ordinal variable, A equals to 4, B equals to 3, C equals to 2, D equals to 1. FQ2= information disclosure rating, dummy variable, 1 if the firm is rated with A-class or B-class, 0 if the firm is rated with C-class or D-class. FEMALECFO = gender of CFOs, dummy variable, 1 if the CFO of the firm is female, 0 otherwise. FSIZE = firm size. INDE = the proportion of independent directors on board. FC = the number of committees set up by listed companies. BSIZE = board size. MSR = the shareholding of senior management. ROE = return on equity. TOP = the shareholding of the largest shareholder. LEV = leverage.

V. CONCLUSION

The proportion of senior executives who are women has been rising globally in recent years. For example, board diversity has doubled from 9.6% in 2010 to above 20% in 2019. Female executives play an increasingly active role in earnings management, disclosure, corporate governance, and social responsibility. On the other hand, with the continuous development of China's market economy and the continuous improvement of the system, more and more attention has been paid to the degree of corporate information disclosure, and transparency has become the focus of academic research and discussion.

In this paper, I examine the association between female CFOs and the quality of financial statements. This paper used data of listed companies in Shenzhen Stock Exchange from 2010 to 2016 to examine the influence of female CFOs on the quality of financial reports. The results indicate that firms with female CFOs have a higher quality of financial statements than firms that have male CFOs, which consist of prior studies. The research findings also support that (1) companies with large scale, companies with a high shareholding ratio of the largest shareholder and companies with good performance are more transparent; (2) setting up four committees, increasing the shareholding ratio of senior management, expanding the scale of the board of directors and reducing the proportion of independent directors on the board can improve the transparency of the company. But I don't find a relationship between ROE and transparency.

This paper is subject to the following limitations. First of all, this paper uses the information disclosure rating from the Shenzhen Stock Exchange to measure the transparency

of listed companies. Although compared with the voluntary information disclosure index, information disclosure rating established by the Shenzhen Stock Exchange is more authoritative and comprehensive, it still has certain limitations to use a single indicator to measure the transparency of companies. Second, some of the listed companies in the sample have issued B shares and a small number have issued H shares. Different stocks are listed in different places and face different investors, and their financial statements follow different accounting standards. Therefore, ratings for financial statements of listed companies may be flawed. Third, all the listed companies in the sample are from the Shenzhen Stock Exchange, not the Shanghai Stock Exchange. The enterprises served by the Shanghai Stock Exchange are mainly state-owned enterprises and well-known companies. Traditional enterprises are secondary. Nevertheless, the Shenzhen Stock Exchange mainly serves small and medium-sized enterprises or entrepreneurial enterprises, mostly high-tech enterprises. There is a lack of diversification in the enterprise.

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