The Impact of the CFO-CEO Power Gap on the Information Disclosure Quality in China

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Abstract. The power allocation of members in top management team is of great importance in corporate governance mechanism. Few studies, however, have been devoted to power allocation between chief financial officers (CFO) and chief executive officers (CEO) or its impact on the quality of information disclosure. This study describes the power allocation between CFOs and CEOs from four aspects, and then investigates the impact of the CFO-CEO power gap on information disclosure quality. This study selected Chinese A-share listed firms in Shenzhen Stock Exchange between 2016 and 2020 as the research samples, and the final samples contained 7,120 firm-year observations. The processing and testing of the relevant data in this research were conducted via Excel 2020 Stata 15.0 statistical software. We constructed the ordered logistic regression model to empirically examine the impact of CFO-CEO power gap on information disclosure quality. The empirical results indicate that the CFO-CEO power gap can improve the quality of information disclosure. When the power gap is larger, the quality of information disclosure is higher. In addition, the CFO-CEO power gap has a more profound impact on the quality of information disclosure in firms whose CFOs serve as the board secretary concurrently or have a financial background. These findings continue to hold when tested with a battery of robustness checks. Hence, the CFO-CEO power gap has an impact on information disclosure quality, which is of theoretical significance for the study of extending the influencing factors of information disclosure quality and enriching the economic consequences of the CFO-CEO power gap. From the perspective of the practical sense, the research conclusions will provide some useful references for the power allocation of top management teams and the selection of senior managers.

Keywords: CFO, CEO, power gap, information disclosure quality, China

1. Introduction

The upper echelon theory believes that the executives' gender, age, education background and experience have an impact on their values and cognitive abilities, leading to the differences in their own behavioral choices, and thus different impacts on corporate decisions (Hambrick and Mason, 1984).

Based on this theory, numerous studies have empirically investigated the impact of top management teams on the firms' accounting-related outcomes, such as the financial report quality (Zhang, 2019), debt financing (Zhang et al., 2021), investment decision-making (Ye et al., 2020) and earnings management (Zwageri et al., 2020), and in particular, and among them, the impact of chief executive officers (CEO) and chief financial officers (CFO) has received more attention (Feng et al., 2011; Florackis and Sainani, 2021). Several studies also have examined the influence of the power gap between chairmen and CEOs on investment efficiency (Duan et al., 2021) and debt financing (Wang et al., 2021).

However, few scholars have paid their attention to the impact of the power allocation between CFOs and CEOs on the quality of information disclosure. Some studies have found that information disclosure of higher quality helps reduce information asymmetry (Brown and Hillegeist, 2007), promotes the improvement of firms' innovation performance (Zhang and Zou, 2021), and reduces the liquidity risk of stocks (Liu and Li, 2014).

Financial accounting information composes the main content of information disclosure for listed firms, and as the financial officers of the firms, CFOs directly participate in the preparation process of financial accounting information disclosed by the firm (Fu and Liu, 2015). A CFO is responsible for ensuring the legality of the firm's information disclosure, making it compliant with the relevant regulations.

However, CFOs, who provide the financial accounting information, have the motivation and ability to affect information disclosure due to the existence of principal-agent problems (Cheng and LO, 2006), and make use of their information advantages for pursuing their own interests.

In consideration of career reputation and litigation risks (Narayanan, 2000), although CFOs have advantaged access to information, they would take actions that comply with accounting laws and standards to avoid mandatory position changes or litigation risks caused by information disclosure violations, thereby improving the information disclosure quality.

However, CFOs' performance of duties may be subject to the interference from CEOs. The existing studies have found that in financial reporting, with their power, CEOs can exert excessive pressure on CFOs for personal interests (Dikolli et al., 2020).

Feng et al. (2011) also suggested that CFOs participate in financial reports manipulation because they cannot resist the pressure from powerful CEOs. According to the power measurement model, the real power of CFOs and CEOs in the firms not

only comes from the position in the formal organization, but also is affected by their own educational background, prestige, and social status (Finkelstein, 1992). In most cases, power is described as the ability of individuals to influence others.

But Florackis and Sainani (2021) pointed out that power is a relative concept, and it also refers to the ability to be unaffected by others. In line with these notions, this paper argues that in some cases, CFOs have enough ability to fight excessive pressure from the CEOs.

This study aims to make several contributions to the existing literature.

First, based on China's institutional background, we set five variables to measure the power gap between CFOs and CEOs.

Second, the existing studies have paid little attention to the impact of the power gap between CFOs and CEOs.

This study has further refined the power allocation between CFOs and CEOs, enriched its economic consequences, and provided a new research perspective for better understanding the behavior and decisions of CFOs and CEOs. Finally, this study has enriched the influencing factors of information disclosure quality. Particularly, the moderating effect of CFOs' concurrently serving as the board secretary and CFOs' financial background on this relationship were added to the factors and analyzed. These research conclusions have shown that the CFO-CEO power gap can improve the information disclosure quality.

2. Literature review and hypothesis development

2.1. Literature review

(1) Concepts and definitions

a) Power gap. Power refers to the ability of an individual to influence others or organizations to achieve the set goals. The power gap within top management teams refers to the unequal distribution of power among executives, that is, the power of each member within a top management team is different.

b) Information disclosure quality. Information disclosure means that the listed firms disclose their financial status and operating results to the outsiders in accordance with the requirements of the laws and regulations, and provide the external users with accounting and non-accounting information relevant to the companies' development status. Information disclosure quality refers to an evaluation behavior for the overall information disclosure of listed companies, which can be fairly reflected by the evaluation conducted by an independent third institution.

(2) Power impact of CEOs and CFOs on information disclosure quality

The CEOs are usually in charge of the strategies and the overall longer-term performance of the firms (Baker et al., 2019). Compared with CEOs with less power, CEOs with more power can exert greater control over other executives in top

management teams and influence financial reporting (Adams et al., 2005). Consistent with this notion, a great deal of literature has reached such a conclusion that a CEO who has more power may lead to a decline in the information disclosure quality.

Baker et al. (2019) found that CEOs' power has a vital effect on earning management from the perspective of type and magnitude, which negatively affects information disclosure quality. Ma et al. (2020) pointed out that when CEOs have more power relative to CFOs, they can perform opportunistic behavior through compensation contracts or financial reports manipulation, which negatively affects information disclosure quality. Yu et al. (2021) stated that CEOs can directly influence firms' information disclosure behavior, and they discovered that the well-known CEOs are more likely to hide the negative information about the firms.

The prior literature has shown that CFOs have the ultimate responsibility for the accounting information (Fu and Liu, 2014). The CFOs would take actions that comply with accounting laws and standards to avoid mandatory position changes or litigation risks caused by information disclosure violations, thereby improving information disclosure quality.

Zhang and Tan (2019) measured the power of CFOs from three dimensions and found that the power of CFOs leads to higher quality of information disclosure of listed companies. Gao et al. (2021) suggested that the power of CFOs plays a supervisory role in earning management, which helps improve the information disclosure quality.

Taken together, the existing studies have paid little attention to the impact of the CFO-CEO power gap on information disclosure quality, which provides us with research opportunity. Hence, this study examines the impact of the CFO-CEO power gap on information disclosure quality and thus to extend the related literature.

2.2. Hypothesis development

Compared with other executive members in top management teams, CEOs usually possess greater structural power due to their formal position in the organization (Finkelstein, 1992). In the Chinese context, CEOs and CFOs are under the typical superior-subordinate relationship in the firms. The CEOs usually rank second in the firms, occupying the top leadership, while CFOs are only the financial officers of companies, possessing relatively weak leadership compared with CEOs.

In such case, a large gap in leadership allows CEOs to make decisions by exerting control over other subordinates. The smaller CFO-CEO power gap indicates that CEOs have greater power relative to CFOs.

In this case, CFOs do not have enough ability to resist excessive pressure from CEOs. A study has shown that CFOs may not be able to resist the pressure of CEOs and are forced to participate in accounting manipulation (Feng et al., 2011). When CEOs have greater influence on the information disclosure, they may manipulate financial accounting information for personal gains or achieving expected

performance goals (Ma et al., 2020), and conceal the negative information, resulting in a negative impact on information disclosure quality.

On the contrary, the larger CFO-CEO power gap suggests that CFOs have greater power relative CEOs. In this case, CFOs have enough ability to resist whitewashing financial accounting information or CEOs' other excessive interference, which may contribute to the increase in the quality of information disclosure. At the same time, CFOs have financial expertise. Therefore, when they possess greater power, they can make better use of their financial expertise (Gao et al., 2021), improve the legality and the compliance of financial accounting information disclosure, thereby ultimately enhancing information disclosure quality.

This paper argues that, although CFOs may be restricted by the excessive pressure from CEOs, there are still some CFOs who have ability to be unaffected by the CEOs and ensure the legality and compliance of the information disclosure. This notion has been supported by some empirical evidence. For example, Florackis and Sainani (2021) pointed out that under certain conditions, the CFOs can resist undue pressure from CEOs to reduce the possibility of participating in earnings management, which contributes to improving the quality of financial reporting.

This paper claims that larger CFO-CEO power gap can positively affect information disclosure quality, leading to this hypothesis:

Hypothesis: The CFO-CEO power gap has a positive impact on information disclosure quality. The larger the power gap is, the higher information disclosure quality will be.

3. Research design

3.1. Sample selection and data source

This article takes Chinese A-share companies listed on Shenzhen Stock Exchange between 2016 and 2020 as the research samples, after excluding samples with ST companies, ST* companies, severely missing data, CEOs serving as CFOs concurrently, and firms in the financial industry. Finally, 7,120 firm-year observations were collected. Table I presents the distribution of the observations per year, in which, the research samples are more evenly distributed among the years. This paper winsorized the continuous variables at their 1st and 99th percentiles to eliminate the influence of outliers. The governance and financial data of the listed companies were obtained from Chinese CSMAR database. The processing and testing of relevant data in this paper were conducted via Excel 2020 Stata 15.0 statistical software.

Table 1: Distribution of observations per year

Type of listed companies		Main board	ChiNext	Total
2016	Number	862	374	1236
	Percentage	69.74%	30.26%	100%
2017	Number	904	454	1358
	Percentage	66.57%	33.43%	100%
2018	Number	939	538	1477
	Percentage	63.57%	36.43%	100%
2019	Number	914	555	1469
	Percentage	62.22%	37.78%	100%
2020	Number	959	621	1580
	Percentage	60.70%	39.30%	100%

3.2. Definitions of variables

(1) Information disclosure quality

Following Xiang and Qian (2020), this study used the information disclosure evaluation results of Chinese listed companies reported by Shenzhen Stock Exchange to measure information disclosure quality. The evaluation results were divided into A, B, C, and D, which indicates that the results are excellent, good, qualified and unqualified, respectively. This study assigned the values 4, 3, 2 and 1 to A, B, C and D respectively. The larger value means higher quality of information disclosure.

(2) CFO-CEO power gap

In this paper, CFO refers to "Chief Financial Officer", "Financial Director" or "Chief Accountant" of a listed company in China. A CEO refers to "Chief Executive Officer" or "General Manager" of a listed company in China. Finkelstein (1992) divided the executive power into four dimensions, including structural power, ownership power, expert power, and prestige power. Thus, this study measured the power gap between CFOs and CEOs from the four dimensions.

   a) Structural power. Structural power is based on individuals' formal positions granted by the formal organizations (Duan et al., 2021). Florackis and Sainani (2021) pointed out that a CFO's compensation relative to the CEOs can measure a CFO's formal power in the organization. Chinese CSMAR database disclosed the total salaries of the top three executives of listed companies, as well as the salaries of CFOs

and CEOs. Therefore, this study made a salary comparison between CFOs and CEOs and set a dummy variable, which identifies whether the CFOs' salary exceed the CEOs'. This variable equals 1 if the CFO's salary surpasses the CEO's in a listed company, and 0 otherwise.

b) Ownership power. This study uses stock ownership to measure ownership power. When the executives have greater stock ownership, they have greater influence on the board's decision-making (Zhang and Zhang, 2017), indicating greater power. If the CFO has greater stock ownership than the CEO in a listed company, this variable equals 1, and 0 otherwise.

c) Expert power. This study uses tenure and senior professional title to measure the expert power. Longer tenure helps executives have a deeper understanding of the firms' business status (Muttakin et al., 2019). It also provides more time and chance for top managers to develop their own management team to gain greater control over the firm (Zhang and Zhang, 2016). Longer tenure indicates greater power, and if the CFO has longer tenure than the CEO in a company, this variable equals 1, and 0 otherwise. Senior professional title indicates that executives are more advantaged in professional fields and able to better solve professional issues, thus they have greater impact on the firms (Liu and Yao, 2014). This paper set senior professional title as a dummy variable identifying whether the CFO has more senior professional titles than the CEO in a company. In the context of this study, senior professional titles include Certified Public Accountant, Chartered Certified Accountant, Certified Tax Agents, Certified Public Valuer, Senior Accountant, Senior Auditor, Certified Financial Analyst, Senior Economist, Senior Engineer, Lawyer, Professor, Researcher, and Senior Charted Architect and Senior International Business Engineer.

d) Prestige power. This paper uses education level to measure prestige power. When executives acquire a higher degree, they are likely to win more trust, resources, and external support, and thus have greater influence on the firms (Liu and Yao, 2014). In the context of this study, education includes five levels: High school and below, Junior college, Bachelor, Master, and Doctor. These five levels take the value of 1, 2, 3, 4, 5, respectively. This variable equals 1 if the CFO has a higher degree than the CEO in a company, and 0 otherwise.

Following the existing studies, this study adopted two different ways to measure the CFO-CEO power gap. For the benchmark analysis, we constructed POW by summing up the five dummy variables, which ranges from 0 to 5. For the robustness checks, we constructed a dummy variable POL, which takes a value of 1 if POW is more than its mean value, and 0 otherwise.

(3) Control variables

This study utilizes the following control variables: the nature of property rights (NPR), audit opinion (AOP), two posts in one (TPO), the number of top managers (NTM), company size (CSI), financial leverage (FLE), return on assets (ROA), operating income growth rate (IGR), and shareholding ratio of the largest shareholder (LSR). Besides, year and industry dummy variables were also added to the model.

Table 2: Definitions of variables

Variables		Abbreviations	Explanation
Dependent Variable	Information Disclosure Quality	IDQ	A takes a value of 4 B takes a value of 3 C takes a value of 2 D takes a value of 1
Independent Variable	Power Gap between CFO and CEO	POW	The sum of these five power gap dummy variables
Control Variables	Nature of Property Rights	NPR	If it is a state-owned company, this variable equals 1, otherwise 0.
	Audit Opinion	AOP	If it is the standard unqualified opinion, this variable equals 1, otherwise 0.
	Two Posts in One	TPO	If CEO works as chairman concurrently, this variable equals 1, otherwise 0.
	Number of Top Managers	NTM	The number of top managers in a company
	Company Size	CSI	Ln (Total assets)
	Financial Leverage	FLE	Total liabilities / Total assets
	Return on Assets	ROA	Net profit/ Total assets
	Operating Income Growth Rate	IGR	The growth rate of a company's operating income
	Shareholding ratio of the largest shareholder	LSR	The shareholding ratio of the largest shareholder

2.3. Model setting

Drawing on the research method of the prior studies, the following ordered logistic regression model (1) was established to examine the impact of the CFO-CEO power gap on information disclosure quality.

$$OrderedLogit(P) = P(IDQ = 1/2/3/4)$$
$$= \beta_0 + \beta_1 \times POW_i + \beta_2 \times NPR_i + \beta_3 \times AOP_i + \beta_4 \times TPO_i +$$
$$\beta_5 \times NTM_i + \beta_6 \times CSI_i + \beta_7 \times FLE_i + \beta_8 \times ROA_i + \beta_9 \times IGR_i +$$
$$\beta_{10} \times LSR + \sum Year + \sum Industry + \varepsilon$$

In model (1), i represents firm I while β_n denotes each independent variable's influence coefficient on the dependent variable.

3. Empirical results and analysis

3.1. Descriptive statistics

The descriptive statistical results of the variables used in this study is presented in Table 3. The mean value of information disclosure quality (IDQ) is 3.0458, showing that most of the sample firms' information disclosure evaluation results are "A" and "B" and information disclosure quality is relatively high. The mean value of the CFO-CEO power gap (POW) is 1.8678, indicating that although the CFO-CEO power gap is relatively small, CFOs are still advantaged in two variables. Table III also shows that all variables used in the model do not have serious extreme value problems.

Table 3: Descriptive statistics

Variables	Mean	Std. Deviation	Minimum	Maximum
IDQ	3.0458	0.6359	1	4
POW	1.8678	1.0262	0	5
NPR	0.2014	0.4011	0	1
AOP	0.9617	0.1920	0	1
TPO	0.3308	0.4705	0	1
NTM	6.2567	2.3166	1	21
CSI	22.1000	1.1222	19.9687	25.6538
FLE	0.3955	0.1906	0.0574	0.8517
ROA	0.1950	0.0388	-0.2889	0.2203
IGR	0.1734	0.3726	-0.5753	2.0747
LSR	0.3082	0.1328	0.0838	0.6774

3.2. Variable correlation test

This paper calculates the Pearson correlation coefficients between the main variables, as shown in Table 4. According to the statistics, the CFO-CEO power gap (POW) has a positive association with information disclosure quality (IDQ) at the 1% level and the coefficient is 0.0579, thereby providing preliminary support for our hypothesis. In addition, all the Pearson correlations reported do not exceed 0.5, showing that there is no serious multicollinearity problem in the ordered logistic regression model (1).

Table 4:Pearson correlation coefficients between main variables

	1	2	3	4	5	6
1.IDQ	1.0000					
2.POW	0.0579 ***	1.0000				
3.NPR	0.1164 ***	-0.0630 ***	1.0000			
4.AOP	0.4089 ***	0.0448 ***	0.0547 ***	1.0000		
5.TPO	-0.0332 ***	0.0571 ***	-0.2340 ***	0.0191	1.0000	
6.NTM	0.1225 ***	0.0474 ***	0.1472 ***	0.0701 ***	-0.0108	1.0000
7.CSI	0.1626 ***	0.0046	0.2779 ***	0.0174	0.1381 ***	0.2675 ***
8.FLE	-0.1272 ***	0.0044	0.1791 ***	-0.1324 ***	0.0696 ***	0.1507 ***
9.ROA	0.4116 ***	0.0244 **	-0.0155	0.2861 ***	0.0061	0.0518 ***
10.IGR	0.0935 ***	0.0261 **	-0.0439 ***	0.0982 ***	0.0212 *	0.0077
11.LSR	0.1517 ***	-0.0255 **	0.1646 ***	0.0843 ***	0.0038	-0.0226 *
	7	8	9	10	11	12
7.CSI	1.0000					
8.FLE	0.4978 ***	1.0000				
9.ROA	0.0114	-0.3102 ***	1.0000			
10.IGR	0.0611 ***	0.0256 **	0.2973 ***	1.0000		
11.LSR	0.1037 ***	0.0350 ***	0.1550 ***	0.0213 *	1.0000	

Notes: ***, ** and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

3.3. The CFO-CEO power gap and information disclosure quality

Table 5 presents the regression results on the relationship between CFO-CEO power gap and information disclosure quality.

Table 5: CFO-CEO power gap and information disclosure quality

Variables	(1)		(2)	
	Coef.	Z-sta.	Coef.	Z-sta.
POW	0.1271***	5.26	0.1052***	4.10
NPR			0.4027***	5.62
AOP			3.3386***	21.68
TPO			-0.0831	-1.44
NTM			0.0467***	3.95
CSI			0.4469***	14.94
FLE			-1.4088**	-7.92
ROA			9.7283***	22.62
IGR			-0.1763**	-2.31
LSR			1.3802***	6.73
Year	Yes		Yes	
Industry	Yes		Yes	
Prob>chi2	0.0000		0.0000	
Pseudo R^2	0.0094		0.1744	
Observations	7120		7120	

Notes: ***, ** and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

In column (1), there are only the key independent variable, POW, and the fixed effects of year and industry in the ordered logistic regression model (1). The coefficient of POW is 0.1271 with a z-statistic of 5.26, statistically significant at the 1% level. In column (2), it introduces the full set of control variables into the ordered logistic regression model (1). The coefficient of POW is 0.1052 with z-statistic being 4.10, statistically significant at the 1% level. The regression results, as presented in Table V, support a positive association between the CFO-CEO power gap and information disclosure quality, indicating that larger CFO-CEO power gap has significant positive impact on information disclosure quality, and the hypothesis is verified. With greater power, the CFO can make better use of his financial expertise, improve the legality and compliance of financial accounting information disclosure, thereby ultimately improving the quality of information disclosure.

3.4. Robustness check
(1) Lag period for independent variable

The CFO-CEO power gap may have a causal relationship with information disclosure quality, leading to endogenous problems. Thus, a lag period is used for the independent and control variables, that is, the dependent variable adopts t period data, independent variable and control variables adopt t-1 period data. The results, as presented in Table VI, support a positive relationship between the CFO-CEO power gap and information disclosure quality, which is consistent with the conclusions in Table V.

(2) Propensity score matching

This study applies the propensity score matching (PSM) method to further solve the endogeneity problem caused by selective bias. With this method, we make a comparison of information disclosure quality between the two groups, which have similarities in some variables, but are at different levels of the CFO-CEO power gap. The PSM treatment group includes companies with larger CFO-CEO power gap while the control group includes similar companies with lower CFO-CEO power gap. In this part, POL is used to measure the CFO-CEO power gap. POL taking a value of 1 means a larger CFO-CEO power gap.

Firstly, the logistic model was used to estimate the propensity score of each sample, where the dependent variable is POL and independent variables are all the control variables in ordered logistic regression model (1). Secondly, according to the propensity score obtained from the first stage, each company with a larger CFO-CEO power gap was matched to a similar company with lower CFO-CEO power gap through the one-to-two matching method. After doing so, the close matches were found for 2,616 (larger CFO-CEO power gap) observations, and 5,232 observations in all were obtained. Finally, the ordered logistic regression model (1) was run with these new samples. The regression results in Table VI draw the same conclusions as those in Table V. Taken together, the findings are robust to the PSM method.

Table 6:. Lag period for independent variable and PSM

Variables	Lag Period for Independent Variable		PSM	
	Coef.	Z-sta.	Coef.	Z-sta.
POW	0.1154***	3.48	-	-
POL	-	-	0.2773***	3.90
NPR	0.6211***	6.78	0.4041***	3.95
AOP	2.3257***	10.10	3.2367***	15.78
TPO	-0.0803	-1.10	-0.0253	-0.30
NTM	0.0536***	3.59	0.0490**	2.57
CSI	0.3530***	9.09	0.4561***	9.90
FLE	-1.3898***	-5.97	-1.6064***	-6.04

ROA	10.3291***	16.65	9.6079***	15.30
IGR	-0.1893*	-1.96	-0.2452**	-2.15
LSR	1.3530***	5.23	1.3960***	4.92
Year	Yes		Yes	
Industry	Yes		Yes	
Prob>chi2	0.0000		0.0000	
Pseudo R^2	0.1235		0.1750	
Observations	4330		5232	

Notes: ***, ** and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

(3) Alternative measure of information disclosure quality

The classification method of information disclosure evaluation results was changed, and the results were divided into two categories. Then a dummy variable, NIDQ, was introduced, which takes a value of 1 if the evaluation results are assessed as "A" or "B", and takes a value of 0 if those are assessed as "C" or "D". The NIDQ is a proxy variable for information disclosure quality, and the values of the independent and control variables are taken as the same way above. The binary logistic regression model is as follows:

$$\text{Logit(P)} = P(IDQ = 1)$$
$$= \alpha_0 + \alpha_1 \times POW_i + \alpha_2 \times NPR_i + \alpha_3 \times AOP_i + \alpha_4 \times TPO_i +$$
$$\alpha_5 \times NTM_i + \alpha_6 \times CSI_i + \alpha_7 \times FLE_i + \alpha_8 \times ROA_i + \alpha_9 \times IGR_i +$$
$$\alpha_{10} \times LSR + \sum Year + \sum Industry + \varepsilon$$

After changing the measure of information disclosure quality, the research hypothesis was tested again empirically. The regression results presented in Table 7 show that POW, the proxy for the CFO-CEO power gap, has a positive relationship with information disclosure quality with a coefficient of 0.1443 and Z-statistics of 3.56, significant at the 1% level. Therefore, the empirical results are consistent with the results mentioned above.

(4) Changing the regression model

The regression for model (1) above used the ordered logit model. In this section, the ordered probit model was applied to test its robustness. Then, the research hypothesis was tested again empirically. The regression results in Table VII show that the CFO-CEO power gap has a positive association with information disclosure quality, which confirms the conclusions reported in Table V and suggests that the research conclusions of this paper will not be affected by the regression method used.

Table 7: Alternative measure and changing regression model

Variables	Alternative Measure of Information Disclosure Quality		Changing Regression Model	
	Coef.	Z-sta.	Coef.	Z-sta.
POW	0.1443***	3.56	0.0588***	4.17
NPR	0.6058***	4.68	0.2336***	5.84
AOP	3.6959***	17.57	1.7305***	21.86
TPO	-0.1251	-1.41	-0.0412	-1.30
NTM	0.0563***	2.78	0.0261***	3.94
CSI	0.1291***	2.70	0.2375***	14.39
FLE	-1.2271***	-5.65	-0.7606***	-7.79
ROA	9.4209***	16.19	5.4842***	23.12
IGR	-0.0287	-0.25	-0.0991**	-2.40
LSR	0.9344***	2.74	0.7456***	6.54
Constant	-5.5926***	-5.27	-	-
Year	Yes		Yes	
Industry	Yes		Yes	
Prob>chi2	0.0000		0.0000	
Pseudo R^2	0.2526		0.1755	
Observations	7120		7120	

Notes: ***, ** and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

4. Additional analysis

4.1. CFO serving as the board secretary

The secretary of the board is the spokesperson of the listed firm, and one of his duties is to be responsible for information disclosure (Fu and Liu, 2015). Thus, the board secretary should ensure the authenticity and integrity of the information disclosed, which requires the board secretary to have a clear grasp of the firm's financial condition and daily operations (Wang and Wang, 2019). However, since the board secretary does not participate in the firm's daily operations and the preparation process of financial reports, he cannot fully grasp the information related to the financial reports (Lu et al., 2019). For this reason, Shenzhen Stock Exchange stipulates that the board secretary should be a director, deputy general manager or the CFO of a listed company, and requires that the board secretary should have work experience in the fields of auditing, accounting, financial investment or law (Jiang et al., 2016).

As the provider of financial accounting information, a CFO serving concurrently as the secretary of the board can solve the problem of the board secretary's insufficient professionalism and effectively promote the function of information disclosure. The existing literature has found that CFOs' concurrently serving as the board secretary can positively affect information disclosure quality (Xiang and Qian, 2020). Therefore, this paper argues that the CFO-CEO power gap has a more

pronounced positive impact on information disclosure quality in firms with CFOs' serving concurrently as the board secretaries.

Table 8: CFO serving concurrently as board secretary

Variables	CFOBS=1		CFOBS=0	
	Coef.	Z-sta.	Coef.	Z-sta.
POW	0.2469***	3.66	0.0781***	2.78
NPR	0.1552	0.81	0.4353***	5.55
AOP	2.6721***	5.37	3.4026***	20.86
TPO	-0.1995	-1.35	-0.0880	-1.39
NTM	0.0042	0.11	0.0612***	4.81
CSI	0.4746***	5.81	0.4544***	13.96
FLE	-1.0362**	-2.14	-1.4529***	-7.53
ROA	9.5532***	8.20	9.7414***	20.92
IGR	-0.2044	-0.99	-0.1972**	-2.38
LSR	1.2637**	2.29	1.3612***	6.13
Year	Yes		Yes	
Industry	Yes		Yes	
Prob>chi2	0.0000		0.0000	
Pseudo R^2	0.1423		0.1862	
Observations	1067		6053	

Notes: ***, ** and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 9: Results of SUEST test

Variable	chi2(1)	Prob > chi2
POW	4.89**	0.0270

Notes: ** indicates statistical significance at the 5% level.

This paper then further examined the moderating effect of CFOs' serving concurrently as the secretary of the board on the relationship between the CFO-CEO power gap and information disclosure quality. In this section, a dummy variable, CFOBS was employed as proxy for CFO serving concurrently as the board secretary. When a CFO serves concurrently as the board secretary, CFOBS takes a value of 1, and 0 otherwise. The samples were divided into two subsamples and the ordered logistic regression model (1) was re-estimated with the two subsamples. The regression results and the results of the SUEST test are shown in Table 8 and Table 9, respectively.

The empirical results reported in Table 8 indicate that the CFO-CEO power gap has a positive association with information disclosure quality at the 1% significance level in both groups, with the coefficients being 0.2469 and 0.0781, respectively. The difference in coefficients between groups reported in Table IX is significant at the level of 5%. Taken together, these results suggest that CFOs' serving concurrently as the board secretary positively moderates the relationship between the CFO-CEO

power gap and information disclosure quality, that is, when a CFO serves concurrently as the board secretary, the CFO-CEO power gap has a more pronounced positive impact on information disclosure quality.

4.2. CFO financial background

According to the upper echelon theory, the executives' work experience has an impact on their values and cognitive abilities, leading to the differences in their own behavioral choices, and thus different impact on firms' decisions. Consistent with this notion, this paper argues that the senior executives' work experience in the financial fields can affect the cognitive abilities of senior executives, thereby having an impact on the firms' financial decision-making. For example, Ren and Yang (2020) found that the executives' financial background is conducive to improving the debt financing capabilities and the capital structure.

Work experience in the financial field equips CFOs with a deeper understanding of the operating norms and laws of the capital market and financial fields (Cheng and Wu, 2021) and provide CFOs with a great deal of experience in financial investment and financing. These characteristics enable CFOs to improve the processing accuracy of confirmation and measurement of special accounting matters related to financial knowledge, and disclose more accurate financial accounting information, thereby improving information disclosure quality. Therefore, it was predicted that a CFO's financial background would promote the positive impact of the power gap on information disclosure quality.

This study further examines the moderating effect of CFOs' financial background on the relationship between the CFO-CEO power gap and information disclosure quality. In this section, a CFO's financial background refers to the CFO's work experience in the financial institutions such as banks, securities, futures, funds, insurance, trust, and other financial institutions. We introduced a dummy variable, CFOFB, as proxy for CFOs' financial background. When the CFO has a financial background, CFOFB takes the value of 1, and 0 otherwise. In this study, all observations were divided into two groups and then the ordered logistic regression model (1) was re-estimated. The regression results and the results of the SUEST test are shown in Table X and Table 11, respectively.

Table 10: CFO financial background

Variables	CFOFB=1		CFOFB=0	
	Coef.	Z-sta.	Coef.	Z-sta.
POW	0.2822***	3.87	0.0785***	2.84
NPR	0.1382	0.68	0.4574***	5.92
AOP	3.0399***	8.08	3.4642***	20.34
TPO	0.0173	0.10	-0.1109*	-1.79
NTM	0.0241	0.65	0.0517***	4.11

CSI	0.5643***	7.07	0.4298***	13.19
FLE	-1.5377***	-3.13	-1.4224***	-7.41
ROA	7.8861***	6.60	10.0850***	21.78
IGR	-0.1840	-0.86	-0.1843**	-2.24
LSR	1.9910***	3.45	1.3449***	6.09
Year	Yes		Yes	
Industry	Yes		Yes	
Prob>chi2	0.0000		0.0000	
Pseudo R^2	0.2080		0.1763	
Observations	885		6235	

Notes: ***, ** and * indicate statistical significance at the 1%, 5%, and 10% level, respectively.

Table 11: Results of SUEST test

Variable	chi2(1)	Prob > chi2
POW	6.54**	0.0106

Notes: ** indicates statistical significance at the 5% level.

The regression results reported in Table 10 show that the CFO-CEO power gap has a positive association with information disclosure quality in both groups at the 1% level, with the coefficients of 0.2822 and 0.0785, respectively. The difference in coefficients between groups in Table 11 is significant at the level of 5%. Taken together, CFOs' financial background positively moderates the relationship between the CFO-CEO power gap and information disclosure quality, that is, when a CFO possesses a financial background, the CFO-CEO power gap has a more pronounced positive impact on information disclosure quality.

5. Conclusion

The existing studies which discussed the factors affecting information disclosure quality have not paid attention to the impact of the power allocation between the CFOs and CEOs of Chinese listed firms. This paper describes the power allocation between CFOs and CEOs from four aspects, and then investigates the CFO-CEO power gap's impact on information disclosure quality. The empirical results indicate that the CFO-CEO power gap can improve information disclosure quality, that is, when the power gap is larger, the quality of information disclosure is higher. The CFO-CEO power gap has a more pronounced impact on information disclosure quality in firms whose CFOs serve as the board secretary concurrently, and firms whose CFOs have a financial background. These findings continue to hold when tested with a battery of robustness checks.

In the Chinese context, although there is a typical superior-subordinate relationship between the CEOs and CFOs, some CFOs have the ability to fight excessive pressure from the CEOs. This study focuses on the CFO-CEO power gap and will enrich the literature on the executive power in corporate decisions. In addition, the research conclusions in this paper also provide evidence that the power gap between CFOs and CEOs plays a vital role in improving the quality of information disclosure, which will add to the literature on the influencing factors about information disclosure quality.

From a practical point of view, the research conclusions will provide some useful references for the power allocation of the top management teams and the selection of executives. It is necessary to balance the power allocation among members in top management teams, especially the power allocation between CFOs and CEOs. The research results also show that CFOs' serving concurrently as the board secretary and their financial background play positive roles in moderating the relationship between the CFO-CEO power gap and information disclosure quality. Therefore, for the selection of senior managers, the board should pay attention to the influence of senior managers' identity background and professional background.

However, this paper still has some limitations. First, the power gap measurement indicators are not comprehensive enough. This article employs the indicators of previous studies to measure the CFO-CEO power gap, but other deeper features related to the Chinese cultural background, such as political connections and personal life experience, can also be used as metrics. These metrics can be added into the future research. Second, this study uses dummy variables to measure the power gap. If a CFO is more advantaged than a CEO in a certain aspect, the dummy variable takes a value of 1, and 0 otherwise. However, this evaluation method is still slightly rough. Therefore, in the future research, various indicators reflecting the power of CFOs and CEOs can be assigned different scores according to their levels, and the power gap can be expressed from the difference in total scores, so that the CFO-CEO power gap may be more accurately portrayed.

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