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-RESEARCH ARTICLE-

CORPORATE GOVERNANCE AND INTERNAL CONTROL INDEX: CASE OF CHINESE FINANCIAL ENTERPRISES

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—Abstract—

The article utilizes data on Chinese A-share listed financial enterprises from 2011 to 2020. It employs the internal control index as the dependent variable, corporate governance as the independent variable, and company characteristics as the control variables to evaluate the efficacy of corporate governance indicators on the internal control index to enhance the internal control level. This paper's empirical analysis is conducted using a two-way fixed effects model. In terms of shareholding structure, the internal control index is significantly negatively related to the proportion of state-owned shares and positively associated with ownership concentration; in terms of the board of directors, the internal control index is significantly positively related to the number of board meetings, the proportion of independent directors, and the number of professional committees; and in terms of management, internal control is significantly positively

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related to the number of board meetings, the proportion of independent directors, and the number of professional committees. Regarding management, the internal control index is significantly and positively correlated with executive compensation and shareholding ratio; in terms of party organizations, it is significantly and positively correlated with "two-way entry." Unlike previous research on the effect of corporate governance on the internal control index, this paper is based on the Chinese socialist system. It encompasses party organization participation in corporate governance.

1. INTRODUCTION

The financial sector is characterized by high leverage, correlation, and risk. The key to increasing the competitiveness of China's financial industry is the solid internal control and efficient operation of financial listed companies, which constitute the core of the financial market. To prevent the recurrence of bankruptcies of financial institutions due to a lack of internal control, such as the Bank of Bahrain in 1995, countries around the world enacted documents such as the Basel Agreement (1988) and the COSO Internal Control-Integrated Framework (1992), which have contributed to the stabilization of the international financial order. Since China acceded to the WTO, the financial industry has developed significantly due to the country's ongoing reform and opening-up initiatives. Simultaneously, the financial risks encountered are also growing. The failure of Hainan Development Bank, Dapeng Securities, and Baoshang Bank demonstrates Chinese financial institutions' lack of internal control. For this purpose, China promulgated the "Basic Standards for Internal Control of Enterprises" (2008), "Guidelines for Internal Control of Commercial Banks" (2014), etc., based on advanced international experience and the actual situation. Internal control failures have complex and diverse causes. Nonetheless, it is evident from the existing cases and the items on which the relevant institutions concentrate their prevention and control that a significant proportion of them are attributable to deficiencies in the corporate governance structure. This paper conducts an empirical test with the internal control index as the dependent variable, corporate governance indicators as the independent variables, and company characteristics as the control variables to identify corporate governance indicators that have a significant effect on the internal control index, thereby achieving the objective of enhancing internal control by enhancing corporate governance.

2. LITERATURE REVIEW

2.1 Internal control index

The internal control index is divided into two primary types: the disclosure index, which is obtained by summing the scores of the disclosure of internal control elements and

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focuses on the design of the internal control system, and the objective index, which is obtained by weighting the sum of the degree of achievement of each internal control objective and focuses on the effectiveness of internal control results. Ahmad, Abdullah, Jamel, and Omar (2015) developed an index to measure the "level of risk management and internal control disclosure" of 150 listed companies in Malaysia. The index consists of 12 indicators, such as whether the reporting mechanism is independent of management, and assigns a score of 1 if the indicator is disclosed and a score of 0 if it is not disclosed. Agyei-Mensah (2016) developed an index to measure the level of internal control disclosure of 110 firms in Ghana. The index consists of nine indicators, such as board independence, and the disclosure index is equal to the total number of actual disclosure items divided by the accurate disclosure indicators. Disclosure indices are more objective, and data are simpler to obtain, according to Y. Xu and Feng (2020).

Nonetheless, documents such as the Basic Standards of Internal Control in China could be more functional, the internal control information disclosure system was launched late, and there is a lack of stringent legal penalty regulations, allowing companies to be falsified. For the target index, there are two distinct approaches. The first is a scholar-created system of indicators for achieving internal control objectives. Gao (2018) and L. Y. Zhang, Duan, Zhang, and Feng (2018), for instance, selected five indicators, such as compliance objectives and asset security objectives, as the main components, extracted representative public factors, calculated the scores of each element, and used the variance explained by them as weights to calculate the internal control objectives index. This method is susceptible to the subjective judgments of scholars, is difficult to construct, and requires an immense amount of data collection and processing work. The second step is to utilize the authoritative institution index. Sun Yat-sen University and Shenzhen DIB Enterprise Risk Management Technology Co., Ltd. collaborated to establish the "DIB Internal Control Index."

The index is derived from the annual report of the company. It is structured based on the degree to which the five major elements of internal control are realized, with the first level containing the major objectives of the five major element indicators and the second level containing the minor objectives of sixty-three specific indicators. Its data is derived from enterprise-disclosed information such as annual reports, audit reports, and internal control evaluation reports, which is more comprehensive and can objectively and accurately reflect the effectiveness of internal control at publicly traded companies. Huang and Li (2019) analyzed the effect of executive equity incentives on the effectiveness of internal control, as measured by the DIB internal control index, for

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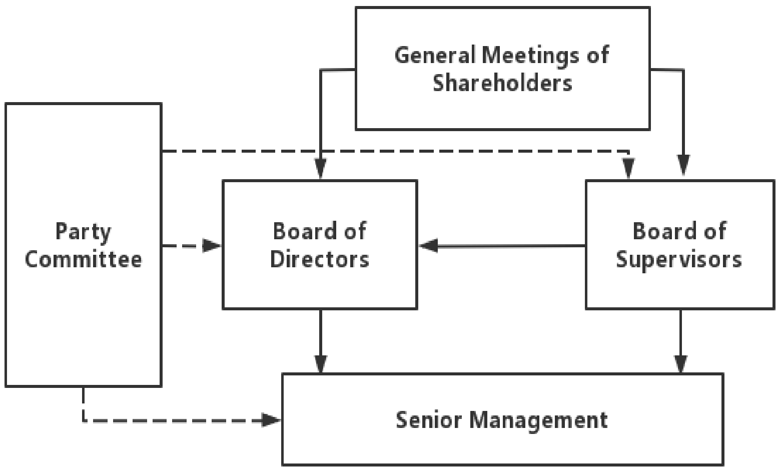
A-share listed companies from 2011 to 2015 using an ordinary OLS model and PSM test (Huo & Wang, 2019; Yuanhui Li, Li, Xiang, & Djajadikerta, 2020; Y. Xu & Feng, 2017; Yin, Zhang, & Han, 2020; Q. Y. Zhang & Feng, 2018)

2.2 Corporate governance structure with Chinese Characteristics

Article 19 of the "Firm Law" specifies that "the organization of the Communist Party of China (CPC) shall be established in the firm, and the CPC's Constitution shall govern its activities." The company will provide the essential conditions for the Party organization's activities. F. Xu, Lin, and Zhang (2022) have noted that the traditional corporate governance theory has lost explanatory power in the face of financial institutions' frequent adverse externality problems and that it is worthwhile to consider including party organizations in corporate governance. This paper upgrades the primary corporate governance structure based on the socialist situation with Chinese characteristics to make it more consistent with the case of Chinese listed financial companies. The structure diagram is depicted below.

Figure 1 The upgraded structure of corporate governance



2.3. Corporate Governance and Internal control index

Dănescu, Prozan, and Prozan (2015) discovered that effective corporate governance can influence the level of internal control. Q. L. Li and Shen (2016) concluded that elevating the level of corporate governance and maximizing the monitoring function of corporate

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governance is conducive to enhancing the quality of corporate internal control. According to the existing literature, the concept's research has more space for improvement. Prior research on the internal control index excluded financial institutions. This may be attributable to the diverse dynamics of the financial sector. In addition, previous research has typically focused on commercial banks relative to other financial institutions. In addition, the relevant literature primarily emphasized the characteristics of individuals or corporate governance structures. In addition, there are few studies on the corporate governance system as a whole, particularly those that examine the participation of party organizations in the corporate governance sector. Thus, this identified lacuna intrigues academics to pursue further advancements, which the current paper intends to do: First and foremost, the present study examined a sample of China-based financial listed companies. The sample comprises commercial banks, securities, insurance, and other publicly traded financial institutions to broaden research in related fields. Second, the paper examines the influence of party organization involvement in corporate governance on internal control indices to offer a novel perspective on the relationship between corporate governance and internal control indices. Thirdly, the study selected 13 corporate governance indicators and 10-year data.

3. RELATIONSHIP BETWEEN VARIABLES

3.1 Ownership Structure

3.1.1 The proportion of state-owned shares

State-owned equity is a stake in a corporation created by a state-approved investment entity. This paper defines the proportion of state-owned shares as the "ratio of state-invested equity to total equity." Musacchio and Lazzarini (2018) have highlighted some principal-agent issues that can arise when a single share of state-owned stock is disproportionately large. Multiple departments are responsible for monitoring SOEs, but they pass the buck to pass on monitoring costs, resulting in ineffective monitoring, etc. Qian (2017), Y. X. Feng, Jiang, and Cai (2016) note that when the effective controlling shareholder is state-owned, all the firm's actions are not solely focused on profit maximization, the firm's resource allocation is less efficient, and the firm's internal control is less effective.

Consequently, the following hypothesis is developed:

Hypothesis 1: *State-owned shareholding has a negative impact on the internal control index.*

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3.1.2 Ownership Concentration

The definition of ownership concentration is "the quantitative index of equity concentration or equity dispersion exhibited by all shareholders as a result of varying shareholding ratios." According to Zhou, Qiu, Cheng, and Peng (2021) and C. Wang and Cui (2017), when equity concentration is high, most shareholders have greater decision-making power, enabling them to fulfill their regulatory responsibilities and agency conflicts more effectively. The "synergy of interests" improves the quality of internal control by leading to more effective integration of corporate resources by the majority shareholder. Therefore, we propose:

Hypothesis 2*:* *Ownership concentration positively impacts the internal control index.*

3.1.3 Checks & Balances on Equity

Inspect & Balance Equity is "the degree of mutual control and checks and balances among major shareholders within the company." According to Q. Li and Yan (2020), a high level of equity checks and balances will likely result in a decrease in the shareholding ratio of absolute controlling shareholders, insufficient incentives for controlling shareholders, and a decrease in their motivation to participate in management. High equity checks and balances can also lead to shareholder infighting over their interests, resulting in a decline in corporate decision-making, execution, etc., which impacts the efficacy of internal control efficiency. Therefore, we propose:

Hypothesis 3: *Checks and Balances on Equity are negatively connected to the internal control index.*

3.2 Board of Directors (BOD)

3.2.1 Board Size

BOD refers to "the decision-making body of the corporation and is fundamental to corporate governance." According to resource-dependent theory, an exceptional board of directors and a larger workforce increase the likelihood that a company can communicate with the outside world and acquire censorious resources. Si (2016) argues that a larger board size can prevent board inefficiencies caused by increased workloads or a lack of board members' competencies and that a larger board will have more board members with stronger professional backgrounds or more experience, thereby contributing to the effectiveness of internal control within the firm. Therefore, we propose:

Hypothesis 4: *The board size is positively connected to the internal control index.*

3.2.2 Number of Meetings

The principal means by which the board monitors the performance of management are board meetings. It implies that frequent meetings result in an efficient decision-making process, which benefits internal control. Shi and Zhang (2016) argue that the frequency of meetings should be increased to facilitate effective communication and interchange between the board of directors and management to reduce directors' information asymmetry and thereby enhance the quality of internal control. Thus, we suggest:

Hypothesis 5: *The number of BOD meetings positively impacts the internal control index.*

3.2.3 Independent Directors Proportion

It should be noted that independent directors are not considered company stakeholders, nor do they labor for the company. Therefore, they are not affiliated with the company's management and cannot evaluate matters objectively. Typically, independent directors possess specialized management experience, expertise, and solid accounting and finance knowledge. J. K. Feng, Ding, and Dong (2016) found that the board of directors' independence is one of the essential guarantees of internal control's efficacy. Independent directors can also be viewed as professional consultants to make insightful suggestions. Therefore, we propose:

Hypothesis 6: *The number of independent directors positively impacts the internal control index.*

3.2.4 CEO Duality

In general, management has access to more complete and direct information than investors, and information asymmetry can arise when management creates moral hazard issues. To prevent investors' interests from being injured, adequate management oversight is necessary. If the chairman of the board of directors is also the general manager, the board of directors' independence will be gravely compromised, directly resulting in a diminution of the board's supervisory function over the general manager and a decline in internal control. L. L. Wang (2021) noted that CEO duality would weaken the board and management's mutual check and supervisory role, the balance between them will be broken, and the worsening principal-agent conflict is not

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conducive to repairing significant internal control deficiencies. Consequently, we hypothesize:

Hypothesis 7*: Lower internal control index is linked to CEO duality.*

3.2.5 Special Committees

In September 2018, the Code on Governance of Listed Companies was revised to require listed companies to establish an audit committee, while other specialized committees can still be established voluntarily as needed. Lu and Zhao (2016) state that the more professional committees a board appoints, the greater its dependence on these committees to fulfill their responsibilities. These professional committees can assist the board in performing its duties more effectively and address governance gaps, thereby providing the board with more resources to make scientific decisions. We suggest that

Hypothesis 8*: professional committees positively impact the internal control index.*

3.3 Board of Supervisors

3.3.1 Size of Supervisory Board

The Supervisory Board is responsible for supervising the Board of Directors and the management and ensuring that neither the Board of Directors nor the executives act against the company's general policy or to its detriment. The size of the supervisory board reflects, in part, the competence and caliber of the board to carry out its responsibilities. Ye and Song (2020) note that the larger the supervisory board, the more likely it is to have internal control or financial expertise to perform its supervisory function more comprehensively and enhance internal control quality. We postulate that:

Hypothesis 9*: The size of the supervisory board positively impacts the internal control index.*

3.4 Management

3.4.1 Monetary Compensation for Executives

The separation of ownership and management has resulted in a principal-agent conflict, causing owners' and managers' interests to conflict. Owners anticipate that management will be proactive in implementing the internal control system, while management may exercise their authority to pursue rent. A corresponding compensation incentive system must be implemented to restrain management's rent-seeking behavior. Gu and Wang (2017) note that as executive compensation incentives increase, executives are compensated for their efforts, the incentive effect of compensation begins to take effect gradually, principal-agent problems are effectively mitigated, firm performance improves, and internal control effectiveness rises. We postulate that:

Hypothesis 10: *Internal control index has a positive impact on executive compensation.*

3.4.2 Senior Management' Shareholding Ratio

Typically, organizations provide their stock to senior management at a discount with the restriction that the shares cannot be transferred for some time. This mechanism transforms the management into shareholders, thereby aligning the executives' interests with those of the shareholders. This entire act assists organizations in addressing corporate agency issues and protecting shareholder interests. According to Q. Y. Zhang and Feng (2018), equity incentives provide executives with a certain quantity of company equity and increase their compensation satisfaction. The synergistic effect between the interests of executives and shareholders increases the executives' self-control and work motivation. It encourages them to construct the company's internal control system and enhance internal corporate governance efficacy. Consequently, the following hypotheses are proposed:

Hypothesis 11: *The percentage of executive ownership is positively connected with the internal control index.*

3.5 Party Committee

According to Wu and Wang (2018), party organizations, as a fourth party force in the enterprise, can monitor the establishment of internal sound control instead of the principal to promote internal control function in the enterprise. Xie, Chen, LV, and Xie (2021) discovered that the participation of party committees in the governance of SOEs through a "two-way entry and cross-appointment" system could influence various elements of SOEs' internal command, thereby enhancing the internal command's overall quality. Cao (2021) argues that to excel in finance and insurance in the new era, it is essential to promote the organic integration of party leadership and corporate governance as the primary focus of corporate governance supervision so that the party organization can play the role of the leading core and political core in financial institutions. This paper refers to H. M. Li and Cheng (2020) and Mengkai, Yilin,

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Liangwei, and Defang (2022) to measure the involvement of party organizations in Chinese financial listed companies using two indicators, "two-way entry" and "cross-posting," to investigate their impact on the internal control index.

3.5.1 Two-Way Entry

Article 14 of the Regulations on the "Work of Grass-roots Organizations of State-owned Enterprises of the Communist Party of China" (for Trial Implementation) (2020) defines "two-way entry" as "qualified members of the party committee (party organization) can enter the board of directors, supervisory board, and managerial level through statutory procedures, and eligible party members of the board of directors, supervisory board, and executive level can enter the party committee (party organization)." Therefore, we propose:

Hypothesis 12: *Two-way entry positively impacts the DIB internal control index.*

3.5.2 Cross-Appointment

Article 14 of the Regulations on the "Work of Grass-roots Organizations of State-owned Enterprises of the Communist Party of China" (for Trial Implementation) (2020) defines "cross-employment" as "the moderate cross-employment of members of the managerial level and members of the leading team of the Party organization; in principle, the chairman and general manager are separated, and one person generally serves the secretary of the Party organization and the general manager." Therefore, we propose:

Hypothesis 12: *Cross-appointment positively impacts the DIB internal control index.*

4. RESEARCH METHODS

4.1 Data Source and Sample Selection

To assure the reliability of the research findings, this paper excludes the missing samples, resulting in a final sample size of 122 companies. The data on the participation of party organizations in corporate governance is derived from the manual compilation of pertinent official information and executive biographies, and additional data sources include CSMAR and the DIB internal control index database.

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Table 1. Variables definition

Types	Name	Definition	Variable
Dependent Variables	Internal Control Index	Internal control index issued by DIB/100	DIB
Independent Variables	The nature of equity	Number of stated-owned shares/total number of shares /100	NS
	Ownership Concentration	The shareholding ratio of the largest shareholders/100	OC
	Equity checks and balances	The second to tenth largest shareholders combined shareholding ratio/ Share ratio of the largest	ECB
	Board Size	Number of directors	BS
	Number of meetings	Number of board meetings	NBM
	The proportion of independent directors	Number of independent directors/ total number of directors	PID
	CEO duality	Yes 1, No 0	DUA
	Number of special committees	Number of special committees under board of directors	COM
	The size of supervisory board	Number of members of the board of supervisors	SS
	Monetary compensation for executives	Natural logarithm of total compensation of the companies' top three executives	PAY
	Management equity incentives	Number of share held by the executives/ the total number of shares	MEI
	Two-Way Entry	If a member of the party organization is also a director, supervisor or senior manager, TW takes the value of 1, otherwise it takes the value of 0.	TW
	Cross appointment	If the secretary of the party committee is also the chairman of the company, or if the vice chairman is also the secretary of the party committee when the chairman is also the deputy secretary of the party committee, CA takes the value of 1, otherwise it takes the value of 0	CA
Control Variables	Length of time on the market	Company listing year	YE
	Firm size	Natural logarithm of total assets of listed companies	SIZE
	Ability to increase and preserve the value of assets	Standardized treatment of Net Assets Growth Rate	NAGR
	Company Growth	Standardized treatment of profit after tax growth rate	GROWTH
	Leverage	Ratio of total liabilities to total assets	ALR
	Listed Exchange	Shanghai 1, Shenzhen 0	EL
	Big Four	Annual report audit by Big Four accounting firms will take 1, no 0	BF

4.2 Model Building

This paper uses a two-way fixed-effects model to evaluate the impact of corporate governance on the internal control index of listed financial companies, and this paper uses STATA software for analysis.

The model is as follows：

$$DIB_{it} = \alpha_0 + \alpha_1 NS_{it} + \alpha_2 OC_{it} + \alpha_3 ECB_{it} + \alpha_4 BS_{it} + \alpha_5 NBM_{it} + \alpha_6 PID_{it} + \alpha_7 DUA_{it} + \alpha_8 COM_{it} + \alpha_9 SS_{it} + \alpha_{10} PAY_{it} + \alpha_{11} MEI_{it} + \alpha_{12} TW_{it} + \alpha_{13} CA_{it} + \alpha_{14} YE_{it} + \alpha_{15} SIZE_{it} + \alpha_{16} NAGR_{it} + \alpha_{17} GROWTH_{it} + \alpha_{18} ALR_{it} + \alpha_{19} EL_{it} + \alpha_{20} BF_{it} + \lambda_t + \mu_i + \varepsilon_{it}$$

(Where:： α_0 means constant terms，ε represents error term. λ_t represents variables that affect the effectiveness of internal control and have a time effect, such as the macroeconomic environment in which the firm operates. μ_i represents unobservable factors that affect the effectiveness of internal control but do not change over time, such as internal control philosophy, corporate culture, etc.)

5. RESULTS

5.1 Descriptive Statistics

Table 2 Descriptive statistics

VARIABLES	N	mean	sd	min	max
DIB	854	6.226	1.607	0	9.755
OC	854	0.318	0.166	0.0607	0.739
NS	854	0.332	0.262	0	0.878
ECB	854	1.343	1.018	0.0329	4.899
BS	854	13.20	4.413	5	24
NBM	854	10.22	3.720	2	33
PID	854	0.365	0.0589	0.232	0.551
DUA	854	0.179	0.384	0	1
COM	854	5.502	1.555	2	8
SS	854	6.721	3.247	3	17
PAY	854	15.18	0.963	12.87	17.04
MEI	854	0.0268	0.0923	0	0.582
TW	854	0.728	0.445	0	1
CA	854	0.686	0.464	0	1
YE	854	13.09	7.413	2	27
SIZE	854	25.06	2.863	19.95	30.83
NAGR	854	-0.0223	0.645	-0.462	5.171
GROWTH	854	-0.0519	0.166	-0.653	0.944
ALR	854	0.680	0.243	0.0491	0.950
EL	854	0.651	0.477	0	1
BF	854	0.390	0.488	0	1

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The internal control index has a maximum value of 975.5, a minimum value of 0, and a mean value of 622.6, with a wide range of index distribution and a large aggregate gap. Significant disparities exist between the proportion of state-owned shares, the concentration of equity, and the equity checks and balances. The minimum capacity of the board of directors is five, which satisfies the Company Law's lower limit of five to nineteen. The minimal value of the ratio of independent directors is 0.232, which falls short of the Company Law's minimum requirement of 1/3. The mean value of CEO duality is 0.179, indicating that CEO duality is uncommon in publicly traded financial companies. The mean value of the number of professional committees is 5.502, with minimum and maximum values of 2 and 8, indicating that there is still some variation in the number of professional committees established by different financial companies. The mean value of the capacity of the supervisory board is 6.721, with a significant difference between the minimum and maximum values of 3. The minimum executive shareholding ratio is 0, and the maximum is 0.582, with a mean value of 0.0268 and a wide range of executive shareholding ratios. The mean value of Two-way entry is 0.728, indicating that most financial institutions have achieved two-way entry; the mean value of Cross appointment is 0.686, indicating that cross-appointment still requires promotion compared to two-way entry.

5.2 Multicollinearity test

Before the regression, the variance inflation factor VIF values are determined to determine whether the model exhibits multicollinearity. All of the inflation factor values in this study are less than 10, indicating that the model does not exhibit severe multicollinearity.

Table 3. Multicollinearity test

Variable	VIF	1/VIF
SIZE	7.15	0.139929
ALR	3.40	0.293788
BF	2.79	0.358525
BS	2.79	0.358708
ECB	2.72	0.368217
OC	2.66	0.375555
SS	2.25	0.445010
NS	1.80	0.555885
MEI	1.53	0.653016
CA	1.52	0.656276
PAY	1.49	0.669334
YE	1.4	0.713921
EL	1.33	0.749492
TW	1.29	0.773393
COM	1.26	0.795514
DUA	1.21	0.825485
NAGR	1.14	0.874790
GROWTH	1.11	0.902053
NBM	1.1	0.909526
PID	1.02	0.976022
Mean VIF	2.05	

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5.3 Regression analysis results and empirical findings

Table 4 Regression results

VARIABLES	DIB
NS	-2.164**
	(-2.36)
OC	3.141**
	(2.51)
ECB	0.041
	(0.31)
BS	-0.030
	(-1.14)
NBM	0.047**
	(2.45)
PID	2.145**
	(2.20)
DUA	0.027
	(0.16)
COM	0.104**
	(2.09)
SS	-0.044
	(-1.12)
PAY	0.420***
	(3.53)
MEI	2.450**
	(2.34)
TW	0.365**
	(2.19)
CA	0.087
	(0.42)
YE	-0.093
	(-0.27)
SIZE	0.427***
	(3.80)
NAGR	-0.175**
	(-2.03)
GROWTH	0.321
	(1.00)
ALR	-1.780***
	(-3.41)
BF	-0.870**
	(-2.01)
Constant	-9.506***
	(-2.72)
Observations	854
R-squared	0.174
Number of stkcd	122
Company FE	YES
Year FE	YES

Notes: t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

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We can draw the following empirical conclusions based on the regression analysis results in the figure above.

5.3.1 Ownership Structure

First, at the 5% significance level, the percentage of state-owned shares is substantially and negatively correlated with the internal control index, confirming the hypothesis that the higher the percentage of state-owned shares, the lower the internal control index. Second, ownership concentration is positively and substantially correlated with the internal control index at the 5% significance level, testing the hypothesis H2 that the higher the equity concentration, the higher the internal control index. Third, there is no significant impact of equity checks and balances on the internal control index; therefore, hypothesis H3 is not supported. Yingnan Li (2021) found no significant correlation between equity checks and balances and internal control effectiveness based on the data of all A-shares traded in Shanghai and Shenzhen from 2015 to 2019.

5.3.2 Board of Directors

First, the magnitude of the board of directors does not affect the internal control index, so hypothesis H4 is invalid. Possible explanation: The "one voice" phenomenon in China's board of directors is severe. The chairman of the board, who represents the majority shareholder, has the final say, so the number of board members may not significantly impact the effectiveness and outcomes of board decisions. The effect on internal governance is negligible. Second, the number of board meetings is substantially and positively correlated with the internal control index at the 5% level, testing hypothesis H5 that the more board meetings there are, the higher the internal control index. Third, the proportion of independent directors is substantially and positively correlated with the internal control index at the 5% significance level, testing hypothesis H6 that the greater the proportion of independent directors, the greater the internal control index. Fourth, the existence of dual CEOs has no significant impact on the internal control index; therefore, hypothesis H7 is not supported. This may be because there are few instances of dual CEOs in Chinese publicly traded financial companies; thus, this indicator cannot differentiate. Fifth, at the 5% significance level, the number of professional committees is significantly and positively related to the internal control index, validating hypothesis H8 that the greater the number of professional committees, the greater the internal control index.

5.3.3 Board of Supervisors

The magnitude of the supervisory board has no significant effect on the internal control index, so hypothesis H9 is not supported. According to China's current one-share-one-rights voting system, the supervisory board's shareholder representative can only be the spokesperson for the largest shareholder or the board of directors, which could compromise their independence and fairness as supervisors.

5.3.4 Party Organizations

At the 5% significance level, the occurrence of "two-way entry" is substantially and positively correlated with the internal control index, confirming hypothesis H12. Second, the occurrence of "cross-employment" has no appreciable effect on the internal control index, so hypothesis H13 is not supported. According to the central government's financial inspection team, several businesses lack a strong sense of party leadership. Party secretaries are accustomed to being referred to as general managers and chairpersons rather than secretaries, possibly because some publicly traded financial institutions have not paid sufficient attention to the duties of party secretaries over the years, rendering this position more symbolic than functional.

5.4 Robustness tests

The model is generally robust when altering one of the independent variables (replacing the independent variable measure) in the model does not alter the empirical results between the independent variable and the dependent variable. In this paper, ECB was initially expressed using the sum of the second to tenth largest shareholder holdings / first share percentage; for robustness testing, the sum of the second to fifth largest shareholder holdings / first share percentage (ECB2) will be used. PAY was initially calculated using the compensation of the top three executives; for the robustness test, the total compensation of all executives (PAY2) will be used. The significance and direction of the variables are generally consistent, indicating that the conclusions mentioned above pass the robustness test.

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Table 5 Robustness test

	Robustness test 1 (ECB2)	**Robustness test 2 (PAY2)**
VARIABLES	DIB	DIB
NS	-1.863**	-2.268**
	(-2.02)	(-2.46)
OC	2.389*	3.199**
	(1.93)	(2.55)
ECB2	-0.132	
	(-0.68)	
ECB		0.072
		(0.53)
BS	-0.029	-0.031
	(-1.11)	(-1.17)
NBM	0.047**	0.052***
	(2.42)	(2.69)
PID	2.206**	2.351**
	(2.27)	(2.41)
DUA	0.008	0.048
	(0.05)	(0.28)
COM	0.103**	0.101**
	(2.07)	(2.00)
SS	-0.046	-0.044
	(-1.16)	(-1.11)
PAY	0.430***	
	(3.61)	
PAY2		0.225**
		(2.27)
MEI	2.517**	2.279**
	(2.40)	(2.17)
TW	0.348**	0.390**
	(2.09)	(2.33)
CA	0.127	0.086
	(0.62)	(0.42)
YE	-0.118	-0.105
	(-0.34)	(-0.30)
SIZE	0.447***	0.489***
	(4.01)	(4.39)
NAGR	-0.165*	-0.217**
	(-1.92)	(-2.54)
GROWTH	0.316	0.322
	(0.99)	(1.00)
ALR	-1.860***	-1.827***
	(-3.59)	(-3.48)
BF	-0.903**	-0.870**
	(-2.09)	(-2.00)
Constant	-9.561***	-8.223**
	(-2.74)	(-2.36)
Observations	854	854
R-squared	0.175	0.166
Number of stkcd	122	122
Company FE	YES	YES
Year FE	YES	YES

Notes: t-statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

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6. INSIGHTS AND POLICY RECOMMENDATIONS

Optimize the shareholder structure first. Companies with a high proportion of state-owned shares or more fragmented shareholdings can adjust their shareholding structure and enhance their corporate governance structure by introducing strategic investors in various methods to promote internal control.

Second, optimize the board of directors structure. First, the frequency of meetings should be increased to promote effective communication and exchange between the board of directors and management and to reduce information asymmetry among directors; second, the number of independent directors should be appropriately increased, and their independence should be ensured according to the company's situation to ensure the effectiveness of their functions to a certain extent; and third, financial listed companies should ensure that the board of directors consists of a sufficient number of members who are independent of the company's management.

Third, an effective incentive system for senior management. Senior management is the company's manager and decision-maker, and a suitable compensation incentive mechanism is conducive to management's work motivation and improves internal control.

The participation of party organizations in corporate governance reflects the national conditions of socialism with Chinese characteristics; financial institutions should strengthen the role of party organizations in corporate governance, improve the ways for party organizations to participate in the corporate governance of financial institutions, and increase the total capacity of p.

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