Internal control, marketization process and enterprise non-efficiency investment-analysis based on property rights heterogeneity

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Abstract: *Investigate whether internal control has an inhibiting influence on non-efficiency investment. Is the degree of marketization of firms and the form of property rights influencing this negative effect? This research examines the influence and disparities of internal control on the non-efficient investment of organizations with varying property rights and degrees of marketization using panel data from 2,133 Chinese listed A-share companies from 2015 to 2020. Based on existing research, this paper introduces the marketization process and the nature of property rights, which provides a new perspective for the study of the influence of internal control on the investment efficiency of enterprises. The study of this paper also hopes to provide reference for government regulatory authorities.*

Keywords: *Internal control; Non-efficiency investment; Property right nature; Marketization process*

1. Introduction

Investment is one of the main economic activities of enterprises, which determines the development speed and development prospects of enterprises. Enterprises can realize efficient investment through reasonable allocation of resources, so as to promote their rapid development and economic growth [1]. The investment efficiency of enterprises is affected by many factors, among which the information asymmetry and the agency problems take the lead. Therefore, we should improve the information transparency and alleviate the agency problem to improve the investment efficiency. As an important part of corporate governance, improving the construction of enterprise's internal control system can supervise and motivate the agent to reduce the agency cost [2]; And it also can alleviate the agency problem by improving the information transparency degree of enterprises [3].

2. Literature review

Most scholars have found that the internal control has an inhibitory effect on the non-efficient investment of enterprises. Chinese scholar Li Wanfu [1] (2011) found that lower internal control quality intensified the efficiency of the enterprise investment behavior, and strengthening the construction of internal control is a significant way to improve the efficiency of investment. Zhang Dong, Yang Shu'e, and Yang Hong[4](2008) pointed out that areas with a high degree of marketization can not only reduce government intervention in the market, but also restrain the non-efficient investment behavior of enterprises. Fang Hongxing and Jin Lina [2] (2013) found that effective corporate governance and internal control can inhibit the non-efficiency investment, and significantly in operational non-efficiency investment. Xiao-bo yuan [5] (2013) studied that the governance effect of internal control in state-owned firms is better, according to research on the effect of internal control on investment efficiency in state-owned and non-state-owned enterprises. Wang Zhi and Zhang Jiaojie [6] (2015) founded that the improvement of internal control quality will help to improve the investment efficiency of listed companies in China, but its role will also be affected by the nature of corporate property rights and other factors. In general, the conclusions of Chinese scholars at this stage generally support that high-quality internal control has a significant inhibitory effect on non-efficiency investment.

The above study on the relationship between internal control and non-efficiency investment lays a solid foundation for subsequent research. In fact, the nature of enterprise property rights and the marketization process also have an impact on the internal control and inefficient investment. For state-owned enterprises, the government controls them and has the ability to influence the decisions and behaviors based on the consideration of other objectives [7]. At the same time, thehigher the marketization

process, the less the government intervenes in the market, and the degree of inefficient enterprise investment decreases with improved financial conditions. [8]. Therefore, this paper will analyze the influence of internal control quality on inefficient corporate investment from the point of view of the nature of property rights and the marketization process.

3. Theoretical analysis and research hypotheses

3.1 Inhibition of non-efficiency investment of enterprises by internal control

It can be learned from the existing literature that overinvestment and information asymmetry is an important part of efficient investment. Therefore, reducing information asymmetry and principal-agent problems is the key to alleviating non-efficiency investment. On the one hand, internal control is a type of internal institutional arrangement including incentives and supervision. Good internal control helps to restrain the agency problem of enterprises and alleviate the problem of excessive investment caused by the agency problem. High-quality internal control can alleviate the first type of agency problem between managers and shareholders: restrain the desire to build a "manager empire" out of their own selfish interests[9]. And the second type of agent problem between controlling shareholders and minority shareholders: is to prevent and timely discovery of unreasonable related transactions. On the other hand, High-quality internal control means high-quality information communication which reduces the problem of information asymmetry.

Hypothesis 1: Internal control is significantly and negatively correlated with inefficient investment.

3.2 The influence of property rights on how internal controls and business inefficiency are related

At present, the operation mode, financing constraints, and supervision environment between state-owned listed companies and non-state-owned listed companies have great differences. Different nature of actual controllers determine the differences in corporate governance structure, and also affect the relationship between internal control and non-efficiency investment. China's state-owned listed companies occupy a dominant position in the national economy in economic growth, and tax revenue to bear more responsibility[10]. The construction of their internal control will be more intervention from the government, which limited the governance role of internal control, and more motivated in non-efficient investment. And the property rights of many state-owned listed companies are the governments at all levels, and some above the regulatory authorities cannot effectively play the role of supervision and punishment. Non-state-owned listed firms must urgently increase their investment efficiency since they face the possibility of bankruptcy and lack a final "savior" or "redemption" from the government[11]. This can be obtained

Hypothesis 2: Internal controls have a stronger deterrent effect on inefficient investment in non-state-owned businesses than in state-owned ones.

3.3 The influence of the marketization process on the relationship between internal control and enterprise inefficient investment

The marketization process belongs to the external governance environment of corporate governance, and the internal control belongs to the internal mechanism of the enterprise. The joint action of the two affects the non-efficiency investment. The more marketization there is, the less government interference there is, the more standardized agents' behavior is, the more efficient the managers' restraint mechanism is, and the more investors are legally protected[12]. At the same time, the degree of marketization in the region obviously inhibits the management's abuse of power and excessive investment, that is, the higher the degree of marketization in the region where the enterprise is located, the more constrained the management power is[13]. And the legal system is relatively perfect, the law enforcement efficiency is high, and the regulatory function is more effective [14], improving the effectiveness of internal control. It can be concluded that

Hypothesis 3: The higher the marketization process in the region where the enterprise is located, the more effective the internal control is, and the more significant the inhibitory effect of the internal control on non-efficient investment.

3.4 The relationship between the internal control and the non-efficient investment of enterprises with different property rights

China's state-owned listed companies are greatly influenced by the will of the government in their investment decisions and corporate management. Some documents also find that the marketization process can affect the external legal environment and financial environment to affect the investment behavior of companies[14]. At the same time, state-owned enterprises in the lower degree of market are more strongly supported by government policies, making their investment decisions more inclined to meet only the performance objectives of relevant government departments rather than to improve investment efficiency, thus more likely to lead to inefficient investment. State-owned enterprises in more market-oriented regions, where there is less government intervention, are more motivated to improve internal controls to protect themselves against market risks in the face of fierce market competition. Therefore, it can be concluded

Hypothesis 4: When the marketization process in the area is high, the inhibitory effect of internal control on the non-efficient investment of state-owned enterprises is more apparent than that of non-state-owned enterprises.

4. Research design

4.1 Sample selection and data source

In this paper, all A-share listed companies from 2015 to 2020 are selected as the research objects, and the samples are treated as follows: First, exclude financial listed companies; Second, eliminate all the enterprises with ST during the sample period; Third, eliminate the samples with missing values of the variables used in the regression; Fourth, the nature of the enterprise is classified as state-owned and non-state-owned only. The financial data in this paper is mainly come from Csmar Database, the internal control data of listed companies are derived from Shenzhen DIB internal control and risk management database, and the marketization index is derived from Fan Gang, and the Chinese province marketization index report (2018)[15]. Data were processed using Excel and Stata17.0.

4.2 Measurement of internal control quality

The effectiveness of internal control is what primarily distinguishes internal control. To measure the level of internal control quality of organizations, the Shenzhen DIB database's internal control index of listed companies is employed. Currently, a huge number of academics both domestically and internationally mostly utilize it to assess the effectiveness of listed businesses' internal control. As a result, this article also uses the internal control index to assess the effectiveness of internal control in businesses.

4.3 Measurement of non-efficiency investment

Many scholars in the academic research on non-efficiency investment have adopted Richardson[16]Actual investment level model: The positive difference between the enterprise's actual investment scale and the investment scale serves as a gauge of investment efficiency. As a result, this research also uses Richardson's model to determine an enterprise's non-investment efficiency using the absolute value of residuals. The greater the absolute value of the residuals, the higher the degree of non-efficiency investment.

In model 1, the new investment Inv_t is equal to years company's actual new investment spending namely total investment minus maintenance investment. In addition, other variables in the model affect investment expenditure: the Company's growth opportunity Growth (expressed by Tobin Q); the Company's years of listing Age; the Company's financial leverage ratio Lev; the Company's cash flow status Cash; the Company's asset size Size (expressed by the natural logarithm of total assets); and the Company's stock yield Ret. At the same time, the industry Industry and the year Year are introduced as virtual variables to control the influence of the time factor and the industry on the investment expenditure.

Therefore, the new investment of an enterprise is jointly determined by the company's cash flow status, growth opportunities and other factors. Meanwhile, non-efficiency investment Res is the residual of model (1) ε represents the degree of non-efficiency investment of the company.

$$Inv_t = \alpha_0 + \alpha_1 Growth_{t-1} + \alpha_2 Lev_{t-1} + \alpha_3 Cash_{t-1} + \alpha_4 Age_{t-1} + \alpha_5 Size_{t-1}$$
$$+\alpha_6 Ret_{t-1} + \alpha_7 Inv_{t-1} + \sum Industry + \sum Year + \varepsilon \tag{1}$$

4.4 Measurement test model

By reference the relevant studies:

Enterprise scale (Size), the larger the enterprise scale, the more resources to invest in the construction of internal control. Asset-liability ratio (Lev), the higher the asset-liability ratio, often lead to insufficient financing. Growth opportunity (Growth), the better the growth of the enterprise, the more likely to have better investment opportunities, to improve the investment efficiency [17]. With the two positions integrated (Dual), when the chairman and the general manager are the same person, they will have a stronger voice, leading to higher inefficient investment[18]. Profitability (Roa), the higher the profitability, the more efficient the investment is. Listing years (Age), the years of listing. The nature of property rights (SOE), the nature of the enterprise controller will affect the investment scale and the efficiency of resource allocation[19]. Institutional investor shareholding ratio (InstSH), the higher the proportion of institutional investment, the lower the possibility of inefficient investment.

The above variables were used as control variables, and we also added industry dummy variables and annual variables to the model. In order to test hypothesis 1, 2, the following measurement model (2) is established, and the multiplication term IC * Mar is introduced on the basis of model (2) to verify hypothesis 3,4. The model is as follows:

$$INV = \alpha_0 + \alpha_1 IC + \alpha_2 Size + \alpha_3 Lev + \alpha_4 Growth + \alpha_5 Dual + \alpha_6 Roa$$
$$+\alpha_7 Age + \alpha_8 InstSH + \alpha_9 SOE + \sum Year + \sum Ind + \varepsilon \tag{2}$$

$$INV = \alpha_0 + \alpha_1 IC + \alpha_2 Mar + \alpha_3 IC * Mar + \alpha_4 Size + \alpha_5 Lev + \alpha_6 Growth + \alpha_7 Dual$$
$$+\alpha_8 Roa + \alpha_9 Age + \alpha_{10} InstSH + \alpha_{11} SOE + \sum Year + \sum Ind + \varepsilon \tag{3}$$

The variables in the model (2) are shown in the table 1:

Table 1: Variable Definition Table

Type of variable	Variable name	Variable symbol	Variable-definition
Explained variable	Inefficient investment	Res	Richardson, absolute value of the residual derived from the model
Explanatory variable	Internal control	IC	Dibo database internal control index / 100
	Processof marketalization	Mar	Fan GangWang Xiaolu,China Province Market Index
Controlled variable	Scale	Size	Natural logarithm of the total assets
	Asset-liability ratio	Lev	Total liabilities / total assets
	Growth opportunities	Growth	increase rate of business revenue
	Two jobs in one	Dual	Two jobs together to take 1, otherwise it is 0
	Profitability	Roa	Net profit / average total assets
	Listing years	Age	The natural logarithm of the number of years a company goes public
	Property nature	SOE	1 for state-owned enterprises and 0 for non-state-owned enterprises
	Institutional investors hold Share ratio	InstSH	The proportion of shares of listed companies held by institutional investors
	year	Year	Annual virtual variable
	trade	Ind	Industry virtual variables

5. Empirical test

5.1 Results analysis of descriptive statistics

Table 2: Descriptive Statistics of Major Variables

VARIABLES	N	mean	sd	min	max
INV	6,906	0.0470	0.0569	0.000644	0.404
IC	6,906	6.293	1.196	0	7.922
Mar	6,906	9.576	1.416	5.216	11.67
Size	6,906	22.31	1.164	20.06	26.05
Lev	6,906	0.414	0.196	0.0601	0.867
Growth	6,906	2.182	1.424	0.860	9.093
Dual	6,906	0.285	0.451	0	1
Roa	6,906	0.0302	0.0689	-0.348	0.184
Age	6,906	0.962	0.298	0.301	1.415
InstSH	6,906	0.402	0.237	0.00410	0.866

The table 2 shows that there are issues with non-efficiency investments in Chinese listed firms, with the mean non-efficiency investment (INV) of the sample company being 0.0470, the maximum value being 0.404, and the smallest value being 0.000644. Internal control quality (IC) has a maximum value of 7.922, a minimum value of 0, and a standard deviation of 1.196, showing that there are clear variations in internal control quality between various organizations. The marketization process (Mar) has a maximum value of 11.67, a minimum value of 5.216, and a standard deviation of 1.416. The degree of marketization in different Chinese provinces and cities varies greatly overall.

5.2 Table of correlation coefficients

The main variable in this study was tested for correlation using Pearson correlation analysis, and the test results are displayed in Table 3. The table shows that there is a negative correlation between internal control quality and non-efficiency investment, which suggests that listed companies' non-efficiency investment behavior can be effectively controlled by raising internal control quality. However, it should be noted that this correlation is only an isolated correlation between pairwise variables and does not consider the influence of other factors, so the true relationship needs to be further estimated by regression.

Table 3: Correlation Analysis of Major Variables

	INV	IC	Mar	Size	Lev	Growth	Dual
INV	1						
IC	-0.0180	1					
Mar	0.027**	0.025**	1				
Size	-0.138***	0.125***	-0.043***	1			
Lev	-0.086***	-0.083***	-0.028**	0.522***	1		
Growth	0.258***	-0.0150	0.023*	-0.492***	-0.344***	1	
Dual	0.064***	0.0110	0.103***	-0.131***	-0.070***	0.075***	1
Roa	0.070***	0.405***	0.023*	0.056***	-0.280***	0.123***	-0.0150
Age	-0.167***	-0.076***	-0.116***	0.423***	0.307***	-0.193***	-0.211***
InstSH	-0.029**	0.071***	-0.073***	0.430***	0.214***	-0.056***	-0.189***
	Roa	Age	InstSH				
Roa	1						
Age	-0.087***	1					
InstSH	0.093***	0.366***	1				

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

5.3 Regression analysis of the influence of internal control on enterprise investment efficiency

In order to verify the influence of internal control on the investment efficiency of enterprises, through the model constructed above (2), empirical regression was performed, and the regression results are shown in Table 4.

The table shows that the regression coefficient of internal control quality is negative in the basic

regression of internal control on the investment efficiency of enterprises, which is significant at the level of 1%, showing that a perfect internal control system can effectively restrain listed companies' inefficient investment behavior. These results are all supportive of H1.

Table 4: Regression Results of Internal Control and inefficient investment behavior

VARIABLES	INV
IC	-0.00288***
	(-4.74)
Size	-0.00008
	(-0.09)
Lev	0.01494***
	(3.34)
Growth	0.00790***
	(12.63)
Dual	0.00329**
	(2.20)
Roa	0.04690***
	(4.20)
Age	-0.02378***
	(-8.32)
InstSH	0.00544*
	(1.65)
Constant	0.04821**
	(2.20)
Observations	6,906
R-squared	0.133
Industry FE	YES
Year FE	YES

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

5.4 Regression analysis of internal control of property right heterogeneity and non-efficiency investment

Table 5: Grouped Regression Results of Internal Control and Inefficient Investment Behavior

VARIABLES	INV	INV
	Non-state-owned enterprises	State-owned enterprises
IC	-0.00287***	-0.00250***
	(-3.47)	(-3.37)
Size	0.00076	-0.00026
	(0.58)	(-0.25)
Lev	0.02197***	0.00585
	(3.62)	(1.00)
Growth	0.00672***	0.01071***
	(8.13)	(11.75)
Dual	0.00228	-0.00140
	(1.25)	(-0.50)
Roa	0.05042***	0.00902
	(3.67)	(0.46)
Age	-0.01761***	-0.01552***
	(-4.35)	(-3.63)
InstSH	0.01067**	0.01739***
	(2.53)	(2.83)
Constant	0.02606	0.03292
	(0.83)	(1.25)
Observations	4,759	2,147
R-squared	0.119	0.212
Industry FE	YES	YES
Year FE	YES	YES

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

This paper divides enterprises into non-state-owned enterprises and state-owned enterprises

according to the nature of property right in order to verify the influence of property right heterogeneity on the quality of internal control on the inhibitory effectof non-efficiency investment. Table 5 displays the results of the regression.

As can be seen from table 5, non-state-owned enterprises and state-owned enterprises internal control and efficiency investment regression coefficient are significant 1% level significant negative correlation, and non-state-owned enterprises internal control and efficiency investment regression coefficient is higher than state-owned enterprises internal control and efficiency investment regression coefficient, that the internal control quality of low efficiency in non-state-owned enterprises investment suppression effect is more obvious. It can well support hypothesis 2.

5.5 Regression analysis of the internal control and the regulation of non-efficiency investment

Through the methods outlined above, the developed model (3) was empirically tested to determine the regulatory impact of the marketization process on the link between internal control and enterprise investment efficiency. The regression results are displayed in Table 6 below.

Table 6: Regression Results of the Moderating Effect of Marketization Process

VARIABLES	INV
IC	-0.00291***
	(-4.78)
IC*Mar	-0.00077**
	(-2.10)
Mar	0.00119**
	(2.37)
Size	-0.00015
	(-0.17)
Lev	0.01545***
	(3.45)
Growth	0.00786***
	(12.58)
Dual	0.00313**
	(2.09)
Roa	0.04737***
	(4.22)
Age	-0.02297***
	(-8.00)
InstSH	0.00559*
	(1.69)
Constant	0.03973*
	(1.78)
Observations	6,906
R-squared	0.134
Industry FE	YES
Year FE	YES

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

As can be seen from the table, the coefficient of the market-oriented process on the non-efficiency investment is 0.00119, with no significant relationship, which shows that the market-oriented process cannot directly affect the non-efficiency investment. The marketization process has a regulatory effect on the influence of internal control on the investment efficiency of enterprises, and the higher the marketization process, the more significant the internal control on the non-efficiency investment of enterprises. At the same time, Ic * Mar, the internal control process, has a significant negative correlation at the level of 5%. This strongly backs theory 3.

5.6 The adjustment effect of marketization process on the relationship between internal control and enterprise non-efficiency investment

Depending on the various property rights, the impact of the marketization process on internal control and enterprise non-efficiency investment may vary. The sample companies are classified into groups of

state-owned enterprise companies and non-state-owned enterprises, respectively, based on the property rights of the listed companies. Table 7 presents the outcomes.

Table 7: Grouped Regression Results of the Moderating Effect of Marketization Process

VARIABLES	INV	INV
	Non-state-owned enterprises	State-owned enterprises
IC	-0.00259***	-0.00308***
	(-3.09)	(-3.78)
cIC*Mar	-0.00092*	-0.00081*
	(-1.74)	(-1.73)
Mar	0.00162**	-0.00036
	(2.24)	(-0.59)
Size	0.00067	-0.00014
	(0.51)	(-0.13)
Lev	0.02157***	0.00606
	(3.55)	(1.03)
Growth	0.00664***	0.01076***
	(8.02)	(11.79)
Dual	0.00216	-0.00138
	(1.19)	(-0.50)
Roa	0.05030***	0.01065
	(3.65)	(0.55)
Age	-0.01684***	-0.01551***
	(-4.16)	(-3.62)
InstSH	0.01059**	0.01776***
	(2.51)	(2.89)
Constant	0.01306	0.03607
	(0.41)	(1.36)
Observations	4,759	2,147
R-squared	0.120	0.214
Industry FE	YES	YES
Year FE	YES	YES

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

From table 7, in non-state-owned and state-owned enterprises, internal control and marketization process of transfer by Icq * Mar coefficient of 0.00259 and 0.00308 respectively, are in the significance of 1% negative correlation, which does not exist in the state-owned enterprises, shows that the regulation effect of marketization process in state-owned enterprises and non-state-owned enterprises, but the process of marketization in state-owned enterprises more significant further illustrates the internal control of state-owned enterprises in the efficiency of the process of marketization. This well supports the hypothesis that 4.

6. Robustness test

For the regression results of this paper, the robustness test is conducted as follows: The adjusted sample period was from 2015-2019. The relationship between the caliber of internal control and investment efficiency was significantly impacted by the advent of the epidemic in 2020, which also had an impact on business investment efficiency. Therefore, we adjusted the sample to 2015-2019 to avoid data interference with the empirical results in 2020, and resumed the regression test. In Table 8(1) - (6), the regression results of hypotheses 1-4 are reported respectively. Under hypothesis 2, the regression results for state-owned firms and non-state-owned enterprises are (2) and (3). The regression results for state-owned and non-state-owned businesses under assumption 4 are (5) and (6), respectively. (1) demonstrate that the size of the non-efficiency investment increases with decreasing benchmark regression. (4) demonstrate that businesses invest less efficiently the more internal control quality is improved. In addition, we discovered that after excluding the data from 2020, the internal control quality of enterprises inhibits non-efficiency investment more than the regression results for the period of 2015

to 2020. This suggests that the epidemic does have some effect on the investment efficiency of enterprises and tampers with the empirical findings.

Table 8: Robustness Test Results of Internal Control and Inefficient Investment Behavior

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	INV	INV	INV	INV	INV	INV
IC	-0.00292***	-0.00278***	-0.00257***	-0.00300***	-0.00249***	-0.00319***
	(-4.59)	(-3.24)	(-3.30)	(-4.71)	(-2.87)	(-3.71)
cIC*Mar				-0.00097**	-0.00118**	-0.00084*
				(-2.49)	(-2.12)	(-1.75)
Mar				0.00111**	0.00153**	-0.00046
				(2.13)	(2.08)	(-0.72)
Size	-0.00000	0.00074	0.00008	-0.00010	0.00060	0.00022
	(-0.00)	(0.56)	(0.08)	(-0.11)	(0.45)	(0.20)
Lev	0.01479***	0.02207***	0.00433	0.01541***	0.02188***	0.00446
	(3.21)	(3.57)	(0.71)	(3.34)	(3.54)	(0.73)
Growth	0.00808***	0.00680***	0.01100***	0.00804***	0.00671***	0.01105***
	(12.60)	(8.11)	(11.71)	(12.54)	(8.00)	(11.76)
Dual	0.00332**	0.00237	-0.00161	0.00315**	0.00222	-0.00154
	(2.17)	(1.28)	(-0.56)	(2.05)	(1.20)	(-0.53)
Roa	0.04436***	0.04789***	0.00463	0.04590***	0.04887***	0.00646
	(3.83)	(3.39)	(0.23)	(3.94)	(3.45)	(0.31)
Age	-0.02397***	-0.01785***	-0.01712***	-0.02318***	-0.01705***	-0.01720***
	(-8.22)	(-4.37)	(-3.89)	(-7.91)	(-4.17)	(-3.91)
InstSH	0.00486	0.01043**	0.01622**	0.00506	0.01040**	0.01661***
	(1.44)	(2.45)	(2.55)	(1.50)	(2.45)	(2.61)
Constant	0.04675**	0.02587	0.02799	0.03989*	0.01483	0.03203
	(2.07)	(0.81)	(1.03)	(1.74)	(0.46)	(1.16)
Observations	6,604	4,620	1,984	6,604	4,620	1,984
R-squared	0.133	0.120	0.223	0.135	0.122	0.225
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

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

7. Conclusion

Investment is one of the main economic activities for enterprises, which determines the development speed and prospects of enterprises. Improving the information transparency of enterprises and alleviating the agency problem can improve the investment efficiency of enterprises. As an important corporate governance mechanism, internal control helps to alleviate information asymmetry and agency problems. Therefore, this paper takes the 2015-2020 A-share listed companies as research sample to empirically test the relationship between internal control and enterprise non-efficiency investment. The study found that: Improvements in internal control quality have a greater inhibitory impact on non-efficiency investment in non-state-owned businesses when compared to state-owned businesses. The higher the marketization process of an enterprise, the more effective the internal control, and the higher the non-efficiency investment, the more obvious it is when compared to non-state-owned businesses. The impact of internal controls on the effectiveness of corporate investment is covered in this essay. It strengthens the construction of internal control and boosts the effectiveness of enterprise investment. It is also beneficial for practical and regulatory agencies to promote internal control construction.

References

[1] Li Wanfu, Lin Bin, Song Lu. The role of internal control in corporate investment: efficiency promotion or suppression? [J]. Management the world, 2011(02): 81-99+188.
[2] Fang Hongxing, Jin Lina. Corporate governance, internal control and non-efficiency investment:

theoretical analysis and empirical evidence [J]. Accounting Research, 2013 (07): 63-69 + 97.

[3] Fang Hongxing, Jin Lina. Can high-quality internal control inhibit surplus management?——Experience study based on voluntary internal control verification reports [J]. Accounting Research, 2011 (08): 53-60 + 96.

[4] Zhang Dong, Yang Shu'e, Yang Hong. The largest shareholder equity, governance mechanism and enterprise overinvestment—based on the research of Panel Data [J]. Contemporary Economic Science, 2008 (04): 62-72 + 126.

[5] Xiaobo Yuan. Internal control, property rights and corporate investment efficiency [J]. Accounting and Communications, 2013(21): 41-44+129.

[6] Wang Zhi, Zhang Xiaojie, Zheng Qi. Internal control quality, property right nature and enterprise non-efficiency investment—Empirical research based on the panel data of listed companies in China [J]. The Management Review, the 2015, 27(09): 95-107.

[7] Huang Sujian, Yu Jing. The nature, objectives and social responsibility of state-owned enterprises [J]. The Industrial economy of China, 2006(02): 68-76.

[8] Zhang Dong, Yang Shu'e, Yang Hong. The largest shareholder equity, governance mechanism and enterprise overinvestment—based on the research of Panel Data [J]. Contemporary Economic Science, 2008 (04): 62-72 + 126.

[9] Jensen M. The modern industrial revolution, exit and the failure of internal control systems [J]. Journal of Finance, 1993, 48(3): 831-880.

[10] Chen Xiao, Jiang Dong. Equity diversification, corporate performance and industry competitiveness [J]. Economic Research, 2000 (08): 28-35 + 80.

[11] Liu Qiliang, Luo Le, He Weifeng, Chen Hanwen. Property rights nature, institutional environment and internal control [J]. Accounting Research, 2012 (03): 52-61 + 95.

[12] Gao Lei, Song Shunlin. Governance environment, governance structure and agency cost—Empirical evidence from the panel data of state-owned listed companies [J]. The Economic Review, the 2007(03): 35-40.

[13] He Chen, Luo Qi, Yu Qing. Empirical evidence of institutional environment, management power and over-investment of listed companies [J]. Statistics and decision-making, 2015(08): 163-166.

[14] Cheng Xinsheng, Tan Youchao, Liao Mengying. Compulsory disclosure, surplus quality and marketization process—based on the analysis of institutional complementarity [J]. Financial Research, 2011, 37(02): 60-71.

[15] Ya T .The Impact of Earnings Management on Enterprise Investment Efficiency Based on the Perspective of Internal Control[J].Journal of Jinling Institute of Technology(Social Science), 2018.

[16] Richardson S. Over-investment of free cash flow [J]. Review of Accounting Studies, 2006, 11(2-3): 159-189.

[17] Xu Yekun, Qian Xianhang, Li Wei'an. Political uncertainty, political correlation and investment in private enterprises—from the replacement of municipal party secretary evidence [J]. Management the world, 2013(05): 116-130.

[18] Wang Chengfang, Ye Ruohui, Bao Zongke. Two integration, major shareholder control and investment efficiency [J]. Scientific research management, 2020, 41(10): 185-192.

[19] Xin Qingquan, Lin Bin, Wang Yanchao. Government control, Manager compensation, and capital investment [J]. Economic Research, 2007 (08): 110-122.