



Executive Compensation and Corporate Financial Leverage: Empirical Evidence from Listed Companies in China

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Abstract. As capital markets evolve, financial leverage has become a critical factor in managing risk and ensuring long-term growth for companies. Executive compensation, a vital aspect of corporate governance, significantly influences financial decisions, risk-taking, and capital structure adjustments. This study empirically examines how executive compensation affects corporate financial leverage under China's "Deleveraging Policy", using data from non-financial state-owned and private A-share listed companies between 2015 and 2023. The analysis reveals a strong negative relationship, showing that higher executive compensation reduces financial leverage by encouraging practices like repaying debt and increasing internal and equity financing. The findings are robust, with additional tests confirming the results. Heterogeneity analysis indicates that the impact is more pronounced in state-owned and larger companies. These findings highlight the importance of aligning executive pay with long-term financial stability and sustainability.

Keywords: Executive Compensation, Financial Leverage, Enterprise Risk Management, Capital Structure, Deleveraging Policy

1 Introduction

As the main entity in a market economy, a company's profitability and risk management capabilities are key indicators of operational efficiency. Business risks include internal operational risks and external systemic risks, with compound leverage risk being the combination of both^[1]. And financial risk primarily arises from financial leverage, referring to the additional risk borne by shareholders due to debt financing. To address the impact of systemic financial risks on businesses, the Chinese government implemented the "deleveraging policy" starting in 2015. Based on the principal-agent theory, the right of management is separated from right of ownership in a company, with senior management responsible for its operations. In order to ensure that business activities are consistent with the interests of shareholders, it is necessary to design the optimal compensation contracts to motivate executives for the reason of achieving synergies between the interests of both parties and ultimately maximizing long-term shareholder's wealth^[2]. Moreover, it can effectively diminish the entrusted agency costs

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connected with top management, lower the self-serving behaviors of executives, avoid the emergence of contradictory factors between shareholder and top managers. As the actual controllers of state-owned (SOEs) and private enterprises in China, it remains to be further tested whether executive compensation can serve as an effective tool to constrain and incentivize senior managers, encouraging them to control financial risks, maintain an appropriate level of financial leverage, and reduce overall business risks. Thus, this study takes 2015, the year when the Chinese government implemented the “deleveraging policy,” as a time point and collects and organizes data from 2015 to 2023 on Chinese A-share non-financial state-owned and private listed companies, aiming to investigate how executive compensation affects the adjustment of corporate financial leverage. To provide a more comprehensive understanding of the relationship between executive compensation and financial leverage, this study also integrates machine learning techniques and heterogeneity analysis. Specifically, the Causal Forest DML model is utilized to validate the robustness of the findings, addressing potential non-linearities and heterogeneities in the data. Furthermore, the study examines size-based and ownership-based heterogeneities to explore how the impact of executive compensation differs across company types.

2 Literature Review

The traditional Modigliani-Miller (MM) theory believed that the amount of corporate debt had nothing to do with the value of the enterprise. In contrast, the modified MM theory argued that the liabilities had a tax shield effect, and enterprises could use as much debt financing as possible to replace equity capital, thereby increasing financial leverage, reducing the cost of capital, and benefiting from moderate risk-taking activities that improve firm performance and promote development [3]. However, a higher gearing ratio would bring bankruptcy risk to the enterprise. Wang et al. concluded from the perspective of multidimensional capital structure that the debt levels in different dimensions had an inverted U-Shaped relationship with firm’s Return on Equity (ROE) [4]. Botta, after studying financial risk and corporate development, concluded that the increase in corporate financial leverage led to the continuous superposition and proliferation of potential risks, triggering systemic financial risks [5]. The increased amount in the possession of financial liabilities by firms brought about higher interest costs, the emergence of debt defaults, and rigid debt covenants, leading to risk aversion and reduced working efficiency among top managers [6].

Muriithi et al. found that due to the inconsistency of interest objectives, managerial defense mechanisms are common among senior executives of listed companies. To maintain their positions and remuneration packages, executives were prone to self-interested psychology, prioritizing short-term gains. And they tended to use the external debt financing to expand company’s scale, which increased the agency costs [7]. Wei studied managerial overconfidence, indicating that executives tended to use debt financing and increased the debt ratio of the listed companies. And he also pointed out that it was a significant negative correlation of capital structure with corporate performance in listed companies. [8].

Krishnan et al. showed, from the perspective of internal control, that the financial irregularities and fraudulent behaviors of top management could be effectively constrained through internal and external supervision of enterprises, and the occurrence of surplus management and performance whitewashing could also be reduced ^[9]. However, Tahir et al. suggested using non-financial information in executive compensation evaluation indexes to reduce the earnings management behavior and risky operations by executives in listed companies ^[10].

Existing literature indicates a potential correlation between capital structure, financial leverage ratios, and a company's operational performance and overall risk levels, which further affect its profitability and risk-bearing capacity. In order to seek the business goal of maximizing shareholders' interests, enterprises need to dynamically adjust the level of internal risk-taking, so as to keep the operating leverage and financial leverage in a relatively reasonable state. Enterprises should formulate a reasonable compensation mechanism to motivate executives to implement business plans that are consistent with shareholders' interests and achieve sustainable development.

3 Research Hypothesis

3.1 Executive Compensation and Corporate Financial Leverage

According to the Trade-Off Theory, one of the crucial decision-making factors for enterprise operation is the capital structure. Enterprises should evaluate the benefits and costs of leverage programs, and select the optimal leverage ratio to balance marginal benefits and marginal costs. When the compound leverage of the enterprise is influenced by external systemic environmental factors, leading to increased internal business risks, it will increase the operating leverage, causing overall leverage to deviate from its target level. In such case, the enterprise should adjust the level of financial leverage at the right time, so as to bring the overall leverage back to the target state.

The implementation of the "deleveraging policy" has, to some extent, reduced the sources of credit funds for enterprises, which might affect their long-term investment plans and potentially have a negative impact on business performance in the short term. Coupled with the principal-agent problem, it often results in low motivation among executives to reduce financial leverage, thus leading to insufficient driving force within the enterprise. According to the optimal compensation contract theory and agency cost theory, enterprises can effectively motivate executives to make business decisions of which maximize shareholder values, coordinate conflict of interests between shareholders and top managers, reduce agency costs by formulating a reasonable compensation mechanism. The two-factor theory points out that strengthening incentives can make executives and shareholders converge in their goals, improve the level of corporate governance, as well as enhance financial management, which further reduces financial risks ^[11].

In the mechanism analysis of the effect of executive compensation on financial leverage, if enterprises are expected the rising in business risk, in order to avoid facing financial risk in the future, executives usually choose the way of "accumulating cash and reducing liabilities" to reduce the expected bankruptcy cost ^[12]. In China, the main

ways to reduce financial leverage include repaying debts, increasing internal financing and equity financing. Internal financing usually includes reducing accounts receivable, increasing accounts payable financing channels, reducing unnecessary investment projects, and converting retained earnings to registered capital. Through internal corporate governance and improved management, internal financing does not increase the enterprise's financial leverage and can lower its level of financing risks. In addition, enterprises can also use equity financing to pursue long-term development. In the equity financing, with the addition of new investors, the absorbed capital becomes the enterprise's own capital, thus ensuring the sustainability of the enterprise's long-term development. Unlike the necessary pledges (e.g. tangible assets) and higher repayment pressure in debt financing, equity financing is the best way for enterprises to choose to reduce financial risks and adjust their capital structure. In the process of enterprises attempting to reduce financial leverage, the managerial autonomy conferred by executive compensation incentives, manifested itself as a supportive effect, and which increased the probability of downward adjustments through the issuance of shares to the outside world and accelerated the speed of downward adjustments in the capital structure of enterprises^[13]. Consequently, the study proposes hypothesis **H1**: the increase in executive compensation will decrease the level of corporate financial leverage.

3.2 The Analysis of Heterogeneity with the Property Rights of Enterprises

Based on the different ownership in Registered Capital of enterprises in China, this paper discusses the classification of enterprises into state-owned enterprises (SOEs) and private enterprises. The capital of SOEs is owned by the state, and for a long time, they have had a closer relationship with commercial banks, financial institutions are more inclined to provide commercial loans to SOEs in order to obtain stable loan returns. In addition, the peculiarity of state-owned enterprises is that the government exercises control on behalf of the state, which is easy to form a management vacuum and difficult to effectively supervise the behavior of executives. By developing an effective executive compensation system, the self-interested behavior of executives can be prevented so that the compensation can play a more effective role in motivation^[14]. SOEs occupy an important position in the national economy, people's livelihood and strategic key areas, and are "pillars and mainstays"^[15]. Considering the long-term interests of enterprises, executives are willing proactively to take risk prevention and control measures to decrease financial leverage, realize the sustainable development model of "stable growth and risk prevention" of SOEs.

In China's private enterprises, there are adverse factors such as unstable profitability, lack of financing credit and collateral policies, and widespread difficulties in obtaining loans. In private enterprises, family-based and friend-based business models are more common, leading to a "Rule of Man" phenomenon. Business philosophy, development strategy and decision-making procedures are at the behest of the actual controllers of the company's equity. The higher involvement of large shareholders in management, the weaker the effectiveness of executive compensation as an incentive^[16]. Based on the signaling theory and the herd effect, once the company reaches a certain scale, its

risk appetite generally increases, triggering impulsive and blind investment expansion, with the company pursuing a short-term and rapid development model

From the above discussion, it can be seen that the state-owned enterprises had more financing credit support, and there was more space to reduce leverage. The executive compensation of private enterprises was difficult to play the role of proper incentives, and the executive's ability and level of controlling corporate financial risks was lower than that in SOEs. Xie et al. found that in the comparison between state-owned enterprises and private enterprises, the executive compensation could improve the speed of capital structure adjustments only in the state-owned enterprises^[14].

Thus, the study proposes hypothesis **H2**: The effect of executive compensation on corporate financial leverage is greater in SOEs than in private enterprises.

4 Research Design

4.1 Sample Selection

The paper takes A-share companies listed in China from 2015 to 2023 as the research sample, excluding those in the financial industry. To ensure the accuracy and reliability of the analysis results, data cleaning and screening were performed. In particular, companies with “ST” labels (those with two consecutive years of losses), “*ST” labels (those with three consecutive years of losses), “SST” labels (those with two consecutive years of losses and incomplete equity reform), and “PT” labels (those with stocks subject to special restrictions) were excluded, as these companies typically face delisting risks and may distort the analysis results. Besides, samples with missing values were excluded to ensure data completeness. To reduce the impact of extreme values on the analysis, this paper truncated the upper and lower 1% of all continuous variables, removing outliers to ensure the data's robustness. In the end, 23,976 valid samples were obtained. The data used in the regression test mainly come from CSMAR database.

4.2 Description of Variables

In terms of the explained variable (**Lev**), the level of corporate financial leverage is measured using the ratio of (financial expenses + income tax expense + net profit) / (income tax expense + income tax expense), with higher values indicating greater financial leverage effects.

For the explanatory variable (Salary), based on the study of Wu Y and Wu S, the paper uses the natural logarithm of the total compensation of top three executives in listed companies to measure the executive compensation of enterprises^[17].

Referring to the existing studies, the paper selects the following control variables. The natural logarithm of the firm's total assets' value at the end of the year is used to measure the size of the firm (Size). The proportion of shares held by the first largest shareholder is measured by the number of shares held by the first largest shareholder divided by the total number of shares (Largest). The proportion of shares held by the top ten shareholders is selected (Top10), as well as the value of Tobin's Q (TobinQ).

The number of independent directors is measured by the number of independent directors divided by the total number of the board of directors (Indrate). The growth rate of fixed assets (Rapid) is calculated by dividing the difference between this year's fixed assets and last year's fixed assets by last year's fixed assets. The proportion of net profit attributable to the parent company is measured by dividing net profit attributable to the owners of the parent company by net profit (Netprofit).

4.3 Regression Model

In order to verify whether executive compensation will have an impact on corporate financial leverage, this paper constructs a two-way Fixed-Effects Model to test the hypothesis. The use of fixed effects helps isolate the impact of executive compensation by controlling for time-invariant factors that could influence the results, ensuring a more accurate estimation of the relationship between compensation and financial leverage^[18]. The regression model is as follows.

$$Lev_{i,t} = \beta_0 + \beta_1 Salary_{i,t} + \beta_2 Controls_{i,t} + \sum year + \sum IND + \varepsilon_{i,t} \quad (1)$$

Where, $Lev_{i,t}$ is financial leverage, $Salary_{i,t}$ denotes executive compensation, $Controls_{i,t}$ is control variables, $year$ is a year fixed effect, IND is an industry fixed effect, and $\varepsilon_{i,t}$ is a random disturbance term.

5 Empirical Analysis Results

5.1 Descriptive Statistics

Table 1 reports the descriptive statistics of the main variables. The results show that the maximum value of financial leverage (Lev) is 6.113, the minimum value is 0.513, and the standard deviation is 0.790, indicating significant differences in financial leverage levels across different companies. The maximum value of executive compensation (Salary) is 17.30, the minimum value is 14.04, and the standard deviation is 0.640, suggesting considerable differences in executive compensation levels among companies.

Table 1. Descriptive statistics of the main variables

Variable	Mean	SD	Min	p25	p50	p75	Max	N
Lev	1.283	0.790	0.513	0.976	1.051	1.254	6.113	23976
Salary	15.50	0.640	14.04	15.07	15.47	15.88	17.30	23976
Size	22.37	1.303	19.94	21.43	22.19	23.11	26.33	23976
Largest	0.340	0.145	0.0857	0.228	0.320	0.436	0.737	23976
Top10	0.593	0.147	0.251	0.486	0.600	0.705	0.906	23976
TobinQ	2.273	1.416	0.890	1.369	1.825	2.652	8.787	23976
Indrate	0.377	0.0528	0.333	0.333	0.364	0.429	0.571	23976
Rapid	0.248	0.735	-0.377	-0.0372	0.0473	0.231	5.354	23976
Netprofit	0.957	0.175	0.275	0.930	0.998	1.002	1.712	23976

5.2 Benchmark Regression

Table 2 reports the results of the benchmark regression of the effect of executive compensation on firms' financial leverage. Column (1) presents the regression results without the addition of control variables, while column (2) includes control variables in addition to the previous specifications. Both regressions control for individual fixed effects, year fixed effects, and industry fixed effects. The results demonstrate that the coefficient on executive compensation is significantly negative at the 1% level in both regressions, indicating that executive compensation is significantly and negatively related to the level of corporate financial leverage. The regression results initially support H1, suggesting that an increase in executive compensation decreases the level of corporate financial leverage.

Table 2. Benchmark regression results

	(1) Lev	(2) Lev
Salary	-0.194*** (-10.21)	-0.248*** (-13.01)
Size		0.209*** (10.25)
Largest		0.220 (1.58)
Top10		-0.971*** (-8.73)
TobinQ		-0.0391*** (-7.86)
Indrate		-0.0651 (-0.36)
Rapid		-0.0251*** (-4.66)
Netprofit		0.358*** (4.61)
_cons	4.288*** (14.56)	0.733 (1.48)
year FE	YES	YES
Industry FE	YES	YES
N	23497	23497

t statistics in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.3 Robustness Testing

Application of Causal Forest DML. To further validate the robustness of the main findings and account for potential non-linearities and unobserved heterogeneity, the study employs the Causal Forest DML model. This machine learning technique estimates conditional average treatment effects (CATE), capturing heterogeneous treat-

ment effects across different firms and conditions. The Causal Forest model is advantageous because it can handle complex relationships without imposing restrictive assumptions about functional forms, making it a more flexible and robust approach compared to traditional regression models ^[19]. The results show that the average treatment effect (ATE) is -0.022, indicating that, on average, an increase in executive compensation reduces financial leverage. Additionally, the distribution of CATE reveals that most treatment effects fall within the range of [-0.04, 0], with the peak around -0.02. This suggests that the negative effect of executive compensation on financial leverage is consistent across most conditions. The findings support the main regression results while capturing potential non-linear relationships and heterogeneity in the data, further enhancing the robustness of the conclusions.

Replacement of Dependent Variable. The paper uses the ratio of total liabilities to total assets to measure the level of firms' financial leverage, replacing the original metrics in the regression ^[20, 21]. Column (1) of Table 3 reports the regression conducted after replacing the measure of the explained variables, and the results show that after replacing the measure of the explained variables, the coefficient on executive compensation is still significantly negative at the 1% level, which is in line with the results of the baseline regression, proving the robustness of H1.

Replacement of Independent Variable. According to the methodology of Sajnóg and Rogozińska-Pawelczyk, this study uses the natural logarithm of the total executive compensation as the new explanatory variable for regression analysis ^[22]. Column (2) of Table 3 reports the regression results after replacing the explanatory variable measure; executive compensation is significantly and negatively related to the level of firms' financial leverage and the coefficients in front of the explanatory variables are still significantly negative at the 1% level, further illustrating the robustness of H1.

Table 3. Partial robustness test results

	Replacement of Dependent and Independent variables		Lagged one-period control variables
	(1) Lev2	(2) Lev	(3) Lev
Salary	-0.0125*** (-5.42)		-0.186*** (-9.17)
Salary2		-0.181*** (-11.68)	
Size	0.0928*** (32.34)	0.201*** (9.90)	0.235*** (11.11)
Largest	0.102*** (5.78)	0.216 (1.55)	0.262* (1.87)
Top10	-0.150*** (-10.68)	-0.963*** (-8.66)	-0.523*** (-4.60)
TobinQB	-0.00236*** (-2.93)	-0.0394*** (-7.93)	-0.00939** (-2.32)
Indrate	-0.0169	-0.0400	-0.247

	(-0.84)	(-0.22)	(-1.43)
Rapid	0.00505***	-0.0254***	-0.00700
	(5.83)	(-4.72)	(-1.21)
Netprofit	0.000870	0.360***	0.131**
	(0.20)	(4.62)	(2.05)
_cons	-1.419***	-0.192	-0.908*
	(-20.35)	(-0.40)	(-1.79)
year FE	YES	YES	YES
Industry	YES	YES	YES
FE			
N	23497	23497	17115

t statistics in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Lagged one-Period Control Variables. In order to prevent potential endogeneity issues with the control variables in the regression, and to enhance the robustness of the results, this paper lags all control variables in the model by one period to mitigate endogeneity concerns. The regression results are shown in Column (3) of Table 3, where the coefficient before executive compensation is still significantly negative at the 1% level after addressing the endogeneity problem of the control variables, proving the robustness of the benchmark regression results.

Instrumental Variable Approach. There may be reverse causality in the model, as the financial leverage of a firm can amplify both profits and losses, while the firm's performance and risk profile may, to some extent, affect executive compensation. Additionally, there may be other omitted variables in the model those are unobserved or difficult to measure, which may lead to an omitted variable problem if they are not considered in the model. In order to solve the endogeneity issue due to possible reverse causality and omitted variables in the model, this paper uses return on assets (ROA) as an instrumental variable and applies the Two-Stage Least Squares (2SLS) method. ROA calculates the profitability of a firm relative to its total assets and evaluates the efficiency of a firm's ability to utilize its assets to generate profits. A higher ROA typically signals better corporate performance, which may lead to an increase in executive compensation. Moreover, ROA is less likely to have a direct impact on corporate financial leverage through other factors, satisfying the condition of exogeneity of the instrumental variable.

The regression results of the instrumental variable method are shown in Table 4, columns (1) and (2) report the results of the first and second stage least squares regressions respectively. The results demonstrate that the Kleibergen-Paap rk LM statistic significantly rejects the original hypothesis at the 1% level and passes the test of non-identifiability. The value of Kleibergen-Paap rk Wald F statistic is 509.315, which is greater than the Stock-Yogo critical value of 16.38 at the 10% level indicating that the instrumental variables do not suffer from weak instrumental variables. After the endogeneity issue is addressed, executive compensation continues to have a significant negative effect on corporate financial leverage, which is consistent with the benchmark regression results and confirms the robustness of these results.

Table 4. Instrumental Variable Method Test Results

VARIABLES	(1) first Salary	(2) second Lev
IV	1.820*** (22.57)	
Salary		-2.834*** (-18.59)
Control variables	YES	YES
Kleibergen-Paap rk LM statistic	477.264*** (0.0000)	
Kleibergen-Paap rk Wald F statistic	509.315 (10% maximal IV size=16.38)	
year FE	YES	YES
Industry FE	YES	YES
Observations	23,497	23,497
Number of id	4,106	4,106
R-squared		-1.186

t statistics in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.4 Heterogeneity Analysis

Through the previous analysis, it can be found that the results of the benchmark regression initially prove that the improvement of executive compensation would reduce the level of financial leverage from 2015 to 2023, and the robustness test further proves the robustness of the benchmark regression results. On the basis of the previous regression results, the paper continues to study whether the difference in the nature of property rights will lead to differences in the impact of executive compensation on the financial leverage of enterprises. By analyzing the nature of property rights of different enterprises, this paper retains the data of SOEs and private enterprises to continue the regression. Table 5 presents the regression results under different nature of property rights, with column (1) and column (2) reporting the impact of executive compensation on financial leverage for SOEs and private enterprises respectively. The results indicate that, regardless of ownership type, executive compensation is significantly and negatively correlated with financial leverage, with all coefficients being significantly negative at the 1% level. The coefficient for executive compensation in SOEs is -0.301, which is greater in absolute value than the coefficient for private enterprises (-0.221), indicating the degree of influence of executive compensation on corporate financial leverage in SOEs is greater than that in private enterprises, thus verifying H2.

Furthermore, a random forest model was employed to analyze the importance of each variable. This method is valuable for identifying the relative importance of variables and revealing nuanced differences in how executive compensation affects financial leverage across firms of different sizes [23]. It provides a more flexible and robust understanding of the factors driving financial leverage, reinforcing the validity of the study's findings. The results show that the control variable company size (Size) had a high importance score of 0.372, indicating a strong explanatory power for financial leverage. Meanwhile, executive compensation had an importance score of 0.090. Although lower than company size, it still demonstrated a certain level of explanatory power for financial leverage. Based on this, the study groups the sample by company

size to examine how executive compensation affects financial leverage. After controlling for fixed effects, the results show a consistent negative relationship between executive compensation and financial leverage in both small and large companies. As shown in column (3) and column (4), for small companies, the coefficient is -0.135, significant at the 1% level, while for large companies, the coefficient is -0.250, also significant at the 1% level. These findings indicate that the negative effect of executive pay on financial leverage is stronger in large companies than in small ones, showing a size-based difference in its impact.

Table 5. Heterogeneity Analysis Results

	(1) Lev	(2) Lev	(3) Small Size	(4) Large Size
Salary	-0.301*** (-8.25)	-0.221*** (-9.63)	-0.135*** (0.02)	-0.250*** (0.03)
Size	0.299*** (6.19)	0.144*** (6.38)		
Largest	0.371 (1.42)	0.0815 (0.43)	-0.037 (0.16)	0.244 (0.18)
Top10	-1.328*** (-4.86)	-0.613*** (-5.06)	-0.903*** (0.12)	-0.791*** (0.15)
TobinQB	-0.0454*** (-4.21)	-0.0332*** (-5.49)	-0.023*** (0.01)	-0.065*** (0.01)
Indrate	-0.246 (-0.84)	0.201 (0.81)	0.201 (0.20)	-0.288 (0.23)
rapid	-0.0183 (-1.18)	-0.0213*** (-4.24)	-0.010 (0.01)	0.039** (0.01)
Netprofit	0.239* (1.95)	0.403*** (3.72)	0.318*** (0.04)	0.355*** (0.05)
_cons	-0.225 (-0.20)	1.415** (2.51)	3.495*** (0.37)	5.692*** (0.40)
year FE	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
N	7400	14265	11988	11988

6 Conclusions

This paper takes the “Deleveraging Policy” implemented by the Chinese government since 2015 as the starting point, collects and organizes the data disclosed by A-Share non-financial SOEs and private companies listed in China between 2015 and 2023, and constructs a Fixed-Effects Model to empirically analyze the effect of executive compensation on corporate financial leverage. It is found that there is a significant decrease in the level of corporate financial leverage with the increase in executive compensation. A series of robustness tests are conducted by applying the Causal Forest DML model, replacing explained and explanatory variables, lagging one period of the control variables, and using the instrumental variables method, the research conclusions still hold. From the theoretical analysis of the influencing mechanism, it is found that the enter-

prises can incentivize executives to reduce financial leverage via strategies such as repaying interest-bearing debt, increasing internal financing, and raising equity financing by establishing a reasonable compensation system. Moreover, the heterogeneity analysis reveals that this effect is more pronounced in state-owned enterprises and larger firms, suggesting that firm size and ownership structure significantly influence the relationship between compensation and leverage.

These findings offer actionable implications for policymakers and regulators. For state-owned enterprises, the results underscore the importance of using executive compensation as an effective policy tool for financial deleveraging. Regulators should strengthen the alignment of executive incentives with long-term risk management goals by establishing performance-based compensation frameworks, particularly in sectors with high leverage risks. For example, in large state-owned enterprises like Sinopec and China Mobile, executive compensation has been strategically linked to reducing financial leverage. These companies have adopted compensation models that incentivize top executives to focus on repaying debt and increasing equity financing, which has successfully supported their deleveraging efforts. For private enterprises, the findings highlight the need for stronger regulatory frameworks to mitigate “rule of man” practices and promote standardized governance structures. Companies like BYD and Gree Electric, where a more family-centric governance model prevails, show how weaker incentives linked to executive compensation can undermine effective risk management. In these cases, improving the linkage between executive pay and performance metrics is critical to ensuring that executives are incentivized to manage capital structure effectively and reduce financial risks. Financial institutions also play a critical role. When assessing credit risk, they should factor in the firm’s ownership structure and size to design tailored financing solutions. For small enterprises, which are less responsive to executive compensation adjustments, targeted policies such as preferential credit terms or risk-sharing mechanisms could help them achieve healthy growth while maintaining sustainable leverage levels. By contrast, larger companies should be encouraged to optimize their capital structures through equity financing, reducing dependency on debt. On the enterprise level, firms should prioritize aligning managerial incentives with shareholder interests by designing standardized and transparent compensation contracts. Large firms, in particular, can leverage executive compensation to promote long-term financial stability, while small firms may benefit from external guidance and support in establishing effective incentive systems.

The study also has some limitations. It is primarily focused on non-financial state-owned and private A-share listed companies in China, which limits the scope of generalizability, particularly for other types of firms. By excluding financial industries and non-listed companies, the study may not fully capture the diversity of capital structures that exist in these sectors. Specifically, financial institutions, which have more complex regulatory and financing structures, could exhibit distinct patterns in executive compensation and its impact on financial leverage. Moreover, the research predominantly uses cross-sectional data from 2015 to 2023, employing a fixed-effects model that captures only the immediate effects of executive compensation on financial leverage. This approach does not consider the potential dynamic nature of capital structure adjust-

ments, particularly the time lags in corporate financial decisions. Therefore, future research could incorporate more sophisticated time-series or dynamic panel models to examine delayed effects and the long-term adjustments of financial leverage in response to changes in executive compensation. Finally, although industry fixed effects are controlled for, the study does not explore the potential heterogeneity within different industries. It is likely that capital-intensive industries, such as energy or manufacturing, may respond differently to executive compensation compared to asset-light industries like technology or services. This limitation suggests that future studies should delve into industry-specific factors to better understand how these characteristics influence the relationship between executive compensation and financial leverage.

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