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Executive Equity Incentives and Corporate Perception of Economic Policy Uncertainty

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Abstract: The perception of uncertainty brought about by fluctuations in economic policy is one of the greatest challenges faced by businesses in their decision-making processes. Executive equity incentives are an effective tool for reducing corporate perception of economic policy uncertainty. Empirical results show that for every 1% increase in executive equity incentives, there is an average decrease of 3.5% in the corporate perception of economic policy uncertainty. Mechanism tests indicate that executive equity incentives can reduce corporate perception of economic policy uncertainty through two main pathways: curbing managerial myopia and enhancing the diversity of the management team. Heterogeneity tests show that the effects of executive equity incentives are more pronounced in state-owned enterprises and high-tech companies. This paper provides a new approach to reducing corporate perception of economic policy uncertainty and reveals the internal logic of how executive equity incentives affect corporate perception of economic policy uncertainty.

Keywords: Executive Equity Incentives, Economic Policy, Uncertainty

1. Introduction

Decision-making within microeconomic entities is often driven by anticipations of future conditions [1]. When businesses encounter increased uncertainty regarding economic policy, it complicates their ability to develop consistent expectations for the future [2]. The concept of corporate economic policy uncertainty is defined as the individual perception of potential changes in economic policy by company leaders and key stakeholders [3]. While the presence of economic policy uncertainty is a factual aspect of the business environment, its perceived impact varies significantly among different companies. Thus, the discussion on corporate reactions to economic policy uncertainty focuses on how these entities subjectively interpret potential policy fluctuations, rather than on any objective likelihood of such changes occurring.

In recent years, influenced by the COVID-19 pandemic, geopolitical frictions, trade conflicts, and other issues, the international economic situation is full of uncertainties, with economic policy uncertainty gradually increasing. Generally speaking, this leads to a concurrent rise in businesses' perception of economic policy uncertainty to a certain extent [4]. Extensive literature has confirmed that an increase in the level of businesses' perception of economic policy uncertainty can inhibit enterprise development in many aspects. Literature primarily starts from the real options theory,

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pointing out that a higher level of economic policy uncertainty perception among businesses increases the real option value of current investment opportunities, prompting enterprises to postpone their long-term development plans and reducing the level of sustainable development [5][6]. Moreover, current studies also indicate that an increased level of businesses' perception of economic policy uncertainty leads to an increase in the holding amount of financial assets by enterprises instead of real assets[7]. It also reduces enterprises' ability to control future risks, increasing the difficulty of accurately estimating future operational cash flows [8] and diminishes the effectiveness of corporate governance, suppressing investors' investment behaviors[9]. Therefore, guiding enterprises to self-adjust in a high economic policy uncertainty context, effectively reducing their perception of economic policy uncertainty, and avoiding the negative impact of objective economic policy fluctuations on enterprises have become urgent and significant issues to address.

Managers play a decisive role in responding to perceived economic policy uncertainty. Managers with good leadership skills and market sensitivity can reduce the level of corporate economic policy uncertainty perception through the correct selection and implementation of business strategies, offsetting the negative impacts of economic policy uncertainty [10]. Based on the important position of management in corporate strategic development, establishing incentive contracts for management, especially long-term and effective incentives, has become an important means to further promote the intrinsic motivation of management.

Thus, the main objective of this article is to analyze the relationship and impact mechanisms between executive equity incentives and corporate perception of economic policy uncertainty, and to test and analyze the conclusions drawn.

Compared to existing literature, the possible marginal contributions of this paper are: (i) to construct quantitative index of corporate economic policy uncertainty perception from a quantitative perspective, overcoming the limitations of existing indicators that cannot distinguish between perceptions among different businesses; (ii) few scholars have explored from the perspective of corporate decision-makers how to effectively reduce the perception of economic policy uncertainty. This paper focuses on executive equity incentives, providing a new and feasible path for reducing corporate perception of economic policy uncertainty; (iii) to elucidate the pathway mechanisms between executive equity incentives and corporate perception of economic policy uncertainty and uses data from Chinese A-share listed companies to provide micro-empirical support for the conclusions of this paper.

2. Literature Review

2.1. Executive Equity Incentives

The inherent conflict caused by the separation of ownership and control in corporations is a primary catalyst for agency problems. Therefore, to reduce the divergence of interests between managers and corporate shareholders, public companies link managers' personal goals closely to those of the owners through equity incentives, mitigating managers' self-serving motives. Mainstream scholars also suggest from the perspective of optimal contract theory that equity incentives for managers help lower agency costs and enhance shareholder value [11].

Existing research mainly focuses on how equity incentives enhance corporate governance efficiency and mitigate agency problems [12]. The mechanism by which equity incentives improve corporate governance efficiency can be analyzed from the perspectives of forward-looking. Equity incentives for company managers help strengthen the supervision of the controlling shareholders' expropriation of interests from other small and medium shareholders, and curb the potential "collusive tunneling tendency" of controlling shareholders [13]. At the same time, equity incentives can effectively increase managers' willingness to take risks, enhance the level of corporate innovation,

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and reduce the likelihood of managerial myopia, a tendency to "sacrifice the long-term for the short-term" [14]. The question of how equity incentives can alleviate agency problems can be explained from the perspectives of "efficiency enhancement" and "reducing information asymmetry". Efficiency contract theory points out that inefficiency in board management not only leads to poor corporate management but also incites "counter-productive behavior" among executives. Equity incentives can improve operational efficiency and optimize capital allocation by strengthening managerial control over the enterprise [15]. Equity incentives also guide managers to mitigate self-serving motives, avoiding deliberate concealment of certain information from shareholders, such as the true operational situation of the company or potential development opportunities.

2.2. Corporate Perception of Economic Policy Uncertainty

How businesses make optimal decisions in the face of economic policy uncertainty has always been an important topic in economic research. Properly recognizing and addressing this issue can help businesses develop smoothly and mitigate the negative impacts of fluctuations in business performance. Existing literature mainly explores the sources and impacts of economic policy uncertainty perception. Research on the sources of perception primarily focuses on internal and external factors. In terms of internal factors, scholars mainly interpret the reasons behind corporate economic policy uncertainty perception from the perspectives of corporate governance mechanisms and managerial behavior [16]. In the analysis of external factors, researchers explain from the perspectives of the frequency of government economic policy adjustments [17], real economic conditions, and systemic financial risks [18].

Research on the impacts related to corporate perception of economic policy uncertainty mainly focuses on the micro-level. When the perception of uncertainty increases, business activities can be significantly impacted. Existing studies indicate that increased perceptions of uncertainty, leading to reduced demand, financial frictions, and other issues, can decrease production efficiency, exacerbate cash flow volatility, and lower the rate of return for businesses. Furthermore, an increase in the level of uncertainty perception can also exacerbate managerial self-interest, intensify conflicts between major shareholders and minor shareholders, and amplify the friction caused by corporate internal agency actions [19].

Existing research has formed a comprehensive understanding of the potential impacts of corporate economic policy uncertainty perception but remains at the level of analyzing objective facts and has not yet proposed specific solutions or approaches to reduce corporate economic policy uncertainty perception.

3. Theoretical Analysis and Hypothesis Development

Higher levels of perceived economic policy uncertainty can inhibit a company's rational decision-making abilities and negatively impact its sustainable development level. Improvements in both internal and external elements of a business can help reduce this perception of uncertainty. This paper posits that executive equity incentives are an important means to optimize internal operations and hedge against external market risks. Based on this, the paper proposes Hypothesis 1:

H1: Executive equity incentives can reduce the level of corporate perception of economic policy uncertainty.

Further analysis in this paper suggests that executive equity incentives can effectively reduce the corporate perception of economic policy uncertainty by alleviating managerial myopia and promoting diversity within the management team.

Regarding managerial myopia, the theory of managerial myopia suggests that a lack of proper incentives can lead to a decrease in the level of risk-taking by company management. Additionally,

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the corporate pressure view also indicates that the internal and external pressures faced by management make them inclined to quickly establish a personal reputation in the market and improve short-term performance rather than focus on long-term development [20]. Equity incentive measures can increase the level of risk-taking by management, weaken self-serving motives, and thereby effectively curb managerial myopia. The "modern stewardship" theory points out that managerial ownership promotes a community of interest between managers and shareholders, satisfying their profit motives from residual ownership rights, which tends managers to favor organizational interests maximization, improving the problem of managerial myopia.

The weakening of managerial myopia tendencies can reduce the level of corporate perception of economic policy uncertainty. The management defense motive viewpoint within agency theory indicates that incentive mechanisms formed by a company can suppress " reactive management defense" phenomena by management, reducing executives' "inaction" motives. Moreover, managerial incentives enable management to effectively play the "steward" role, through " proactive management defense" to take effective measures, enhancing the possibility of proactive transformation by executives to reduce the level of corporate perception of economic policy uncertainty, minimizing potential losses faced by the company. Information asymmetry theory suggests that the reduction in managerial myopia levels decreases the possibility of executives creating information asymmetries, allowing all information to assist in rational decision-making by the company, thus reducing the level of corporate perception of economic policy uncertainty. Based on this, the paper proposes Hypothesis 2:

H2: Executive equity incentives can reduce the level of corporate perception of economic policy uncertainty by curbing managerial myopia.

Regarding the diversity of the management team, upper echelons theory suggests that executives are the main decision-making body of a company, and the characteristics of the executive team are reflected in actual management practices. Management teams lacking incentives have serious structural problems, affecting the level of company management. Executives tend to form teams through nepotism and clique-building, leading to a lack of diversity within the executive team. Equity incentives are an important means of forming diversity within the management team. Tournament theory indicates that equity incentives can encourage excellent managers to enhance comparative competition, increasing the overall effort level of the management, stimulating potential management capabilities, optimizing structural configurations, etc. Equity incentives increase the diversity of the management through a "survival of the fittest" approach, aligning individual goals with team goals while enhancing the effectiveness of corporate investments.

The diversity of the management team can reduce the level of corporate perception of economic policy uncertainty. Management cognition theory indicates that managers may form different opinions due to differences in their knowledge structures [21], and homogenized management teams are prone to groupthink, leading to subjective cognitive biases in information. Therefore, the heterogeneity in the backgrounds of management team members, such as education, career, age, etc., can increase the cognitive diversity of the executive team, strengthen the rationality of corporate decision-making, and reduce the level of corporate perception of economic policy uncertainty. Based on this, the paper proposes Hypothesis 3:

H3: Executive equity incentives can reduce the level of corporate perception of economic policy uncertainty by promoting the formation of diversity within the management team.

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4. Research Design

4.1. Sample Selection and Data Sources

This study focuses on companies listed on the Shanghai and Shenzhen A-shares from 2011 to 2021. Data were collected from the Juchao Information Network, China Securities Market & Accounting Research (CSMAR) database, and Wind database. This study excludes companies in the financial industry as well as those marked with S, T, and PT, and manually completes some missing values in the sample by reviewing annual reports. After these adjustments, a total of 19,674 observations were obtained. To prevent the impact of outliers on the accuracy of the research results, continuous variables were winsorized at the 1% level at both tails.

4.2. Definition and Selection of Variables

4.2.1. Dependent Variable

Perception of Corporate Economic Policy Uncertainty (EPU). Inspired by the methodology of Nie Huihua and colleagues [22], this research adopts text mining techniques to analyze data. It utilizes Python for web scraping and the Jieba tool for text segmentation to gather relevant data from the Management Discussion and Analysis (MD&A) sections of annual reports from publicly traded companies. An index measuring the perception of economic policy uncertainty within corporations is then constructed. If M represents the total word count in the MD&A section, and N signifies the count of words indicating economic policy uncertainty, the index is calculated by the formula $\frac{N}{M} \times 100$ to quantify the level of perceived economic policy uncertainty. Additionally, for enhanced index robustness, two alternative measures are also developed: one excluding numbers (EPUn) and another excluding both numbers and letters (EPUnl) from the uncertainty-related word count.

4.2.2. Independent Variable

Shareholder-oriented Incentives (SOI). Following the research of Hu Jingtao et al. [23], executive equity incentives are defined as the ratio of the actual number of stock options or restricted shares granted in the company's equity incentive plans to the total number of shares.

4.2.3. Mechanism Variables

（1）Managerial Myopia (Myopia). Building on the findings of Hu Nan et al. [24], this study examines the Management Discussion and Analysis (MD&A) sections of annual reports from listed companies. It develops a set of words indicative of a "short-term outlook" and measures the prevalence of these words as a percentage of overall word frequency in the MD&A sections. An elevated value of this measure indicates a stronger predisposition towards managerial myopia.

（2）Management Team Heterogeneity (TeamHG). Expanding on the work by Huang Yue et al. [25], this research categorizes the diversity of the management team into three distinct aspects: age, educational background, and functional background. These dimensions are quantified as follows: age diversity is calculated by the standard deviation of the team members' ages relative to the mean age; educational diversity is determined by the standard deviation of the educational qualifications relative to the mean level of education; and functional diversity is measured by the standard deviation of the team members' professional backgrounds relative to the average professional background. Higher values in these metrics signify greater diversity within the management team.

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4.2.4. Control Variables (Controls)

In alignment with established studies, this analysis incorporates several control variables: company size (Size) defined as the natural logarithm of the total assets at the end of the year; company age (Age) calculated as the natural logarithm of the difference between the current year and the year the company went public; financial leverage (LEV) measured by the ratio of total debt to total assets; return on equity (ROE) expressed as the ratio of net income to average equity; ownership concentration (CR10) denoted by the share percentage owned by the top ten shareholders. CEO duality (Dual) is indicated by a binary variable, 1 if the CEO and chairman are the same person and 0 otherwise; operational cash flows (Cash) as the ratio of net operating cash flow to total assets; the proportion of independent directors (INR) as the fraction of independent to total board members; board size (Board) measured by the natural logarithm of the number of board members; and company growth (Growth) calculated as the percentage change in total assets from the start to the end of the year.

Additionally, to account for temporal and sectoral variations in the data, the study includes dummy variables for each of the 11 years covered in the study and for each of the 80 industries classified under the 2012 standards set by the China Securities Regulatory Commission.

4.3. Empirical Model Construction

To test the aforementioned hypotheses, the following model is constructed for analysis:

$$EPU_{i,t} = \beta_0 + \beta_1 SOI_{i,t} + \sum Controls_{i,t} + \sum Year + \sum Industry + \sum Province + \varepsilon_{i,t}$$

Where EPU represents the perception of economic policy uncertainty by the company, SOI represents the intensity of executive equity incentives carried out by the company, and Controls represents the control variables defined in this paper. Year represents the year dummy variables, Industry represents the industry dummy variables, Province represents the province dummy variables, and ε represents the residual. This paper primarily focuses on the coefficient β_1. If β_1 is less than 0 and statistically significant, it indicates that executive equity incentives are negatively correlated with corporate perception of economic policy uncertainty, thereby supporting the hypotheses of this paper.

5. Empirical Research Results Analysis

5.1. Descriptive Analysis

The statistical analysis detailed in Table 1 reveals that the range of corporate economic policy uncertainty perception (EPU) among Chinese listed companies varies widely, with a minimum recorded at 0.0141 and a maximum at 0.4846. This indicates considerable variability in how different companies perceive economic policy uncertainty. Regarding equity incentives, the average value stands at 0.1894, reflecting that a relatively modest proportion of companies have adopted such measures. The equity incentives show a minimum of 0.000 and reach up to 1.1048, demonstrating a broad disparity in the level and application of equity incentives across firms.

Table 1: Descriptive Statistics of Variables

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
EPU	19674	0.1099	0.1025	0.0141	0.4846
EPUn	19674	0.1129	0.1052	0.0145	0.5010
EPUnl	19674	0.1134	0.1056	0.0146	0.5043

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Table 1: (continued).

SOI	19674	0.1894	0.2895	0.0000	1.1048
Size	19674	22.2238	1.2761	19.9203	26.1053
Age	19674	2.9033	0.3264	1.7918	3.4965
ROE	19674	0.0953	0.0739	0.0031	0.3936
LEV	19674	0.4133	0.1995	0.0535	0.8630
CR10	19674	0.5900	0.1488	0.2474	0.9027
Dual	19674	0.2685	0.4432	0.0000	1.0000
Cashflow	19674	0.0523	0.0669	-0.1422	0.2461
INR	19674	0.3748	0.0527	0.3333	0.5714
Board	19674	2.1292	0.1945	1.6094	2.7081
Growth	19674	0.1573	0.2439	-0.2019	1.4206

5.2. Basic Test Results

Table 2 reports the test results for the correlation between executive equity incentives and corporate economic policy uncertainty perception. Column (1) controls for time and industry fixed effects, while columns (2)-(4) control for time, industry, and province fixed effects. The results show that the coefficient of executive equity incentives is significantly negative at the 1% level across columns (1)-(4). These results indicate a significant negative correlation between executive equity incentives and corporate economic policy uncertainty perception, confirming Hypothesis H1.

Table 2: Basic Test Results

Variable	EPU	EPU	EPUn	EPUnl
	(1)	(2)	(3)	(4)
SOI	-0.0400***	-0.0350***	-0.0356***	-0.0357***
	(-8.9615)	(-7.9483)	(-7.8974)	(-7.8797)
Controls	Yes	Yes	Yes	Yes
Year/Industry	Yes	Yes	Yes	Yes
Province	No	Yes	Yes	Yes
N	19674	19674	19674	19674
R^2	0.0302	0.1008	0.1004	0.1000

Note: *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively, with t-values of coefficients in parentheses. Regression uses clustered robust standard errors.

5.3. Mechanism Test

Following Jiang Ting's [26] approach for mechanism testing, column (1) of Table 3 reports the impact of executive equity incentives on managerial myopia. In column (1), the coefficient is significantly negative at the 1% level, indicating that executive equity incentives can effectively curb managerial myopia, thereby reducing the level of corporate economic policy uncertainty perception, confirming Hypothesis H2. Columns (2)-(4) of Table 3 report the impact of executive equity incentives on the formation of management team heterogeneity. In columns (2)-(4), coefficients are significantly positive at the 1% level, indicating that executive equity incentives can effectively promote the formation of management team heterogeneity, thereby reducing the level of corporate economic policy uncertainty perception, confirming Hypothesis H3.

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Table 3: Mechanism Test Results

Variable	Myopia	TeamHG-profession	TeamHG-age	TeamHG-education
	(1)	(2)	(3)	(4)
SOI	-0.0005***	0.0058**	0.0138***	0.0957***
	(-8.8114)	（2.1364）	（9.2260）	（13.2943）
Controls	Yes	Yes	Yes	Yes
Year/Industry	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes
N	19674	19674	19674	19674
R^2	0.126	0.145	0.104	0.126

Note: *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively, with t-values of coefficients in parentheses. Regression uses robust standard errors.

6. Robustness Tests

6.1. Robustness Checks

To verify the robustness of our empirical results, we conducted tests under different scenarios, mainly including the following aspects.

6.1.1. Lagging the Core Explanatory Variable

Given the reality that businesses cannot swiftly adjust their corporate strategies, there might be a mismatch between executive equity incentives and the corporate economic policy uncertainty perception index. The reduction in economic policy uncertainty perception could potentially promote executive equity incentives, posing a risk of reverse causality. Therefore, we lagged the executive equity incentive index by one period (L.SOI). Table 4 reports the regression results after adjusting the core explanatory variable. In columns (1)-(3), the lagged executive incentives significantly negatively affect the corporate economic policy uncertainty perception index at the 1% level across different indicators, consistent with previous findings, further proving the validity of our core conclusions.

Table 4: Robustness Test Results for Lagged Variables

Variable	EPU	EPUn	EPUnl
	(1)	(2)	(3)
L. SOI	-0.0353***	-0.0360***	-0.0360***
	(-6.9024)	(-6.8567)	(-6.8382)
Controls	Yes	Yes	Yes
Year/Industry/Province	Yes	Yes	Yes
N	13214	13214	13214
R^2	0.1126	0.1117	0.1113

Note: *, **, *** respectively represent significance levels of 10%, 5%, and 1%, with t-values of coefficients in parentheses. The regression uses clustered robust standard errors.

6.1.2. Adding Individual Fixed Effects

Unique factors among different companies may potentially affect the main conclusions of this paper. Therefore, to enhance the robustness of the conclusions, individual fixed effects (Individual FE) were further added to the regression model. The results are shown in Table 5. In columns (1)-(3), after adding individual fixed effects, the coefficients of executive equity incentives on the level of

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corporate economic policy uncertainty perception, under different measurement standards, are significantly negative at the 1% level, further proving the robustness of our conclusions.

Table 5: Individual Fixed Effects Test Results

Variable	EPU	EPUn	EPUnl
	(1)	(2)	(3)
SOI	-0.0316***	-0.0324***	-0.0324***
	(-7.3084)	(-7.3021)	(-7.2909)
Controls	Yes	Yes	Yes
Year/Industry/Province	Yes	Yes	Yes
Individual FE	Yes	Yes	Yes
N	19674	19674	19674
R^2	0.0678	0.0676	0.0673

Note: *, **, *** respectively represent significance levels of 10%, 5%, and 1%, with t-values of coefficients in parentheses. The regression uses clustered robust standard errors.

6.1.3. Tobit Method

Given significant differences in executive incentives across different companies and years, with some companies not implementing equity incentives in certain years, resulting in a proportion of observations with a value of 0 for executive incentives, this paper uses the Tobit model to address the issue of left-censoring for zero-valued data and then proceeds to regression. The regression results are presented in Table 6. In columns (1)-(3), the coefficients of executive equity incentives on the level of corporate economic policy uncertainty perception, under different measurement standards, are significantly negative at the 1% level. The Tobit model's regression results are consistent with those of the basic regression, further proving the robustness of our conclusions.

Table 6: Tobit Model Test Results

Variable	EPU	EPUn	EPUnl
	(1)	(2)	(3)
SOI	-0.0400***	-0.0410***	-0.0410***
	(-13.2279)	(-13.2224)	(-13.1633)
Controls	Yes	Yes	Yes
Year/Industry/Province	Yes	Yes	Yes
N	19674	19674	19674

Note: *, **, *** respectively represent significance levels of 10%, 5%, and 1%, with t-values of coefficients in parentheses. The regression uses robust standard errors.

6.2. Endogeneity Tests

In the previous analysis, we found that executive equity incentives can significantly reduce the level of corporate economic policy uncertainty perception. However, the aforementioned regression analysis might face some endogeneity issues.

6.2.1. Heckman Method

This paper employs the Heckman model for regression analysis, measuring the level of executive equity incentives with the inverse Mills ratio and using the IFSOI dummy variable as the dependent variable for the sample selection mechanism. The regression results of the Heckman model are reported in Table 7. In columns (1)-(3), the inverse Mills ratios are significantly positive at the 1%

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level, indicating the presence of self-selection bias in the sample. The coefficients of executive equity incentives on the level of corporate economic policy uncertainty perception, under different measurement standards, are significantly negative at the 1% level, suggesting that even when self-selection bias is present, the basic regression results still hold, consistent with previous findings, and further proving the robustness of our main conclusions.

Table 7: Heckman Model Test Results

Variable	EPU	EPUn	EPUnl
	(1)	(2)	(3)
IFSOI	-0.0282***	-0.0289***	-0.0289***
	(-8.4992)	(-8.4844)	(-8.4384)
IMR	0.1174***	0.1214***	0.1222***
	（2.7834）	（2.8024）	（-2.8071）
Controls	Yes	Yes	Yes
Year/Industry/Province	Yes	Yes	Yes
N	19674	19674	19674

Note: *, **, *** respectively represent significance levels of 10%, 5%, and 1%, with t-values of coefficients in parentheses. The regression uses robust standard errors.

6.2.2. PSM-DID Method

Due to the intrinsic tendency of well-managed companies to reduce their perception of uncertainty, there exist systemic differences in uncertainty perception across different companies, potentially leading to a selection bias issue in the model. This paper further conducts robustness checks using the Propensity Score Matching (PSM) method on top of the DID (Difference in Differences) test. Control variables, industry and time dummy variables, and a dummy variable indicating whether a company has implemented equity incentives (SOIDID) are set as matching variables. By conducting 1:1 nearest neighbor matching through Logit regression, we aim to minimize systemic differences in uncertainty perception across different companies. After matching, the standardized mean differences of the variables are reduced and all are less than 10%, meeting the balance test criteria. Table 8 reports the regression results under the PSM-DID matching method. The results show that the coefficients of executive equity incentives and corporate economic policy uncertainty perception, across different measurement standards, are significantly negative at the 1% level, once again proving the robustness of the conclusions.

Table 8: PSM-DID Method Test Results

Variable	EPU	EPUn	EPUnl
	(1)	(2)	(3)
SOIDID	-0.0244***	-0.0251***	-0.0251***
	(-11.7366)	(-11.7763)	(-11.7168)
Controls	Yes	Yes	Yes
Year/Industry/Province	Yes	Yes	Yes
N	19,674	19,674	19,674
R^2	0.0283	0.0282	0.0279

Note: *, **, *** respectively represent significance levels of 10%, 5%, and 1%, with t-values of coefficients in parentheses. The regression uses robust standard errors.

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7. Heterogeneity Tests

7.1. Nature of the Enterprise

In contrast to private firms, state-owned enterprises typically incur higher agency costs, are more prone to collusion in tunneling practices, and operate with less flexible management systems and mindsets. As a result, state-owned enterprises tend to perceive a higher level of economic policy uncertainty. The introduction of executive equity incentives in these enterprises appears to mitigate managerial short-sightedness effectively, expand the breadth of managerial perspectives, and thus diminish the perception of economic policy uncertainty [27]. The findings, as presented in Table 9, illustrate these dynamics. Specifically, the impact of executive equity incentives is shown to be non-significant for non-state-owned enterprises in column (1), whereas for state-owned enterprises, the impact is significant and negatively correlated with economic policy uncertainty perception at the 1% significance level in column (2). This outcome suggests a more substantial influence of executive equity incentives on reducing economic policy uncertainty perceptions within state-owned enterprises.

7.2. Level of Information Asymmetry

Compared to companies with a lower degree of information asymmetry, those with a higher degree have lower transparency, which leads to a decrease in the scientific and rational decision-making by managers and weaker corporate governance [28]. Equity incentives can help avoid information blockages caused by executive individual will, by strengthening communication and conveying to enhance the rational decision-making level of the management team, alleviating the increase in corporate economic policy uncertainty perception caused by information asymmetry. Table 9 reports the related results. In column (3), the coefficient for equity incentives in companies with low information asymmetry is not significant, while in column (4), the coefficient for equity incentives in companies with high information asymmetry is significantly negative at the 5% level. This indicates that if a company belongs to the category with a higher level of information asymmetry, the effect of executive equity incentives on reducing corporate economic policy uncertainty perception is more pronounced.

Table 9: Heterogeneity Test by Nature of the Enterprise

Variable	SOCs		Imformation Asymmetry	
	(1)	(2)	(3)	(4)
	Non-State-Owned Enterprises	State-Owned Enterprises	Low Degree of Information Asymmetry	High Degree of Information Asymmetry
SOI	-0.0007	-0.0320***	-0.0099	-0.0331**
	(-0.0068)	(-3.5537)	(-0.8818)	(-2.2813)
Controls	Yes	Yes	Yes	Yes
Year/Industry	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes
N	7463	12136	10037	9637
R^2	0.0673	0.0834	0.0935	0.0607

Note: *, **, *** respectively represent significance levels of 10%, 5%, and 1%, with t-values of coefficients in parentheses. The regression uses clustered robust standard errors.

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8. Conclusions and Recommendations

8.1. Conclusion

The prevalence of economic policy uncertainty is a defining trait of today's market environment. Addressing how companies perceive and cope with this uncertainty is vital for effective corporate governance. This study advocates for the strategic use of equity incentives as a crucial tool in this context. The findings suggest that an increased presence of executive equity incentives correlates with a reduction in the perceived levels of economic policy uncertainty within corporations. The analysis identifies two primary mechanisms through which these incentives function: they limit short-term thinking among managers and encourage diversity within management teams. Further, comprehensive robustness tests and examinations of endogeneity support the validity of these findings across various conditions. Particularly, the effectiveness of executive equity incentives in reducing perceptions of economic policy uncertainty is more significant in state-owned enterprises and in environments characterized by high informational asymmetry. The implications of this research indicate a novel approach for companies to enhance their governance practices and bolster their capacity for sustainable growth.

8.2. Recommendations

First, enterprises should pay attention to the decisive role of executive equity incentives in corporate management. Through equity incentive plans, enterprises can further motivate managers to embrace new tools and thinking, weaken managerial self-interest, and optimize the management structure. Executive equity incentives have become an important means to improve enterprise management levels and promote sustainable development. Second, state-owned enterprises and companies with a high level of information asymmetry should pay special attention to the role of executive equity incentives. Executive equity incentives can help reduce agency costs in these enterprises, leverage individual managerial strengths, and reduce the level of corporate economic policy uncertainty perception. Third, when implementing executive equity incentives, enterprises can offer more favorable measures to beneficiaries, maintain clear standards for equity incentives, and perfect the incentive implementation process to prevent excessive and short-term incentives. Fourth, perfecting the system of equity incentives is an important safeguard for promoting executive equity incentives. We should further strengthen laws and policies covering the entire process of equity incentives, enhance the supervision of executive equity incentives, fill the gaps and deficiencies of the existing system, and fully leverage the advantages and benefits of executive equity incentives.

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