The Impact of EPU on Corporate Investment in China: Insights for State-Owned Enterprises and the XPCC Enterprises

Jing Wang[1,2], Yinan Li[3,*]

[1]Bingtuan Xingxin Vocational and Technical College, Tiemenguan City, Xinjiang Uygur Autonomous Region, 841007, China
[2]School of Business and Economics, Universiti Putra Malaysia, 43400, Seri Kembangan, Malaysia
[3]Xinjiang LvYuan XinRong Trading Co., Tiemenguan City, Xinjiang Uygur Autonomous Region, 841007, China

*3527015576@qq.com

Abstract. This study investigates how China's economic policy uncertainty (EPU) affects corporate investment levels, with a focus on ownership heterogeneity. Utilizing the Economic Policy Uncertainty Index and data from 3,307 Chinese A-share firms (2003-2021), we find that heightened EPU significantly suppresses corporate investment. The negative effect is amplified in policy-sensitive enterprises, particularly state-owned entities like the Xinjiang Production and Construction Corps (XPCC) enterprises, which face dual mandates of economic development and social stability. These enterprises' unique organizational structure and heavy policy reliance make their investments more vulnerable to EPU fluctuations. This results highlight the critical role of government intervention in shaping corporate investment behavior under uncertainty. Policymakers should prioritize clear policy guidance and design compensatory mechanisms for state-owned enterprises (SOEs) to mitigate EPU-induced risks. Additionally, SOEs like XPCC enterprises must strengthen internal risk management systems to navigate policy volatility.

Keywords: Policy Uncertainty, Government Intervention, State-owned Enterprises, Corporate Investment

1 Introduction

China’s shift from a planned to a socialist market economy has seen state-owned enterprises (SOEs), including corps enterprises in Xinjiang, play a central role. Despite efforts to address market flaws, frequent policy changes increase economic policy uncertainty (EPU) [1], affecting SOEs due to their policy dependence.

This study investigates EPU’s impact on corporate investment by comparing SOEs, including corps enterprises, with non-SOEs. While EPU negatively affects investment [2], corps enterprises may respond differently due to their dual focus on market

A. Mallik et al. (eds.), *Proceedings of the 2025 6th International Conference on Management Science and Engineering Management (ICMSEM 2025)*, Atlantis Highlights in Economics, Business and Management 4,
https://doi.org/10.2991/978-94-6463-845-5_52

efficiency and regional stability. The case of corps enterprises highlights how SOEs with dual mandates are more vulnerable to EPU, emphasizing the need for a systematic analysis of EPU's varying impacts across ownership types.

2 Literature Review

This study explores how Economic Policy Uncertainty (EPU) influences corporate investment, drawing hypotheses based on existing literature. Corporate investment is essential for development and risk mitigation, but since the global financial crisis, rising EPU has increasingly impacted firms' investment behaviors. The effect can be analyzed from three perspectives: corporate managers, shareholders, and creditors.

From the managerial perspective, heightened EPU complicates forecasting future policy environments, influencing managers' investment expectations concerning policy formulation, implementation, and government intervention. Managers' inherent risk aversion leads them to reduce investments under high EPU to mitigate market and legal risks. [2] further find that uncertainty increases financing costs and hinders managers' ability to plan investments. High-quality managers must thus employ systematic analysis methods to navigate EPU, balancing short-term impacts with long-term policy forecasts, and dynamically adjust investment plans when faced with adverse policies [3].

From the shareholders' perspective, higher EPU complicates assessments of future corporate performance, discouraging direct investments. Studies[4] indicate that EPU raises stock volatility, weakening investors' confidence. Given China's still-maturing investor protection mechanisms, increased policy uncertainty heightens investment caution.

From the creditors' standpoint, increased EPU leads banks and other lenders to tighten credit supply, raising interest rates and decreasing loan availability. This results in higher investment maintenance costs and reduced business investment.

Overall, EPU underscores unpredictability in socio-economic and policy environments, exerting both inhibitory and stimulatory effects on corporate investment. While some research suggests that uncertainty might stimulate corporate innovation and improve decision-making efficiency [5], more studies, grounded in real options and financial friction theories [2], demonstrate that EPU predominantly curtails investment by increasing financing costs and triggering risk aversion. Therefore, we propose the following hypothesis:

Hypothesis 1: An increase in EPU leads to a decline in corporate investment.

In China, the ownership structure of firms—whether state-owned (SOEs) or non-state-owned (non-SOEs)—introduces significant heterogeneity in investment responses to EPU. SOEs, often subject to extensive government control, are particularly sensitive to policy changes. They may be tasked with fulfilling social objectives beyond profit maximization [6]. Due to their close ties with government agendas, SOEs are more deeply affected by policy shifts and associated uncertainties compared to non-SOEs.

When EPU rises, SOEs, lacking clear policy direction, tend to experience sharper investment declines. In contrast, non-SOEs, while also affected, generally demonstrate more agility and independence in navigating uncertainty. Thus, based on these structural differences, we propose:

Hypothesis 2: EPU exerts a greater negative impact on the investment behaviors of State-Owned Enterprises compared to Non-State-Owned Enterprises.

In recent years, research on the XPCC enterprises has gradually increased. [7] pointed out that XPCC enterprises have improved their efficiency through "intelligent transformation and digital upgrading." [8] analyzed the feasibility of XPCC's construction. These studies provide a theoretical basis for XPCC enterprises under policy uncertainty.

3 Methods

This study employs an empirical approach to investigate the impact of Economic Policy Uncertainty (EPU) on corporate investment in China. The methodology involves the use of reliable data sources and statistical analysis techniques. The empirical analysis employs regression models to test the research hypotheses. The primary regression model examines the relationship between EPU and corporate investment. Robust OLS estimates are used, clustering at the company level, to address potential heteroscedasticity and correlation within clusters. All statistical analyses and data manipulations are performed using Stata 17.

Building on the findings of [2], the dependent variable (INVEST) is measured by the cash paid for the acquisition of fixed assets, intangible assets, and other long-term assets in the cash flow statement and the total assets as of the date of measurement. The explanatory variables are economic policy uncertainties, namely EPU and REPU. For specific variable definitions, please refer to Table 1.

Table 1. Variable Definition.

Variable	Variable	Sym-	Measurement
Dependent	Investment	Invest	(Fixed Assets + Intangible Assets + Other Long-term Asset Cash Pay-
Independent	Economic	EPU	Weighted average of monthly EPU index over each quarter (weights: 1/2,
Variables	Relative	REPU	Standardized EPU divided into 10 groups, scaled between 0 and 1
	Market Vola-	MVO	Standard deviation of daily market returns over the past three months
	GDP Growth	GDPG	One-period lagged quarterly GDP growth
	Tobin's Q	TQ	(Share Market Value + Book Value of Liabilities) / Total Assets (lagged
	Firm Size	SIZE	Logarithm of total assets at quarter-end
Control	Cash Flow	CFO	Operating cash flow / Total assets
Variables	Tangibility	TAN	Tangible assets / Total assets
	Cash Hold-	CASH	Cash holdings / Total assets
	Firm Age	AGE	Logarithm of establishment years
	Financial	LEV	Total liabilities / Total assets
	Industry	lnSTD	Logarithm of standard deviation of industry ROA
Moderator	Ownership	SOE	1 for SOEs, 0 for non-SOEs

This study's research hypothesis, H1, posits that an increase in EPU leads to a decline in corporate investment. Following the research approach of [2], we establish the following regression analysis model:

$$INVEST = \alpha 0 + \alpha 1\ Economic\ Policy\ Uncertainty + \alpha 2\ TQ + \alpha 3\ CFO + \alpha 4\ SIZE + \alpha 5\ MVOL + \alpha 6\ STD\_ROA + \alpha 7\ GDPG + \sum Industry\ and\ Quarter\ dummies + \varepsilon \quad (1)$$

The dependent variable INVEST (investment) is computed using the cash paid for the acquisition of fixed assets, intangible assets, and other long-term assets as reported in the cash flow statement and normalized by current total assets. EPU represents economic policy uncertainties, namely EPU and REPU.

4 Results

4.1 Descriptive Statistics

Descriptive statistics for the macroeconomic and enterprise-level data are provided in Table 2, respectively.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Median	Std.Dev.	Min	Max
EPU	108904	3.396	2.486	2.714	0.540	8.889
REPU	108904	0.500	0.427	0.360	0.100	1
MVOL	108904	0.0170	0.0150	0.00700	0.00800	0.0490
GDPG	108904	0.0340	0.0760	0.116	-0.259	0.210
INVEST	108904	0.0330	0.0200	0.0360	0	0.194
TQ	108904	2.059	1.668	1.198	0.915	7.769
SIZE	108904	22.02	21.81	1.270	19.91	26.07
CFO	108904	0.0230	0.0160	0.0320	-0.0560	0.140
TANG	108904	0.935	0.961	0.0820	0.545	1
CASH	108904	0.170	0.128	0.136	0.0130	0.668
AGE	108904	8.328	7	6.506	0	25
LEV	108904	0.406	0.404	0.198	0.0450	0.831
lnSTD ROA	108904	0.0570	0.0350	0.0840	0.00700	0.674

Further subgroup regression analysis reveals that economic policy uncertainty exerts a negative impact on investments by both state-owned and non-state-owned enterprises. Notably, the investment behavior of non-state-owned enterprises is more significantly affected by economic policy uncertainty. Additionally, the interaction effect between economic policy uncertainty and investment opportunities demonstrates that the presence of investment opportunities plays a more pronounced mitigating role on the influence of economic policy uncertainty among non-state-owned enterprises.

4.2 Regression Analysis and Robustness Tests

Overall, the regression results support the research hypotheses and indicate that economic policy uncertainty has a significant negative impact on corporate investment.

Table 3. Economic Policy Uncertainty and Corporate Investment

Variable	(1) INVEST	(2) INVEST	(3) SOEs	(4) Non-SOEs	(5) INVEST	(6) INVEST
EPU	-0.00127***		-0.00190***	-0.00123***		
	(-14.42)		(-14.41)	(-11.02)		
REPU		-0.000607***				
		(-2.74)				
L.EPU					-0.00158***	
					(-15.15)	
L.REPU						-0.00111***
						(-4.43)
TQ	-0.00219***	-0.00231***	-0.00214***	-0.00228***	-0.00275***	-0.00303***
	(-11.37)	(-11.84)	(-6.07)	(-10.14)	(-12.24)	(-13.47)
CFO	0.189***	0.189***	0.192***	0.171***	0.197***	0.199***
	(19.58)	(19.63)	(11.50)	(14.87)	(20.11)	(20.25)
SIZE	-0.00146***	-0.00204***	-0.000777**	-0.00128***	-0.00179***	-0.00251***
	(-5.22)	(-7.57)	(-2.05)	(-3.21)	(-5.44)	(-7.90)
MVOL	0.0191	0.0990***	0.0912***	-0.0244	-0.0671***	0.100***
	(1.17)	(5.55)	(3.67)	(-1.15)	(-3.43)	(4.68)
lnSTD_	0.00578**	0.00593**	-0.000157	0.0134***	0.00640**	0.00644**
	(2.24)	(2.26)	(-0.04)	(3.98)	(2.50)	(2.47)
GDPG	0.00606**	0.0314***	0.0106**	0.00496	0.0266***	0.0352***
	(2.17)	(9.48)	(2.35)	(1.44)	(9.74)	(11.50)
CONS	0.0543***	0.0604***	0.0356***	0.0547***	0.0812***	0.0927***
	(6.87)	(7.68)	(3.27)	(4.83)	(9.05)	(10.44)
N	108904	108904	46436	62468	78321	78321
Adjusted	0.263	0.256	0.294	0.262	0.209	0.199

t statistics in parentheses;* p < .1, ** p < .05, *** p < .01

This findings show that the coefficients of Economic Policy Uncertainty (EPU) for non-SOEs and SOEs are -0.00123 and -0.00190, respectively, both significant at the 1% level. EPU exhibits a significantly negative impact on corporate investment (INVEST) across both groups, with a more pronounced effect in SOEs. This suggests that firms more influenced by policy, such as SOEs, are more sensitive to uncertainty.

To ensure robustness, we re-estimate the models using a one-period lag of EPU. The results remain consistent, confirming the negative relationship between EPU and INVEST. These findings reinforce the reliability of this regression outcomes. Detailed robustness results are presented in Table 3, rows (5) and (6).

5 Discussion

This study reaffirms the findings of [1] that heightened economic policy uncertainty (EPU) negatively impacts corporate investment. Focusing on Chinese firms, the analysis reveals that this adverse effect is especially pronounced in state-owned enterprises (SOEs), such as enterprises in XPCC, which are heavily reliant on government policies and have dual mandates encompassing both economic and social objectives.

Empirical evidence shows that increased EPU leads to a significant reduction in investment activity among these policy-dependent enterprises. The dual responsibilities of SOEs—balancing profitability with socio-political goals—render them especially vulnerable to policy fluctuations, resulting in more conservative investment behavior during periods of heightened uncertainty. In environments marked by elevated uncertainty, firms exhibit greater sensitivity to market dynamics, underscoring the profound influence of government policy on corporate decision-making.

Policymakers should prioritize enhancing policy clarity and stability to foster a favorable environment for corporate investment, particularly for SOEs with substantial policy exposure. Additionally, SOEs should enhance their internal risk assessment and management capabilities to better navigate policy volatility and maintain investment resilience. Given the unique characteristics of entities like the XPCC, policies should also be tailored to their dual mandates, providing clearer guidance and supportive mechanisms that balance economic performance with social responsibilities. Through coordinated efforts between policymakers and enterprise leaders, the adverse effects of policy uncertainty on corporate investment can be mitigated, promoting more stable and sustainable economic development.

This study has certain limitations, notably its restriction to A-share listed firms, excluding unlisted SOEs. This limitation may affect the generalizability of the findings, as unlisted SOEs could exhibit different investment responses to policy uncertainty. Future research should aim to incorporate a broader spectrum of firms and explore alternative, locally grounded measures of policy uncertainty to enhance the external validity and contextual relevance of the results.

6 Conclusion

This study highlights the inverse relationship between economic policy uncertainty and corporate investment in China, especially for policy-dependent firms like SOEs. The findings emphasize the need for clearer policies and stronger risk management strategies to mitigate the negative effects of EPU. Future research should broaden the scope to include unlisted firms and other measures of policy uncertainty.

Acknowledgments

This research was supported by the 2025 Institutional General Research Project of Bingtuan Xingxin Vocational and Technical College (Project No. YJYBKT202530).

Competing Interests

Authors have declared that no competing interests exist.

References

1. Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring Economic Policy Uncertainty. *The Quarterly Journal of Economics*, 131, 1593 -1636. https://doi.org/10.1093/qje/qjw024
2. Gulen, H., & Ion, M. (2016). Policy Uncertainty and Corporate Investment. Review of Financial Studies, 29(3), 523-564. https://doi.org/10.1093/rfs/hhv050.
3. Chen, S., & Wang, X. (2020). Does Economic Policy Uncertainty Suppress Real Estate Company Investment Behavior? - Based on the Data Analysis of Real Estate Companies in Shanghai and Shenzhen from 2003 to 2018. *Jianghan Forum*, (6), 59-68. https://doi.org/10.33142/mem.v1i4.2884.
4. Pastor, L., & Veronesi, P. (2013). Political Uncertainty and Risk Premia. *Journal of Financial Economics*, 110, 520-545. https://doi.org/10.1016/j.jfineco.2013.08.0071.
5. Gu, X., Chen, Y., & Pan, S. (2018). Economic Policy Uncertainty and Innovation---An Empirical Analysis Based on Listed Companies in China. *Economic Research*, 17(2), 9-123.
6. Fang, J. (2007). Ownership, Process of Marketization, and Capital Allocation Efficiency. *Management World*, (11).
7. Ma, X., & Ji, X. (2024, July 5). Zhi gai shu zhuan, ruhe gai chu xiaoyi zhuan chu qianjing? ["Intelligent transformation and digitalization": How to improve efficiency and prospects?]. *Bingtuan Ribao*, 004.
8. Ge, Y., & Zeng, T. (2024). Bingtuan goujian xinxing nongye jingying tixi kexingxing fenxi [Feasibility analysis of constructing a new agricultural management system in the XPCC]. *Hezuo Jingji yu Keji*, 17, 31–33.