

An Empirical Study of the Relationship between Economic Policy Uncertainty and Banks' Non-performing Loan Ratios

Jingxiang Tong

Southwest Petroleum University, Chengdu 610500, China

How to cite this paper: Tong, J. X. (2026). An empirical study of the relationship between economic policy uncertainty and banks' non-performing loan ratios. *Economics & Business Management*, 4(2), 1-11. ISSN Print: 3079-5214; ISSN Online: 3079-5222
<https://doi.org/10.63313/EBM.9135>
Published: 2026-01-06

Copyright © 2026 by author(s) and Erytis Publishing Limited.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Abstract

Using panel data for 117 Chinese banks over the period 2011–2022, this paper examines how economic policy uncertainty influences banks' non-performing loan ratios. The empirical evidence shows that rising economic policy uncertainty increases commercial banks' non-performing loan ratios. Specifically, economic policy uncertainty affects these ratios through two main channels: asset returns and credit growth. Further analysis reveals that the effects of economic policy uncertainty on non-performing loan ratios are heterogeneous across banks of different sizes. In particular, state-owned banks are less affected by shocks stemming from economic policy uncertainty than non-state-owned banks.

Keywords

Economic Policy Uncertainty; Non-performing Loan Ratio; Asset Prices; Loan Growth

1. Introduction

In the context of global economic interconnection, China's integration into the world economy since its reform and opening-up has brought substantial benefits. However, events such as the 2008 financial crisis, the China-US trade war, and the COVID-19 pandemic have disrupted global economic order and posed challenges to China's industrial upgrading. Slowing growth in advanced economies and domestic issues like weakened consumer confidence have constrained effective demand, hindering the "dual circulation" model. As China transitions toward high-quality development, economic policy adjustments amid external uncertainties have increased volatility, impacting financial stability.

The 20th CPC National Congress emphasized strengthening financial regulation and preventing systemic risks. As core components of the financial system, banks facilitate capital allocation through deposits and loans. However, data show that non-performing loans (NPLs) in commercial banks remain at elevated levels. Since banks profit primarily from credit risk, economic policy fluctuations significantly

influence macroeconomic conditions and, consequently, loan quality. The NPL ratio serves as a critical indicator of bank asset health, making it essential to examine how economic policy uncertainty affects this ratio.

2. Literature Review

Economic policy uncertainty (EPU) refers to the unpredictability regarding if, when, and how governments will adjust economic policies. It is commonly measured using two approaches. The first, pioneered by Baker et al. (2016), constructs an index by quantifying the frequency of policy-related uncertainty keywords in major newspaper coverage. The second approach uses political events, such as official turnovers, as a proxy. Among these, the news-based index is widely adopted for its superior data consistency and effectiveness in capturing cross-country EPU variations, making it a prevalent tool in empirical research.

Economic policy uncertainty significantly influences macroeconomic dynamics, with effects that vary across business cycles. Research indicates that during economic expansions, policy uncertainty tends to suppress output growth, whereas during downturns, it may paradoxically support growth by aligning with government stabilization efforts. Studies focusing on monetary policy uncertainty further reveal its adverse impact on output, which is amplified by higher default risks. Additionally, elevated uncertainty undermines monetary policy effectiveness, as increased caution among investors dampens the transmission mechanism of interest rate adjustments.

At the firm level, economic policy uncertainty (EPU) undermines the predictability of future economic conditions, prompting firms to postpone investments and reduce hiring due to elevated risks and evaluation difficulties. This uncertainty transmits to firms through bank lending channels, as financial institutions tighten credit conditions in response to policy volatility, indirectly constraining corporate resource allocation. Empirical studies show that EPU increases firms' cash holdings and accelerates cash accumulation, with state-owned enterprises less affected due to superior bank finance access. Concurrently, firms face higher bank financing costs, particularly small, private, and micro enterprises, and experience reduced bank borrowing. These constraints suppress technological innovation and capital structure adjustments due to higher costs and diminished gains. Furthermore, EPU reduces shadow banking scale, dampening corporate investment, while stronger bank-firm relationships can partially offset credit contraction.

Economic policy uncertainty (EPU) significantly influences commercial banks' risk-taking and liquidity management. Studies indicate that heightened EPU generally reduces banks' active risk-taking, though state-controlled banks in China may exhibit increased risk propensity due to implicit government backing, reflecting a more proactive stance toward risk under uncertainty. From a systemic perspective, higher bank concentration amplifies the positive effect of uncertainty on bank risk,

supporting the “concentration–fragility” hypothesis that market dominance encourages riskier behavior. In response to EPU, banks enhance precautionary measures, such as increasing loan loss provisions, indicating forward-looking risk management. Simultaneously, banks' liquidity creation is constrained as uncertainty affects both the supply and demand sides of financing. Banks tend to hoard liquidity through adjustments in assets, liabilities, and off-balance-sheet activities to mitigate potential shocks. Furthermore, EPU influences deposit stability, prompting shifts from time to demand deposits, which shortens deposit maturities and exacerbates liquidity hoarding. These behaviors collectively underscore how uncertainty reinforces defensive financial strategies, impacting both credit allocation and systemic stability.

3. Theoretical Analysis and Research Hypotheses

Over the past two decades, China's economic policy uncertainty (EPU) has evolved in two distinct phases: an initial decade of relative stability with fluctuations around events such as the 2008 global financial crisis and the 2012 leadership transition, followed by a period of heightened volatility from around 2015 onward, coinciding with financial reforms like the registration-based stock issuance system and subsequent market adjustments. Notably, this rise in EPU correlated with an increase in commercial banks' aggregate non-performing loan (NPL) ratio, which climbed from approximately 1% to between 1.5% and 2%. Further swings in the EPU index during 2018 and 2021 were accompanied by significant fluctuations in banks' NPL ratios, underscoring the heightened risks and challenges that policy uncertainty poses to banking sector stability.

Frequent policy adjustments and opaque decision-making in China create significant challenges for commercial banks by amplifying market uncertainty and information asymmetry. These conditions hinder firms' ability to formulate long-term development plans, which in turn complicates banks' assessment of borrowers' underlying credit risk at the point of lending. Additionally, the frequent shifts in policy direction and occasional weak implementation further undermine policy effectiveness and fuel market unpredictability. Consequently, banks struggle to accurately gauge whether a given policy will genuinely impact borrowers' repayment capacity, increasing the difficulty of sound credit risk judgment. Accordingly, this paper proposes the following hypothesis:

H1: Rising economic policy uncertainty increases commercial banks' non-performing loan ratios.

Based on Keynesian theory, borrowers' demand for bank loans stems from consumption, investment, and precautionary motives, with investment-related loans having the most significant impact on non-performing loans (NPLs). Economic policy uncertainty (EPU) undermines expectations about future economic conditions, making investment returns less predictable and dampening investor confidence.

This often leads firms to delay, scale back, or cancel investment projects, thereby weakening their debt-servicing capacity and increasing the risk of loans turning non-performing. Furthermore, heightened policy uncertainty increases financial market volatility, particularly in asset prices. When asset prices fluctuate sharply, the value of collateral held against loans—such as real estate or equities—can erode, reducing recovery value for banks and elevating credit risk. Empirical studies confirm that EPU negatively predicts real estate returns and stock market volatility, creating a feedback loop where market downturns further amplify uncertainty and impair borrowers' repayment ability. Accordingly, this paper proposes the following hypothesis:

H2: Economic policy uncertainty influences commercial banks' non-performing loan ratios through its effect on asset returns.

Economic policy uncertainty (EPU) significantly influences bank credit activity through both supply-side and demand-side channels. On the supply side, banks respond to heightened uncertainty by tightening credit standards, as increased macroeconomic volatility and default risks prompt more cautious lending behavior. Simultaneously, regulators may impose stricter capital requirements, further constraining credit supply. On the demand side, borrowers—including firms and households—become more risk-averse, delaying investments and reducing credit-financed expenditures due to pessimistic expectations about future income and returns. Empirical studies corroborate that EPU depresses overall bank credit volume, with effects intensifying during financial crises, and leads to longer approval times and stricter lending terms even for qualified borrowers. Consequently, this paper proposes the following hypothesis:

H3: Economic policy uncertainty influences commercial banks' non-performing loan ratios via its impact on loan growth.

4. Research Design

4.1. Sample Selection and Data Sources

The study employs annual bank-level data for the period 2011–2022 as its research sample. The data are sourced from the CSMAR database, the National Bureau of Statistics and the official website of the People's Bank of China. The data are treated as follows: (1) observations with serious missing values in key variables are excluded. (2) For observations with a small amount of missing data, we consult the annual reports of the relevant banks to supplement and complete the dataset. (3) To mitigate the impact of extreme values, all bank-level continuous variables are winsorised at the 1 per cent level. This process yields a final sample of 117 banks over the period 2011–2022, comprising 1,404 bank-year observations.

4.2. Variable Definitions

(1) Dependent variable: commercial banks' non-performing loan ratio (NPL). NPL is defined as the share of substandard, doubtful and loss loans in total loans. A higher NPL indicates that a larger proportion of a commercial bank's loan portfolio cannot be recovered and therefore signals greater operational risk for the bank.

(2) Core explanatory variable: economic policy uncertainty index (EPU). The analysis employs the China economic policy uncertainty index developed by Baker et al. (2016) as the key explanatory variable, in order to quantify fluctuations in China's economic policy environment. The index is constructed using the South China Morning Post, a Hong Kong newspaper, as the textual data source, and is derived through systematic searching and filtering of the newspaper's articles.

(3) Control variables: At the macroeconomic level, the analysis includes economic growth (GDP), the consumer price index (CPI) and the growth rate of broad money (M) as control variables. At the bank level, the provision coverage ratio (PC), capital adequacy ratio (CAR), bank size (SIZE) and pre-interest-and-tax profit-to-assets ratio (PAR) are used as control variables.

(4) Mediating variables: The rate of return on real estate (DAPP) and stock market returns (DSSE) are employed as mediating variables for asset returns, while the loan growth rate (LGR) serves as the mediating variable for loan growth.

4.3. Model Specification

(1) Baseline model: To investigate the effect of economic policy uncertainty on commercial banks' non-performing loan ratios, this paper, informed by the theoretical framework and related studies, employs a fixed-effects panel model that controls for individual-specific effects, specified as follows:

$$NPL_{it} = \beta_0 + \beta_1 \ln EPU_{it} + \sum Controls + \mu_i + \varepsilon_{it}$$

In this model, NPL is the dependent variable, namely the non-performing loan ratio of commercial banks; $\ln EPU$ is the natural logarithm of economic policy uncertainty and serves as the core explanatory variable; Controls denotes the vector of control variables. μ represents the individual fixed effects, ε is the random error term, β_0 is the intercept, and β_1 measures the impact of economic policy uncertainty on the non-performing loan ratio, which is the key parameter of interest in the empirical analysis.

(2) Tests of the transmission mechanism

Recognising that mediation-effect tests based on the conventional stepwise approach are susceptible to endogeneity bias, this paper follows Ting Jiang (2022) and investigates the mediating channels between economic policy uncertainty and the non-performing loan ratio from two angles—asset returns and loan growth—by estimating the following models:

$$M_{it} = \alpha_0 + \alpha_1 \ln EPU_{it} + \sum Controls + \mu_i + \varepsilon_{it}$$

In this context, M denotes the mediating variables, namely the rate of return on real estate (DAPP), stock market returns (DSSE) and the loan growth rate (LGR).

4.4. Descriptive Statistics

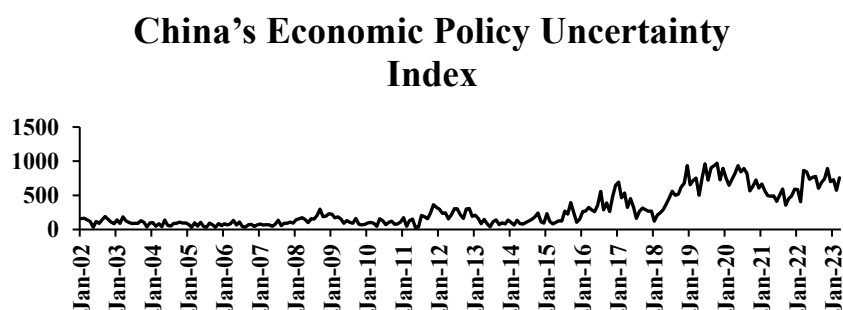
The table presents descriptive statistics for the key variables.

Table 1. Descriptive Statistics

Variable	Observations	Mean	Standard deviation	Minimum	Maximum
NPL	1,404	1.466	0.729	0.0200	5.590
EPU	1,404	399.0	237.4	113.9	791.9
M	1,404	11.14	2.154	8.100	13.84
GDP	1,404	6.608	2.001	2.200	9.500
CPI	1,404	102.3	1.071	100.9	105.4
PAR	1,404	0.0335	0.0150	0.00270	0.365
PC	1,404	306.3	430.2	5.010	6,374
CAR	1,404	13.59	2.772	2.370	59.61
SIZE	1,404	1.434e+12	4.355e+12	5.523e+09	3.961e+13
DAPP	1,404	0.0595	0.0374	-0.0321	0.106
DSSE	1,404	0.0271	0.205	-0.246	0.529
LGR	1,404	0.1795	0.112	-0.043	0.695

The figure illustrates the trajectory of China's Economic Policy Uncertainty (EPU) index from 2002 to 2023. After relative stability during 2002–2016, the index rose markedly from 2017 onward, influenced by international events such as Brexit, U.S. trade policy shifts under the Trump administration, and the onset of the COVID-19 pandemic. These developments heightened external instability, prompting the Chinese government to introduce successive economic interventions to mitigate shocks and support growth. Policy responses to trade tensions, pandemic disruptions, and geopolitical conflicts such as the Russia-Ukraine war further amplified EPU levels, reflecting increased uncertainty in China's economic environment.

Figure 1. China's Economic Policy Uncertainty Index



5. Empirical Results and Analysis

5.1. Baseline Regression Results

The baseline regression results demonstrate a statistically significant positive association between economic policy uncertainty (EPU) and commercial banks' non-performing loan (NPL) ratios. The estimated coefficient for EPU is 0.124 ($p < 0.01$) in the fully specified model, indicating that a one-unit increase in the EPU

index leads to a 0.124-unit rise in NPL ratios. This result remains robust after the stepwise inclusion of control variables, confirming hypothesis H1 that elevated economic policy uncertainty impairs bank asset quality by increasing credit risk.

Table 2. Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	NPL	NPL	NPL	NPL	NPL	NPL	NPL	NPL
lnepu	0.280*** (0.022)	0.107*** (0.031)	0.122*** (0.030)	0.089*** (0.025)	0.099*** (0.025)	0.238*** (0.036)	0.187*** (0.037)	0.124*** (0.041)
M		-0.077*** (0.009)	-0.054*** (0.010)	-0.033*** (0.008)	-0.033*** (0.008)	-0.039*** (0.008)	-0.039*** (0.008)	-0.055*** (0.009)
CPI			-0.105*** (0.015)	-0.033*** (0.012)	-0.030** (0.012)	-0.079*** (0.015)	-0.082*** (0.015)	-0.081*** (0.015)
PC				-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
CAR					-0.020** (0.008)	-0.028*** (0.008)	-0.028*** (0.008)	-0.027*** (0.008)
lnsize						-0.280*** (0.052)	-0.311*** (0.052)	-0.368*** (0.054)
PAR							-14.451*** (2.506)	-14.896*** (2.497)
GDP								-0.032*** (0.009)
_cons	-0.156 (0.131)	1.706*** (0.262)	12.057*** (1.464)	5.361*** (1.237)	5.208*** (1.236)	16.927*** (2.496)	18.860*** (2.488)	20.940*** (2.545)
N	1404	1404	1404	1404	1404	1404	1404	1404
r2	0.108	0.152	0.185	0.447	0.449	0.461	0.475	0.480
r2_a	0.027	0.074	0.109	0.395	0.397	0.410	0.424	0.430

Standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

5.2. Robustness Checks

In the baseline empirical analysis above, the annual index of economic policy uncertainty is obtained by taking the arithmetic mean of the monthly values of the China EPU index compiled by Baker et al. (2016) and then taking logs. In the robustness checks, the annual index is reconstructed by using the geometric mean and the harmonic mean of the monthly series and then taking logs. The regression results based on the reconstructed indices are reported in the table. Here, lnEPU1 denotes the index reconstructed using the geometric mean, and lnEPU2 denotes the index reconstructed using the harmonic mean. The core variable remains significant, and the sign of the coefficient on the economic policy uncertainty index is unchanged, consistent with the earlier findings. This indicates that the impact of economic policy uncertainty on non-performing loan ratios is robust.

Table 3. Robustness Test

	(1)	(2)
--	-----	-----

	NPL	NPL
lnEPU1	0.096**	
	(0.038)	
lnEPU2		0.070**
		(0.034)
Control variables	Controlled	Controlled
_cons	19.999***	19.022***
	(2.484)	(2.414)
N	1404.000	1404.000
r2	0.479	0.478
r2_a	0.428	0.427

Standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

5.3. Analysis of the Transmission Mechanism

The regression results indicate that economic policy uncertainty (EPU) significantly reduces both real estate and stock market returns. Column (1) suggests EPU dampens investor confidence, raises financing costs, and lowers expected returns, thereby reducing real estate investment and its returns. Column (2) shows that EPU increases investor caution, complicates forecasting of corporate profits, and lowers firm profitability expectations, depressing equity valuations and stock returns. These findings collectively support Hypothesis H2, which posits that EPU impairs borrowers' repayment capacity by eroding investment returns and collateral value. Column (3) indicates that economic policy uncertainty significantly reduces loan growth, as heightened risk aversion among financial institutions and borrowers tightens credit supply and dampens demand. This supports hypothesis H3.

Table 4. Mechanism Test

	(1)	(2)	(3)
	DAPP	DSSE	LGR
lnepu	-0.008***	-0.201***	-0.018**
	(0.003)	(0.015)	(0.008)
Control variables	Controlled	Controlled	Controlled
_cons	-0.529***	6.120***	-2.301***
	(0.097)	(0.528)	(0.560)
N	1404.000	1404.000	1404.000
r2	0.175	0.199	0.111
r2_a	0.097	0.124	0.024

Standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

5.4. Heterogeneity analysis

Based on the regression results, the impact of economic policy uncertainty (EPU) on non-performing loan (NPL) ratios exhibits significant heterogeneity based on bank size. For small banks, EPU exerts a significant positive effect on NPL ratios, whereas

for large banks, this effect is not statistically significant. This disparity can be attributed to large banks' stronger capital buffers, greater resource abundance, and more diversified portfolios and customer bases, which enhance their resilience to uncertainty. In contrast, small banks' higher dependency on specific regions or sectors makes them more vulnerable to economic policy shifts, leading to more pronounced fluctuations in their NPL ratios.

Next, the regression results demonstrate heterogeneous effects of economic policy uncertainty (EPU) on banks by ownership type. While the coefficient on EPU is statistically significant for both state-owned and non-state-owned banks, it is notably smaller for state-owned banks. This indicates that state-owned banks are less affected by EPU shocks, likely due to stronger government policy support, more stable capital positions, and greater access to resources during uncertain periods. In contrast, non-state-owned banks rely more on market mechanisms and are therefore more vulnerable to fluctuations in economic policy uncertainty, resulting in a larger impact on their non-performing loan ratios.

In September 2023, in accordance with the Assessment Measures for Systemically Important Banks, the People's Bank of China and the National Financial Regulatory Administration identified 20 domestic systemically important banks. Based on this assessment, the sample is divided into systemically important and non-systemically important banks, and separate regressions are run for each group; the results are reported in columns (5) and (6) respectively. The results show that the impact of economic policy uncertainty on non-performing loan ratios is not significant for systemically important banks, whereas it is significant at the 1 per cent level for non-systemically important banks. This indicates that systemically important banks operate prudently and serve as stabilisers and anchors for China's financial system.

Table 5. Heterogeneity Test

	(1)	(2)	(3)	(4)	(5)	(6)
	NPL	NPL	NPL	NPL	NPL	NPL
lnepu	0.122*	0.064	0.101*	0.126***	0.055	0.131***
	(0.063)	(0.051)	(0.060)	(0.042)	(0.044)	(0.047)
Control variables	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
_cons	26.817***	10.005***	1.528	21.265***	4.150	21.336***
	(4.001)	(3.436)	(8.348)	(2.643)	(3.305)	(2.903)
N	705.000	699.000	60.000	1344.000	228.000	1176.000
r ²	0.441	0.557	0.872	0.479	0.815	0.465
r ² _a	0.375	0.504	0.839	0.428	0.791	0.412

Standard errors in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

6. Main Conclusions

Based on the economic policy uncertainty index proposed by Baker et al. (2016), this paper conducts an empirical analysis using panel data for 117 Chinese banks over the period 2011–2022. The results show that rising economic policy

uncertainty increases commercial banks' non-performing loan ratios. This finding remains robust when the construction of the explanatory variable is altered and continues to hold after addressing potential endogeneity. The paper also finds that economic policy uncertainty affects commercial banks' non-performing loan ratios through two channels: asset returns and loan growth. In addition, the paper conducts group regressions and finds that the impact of economic policy uncertainty on non-performing loan ratios is heterogeneous across banks of different sizes. Specifically, state-owned banks are less affected by shocks from economic policy uncertainty than non-state-owned banks.

References

- [1] Baker S R, Bloom N, Davis S J. Measuring economic policy uncertainty[J]. *The quarterly journal of economics*, 2016, 131(4): 1593-1636.
- [2] Zhi Su, Chengcheng Liu and Xueli Wei. Will Economic Uncertainty Weaken the Effectiveness of China's Monetary Policy? [J]. *The Journal of World Economy*, 2019, 42(10): 49-72.
- [3] Bo Wang, Li Li and Dapeng Hao. Monetary Policy Uncertainty, Default Risks and Macroeconomic Fluctuations [J]. *Economic Research Journal*, 2019, 54(3): 119-134.
- [4] Yupeng Zhang and Qian Wang. The Nonlinear Macroeconomic Effect of Policy Uncertainty and Its Influencing Mechanism [J]. *Finance & Trade Economics*, 2016, (4): 116-133.
- [5] Wang Y, Chen C R, Huang Y S. Economic policy uncertainty and corporate investment: Evidence from China[J]. *Pacific-Basin Finance Journal*, 2014, 26: 227-243.
- [6] Aimin Zhou and Xinrui Liu. Economic Policy Uncertainty, Bank Concentration and Bank Risk [J]. *Economic Theory and Business Management*, 2021, 41(3): 10-25.
- [7] Guohua He and Piao Wu. Economic Policy Uncertainty and Bank Risk Taking——Based on the Evidence of the Banking System in China and the United States [J]. *Economic Survey*, 2020, 37(2): 159-168.
- [8] Pan Pan, Chao Deng and Yu Qiu. Economic Policy Uncertainty, Bank Risk-taking and Firm Investment [J]. *Journal of Finance and Economics*, 2020, 46(2): 67-81.
- [9] Haifeng Gu and Jiajun Yu. China's Economic Policy Uncertainty and Bank's Risk-Taking [J]. *The Journal of World Economy*, 2019, 42(11): 148-171.
- [10] Quanyun Song, Xiao Li and Long Qian. Economic Policy Uncertainty and Bank Lending Costs [J]. *Journal of Financial Research*, 2019, (7): 57-75.
- [11] Jingwen Yu, Kaiming Guo and Liutang Gong. Macro-Policy Uncertainty and Corporate Cash Holdings [J]. *China Economic Quarterly*, 2019, 18(3): 987-1010.
- [12] Chaoyang Wang, Xuelan Zhang and Huina Bao. Economic policy uncertainty, dynamic adjustment of corporate capital structure and leverage stabilisation [J]. *China Industrial Economics*, 2018, (12): 134-151.
- [13] Qianxiao Zhang and Lei Feng. Macroeconomic policy uncertainty and firms' technological innovation: empirical evidence from Chinese listed companies [J]. *Contemporary Economic Science*, 2018, 40(4): 48-57, 126.
- [14] Teng Jiang, Yongji Zhang and Xiaoli Zhao. Economic Policy Uncertainty and Corporate Debt Financing [J]. *Management Review*, 2018, 30(3): 29-39.
- [15] Guangli Zhang, Xianhang Qian and Jin Xu. Can Economic Policy Uncertainty Affect Companies' Cash Holding Behavior? [J]. *Management Review*, 2017, 29(9): 15-27.
- [16] Orden-Cruz C, Paule-Vianez J, Lobão J. The effect of Economic Policy Uncertainty on the credit risk of US commercial banks[J]. *International Journal of Finance & Economics*, 2023, 28(3): 3420-3436.

- [17] Guoqiang Tian and Shuangjian Li. Economic Policy Uncertainty and the Creation of Bank Liquidity: Empirical Evidence from China [J]. *Economic Research*, 2020, 55(11): 19–35.
- [18] Yu Shen, Meixu Ren and Jingmei Zhao. Economic Policy Uncertainty and Bank Loan Loss Provision [J]. *China Industrial Economics*, 2020, (4): 154–173.
- [19] Berger A N, Guedhami O, Kim H H, et al. Economic policy uncertainty and bank liquidity hoarding[J]. *Journal of Financial Intermediation*, 2022, 49: 100893.
- [20] Deng W, Gao L, Wang F, et al. Economic policy uncertainty, bank deposits, and liability structure[J]. *Emerging Markets Review*, 2023, 55: 101024.
- [21] Chow S C, Cunado J, Gupta R, et al. Causal relationships between economic policy uncertainty and housing market returns in China and India: Evidence from linear and nonlinear panel and time series models[J]. *Studies in Nonlinear Dynamics & Econometrics*, 2018, 22(2): 20160121.
- [22] Christou C, Gupta R, Hassapis C. Does economic policy uncertainty forecast real housing returns in a panel of OECD countries? A Bayesian approach[J]. *The Quarterly Review of Economics and Finance*, 2017, 65: 50–60.
- [23] Pastor L, Veronesi P. Uncertainty about government policy and stock prices[J]. *The Journal of Finance*, 2012, 67(4): 1219–1264.
- [24] Li X, Balcilar M, Gupta R, et al. The causal relationship between economic policy uncertainty and stock returns in China and India: Evidence from a bootstrap rolling window approach[J]. *Emerging Markets Finance and Trade*, 2016, 52(3): 674–689.
- [25] Liu L, Zhang T. Economic policy uncertainty and stock market volatility[J]. *Finance Research Letters*, 2015, 15: 99–105.
- [26] Bordo M D, Duca J V, Koch C. Economic policy uncertainty and the credit channel: Aggregate and bank level US evidence over several decades[J]. *Journal of Financial Stability*, 2016, 26: 90–106.
- [27] Fumei He, Zhigang Ouyang and Zhenjiang Dou. Whether Economic Policy Uncertainty Inhibit China's Bank Credit [J]. *Contemporary Finance & Economics*, 2019, (12): 61–72.
- [28] Alessandri, Piergiorgio, and Margherita Bottero. Bank lending in uncertain times[J]. *European Economic Review* 128 (2020): 103503.