

Construction of Social Credit System and the Cost of Equity Financing

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Abstract. As credit serves as the bedrock for orderly capital market operations, equity financing has become a mainstream fundraising approach for domestic listed enterprises. China has continuously rolled out national credit reforms and optimized unified corporate credit assessment criteria over recent years, bringing tangible changes to firms' equity capital costs. Using all Chinese A-share listed firms from 2010 to 2020 as the research sample, this study adopts the multi-period DID approach to assess the policy effects of credit demonstration city pilots. The empirical outcomes reveal that the credit reform notably cuts firms' equity financing costs, and this finding remains robust across various validation tests. This effect is more pronounced for enterprises featuring severe ownership-control divergence, weak equity restriction and non-Big Four audit services. Further mechanism tests prove that credit reforms ease information frictions and alleviate internal agency conflicts to achieve the cost-reduction goal. This research delivers theoretical references and empirical evidence for refining credit governance, streamlining capital market operations and supporting the high-quality development of the real economy.

Keywords: Construction of social credit system, Equity financing, Information asymmetry, Agency costs.

JEL Classification: F275.1, F832.5

1. Introduction

As the market economy matures and capital market reforms advance, direct financing has become a key driver for the real economy. Creating a favorable financing ecosystem and reducing corporate financing burdens are essential for high-quality economic development. Credit is the very foundation of corporate financing. As emphasized at the 2020 Entrepreneurs' Symposium, "A person cannot stand without integrity, and this principle applies even more to enterprises and entrepreneurs." This view underscores the core role of credit in a market economy. The central authorities jointly issued Opinions on Improving the Social Credit System, which defines the social credit system as a basic institutional arrangement for the market economy. A mature social credit system can standardize market order, optimize resource allocation and defuse potential financial risks. Currently, the social credit framework has moved beyond a simple moral standard and developed into a core institutional tool for regulating market transactions, containing financial risks and rationalizing capital allocation. It exerts far-reaching impacts on investment, financing and pricing in the capital market. Accordingly, exploring the microeconomic effects of social credit development has important research value.

As China's social credit system matures and gains greater institutional importance, its supportive role for market participants and the capital market has attracted extensive academic attention. A wealth of domestic and foreign scholars have studied the economic implications of credit development from multiple perspectives. Lin developed the Urban Commercial Credit Environment Index and found notable regional gaps in credit development, alongside a positive link between regional credit quality and economic growth[1]. From the perspective of corporate solvency, Dai examined the micro-level credit conditions of domestic firms and presented empirical evidence on corporate default risks[2]. Zhang and Ke pointed out that credit lifts market efficiency and boosts economic growth by cutting transaction costs[3]. Chen et al. and Guiso et al. further confirmed the positive role of credit in financial system design and cross-border investment and financing[4-5]. Different from existing literature, this study focuses on how the social credit system affects firms' cost of equity financing.

Based on theoretical analysis, this paper holds that the improvement of the social credit system helps reduce the cost of corporate equity financing. Specifically, the long-term external supervision enabled by the social credit system can strengthen constraints on the management of listed companies and mitigate internal agency conflicts. A sound credit publicity system restrains opportunistic behaviors of listed companies such as concealing operating information and financial fraud[6]. In addition, the integration and public sharing of credit information can break down information barriers in the capital market and improve the transparency and quality of corporate information disclosure[7]. This enables investors to assess the true value of enterprises and make rational investment decisions, thereby cutting down the risk premium and required rate of return, and ultimately lowering the cost of equity financing.

On the contrary, the information disclosure requirements and institutional transparency brought by the social credit system may also generate upward pressure on firms' equity financing costs. To comply with relevant credit supervision rules, enterprises need to input extra human and financial resources to upgrade internal control systems and credit management mechanisms. Such additional expenditures will crowd out operating cash flow, intensify capital shortages and worsen internal agency conflicts[8]. Furthermore, full disclosure of dishonesty records and historical operational issues allows investors to directly identify potential default risks of enterprises. Driven by risk aversion, investors will demand a higher risk premium. Accordingly, credit deficiencies will intensify financing constraints and eventually raise the cost of corporate equity financing[9].

Since academic discussions have formed two opposing theoretical views on this topic, this paper adopts empirical tests to clarify the actual influence of credit policies on equity financing costs. We select China's A-share listed enterprises between 2010 and 2020 as research samples. The empirical results confirm that credit pilots can effectively cut firms' equity capital costs, and this conclusion stands firm after multiple robustness tests, including variable replacement, placebo test and PSM estimation. This cost-reduction effect is more obvious for companies without Big Four audit services, with serious ownership-control divergence and weak equity governance. Mechanism tests show that credit policies mainly work by restricting corporate information manipulation. Overall, the empirical findings are consistent with our theoretical assumptions.

Compared with previous studies, the marginal contributions of this paper are reflected in three aspects. First, this paper enriches and expands the research on how the construction of the social credit system affects firms' micro-decisions, thus offering valuable theoretical references. Existing studies have documented that the social credit system can significantly boost corporate social responsibility performance, improve firms' new quality productive forces, enhance corporate digital innovation capability, boost economic growth and restrain corporate irregularities[10-13]. Differing from the above perspectives, this paper adopts the multi-period DID model to specifically examine the causal effect of credit system reform on the cost of equity financing of listed companies. From the perspective of capital cost, it supplements empirical evidence on the micro-level impacts of the social credit environment and expands the theoretical literature concerning informal institutions and capital market pricing.

Second, this paper complements the literature on influencing factors of equity financing cost. Prior research has verified that factors including beta coefficient, firm size, book-to-market ratio, asset-liability ratio, corporate growth, stock liquidity, financial risk, information disclosure and corporate innovation can affect equity financing cost[14-17]. This study finds that the development of the social credit system substantially reduces equity financing cost. It further clarifies the internal mechanism through which the external institutional environment acts on corporate equity pricing, and extends the research scope of determinants of equity financing cost.

Third, the research conclusions provide practical implications for governments to optimize credit policies and improve capital market institutions. China has continuously promoted the construction of the social credit system to optimize firms' financing environment via credit reform. The empirical results show that credit system construction effectively lowers the equity financing cost of listed companies, with a more prominent effect on enterprises featuring weak internal governance and

external audit quality. This finding not only provides empirical support for local governments to implement differentiated credit support and for regulators to optimize equity financing supervision in the capital market, but also helps fuel the development of the real economy through institutional credit construction.

The remainder of this paper is structured as follows. Section 2 presents the literature review and research hypotheses. Section 3 elaborates on the research design. Section 4 analyzes the empirical results. Section 5 conducts further analysis. Section 6 draws conclusions and puts forward policy implications.

2. Literature Review and Research Hypotheses

2.1. Literature Review

2.1.1. Research on Social Credit System

Since the 18th National Congress of the Communist Party of China, General Secretary Xi Jinping, standing at the overall development of the market economy, has emphasized the strategic value of credit construction on many important occasions and public forums, and made the important judgment that “the socialist market economy is essentially a credit economy and a rule-of-law economy”. Regarding the implementation of credit governance, General Secretary Xi has clearly deployed the construction of a new regulatory system centered on credit, leveraging government credibility to play an exemplary and leading role, and promoting the coordinated development of business integrity, social integrity, and judicial credibility. Through diversified measures, a standardized integrity governance system has been established, setting the top-level direction and providing fundamental guidelines for the high-quality development of China’s social credit industry in the new era. Based on the effectiveness of system implementation, the social credit system is not only a key instrument for advancing market-oriented reforms in an all-round way but also an important institutional guarantee for promoting high-quality domestic economic development. Advancing pilot projects for the construction of the social credit system is a major strategic arrangement for improving the basic market economy institutions and serving Chinese-style modernization.

The State Council released the national credit development outline (2014-2020) in 2014, which launched the nationwide systematic construction of credit mechanisms. From 2015 onwards, a number of pilot demonstration cities such as Shenyang and Qingdao were successively approved by relevant national authorities. In 2022, new guidance documents were released to arrange medium and long-term plans for high-quality credit development, with credit information sharing platforms listed as a key development task. With the high-quality development, transformation, and upgrading of China’s economy, the Third Plenary Session of the 20th Central Committee of the Communist Party of China put forward new requirements such as “improving the social credit system and regulatory framework”.

The social credit system serves as a critical constraint mechanism regulating market entities’ behavior and a key underpinning for optimizing corporate financing environments and enhancing resource allocation efficiency. Therefore, improving the social credit system is an essential institutional safeguard for supporting healthy corporate development and bears on the long-term stable operation of China’s capital market. Existing literature has explored the impact of the social credit system on firms’ micro-level behaviors and corporate governance from multiple perspectives. For instance, Huang et al. focused on the microeconomic effects of credit, finding that social credit system construction significantly inhibits corporate irregularities, including information disclosure violations and management self-serving misconduct[13]. Meanwhile, as a reflection of contractual spirit, credit acts as a vital informal governance mechanism mitigating firms’ principal-agent problems. Early theoretical studies indicated that a sound credit environment alleviates agency conflicts between shareholders and management[18]. In terms of specific governance outcomes,

credit system construction enhances management's integrity awareness and constrains managers' opportunistic and self-serving behaviors[19]. Furthermore, a favorable credit environment not only restrains corporate dishonesty but also exerts positive guiding effects: it promotes firms to actively fulfill social responsibility[10], stimulates innovation willingness, reduces financial statement manipulation, improves information disclosure quality, and fosters honest tax compliance[20-22].

The refinement of the social credit system not only influences firms' internal micro-level behaviors but also spills over into the capital market, affecting market risks, pricing mechanisms, and financial resource allocation. Regarding capital market risk and pricing efficiency, a sound credit governance environment standardizes market entities' behavior, stabilizes market expectations, and effectively curbs firms' stock price crash risk, thereby optimizing capital market pricing efficiency and operational stability[23]. From the perspective of financial market development and financing environment, social credit system construction supports the orderly and prosperous growth of financial markets, empowers firms' innovative operations while reducing financial institutions' credit risks, promotes the standardized development of informal finance, and enhances the coverage and quality of inclusive financial services[24-25]. Macroscopically, the social credit system is a cornerstone for improving the market economy system and deepening market-oriented reforms[26], effectively reducing transaction costs, boosting overall economic efficiency, and underpinning the robust development of finance and trade industries[27]. It also continuously improves social credit infrastructure, enriches credit application products and service scenarios, and consolidates the credit foundation for the high-quality development of the market economy[28].

2.1.2. Research on Cost of Equity Financing

Financing costs refer to all expenses incurred by enterprises to raise funds, which directly affect corporate operation and long-term development. Most listed companies in China exhibit a preference for equity financing in their financing decisions. Equity capital is perpetual and free from the rigid constraints of principal and interest repayment upon maturity. It can effectively ease enterprises' debt-servicing pressure and reduce financial risks arising from liabilities. Essentially, equity financing is a form of investment, wherein external investors make venture capital investments by acquiring corporate equities. Investors share both profits and losses of the business, and their future returns from dividends and capital gains depend on corporate profitability and market conditions, leading to uncertain investment outcomes. Since equity investment is inherently accompanied by operational risks and market volatility, it is susceptible to a variety of internal and external factors including corporate governance and market conditions. Compared with the cost of debt financing, the cost of equity financing has greater volatility and a more complex underlying mechanism. Accordingly, it has long been a key research focus in the field of finance at home and abroad.

Existing literature has proven that the macro institutional environment is a vital external factor affecting the cost of equity financing. For example, Diao et al. found that administrative approval reform can significantly reduce corporate equity financing costs[29]. Pang et al. pointed out that capital market liberalization also helps lower the cost of equity capital under appropriate conditions[30]. In terms of market operation mechanisms, Amihud et al. argued that higher stock liquidity reduces the risk discount required by investors, which in turn cuts down firms' equity financing costs[31]. Xia & Feng further confirmed that the margin trading and short selling system can reduce equity financing costs by improving corporate information transparency[32]. Against the backdrop of the digital economy, Yu & Zhou stated that digital finance can lower financing costs by enhancing stock liquidity and reducing investors' supervision costs[33]. Hua et al. discovered that corporate digital transformation improves the quality of information disclosure and mitigates operational uncertainty, thereby reducing equity financing costs[34]. In addition, informal systems and supporting rules such as political uncertainty and dividend regulation also exert notable impacts. Li et al. demonstrated that political uncertainty raises market risk expectations and pushes up equity financing costs[23]. Wang & Guo indicated that the implementation of the semi-mandatory dividend policy also imposes substantial influences on the cost of equity financing[35].

At the micro level, corporate characteristics and information governance mechanisms serve as core determinants of equity financing costs. Early studies mainly focused on corporate fundamental characteristics. Ye & Lu held that financial indicators such as firm size and capital structure have a significant impact on equity financing costs[14]. Zhou & Wang verified that higher operational risk corresponds to higher financing costs[36]. Wang & Xu found that financing constraints further drive up the cost of equity financing[37]. With the advancement of information asymmetry theory, the impacts of information disclosure and corporate governance on equity financing costs have become a popular research topic. Richardson & Welker showed that the quality of financial information disclosure is negatively correlated with equity financing costs[38]. Based on China's market, Wang & Jiang also verified that high-quality information disclosure effectively reduces financing costs[39]. Zhao et al. proposed that audit information disclosure can lower financing costs by alleviating information asymmetry and optimizing governance mechanisms[40]. In the field of ESG and environmental information, Ye et al. concluded that high-quality environmental information disclosure helps reduce financing costs[41]. Lei et al. further found that sound ESG performance can significantly cut corporate equity financing costs by optimizing the information environment and easing operational risks[42].

Most previous studies have concentrated on the effects of formal systems such as policies, regulations and information disclosure, while paying limited attention to how the social credit system—an institutional arrangement with both formal and informal attributes—affects corporate equity financing costs. Research on the underlying mechanism between the social credit system and financing costs remains insufficient. Given the above research gaps, this paper takes the construction of the social credit system as the core variable to explore its impact and transmission mechanism on the cost of equity financing of China's listed companies, which is of great research significance.

2.2. Research Hypotheses

2.2.1. External Supervision and Information Disclosure Effect

In the capital market, the cost of equity financing largely depends on investors' judgment of corporate operational risks and information transparency[43]. The social credit system integrates information sharing, public disclosure and penalty mechanisms for dishonest behaviors, forming a full-process supervision network for corporate operations and effectively restraining irregular corporate activities. Under such a standardized credit environment, investors can judge corporate operating conditions according to credit records and set a reasonable required rate of return on investment. Generally speaking, a higher credit level indicates sounder business operations and stronger performance capacity, which lowers investors' perceived risks and the corresponding risk premium demanded, and ultimately reduces the cost of equity financing[44]. Therefore, the social credit system serves as an important pillar for regulating corporate equity financing costs and optimizing resource allocation in the capital market.

First, a sound social credit system strengthens external supervision over corporate management and mitigates agency problems[45]. On the one hand, the dishonesty punishment mechanism markedly raises the costs of managerial self-serving behaviors and restrains opportunistic activities such as interest tunneling[6]. On the other hand, ongoing credit supervision urges enterprises to improve internal governance, enhance operational stability and reduce the risk of future performance volatility. Lower corporate risk will cut down the risk premium required by investors, laying a foundation for the decline in equity financing costs[36].

Second, the disclosure and sharing of credit information improve corporate information transparency and effectively alleviate market information asymmetry[46]. Improved transparency enables investors to fully understand enterprises' actual operating conditions and credit status, reducing valuation deviations. It also eases external financing constraints and lowers corporate liquidity risks[47]. As investors become less concerned about moral hazard and adverse selection, their required rate of return decreases, which further drives down the cost of equity financing. Based on the above analysis, we propose the following hypothesis:

H1: The construction of the social credit system is negatively correlated with corporate equity financing costs.

2.2.2. Compliance Pressure and Risk Exposure

Nevertheless, the regulatory nature and transparency requirements of the social credit system may also bring additional compliance pressure and risk exposure to enterprises. Existing studies have generally recognized that the social credit system improves the overall market credit environment, yet few have addressed its implicit constraints on corporate operations, information disclosure and investor decision-making in implementation[24].

From the perspective of corporate operation, to meet credit regulatory standards and maintain market reputation, enterprises have to allocate extra funds and resources to improve credit management systems and standardize operations, contract performance, tax payment and other activities. While such efforts play a vital role in hedging operational risks arising from market fluctuations, they inevitably increase operating costs and compliance burdens[48]. This may squeeze operating cash flow, aggravate financing constraints and raise operational risks to a certain extent. From the perspective of investor decision-making, full disclosure of credit information exposes hidden risks such as enterprises' historical bad credit records and operational defects to the market. Dishonest behaviors damage corporate reputation and disrupt business partnerships[49]. More importantly, they significantly undermine investor confidence and raise expectations of corporate default risk. Consequently, investors will demand higher risk premium in equity financing activities[50]. Based on the above analysis, we propose the following hypothesis:

H2: The construction of the social credit system is positively correlated with corporate equity financing costs.

3. Research Design

3.1. Empirical Model

To examine the policy shock effect of the social credit pilot reform on the cost of equity financing of listed firms, this paper regards the pilot policy as a quasi-natural experiment. Given that the launch timing of the social credit system pilot differs across cities and the policy is implemented in batches, this paper adopts the empirical frameworks from Cao as well as Beck et al., and constructs a difference-in-differences (DID) model[10,51]. The specific model is specified as follows:

$$PEG_{i,t} = \alpha_0 + \alpha_1 \text{Treat} \times \text{Post}_{i,t} + \alpha_i \text{Controls}_{i,t} + \mu_i + \theta_t + \varepsilon_{i,t} \quad (1)$$

3.2. Variable Definitions and Explanations

In the formula, the explained variable $PEG_{i,t}$ denotes the cost of equity financing. There are various measurement methods for equity financing costs in existing literature. Since the PEG model is built directly on earnings expectations and stock prices and closely reflects market conditions, this paper adopts this model for calculation. Referring to Cao et al.[10], this paper takes $\text{Treat} \times \text{Post}_{i,t}$ as the core explanatory variable to represent the social credit system pilot reform. If the city where a firm is registered is included in the pilot list, $\text{Treat} \times \text{Post}_{i,t}$ equals 1 in the year of policy implementation and all subsequent years; otherwise, it equals 0.

$\text{Controls}_{i,t}$ refers to the set of control variables, covering firm-level micro characteristics and city-level variables. Based on prior studies by Meng et al. and Huang et al.[13,52], the control variables selected are as follows: firm size (Size), asset-liability ratio (Leverage), return on total assets (ROA), operating revenue growth (Growth), board size (Boardsize), firm age (FirmAge), industrial asset-liability ratio (IndRate), ownership concentration (Top1), stock return (Return), and stock turnover rate (Turnover). In addition, the model incorporates firm fixed effects (μ_i) and year fixed effects (θ_t). Unless otherwise stated, all regression results in this paper use firm-level clustered robust standard

errors. $\varepsilon_{i,t}$ is the random disturbance term of the model. Detailed definitions of all variables are presented in Table 1.

Table 1. Variable Definition

Symbol	Variable Name	Definition
PEG	Cost of equity financing	Calculated via PEG valuation model
Treat×Post	Policy shock dummy	Equals 1 for treated firms after pilot implementation
Size	Firm size	Natural logarithm of total year-end assets
Leverage	Asset-liability ratio	Total liabilities / total assets
ROA	Return on total assets	Net profit / average total assets
Growth	Operating revenue growth	(Current-year revenue - last-year revenue)/last-year revenue
Boardsize	Board size	Natural logarithm of the number of directors
FirmAge	Firm age	Natural logarithm of corporate establishment years
IndRate	Industrial average leverage	Annual mean asset-liability ratio within industry
Top1	Ownership concentration	Shareholding percentage of the largest shareholder
Return	Annual stock return	Annual stock return with cash dividend reinvested
Turnover	Stock turnover	Annual average daily turnover×total trading days

3.3. Sample Selection and Data Processing

This research selects all A-share listed companies in China during 2010 to 2020 as research samples, and all original data are extracted from the CSMAR financial database. We eliminate samples from the financial sector as well as ST and *ST listed enterprises, and remove observations with missing values. Finally, we obtain 17,934 valid firm-year records for empirical analysis. All continuous variables are winsorized at the top and bottom 1% to eliminate outliers.

3.4. Descriptive Statistics

Table 2 presents the descriptive statistics of all variables. The mean value of the explained variable PEG is 8.866 with a standard deviation of 5.124, indicating a large disparity in the cost of equity financing across listed firms. The mean value of the core explanatory variable Treat×Post is 0.294, suggesting that approximately 29.4% of sample firms are located in cities implementing the credit system pilot and thus affected by relevant policies. In terms of control variables, the mean of firm size (Size) is 22.455 and the mean of asset-liability ratio (Leverage) is 0.429, which reflects a moderate overall financial leverage level. The average return on total assets (ROA) stands at 0.049, equivalent to an average profitability of 4.9% among sample firms, showing stable earning performance. Indicators including operating revenue growth (Growth), firm age (FirmAge) and stock turnover rate (Turnover) exhibit relatively large standard deviations. This implies notable heterogeneity among sample firms in business development and capital market trading characteristics, laying a solid data foundation for identifying policy effects in subsequent empirical tests.

Table 2. Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
PEG	17,934	8.866	5.124	0.141	23.136
Treat×Post	17,934	0.294	0.456	0.000	1.000
Size	17,934	22.455	1.323	20.155	26.449
Leverage	17,934	0.429	0.201	0.056	0.858
ROA	17,934	0.049	0.050	-0.134	0.200
Growth	17,934	0.209	0.388	-0.428	2.443
Boardsize	17,934	2.146	0.199	1.609	2.708
FirmAge	17,934	2.855	0.329	1.792	3.526
IndRate	17,934	0.374	0.054	0.333	0.571
Top1	17,934	0.004	0.002	0.001	0.008
Return	17,934	0.150	0.532	-0.560	2.292
Turnover	17,934	571.375	441.563	49.974	2250.241

4. Empirical Results Analysis

4.1. Baseline Regression

This paper adopts the difference-in-differences (DID) model to empirically examine the impact of social credit system construction on corporate equity financing costs. The results of baseline regression are reported in Table 3. Column (1) presents the univariate regression without control variables and fixed effects. The coefficient of the core explanatory variable $Treat \times Post$ is -1.365 and statistically significant at the 1% level with a negative sign. After controlling for year fixed effects in Column (2), the coefficient drops to -0.695, remaining significantly negative at the 1% level. Column (3) further incorporates firm-level control variables, and the coefficient of $Treat \times Post$ is -1.545, which is still significant at the 1% level. Column (4) shows the full model with all control variables, firm fixed effects and year fixed effects included. The core explanatory variable $Treat \times Post$ has a coefficient of -0.843, which is statistically significant at the 1% level. The regression outcomes indicate that the social credit system pilot policy can effectively lower enterprises' equity financing costs, and this conclusion remains robust after adding control variables and two-way fixed effects. Accordingly, Hypothesis H1 is verified. Overall, the empirical findings are consistent with the theoretical analysis. It indicates that the pilot reform of the credit system effectively optimizes the financing environment and relieves the pressure of equity financing costs for enterprises.

Table 3. Baseline Regression Results

	(1) PEG	(2) PEG	(3) PEG	(4) PEG
$Treat \times Post$	-1.365***	-0.695***	-1.545***	-0.843***
	(0.116)	(0.160)	(0.141)	(0.158)
Size			0.364***	0.531***
			(0.128)	(0.133)
Leverage			2.661***	2.012***
			(0.501)	(0.502)
ROA			5.139***	3.226***
			(1.264)	(1.237)
Growth			-0.197*	0.004
			(0.109)	(0.108)
Boardsize			-0.051	-0.630
			(0.478)	(0.467)
FirmAge			-2.459***	-0.337
			(0.406)	(0.840)
IndRate			0.567	-0.396
			(1.463)	(1.430)
Top1			-119.455	-173.970**
			(78.143)	(77.661)
Return			-1.373***	-1.233***
			(0.079)	(0.088)
Turnover			-0.001***	-0.000***
			(0.000)	(0.000)
N	17934	17934	17934	17934
R ²	0.010	0.072	0.053	0.090
F	139.28	92.10	66.78	60.07
Id	N	Y	N	Y
Year	N	Y	N	Y

Notes:*, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively. Standard errors are reported in parentheses. All subsequent empirical analyses include control variables and two-way fixed effects, which will not be elaborated hereinafter.

4.2. Parallel Trend Test

The parallel trend assumption is a fundamental prerequisite for the validity of the difference-in-differences model. It requires that the changing trends of equity financing costs between the treatment group and the control group share no systematic differences before policy implementation, so as to exclude the interference of pre-existing disparities on the identification of policy effects. This paper takes one period prior to policy implementation as the reference period and introduces a set of relative time dummy variables, namely *Treat_Before5* to *Treat_Before1*, *Treat_Current*, and *Treat_After1* to *Treat_After4*. These variables are adopted to empirically identify the dynamic effects of the social credit system construction on corporate equity financing costs. The test results are illustrated in Figure 1.

As shown in the figure, all coefficients for pre-policy periods are statistically insignificant and their confidence intervals contain zero. This verifies that the treatment group and the control group follow consistent trends before the policy shock, and the parallel trend assumption holds. In the current period and subsequent periods after policy implementation (time point 0 and onwards), all regression coefficients are significantly negative with confidence intervals excluding zero. It indicates that the social credit system construction exerts a persistent and significant inhibitory effect on equity financing costs, which further confirms the robustness of the baseline regression results.

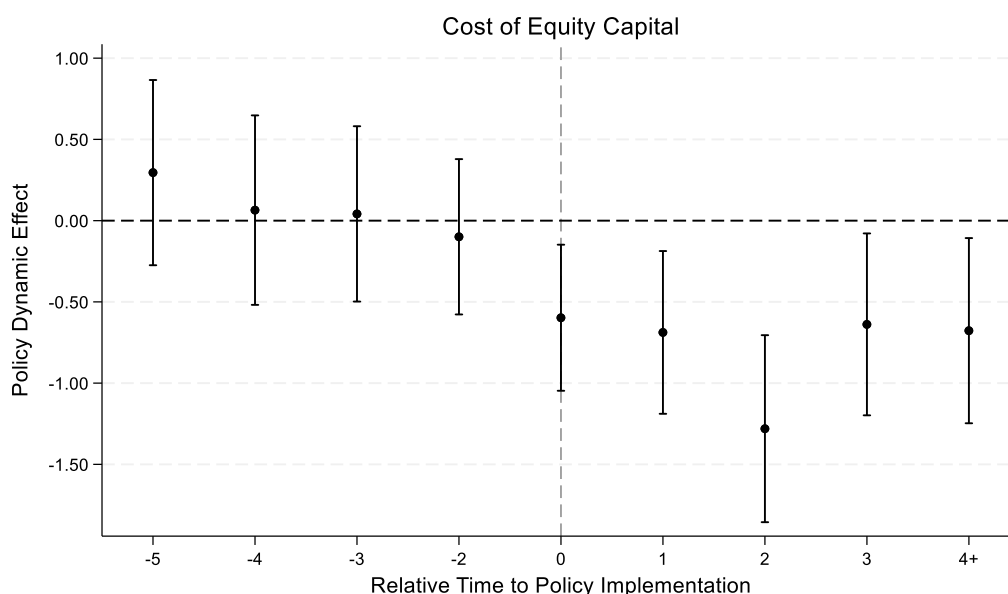


Fig. 1 Parallel Trend Test

4.3. Robustness Tests

4.3.1. Placebo Test

To rule out potential biases from unobservable factors such as omitted variables and random disturbances, this paper conducts a placebo test by randomly assigning pilot policies. Following the classic approach of Kong et al.[53], we randomly assign fictitious implementation years of the social credit system pilot to each firm and repeat the regression for 1,000 times, so as to examine the impact of the fictitious policy shock on corporate equity financing costs. As presented in Figure 2, the coefficients after random permutation are concentrated around zero, and their absolute values are far smaller than the estimated coefficient obtained from the actual policy in the baseline regression. This result suggests that the randomly assigned fictitious policy produces no significant governance effect, indicating that the baseline findings are not driven by unobserved systematic factors within the sample. In summary, the placebo test is passed successfully. It further supports the causal inference that social credit system construction effectively reduces corporate equity financing costs and fully verifies the strong robustness of the baseline empirical results.

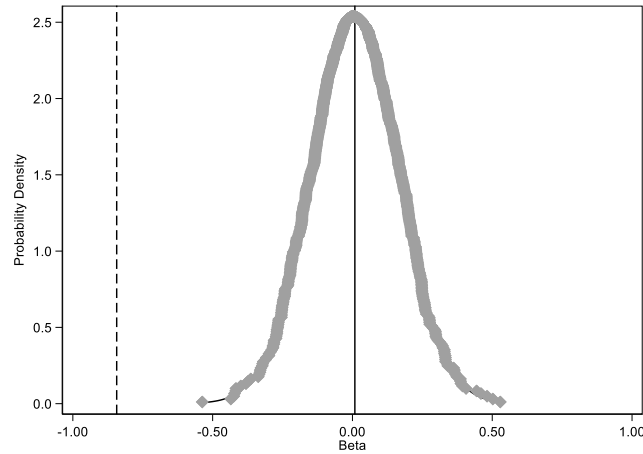


Fig. 2 Placebo Test

4.3.2. Alternative Measure of the Explained Variable

To alleviate potential biases caused by a single measurement method for the explained variable, we conduct robustness tests by adopting alternative indicators to measure the cost of equity financing. The regression results are reported in Table 4. Apart from the PEG model used in the baseline regression, this paper follows Jiang & Ban and Zhang et al. to re-estimate the cost of equity financing using the MPEG model and the CAPM model[54-55]. The corresponding results are presented in Columns (1) and (2) of Table 4. The outcomes show that the coefficients of the core explanatory variable $Treat \times Post$ are significantly negative at the 1% and 5% significance levels, respectively. The above findings demonstrate that the inhibitory effect of social credit system construction on equity financing costs remains significant after changing the measurement approach. This rules out the influence of measurement errors of the explained variable and further confirms the robustness of our main conclusions.

Table 4. Robustness Test Results

	(1)	(2)	(3)
	MPEG	CAPM	PEG(PSM)
Treat×Post	-0.879*** (0.166)	-0.172** (0.056)	-0.819*** (0.167)
Size	0.671*** (0.147)	0.189*** (0.045)	0.511*** (0.139)
Leverage	1.105* (0.513)	0.273 (0.156)	1.868*** (0.523)
ROA	3.875** (1.415)	-0.035 (0.413)	2.847** (1.310)
Growth	0.070 (0.103)	-0.032 (0.035)	0.006 (0.112)
Boardsize	-0.207 (0.505)	0.122 (0.157)	-0.262 (0.507)
FirmAge	-1.069 (0.907)	0.638* (0.278)	-0.022 (0.914)
IndRate	0.349 (1.532)	-0.103 (0.464)	-0.185 (1.644)
Top1	-67.684 (81.121)	-52.862* (24.264)	-170.391** (80.804)
Return	-1.916*** (0.078)	-0.284*** (0.030)	-1.295*** (0.095)
Turnover	-0.000 (0.000)	0.001*** (0.000)	-0.000*** (0.000)
N	17492	17934	16714
R ²	0.225	0.503	0.091
F	161.71	727.98	57.17
Id	Y	Y	Y
Year	Y	Y	Y

4.3.3. PSM-DID Estimation

To mitigate the bias arising from sample self-selection, we further perform robustness tests using the PSM-DID model, and the results are presented in Table 4. We select firm size, asset-liability ratio and other micro-level characteristics as matching covariates and adopt the one-to-one nearest neighbor matching to narrow the characteristic gaps between the treatment group and the control group. A balance test is conducted after matching. The results indicate that the differences of all covariates between the two groups are substantially reduced, which satisfies the balancing requirement. We then re-estimate the DID model based on the matched samples. As shown in Column (3) of Table 4, the coefficient of $Treat \times Post$ is significantly negative, with its sign and magnitude largely consistent with those in the baseline regression. The above evidence proves that after effectively controlling for sample self-selection bias, the effect of the social credit system reform in reducing corporate equity financing costs still holds, which further verifies the robustness of our main findings.

5. Further Analysis

5.1. Mechanism Analysis

The above results confirm that the rollout of social credit initiatives effectively lowers firms' equity financing costs. To further explore the internal transmission channels, this paper conducts mechanism analysis from two perspectives: information asymmetry and agency costs. Following the approaches proposed by Cao et al. and Wen et al. [10,56], we construct Model (2) for empirical testing:

$$Channel_{i,t} = \gamma_0 + \gamma_1 Treat \times Post_{i,t} + \gamma Controls_{i,t} + \mu_i + \theta_t + \varepsilon_{i,t} \quad (2)$$

In this equation, $Channel_{i,t}$ refers to mechanism variables, including information asymmetry, agency costs and stock price risk in sequence. $Treat \times Post_{i,t}$ denotes the policy variable. $Controls_{i,t}$ represents the set of control variables defined earlier. μ_i and θ_t stand for firm fixed effects and year fixed effects respectively, and $\varepsilon_{i,t}$ is the random disturbance term.

5.1.1. Information Asymmetry Channel

To verify whether the social credit system affects equity financing costs by mitigating information asymmetry, we adopt analyst forecast dispersion (FDISP) and stock price crash risk (NCSKEW, DUVOL) as proxy variables for information asymmetry. As shown in Column (1) of Table 5, the coefficient of $Treat \times Post$ is -0.001 and significantly negative at the 5% level. This indicates that the social credit system effectively reduces analyst forecast dispersion and alleviates information asymmetry between firms and external investors. A transparent information environment narrows the information gap between financiers and investors, mitigates adverse selection in the market, and thereby cuts equity financing costs. According to Columns (2) and (3) of Table 5, the coefficients of $Treat \times Post$ are -0.075 and -0.058, both significant at the 1% level. It demonstrates that credit system construction optimizes the market information environment and restrains extreme stock price fluctuations and crash risks. Improved information transparency lowers the risk premium arising from stock price uncertainty, which further reduces equity financing costs. To sum up, the social credit system reform helps reduce financing costs via alleviating information asymmetry.

5.1.2. Agency Cost Channel

To examine whether the social credit system reduces equity financing costs by curbing agency costs, this paper uses the administrative expense ratio (Ofee) and selling expense ratio (Mfee) to measure agency costs, referring to Kim & Zhang [57]. Columns (4) and (5) of Table 5 show that the coefficients of $Treat \times Post$ are -0.009 and -0.005, significant at the 1% and 5% levels respectively. The results prove that the social credit system can effectively restrain corporate agency costs. On the one hand, a sound credit system strengthens external supervision over management and constrains

managerial opportunistic and self-serving behaviors. On the other hand, a favorable credit environment cuts internal management and coordination expenses, eases agency conflicts between shareholders and managers, and reduces the risk premium demanded by investors for agency risks. Ultimately, equity financing costs are lowered. The findings suggest that reducing agency costs serves as a vital transmission channel through which the social credit system decreases equity financing costs.

Table 5. Mechanism Regression Results

	(1)	(2)	(3)	(4)	(5)
	FDISP	NCSKEW	DUVOL	Ofee	Mfee
Treat×Post	-0.001**	-0.075***	-0.058***	-0.009***	-0.005**
	(0.000)	(0.013)	(0.016)	(0.003)	(0.002)
Size	-0.000	-0.010	0.021	-0.015***	-0.011***
	(0.000)	(0.007)	(0.013)	(0.003)	(0.002)
Leverage	0.001	-0.044	-0.023	-0.044***	-0.024***
	(0.001)	(0.040)	(0.052)	(0.009)	(0.006)
ROA	-0.049***	0.865***	0.378**	-0.354***	-0.219***
	(0.004)	(0.136)	(0.128)	(0.024)	(0.016)
Growth	-0.001*	0.049***	0.018	-0.020***	-0.013***
	(0.000)	(0.014)	(0.011)	(0.002)	(0.001)
Boardsize	0.000	-0.080*	0.029	0.010	0.004
	(0.001)	(0.039)	(0.051)	(0.008)	(0.005)
FirmAge	-0.001	-0.034	-0.039	-0.042**	-0.028**
	(0.002)	(0.021)	(0.081)	(0.015)	(0.010)
IndRate	-0.001	0.140	0.348*	0.002	0.008
	(0.004)	(0.145)	(0.154)	(0.022)	(0.013)
Top1	-0.082	-16.650***	-11.771	-0.996	-0.969
	(0.153)	(4.319)	(7.438)	(1.402)	(0.772)
Return	0.000	-0.162***	-0.157***	0.002	0.001
	(0.000)	(0.011)	(0.010)	(0.001)	(0.001)
Turnover	0.000*	-0.000***	-0.000***	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N	14074	16714	16714	16713	16713
R ²	0.079	0.069	0.078	0.191	0.258
F	20.24	44.27	51.49	50.86	69.46
Id	Y	Y	Y	Y	Y
Year	Y	Y	Y	Y	Y

5.2. Heterogeneity Analysis

5.2.1. Heterogeneity of Auditor Scale

External audit optimizes corporate information disclosure through information verification and ex-post supervision. Firms differ substantially in information environment and agency issues under varied audit quality, which may lead to heterogeneous effects of the social credit system reform. Theoretically, better external governance and information disclosure help lower financing costs[41]. The Big Four accounting firms possess higher independence and professional supervision capacity. Their high-quality audits constrain management's information hiding behaviors, improve information disclosure, and reduce equity financing costs via internal supervision. Accordingly, such firms rely less on external credit institutions. By contrast, listed companies audited by non-Big Four firms face weaker external supervision and more defects in information environment, so they can benefit more from the institutional dividends brought by the social credit system reform to improve financing conditions. We therefore hypothesize that the credit pilot policy exerts a stronger cost-reduction effect on firms audited by non-Big Four accounting firms.

To examine the heterogeneous impact of external audit quality, we introduce the interaction term $Treat \times Post \times Big4$ into the baseline model following Li & Xu[58]. As shown in Column (1) of Table 6, the coefficient of $Treat \times Post$ is significantly negative at the 1% level, while the coefficient of the interaction term is significantly positive. This indicates that the marginal effect of the social credit system on cutting equity financing costs is markedly weakened for firms audited by the Big Four. In other words, the social credit system plays a more prominent corporate governance role and generates a stronger restraining effect on equity financing costs among non-Big Four audited firms, which is consistent with our theoretical inference.

5.2.2. Heterogeneity of Separation of Ownership and Control

The separation of ownership and control is a major cause of tunneling by controlling shareholders. Different degrees of separation lead to divergent internal agency costs and varying demands for external credit governance. From the perspective of agency theory, a higher degree of separation implies a larger deviation between the cash flow rights and control rights of controlling shareholders. Such shareholders are more likely to seek private gains through interest expropriation and withholding negative information[59], resulting in severe internal agency conflicts and persistently high financing costs[60]. In this case, external credit institutions can make up for deficiencies in internal governance. For firms with a low degree of separation, the interests of controlling shareholders are closely aligned with those of listed companies, so agency conflicts are inherently mild and the credit policy has limited room to function. We infer that the marginal effect of the credit system in curbing equity financing costs is stronger for firms with a higher degree of separation of ownership and control.

To explore agency differences caused by the separation of ownership and control, we add the interaction term $Treat \times Post \times Separation$ to the baseline model. According to Column (2) of Table 6, the coefficient of $Treat \times Post$ is significantly negative at the 1% level, and the interaction term is also significantly negative. The results reveal that the cost-reduction effect of the social credit system is amplified as the degree of separation rises. Firms with severe separation gain more from the supplementary external governance of the credit system, which remedies internal agency problems and reduces financing premium. This finding is in line with our theoretical expectation.

5.2.3. Heterogeneity of Equity Balance

Equity balance is an internal ownership arrangement that restrains the self-interested behaviors of controlling shareholders. The strength of internal balance directly affects corporate risk control and information environment, and further influences the implementation effect of the credit pilot policy. A high level of equity balance means that the shareholdings of the second and other major shareholders are relatively large. These shareholders can constrain the tunneling behaviors of the largest shareholder[61], optimize the information environment and reduce financing premium through internal ownership governance. Prior studies also prove that equity balance contributes to the improvement of corporate value [62]. Nevertheless, firms with low equity balance fail to effectively restrict controlling shareholders via other major shareholders and suffer from ineffective internal governance, thus needing external credit institutions to fill the governance gap. We propose that the credit pilot policy works better and achieves a more remarkable reduction in equity financing costs for firms with low equity balance.

To verify the moderating effect of equity balance, we incorporate the interaction term $Treat \times Post \times Balance$ into the baseline regression. As presented in Column (3) of Table 6, the coefficient of $Treat \times Post$ is significantly negative, and the interaction term $Treat \times Post \times Balance$ is significantly positive at the 5% level. The results suggest that the restraining effect of the social credit system on equity financing costs declines as equity balance increases. Our main conclusion is more pronounced among firms with weak equity balance, which can better leverage the credit system to lower financing costs. This conclusion matches our theoretical inference.

Table 6. Heterogeneity Test Results

	(1)	(2)	(3)
	PEG	PEG	PEG
Treat×Post	-0.917***	-0.629***	-1.106***
	(0.164)	(0.169)	(0.210)
Big4	0.464		
	(0.370)		
Treat×Post×Big4	0.641**		
	(0.322)		
Separation		-1.347	
		(1.350)	
Treat×Post×Separation		-5.481***	
		(1.557)	
Balance			-0.143
			(0.152)
Treat×Post×Balance			0.258**
			(0.130)
N	17934	17934	17933
R ²	0.089	0.090	0.089
F	55.14	55.36	54.99
Control	Y	Y	Y
Id	Y	Y	Y
Year	Y	Y	Y

6. Conclusions and Policy Implications

Against the background of improving capital market institutions and reducing corporate financing costs, the steady advancement of social credit system construction serves as a crucial measure to optimize the business environment and consolidate the credit foundation of the capital market. Based on the quasi-natural experiment of the national social credit demonstration city pilot reform, this paper selects China's A-share listed companies from 2010 to 2020 as the research sample and adopts the DID model to empirically examine the impact and internal transmission mechanism of social credit system construction on corporate equity financing costs. The research conclusions are as follows: (1) The implementation of the social credit system exerts a prominent inhibitory effect on the equity financing costs of listed companies.; (2) Further mechanism tests show that this policy effect works mainly via two paths: mitigating information asymmetry between enterprises and investors, and reducing internal agency costs within firms; (3) The cost-reduction effect of the social credit system is more pronounced for firms audited by non-Big Four accounting firms, firms with a high degree of separation of ownership and control, and firms with low equity balance.

This study verifies the positive governance effect of the social credit system on reducing corporate equity financing costs. It provides solid empirical evidence for the financing optimization effect of credit system reform, offering reliable empirical support for the subsequent improvement of credit-related policies. Furthermore, this paper complements and enriches the research on the relationship between credit system construction and corporate financing pricing, and clarifies the internal mechanism through which credit reform affects equity financing costs by optimizing the information environment and mitigating agency problems. The corresponding policy implications are proposed as follows.

On the one hand, local governments should further promote the reform and improvement of the social credit system and expand its coverage. It is essential to improve the system for the collection, public disclosure and sharing of corporate credit information, refine the detailed rules for credit incentives and dishonesty penalties, and implement differentiated credit support policies with clear rewards and punishments. These efforts can foster a sound social credit environment and optimize

the operational efficiency of the capital market. In addition, governments should accelerate the supporting legal construction of credit system, improve local credit supervision rules and regulations, provide legal guarantees for the implementation of credit incentive and constraint mechanisms, and continuously cultivate a high-quality regional credit business environment. On the other hand, listed companies should attach importance to credit system construction and internal governance optimization. In daily operation, enterprises need to standardize information disclosure practices and improve information transparency to reduce the risk premium required by investors. In particular, firms with weak external supervision and high separation of ownership and control should optimize their internal corporate governance structure according to their operational shortcomings. Moreover, enterprises should cultivate a credit-oriented corporate culture, actively participate in local credit incentive policies, expand equity financing channels based on sound credit qualifications, and effectively reduce financing costs by leveraging institutional credit dividends to achieve long-term and stable development.

References

- [1] Lin, J.Y. Development and Analysis of China's Urban Commercial Credit Environment Index. *Finance & Trade Economics*, 2012, (2): 89-97.
- [2] Dai, M.H. Financial Geographic Structure, Bank Competition and Business Environment: Evidence from Bank Branches and Corporate Dishonesty. *Finance & Trade Economics*, 2022, 43(5): 66-81.
- [3] Zhang, W.Y., Ke, R.Z. Trust and Its Explanations: Evidence from Cross-provincial Surveys in China. *Economic Research Journal*, 2002, (10): 59-70.
- [4] Chen, Y.L., Ma, Y. Social Credit Culture, Financial System Structure and Organizational Forms of the Financial Industry. *Economic Research Journal*, 2008, (3): 29-38.
- [5] Guiso, L., Sapienza, P., Zingales, L. Trusting the Stock Market. *The Journal of Finance*, 2008, 63(6): 2557-2600.
- [6] Dong, W. et al. Does Social Trust Restrain Excess Perk Consumption? Evidence from China. *International Review of Economics & Finance*, 2021, 76: 1078-1092.
- [7] Garrett, J., Hoitash, R., Prawitt, D.F. Trust and Financial Reporting Quality. *Journal of Accounting Research*, 2014, 52(5): 1087-1125.
- [8] Xiang, Y., Dai, Q.W., Ma, J.F. The Impact of Social Credit on Corporate Financialization and Its Mechanism: Evidence from Urban Dishonest Persons Subject to Enforcement. *Contemporary Finance & Economics*, 2021, (12): 126-136.
- [9] Yu, Y.Z., Guo, M.H., Hu, S. Social Distrust Environment and the Growth of Private Enterprises: Evidence from Urban Dishonest Persons. *China Industrial Economics*, 2020, (9): 137-155.
- [10] Cao, Y.Y., Kong, D.M., Tao, Y.Q. Evaluation of the Pilot Reform of China's Social Credit System: From the Perspective of Corporate Social Responsibility. *Journal of Finance and Economics*, 2022, 48(2): 93-108.
- [11] Zhou, X.M., Wang, Y. Research on the Impact of Social Credit System Construction on Enterprises' New Quality Productive Forces. *Journal of Technology Economics*, 2026, 45(3): 155-170.
- [12] Xu, H.Q., Wang, L., Hu, J.Y. Social Credit System Construction and Enterprise Digital Innovation: Evidence from the Social Credit System Pilot Reform. *Economic Perspectives*, 2026, (2): 101-126.
- [13] Huang, Z., Tao, Y.Q., Wang, S. Does the Improvement of Social Credit Environment Reduce Corporate Violations? Evidence from China's Social Credit System Construction. *Journal of Financial Research*, 2023, (5): 96-114.
- [14] Ye, K.T., Lu, Z.F. Analysis on Influencing Factors of Equity Financing Cost of China's Listed Companies. *Management World*, 2004, (5): 127-131+142.
- [15] Wang X J. An Analysis on Influencing Factors of Equity Financing Cost of Listed Companies[J]. *Co-Operative Economy & Science*, 2018(7):38-50.

- [16] Sun, T., Xue, S., Xu, J.Y. Can Informal Information Transmission Mechanisms Reduce Corporate Equity Financing Costs? An Empirical Test Based on Entrepreneurs' Weibo. *Journal of Finance and Economics*, 2020, 46(11): 154-168.
- [17] Wen, S.X., Ding, W., Li, H.R. et al. Empirical Research on the Heterogeneous Impact of Enterprise Technological Innovation on Capital Cost: From the Perspective of Corporate Life Cycle. *Journal of Nanjing Audit University*, 2021, 18(5): 61-70.
- [18] Chami, R., Fullenkamp, C. Trust and Efficiency. *Journal of Banking & Finance*, 2002, 26(9): 1785-1809.
- [19] Jha, A., Chen, Y. Audit Fees and Social Capital. *The Accounting Review*, 2015, 90(2): 611-639.
- [20] Kong, D.M., Zhao, Y., Liu, S.S. Trust and Innovation: Evidence from CEOs' Early-life Experience. *Journal of Corporate Finance*, 2021, 69: 101984.
- [21] Chen, D.Q., Li, L., Liu, X.J. et al. Social Trust and Auditor Reporting Conservatism. *Journal of Business Ethics*, 2018, 153(4): 1083-1108.
- [22] Fan R, Zhai S P, Su Y. Social Credit Environment and Corporate Default Risk: A Quasi-natural Experiment Based on the Construction of Social Credit System Demonstration Cities[J]. *Economic Survey*, 2024, 41(1): 120-133.
- [23] Li, X.R., Wang, S.S., Wang, X. Trust and Stock Price Crash Risk: Evidence from China. *Journal of Banking & Finance*, 2017, 76: 74-91.
- [24] Wang, Y., Li, S.M. Does Social Trust Improve Corporate M&A Performance? *Management World*, 2017, (12): 125-140.
- [25] Cull, R. et al. Social Capital, Finance, and Consumption: Evidence from a Representative Sample of Chinese Households. *Journal of Banking & Finance*, 2022, 145: 106637.
- [26] Xie, K.J. Modern Corporate Credit and the Construction of Enterprise Credit System. *Management World*, 2002, (11): 108-112+151.
- [27] Ji, X.Q., Qiao, Y., Zhao, J.Y. Labor Market Segmentation, Social Trust and Capital Accumulation Efficiency. *Finance & Trade Economics*, 2020, 41(11): 83-96.
- [28] Jin, X.Y., Li, T., Zhang, M.R. et al. Enterprise Digital Technology Application and Total Factor Productivity Improvement. *Economic Perspectives*, 2025, (9): 59-77.
- [29] Diao, X.C., He, Q.L., Xia, R. Research on the Impact of Administrative Approval Reform on the Cost of Equity Financing. *Communication of Finance and Accounting*, 2025, (1): 46-49.
- [30] Pang, J.R., Zhang, H., Zhang, M.J. Capital Market Liberalization and the Cost of Equity Capital: An Empirical Study Based on Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connect. *Journal of Financial Research*, 2020, (12): 169-188.
- [31] Amihud, Y., Noh, J. Illiquidity and Stock Returns II: Cross-section and Time-series Effects. *The Review of Financial Studies*, 2021, 34(4): 2101-2123.
- [32] Xia, T.S., Feng, X.H. Margin Trading, Short Selling and the Cost of Equity Financing: A Quasi-natural Experiment Based on Phased Expansion. *Financial Development Research*, 2022, (11): 30-37.
- [33] Yu, Z., Zhou, L. How Does Digital Finance Affect Corporate Equity Financing Cost? Mechanism Test, Heterogeneity and Economic Consequences. *Communication of Finance and Accounting*, 2022, (3): 57-60.
- [34] Hua, J.G., Liu, C., Zhu, D. Digital Transformation, Financing Constraints and Corporate Total Factor Productivity. *South China Finance*, 2022, (7): 54-65.
- [35] Wang, C.F., Guo, Y.N. Semi-mandatory Dividend Policy and the Cost of Equity Financing. *Journal of Financial Research*, 2021, (8): 172-189.
- [36] Zhou, D.H., Wang, J. Customer Concentration, Product Market Competition and the Cost of Equity Financing. *Journal of Shanxi University of Finance and Economics*, 2017, 39(7): 44-58.
- [37] Wang, S.N., Xu, Y.F. Financing Constraints, Accounting Conservatism and the Cost of Equity Financing. *Modern Finance and Economics*, 2016, 36(11): 64-75.
- [38] Richardson, A.J., Welker, M. Social Disclosure, Financial Disclosure and the Cost of Equity Capital. *Accounting, Organizations and Society*, 2001, 26(7-8): 597-616.
- [39] Wang, W., Jiang, G.F. Information Disclosure, Transparency and Cost of Capital. *Economic Research Journal*, 2004, (7): 107-114.

- [40] Zhao, Y.J., Wan, Y.J., Fang, X. Can Key Audit Matters Disclosure Reduce the Cost of Equity Financing of Listed Companies? *Auditing Research*, 2020, (6): 59-67.
- [41] Ye, C.G., Wang, Z., Wu, J.F. et al. External Governance, Environmental Information Disclosure and the Cost of Equity Financing. *Nankai Business Review*, 2015, 18(5): 85-96.
- [42] Lei, R.X., Zhang, X.H., Li, N. ESG Performance and Cost of Equity Financing: A Mechanism Test Based on Information Quality, Corporate Reputation and Operational Risk. *Commercial Accounting*, 2024, (23): 10-17.
- [43] Zeng, Y., Lu, Z.F. Information Disclosure Quality and the Cost of Equity Financing. *Economic Research Journal*, 2006, (2): 69-79+91.
- [44] Wang, Z.Q., Wang, Z.J., Li, J. Operational Risk and Working Capital Financing Decisions. *Accounting Research*, 2017, (5): 60-67+97.
- [45] Shen D L. Social Trust and Corporate Risk-Taking[J]. *Economic Management Journal*, 2019, 41(8): 147-161.
- [46] Bae, K.H., Kanagaretnam, K., Tan, H.P. Societal Trust and the Informativeness of Analyst Research. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2547875, 2020.
- [47] Ding, H., Lv, C.J., Chen, Y.J. Investors' Information Capability, Opinion Divergence and Stock Price Crash Risk: Evidence from SSE Interactive. *Management World*, 2018, 34(9): 161-171.
- [48] Ling, R.Z., Pan, A.L., Li, B. Can Supply Chain Finance Improve Enterprise Innovation? *Journal of Finance and Economics*, 2021, 47(2): 64-78.
- [49] Pan, A.L., Wang, X. How Does Distrust Environment Affect Corporate Risk-Taking? Evidence from Urban Dishonest Persons Subject to Enforcement. *Theory and Practice of Finance and Economics*, 2023, 44(4): 34-41.
- [50] Li, B., Huo, Z.F. Social Distrust Environment and Corporate Default Risk: Evidence from Urban Dishonest Persons Subject to Enforcement. *Journal of Yunnan University of Finance and Economics*, 2025, 41(1): 80-95.
- [51] Beck, T., Levine, R., Levkov, A. Big Bad Banks? The Winners and Losers from Bank Deregulation in the United States. *The Journal of Finance*, 2010, 65(5): 1637-1667.
- [52] Meng Q B, Zou Y, Hou D S. Can Short Selling Restraining Irregular Behaviors of Listed Firms?[J]. *Economic Research Journal*, 2019, 54(6): 89-105.
- [53] Kong, D.M., Tao, Y.Q., Wang, Y.N. China's Anti-corruption Campaign and Firm Productivity: Evidence from a Quasi-natural Experiment. *China Economic Review*, 2020, 63: 101535.
- [54] Jiang, Y.B., Ban, X. Social Trust and the Cost of Equity Capital. *Economic Survey*, 2021, 38(6): 150-160.
- [55] Zhang, Y.J., Yin, L.H., Jiu, L.L. Does Lower Accounting Information Comparability Increase the Cost of Equity Financing? *International Business Review*, 2019, (6): 135-152.
- [56] Wen Z L, Ye B J. Mediating Effect Analysis: Development of Methods and Models[J]. *Advances in Psychological Science*, 2014, 22(5): 731-745.
- [57] Kim, J.B., Zhang, L.D. Accounting Conservatism and Stock Price Crash Risk: Firm-level Evidence. *Contemporary Accounting Research*, 2016, 33(1): 412-441.
- [58] Li, C.G., Xu, R. Insurance Governance and Corporate Violations: Research on the Governance Effect of Directors' and Officers' Liability Insurance. *Journal of Financial Research*, 2020, (6): 188-206.
- [59] Claessens, S., Djankov, S., Fan, J.P.H., Lang, L.H.P. Disentangling the Incentive and Entrenchment Effects of Large Shareholdings. *The Journal of Finance*, 2002, 57(6): 2741-2771.
- [60] Zeng, Y. Separation of Ownership and Control, Equity Balance and Equity Financing Cost: Evidence from China's Listed Companies. *Journal of Guangxi University of Finance and Economics*, 2010, 23(1): 78-83.
- [61] Huang, Y.X., Sun, Y., Shao, Y.H., Wang, S.J. Research on Equity Balance and Corporate Governance. *Journal of Tongji University (Natural Science)*, 2003, (9): 1102-1105+1116.
- [62] Bai, C.E. et al. An Empirical Study on Corporate Governance Structure of China's Listed Companies. *Economic Research Journal*, 2005, (2).