

Does Capital Market Opening Curb Corporate "Short-Term Debt for Long-Term Investment"? Evidence from the Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connect Programs

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Abstract

Using A-share listed companies from 2010 to 2021 as a sample and leveraging the quasi-natural experiment of the "Shanghai-Hong Kong Stock Connect" and "Shenzhen-Hong Kong Stock Connect" programs, this study constructs a multi-period difference-in-differences (DID) model to examine the impact of capital market opening on corporate "short-term debt for long-term investment" (SFLI) behavior. The findings reveal that the Stock Connect programs significantly suppress corporate SFLI. This effect operates through three distinct yet interconnected channels: reconstructing financing conditions via price signals, improving the information environment, and optimizing corporate governance structures. Heterogeneity analysis indicates that the policy effect is more pronounced in non-state-owned enterprises and small and medium-sized enterprises, highlighting its role in mitigating structural biases in credit allocation. This paper provides new empirical evidence on the micro-level effects of capital market opening and offers important implications for financial marketization reforms.

Keywords: Capital market opening; Short-Term Debt for Long-Term Investment; Financing Constraints; Information Environment; Corporate Governance

1. Introduction

Corporate "short-term debt for long-term investment" (SFLI), a typical manifestation of maturity mismatch in corporate investment and financing, is a prominent and potentially risky financial phenomenon in China's real economy. This strategy significantly increases liquidity risk and can even trigger debt defaults and systemic financial risk. Existing research primarily explores the causes of SFLI from perspectives of information asymmetry and managerial irrationality, generally concluding that defects in the financial system and managerial myopia are key factors. However, most studies are confined to static analyses, with insufficient research on how dynamic changes in capital market institutions reshape corporate financing behavior.

The two-way opening of China's capital market, exemplified by the "Shanghai-Hong Kong Stock Connect" (2014) and "Shenzhen-Hong Kong Stock Connect" (2016), provides a valuable quasi-natural experimental setting. Compared to the traditional Qualified Foreign Institutional Investor (QFII) system, the "Stock Connect" programs feature a higher degree of marketization and transparency, potentially reshaping corporate financing decisions from multiple dimensions. Although existing studies have noted the role of capital market opening in promoting corporate innovation and price efficiency, its impact on corporate debt maturity structure choices---particularly SFLI behavior---lacks systematic theoretical explanation and empirical testing.

Based on data from A-share listed companies from 2010 to 2021, this study utilizes the exogenous policy shock of the phased inclusion of stocks into the "Stock Connect" programs to construct a multi-period DID model, systematically examining the impact channels and economic consequences of capital market opening on corporate SFLI behavior. The main theoretical contribution is the construction of a "price signal-information environment-governance structure" triple-channel analytical framework, explaining how secondary market opening influences corporate maturity mismatch behavior through synergistic effects. Practically, the findings provide micro-level evidence for optimizing capital market opening policies and precisely alleviating corporate long-term financing bottlenecks.

2. Theoretical Framework and Hypotheses

This paper constructs a triple-channel analytical framework of "price signals - information environment - governance structure" to explain the theoretical pathways through which capital market opening affects corporate SFLI behavior.

2.1 Price Signal Channel and Financing Condition Reconstruction (H1)

The "Stock Connect" policy reconstructs corporate financing conditions by reshaping price signals in the secondary market. Foreign institutional investors enhance stock price informativeness, making prices better reflect long-term firm value. This clearer valuation signal reduces the discount on equity refinancing and transmits a positive certification effect to the credit market, thereby improving the overall financing environment for firms. When firms can access long-term funds more easily and cheaply, their motivation to rely on the high-risk SFLI strategy diminishes.

H1: Capital market opening reconstructs corporate financing conditions through the price signal channel, thereby inhibiting SFLI behavior.

2.2 Information Environment Improvement and Supervisory Effects (H2)

FLI is essentially adverse selection behavior in an opaque information environment. The intervention of foreign investors systematically improves the information environment by strengthening analyst coverage and disclosure requirements. Increased information transparency raises the hidden costs for firms attempting to conceal maturity mismatches. Concurrently, enhanced market monitoring forces create an effective "reputational discipline" mechanism against managerial opportunism.

H2: Capital market opening inhibits corporate SFLI behavior by improving the information environment and strengthening external monitoring.

2.3 Governance Structure Optimization and Agency Cost Reduction (H3)

SFLI is a typical manifestation of the conflict of interest between managers and shareholders. The introduction of foreign institutional investors introduces new variables into the corporate governance structure. The "long-term value orientation" brought by foreign shareholders and the potential "market for corporate control threat" jointly curb managerial myopic behavior. This optimization encourages firms to shift their financing decisions from pursuing short-term scale to focusing on long-term stability.

H3: Capital market opening inhibits corporate SFLI behavior by optimizing the governance structure and reducing agency costs.

3. Research Design

This study employs a multi-period DID model to identify the causal effect of the "Stock Connect" policy on corporate SFLI behavior. The baseline model is specified as follows:

$$Mismatch_{i,t} = \alpha_0 + \alpha_1 Did_{i,t} + \sum_{k=2}^8 \alpha_k Control_{k,i,t} + Firm_i + Year_i + \varepsilon_{i,t} \quad (1)$$

The dependent variable $Mismatch_{i,t}$ represents the degree of SFLI for firm i in year t , measured using the maturity mismatch index. The core explanatory variable $Did_{i,t}$ is a policy dummy variable, which equals 1 if firm i is included in the Stock Connect program in year t or thereafter, and 0 otherwise.

The model controls for factors affecting corporate financing decisions, including ownership concentration, firm size, asset-liability ratio, return on assets, fixed asset ratio, cash holdings, and the proportion of non-current liabilities. Channel variables include the SA index (financing constraints), number of analyst followers (information environment), and

proportion of independent directors (governance). All continuous variables are winsorized at the 1st and 99th percentiles.

The initial sample comprises Shanghai and Shenzhen A-share listed companies from 2010 to 2021. Financial firms, ST, *ST, delisted companies, B-share issuers, and firms with pre-existing QFII holdings are excluded. The final sample includes 514 treatment firms and 449 control firms (8,147 firm-year observations). Data sources include Hong Kong Stock Exchange, CSMAR, and Wind. The model uses firm-level clustered standard errors, firm fixed effects, and year fixed effects. Mediation analysis examines the theoretical channels.

4. Empirical Results

4.1 Descriptive Statistics and Parallel Trends

Descriptive statistics show variables within reasonable ranges. The mean SFLI is 0.25 (std. dev. 0.18). The parallel trends test confirms no systematic differences between groups before policy implementation; effect coefficients become negative and increasing post-implementation, confirming the dynamic cumulative policy effect.

4.2 Baseline Regression and Economic Interpretation

Baseline regression results show the policy dummy (Did) coefficient is significantly negative at the 5% level (-0.0067), indicating the "Stock Connect" policy significantly reduced SFLI. This supports the core proposition that capital market opening guides firms to optimize debt maturity structure. The effect size is equivalent to 2.7% of the sample mean, indicating substantial economic importance, especially for non-SOEs and SMEs.

Table 1: Baseline Regression and Mechanism Test Results

VARIABLES	Baseline Regression				Mechanism Tests			
			Financing Constraint Mechanism		Information Environment Perspective		Corporate Governance Perspective	
	(1) Mismat	(2) Mismat	(3) FC	(4) Mismat	(5) Mismat	(6) Mismat	(7) Mismat	(8) Mismat
Did	-0.005 (-0.92)	-0.006* (-1.86)	-0.081* (0.044)	-0.007** (0.003)	-0.008* (0.004)	-0.005 (0.006)	-0.012*** (0.004)	-0.006 (0.005)
FC				0.002** (0.001)				
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm/Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,147	8,147	8,146	8,146	4,624	3,522	4,281	3,865
R-squared	0.007	0.694	0.626	0.886	0.908	0.902	0.904	0.900

Note: Here in the table, "Mismat" stands for the dependent variable "Mismatch".

4.3 Examination of Transmission Channels

1. Price Signal Channel: Policy implementation alleviated financing constraints (SA index), confirming that price signals improve fundamental financing conditions.
2. Information Environment Channel: The policy effect is more pronounced among firms with extensive analyst coverage, suggesting synergy between foreign investors and domestic analysts in monitoring corporate behavior.
3. Governance Structure Channel: An increase in the proportion of independent directors is associated with the policy effect, supporting the governance optimization pathway. This effect is stronger in firms with initially weaker governance.

4.4 Robustness Checks

Robustness checks (alternative SFLI measures, adjusted policy timing, PSM samples, excluding B-shares and pre-existing QFII holdings, placebo tests) confirm stable conclusions, ruling out interference from measurement methods, sample selection, or other policies.

Table 2: Robustness Check Results

VARIABLE	(1)Mismat	(2)Mismat	(3)Mismat	(4)Mismat	(5)Mismat	(6)Mismat	(7)Mismat
Did	-0.006*	-0.007**	-0.008*	-0.006**	-0.016***	-0.004	-0.005
	(0.003)	(0.003)	(0.004)	(0.003)	(0.005)	(0.003)	(0.003)
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Firm/Year	Yes						
FE							
Observations	8,146	8,146	3,387	7,855	4,199	8,146	8,146
R-squared	0.886	0.886	0.934	0.886	0.880	0.886	0.886

Note: This table presents the results of robustness checks. Column (1): Alternative dependent variable (SFLI). Column (2): Adjusted policy timing. Column (3): PSM sample. Column (4): Excluding B-share firms. Column (5): Excluding pre-existing QFII holdings. Columns (6) and (7): Placebo tests with policy dates fictitiously advanced by 2 and 3 years, respectively.

4.5 Heterogeneity Analysis and Deep Interpretation

The policy effect is significant in non-SOEs and SMEs, demonstrating the market-based corrective function of capital market opening. It partially rectifies "ownership discrimination" and "scale discrimination" in credit allocation. The lack of significant effect in SOEs and large enterprises suggests that for these firms, secondary market opening alone is insufficient to alter inherent financing behaviors; deeper governance reforms are needed.

Table 3: Heterogeneity Analysis Results

VARIABLES	(1)Mismat	(2)Mismat	(3)Mismat	(4)Mismat
Did	0.006	-0.011**	-0.022***	0.003

	(0.004)	(0.004)	(0.006)	(0.004)
Controls	Yes	Yes	Yes	Yes
Firm/Year FE	Yes	Yes	Yes	Yes
Observations	3,199	4,947	4,310	3,836
R-squared	0.920	0.871	0.866	0.941

Note: This table presents the results of heterogeneity analysis. Columns (1) and (2) report results for subsamples of State-Owned Enterprises (SOEs) and Non-SOEs, respectively. Columns (3) and (4) report results for subsamples of Small and Medium-sized Enterprises (SMEs) and Large Firms, respectively.

5. Conclusion and Implications

This study demonstrates that the "Stock Connect" policy significantly inhibits corporate SFLI behavior through the triple channels of "price signals - information environment - governance structure." The core insight is that the micro-level effect of capital market opening extends beyond introducing capital; its deeper significance lies in reshaping the external environment and decision-making foundation of firms through market-based mechanisms.

Policy implications: a) Persist with and optimize structural opening strategies, especially benefiting SMEs and private enterprises by expanding included stocks and optimizing trading mechanisms. b) Promote linkage between opening policies and corporate governance reforms, particularly for SOEs where coordination with deeper institutional changes (e.g., SOE reform) is needed. c) Emphasize policy coordination across different markets, encouraging credit markets to absorb price signals and reputational capital from the capital market, fostering a virtuous cycle between direct and indirect financing.

Capital market opening should not be viewed merely as a channel for introducing foreign capital. Greater emphasis should be placed on its profound role in shaping corporate financing behaviors and governance structures. By accurately identifying policy effect heterogeneity and strengthening market-institution alignment, China can potentially achieve risk control and efficiency improvement during its opening process.

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