Economic Analysis Letters

Homepage: https://www.anserpress.org/journal/eal

Corporate financialization matters trade credit financing: Evidence from China's non-financial listed companies

Xiaohua Huang [a], Benhuan Nie [a], Zhehao Huang [b,*]

[a] *School of Economics and Statistics, Guangzhou University, Guangzhou, China*
[b] *Guangzhou Institute of International Finance, Guangzhou University, Guangzhou, China*

ABSTRACT

This study empirically examines the influence of corporate financialization on trade credit financing, focusing on non-financial companies listed in China's A-share market from 2010 to 2022. The results indicate that as corporate financialization increases, companies will obtain less trade credit financing. Further incorporating moderating factors like market position and financing constraints, we find that a higher market position effectively mitigates the negative impact of corporate financialization on trade credit financing, whereas higher financing constraints exacerbate the adverse effects of corporate financialization on trade credit financing. Additional analysis shows that corporate financialization negatively affects trade credit financing by crowding out main business performance and increasing operational risks. Moreover, corporate financialization more strongly inhibits trade credit financing in state-owned companies.

KEYWORDS

Corporate financialization; Trade credit financing; Market position; Financing constraint

* Corresponding author: Zhehao Huang
E-mail address: zhehao.h@gzhu.edu.cn

ISSN 2972-3272
doi: 10.58567/eal03030004

Received 30 July 2024; Accepted 16 September 2024; Available online 5 November 2024; Version of Record 15 September 2024

1. Introduction

As financial markets mature and financial capital accumulates, the financial sector has rapidly developed with significant profit increases. Meanwhile, due to the slowdown in global demand for goods and economic growth, along with overcapacity, real enterprises are experiencing generally low profit margins. In this context, an increasing number of companies are transferring substantial funds from the production sector to the financial sector in order to achieve higher returns, ultimately leading to the phenomenon of corporate financialization. (Wang et al., 2022).

The phenomenon of corporate financialization has attracted widespread attention from various sectors. Research on the effects of corporate financialization on the real economy is mainly categorized into two situations. The first is the reservoir effect, which includes revitalizing idle funds, enhancing liquidity, and easing financial constraints (Duchin et al., 2017). The second is the crowding-out effect, such as occupying innovation investment and main business investment (Tori and Onaran, 2018), increasing corporate operational risks (Deng et al.,2023), and hindering the improvement of production efficiency (Lyu et al., 2023). Corporate financialization can significantly alter companies' operations and financial condition, thereby impacting external stakeholders' perceptions. This encompasses assessments of company risk and the level of trust stakeholders place in them. Trade credit financing, based on trust between companies, has an impact on the real economy that is comparable to traditional commercial bank loan financing. Levien et al. (2018) selected over 3500 samples from 34 countries and found that trade credit financing on average accounts for 25% of total corporate debt in these samples. The CSMAR database indicates that among Chinese A-share listed companies in 2022, 29.78% used advance receipts, 67.09% utilized notes payable, and as high as 98.98% used accounts payable for financing. Clearly, trade credit financing is increasingly playing a pivotal role in corporate debt financing. Trade credit financing serves as a vital strategy for suppliers to maintain stable, high-quality customer relationships, enhancing the interconnectivity between the parties. This financing method requires suppliers to carefully assess not only operational risks but also the financial stability of their clients. Then, when companies shift their operational focus from real operations to financial investments, how will suppliers identify and respond to risks? And how will suppliers adjust their decisions regarding trade credit supply? These are all worth exploring. Therefore, this paper examines the influence of corporate financialization on trade credit financing, using data from Chinese A-share listed companies from 2010 to 2022 as an example, aiming to offer guidance for corporate decision-making.

The possible contributions of this paper are as follows: First, this paper extends the research on the impact of corporate financialization on trade credit financing. Few scholars have examined the relationship between corporate financialization and commercial credit financing. This study takes an external stakeholder perspective to investigate the impact between the two, expanding the research on the economic consequences of corporate financialization and the factors influencing trade credit. Second, the paper analyzes the impact of market position and financing constraints on the relationship between corporate financialization and trade credit financing. The research findings reflect the scruples of suppliers and the potential risks that suppliers are attentive to when companies engage in financialized investments, confirming the necessity for companies to enhance their market competitiveness and reduce their own risks. Third, this study analyzes the impact pathways of corporate financialization on trade credit financing from both operational risk and core business performance perspectives, enriching the research on the mechanisms by which corporate financialization affects trade credit financing.

2. Hypotheses development

2.1. Corporate financialization and trade credit financing

Trade credit financing is an informal financing method among companies resulting from business operations. When formulating trade credit policies, suppliers and customers carefully assess companies' credit risks and operational conditions, adjusting credit terms accordingly. Corporate financialization affects both the operational risks and the development of the main business, therefore, it may affect the company's trade credit financing through the following two pathways.

First, the trade credit provided by suppliers to their customers can be viewed as a short-term investment strategy, designed to attract customers and establish long-term business partnerships (Dass et al., 2015). Therefore, when making decisions on the supply of trade credit, suppliers will consider the company's operational performance and long-term development. Some scholars argue that companies, driven by precautionary motives, can enhance the liquidity of their assets by allocating financial assets, which is beneficial to their main business operations. However, more empirical evidence suggests that corporate financialization has a crowding-out effect on main business development (Xu, et al., 2021; Wang et al., 2022; Lyu et al., 2023). When companies have limited resources, holding more financial assets reduces funds available for productive investments (Clarke, 2014). Reducing investment in productive activities will weaken the collateral value of physical assets, decrease the company's ability to raise funds (Benmelech and Bergman, 2009), and have a negative impact on its operational development. Furthermore, equity incentives and shareholder primacy will induce managerial short-termism (Davis and Kim, 2015). Consequently, managers may shift the focus of operational management from the real sector to the financial domain to seek high short-term returns, neglecting real investment and technological innovation (Tori and Onaran, 2018). This behavior deviates from suppliers' long-term business strategy, thereby reducing trade credit extended to demand-side companies.

Second, corporate financialization increases operational risks for companies, thereby having a negative impact on trade credit financing. On one hand, according to agency theory, in an effort to meet performance assessments, management tends to heavily invest in financial assets with higher rates of return. However, the returns on financial assets are uncertain and come with a high risk of loss (Chen et al.,2023). Additionally, investing in financial assets can diminish a company's cash holdings, particularly when it comes to long-term financial assets with low liquidity, which can readily precipitate a liquidity crisis, thereby escalating the company's bankrupt risks (Deng et al.,2023). On the other hand, as substantial real capital flows into the financial sector, funds become idle and circulate within the financial realm, exacerbating the bubble in the virtual economy and potentially accumulating systemic risks. Financial assets largely depend on the capital market, which is characterized by significant volatility and strong risk contagion. This has reinforced the risk interconnectivity between real enterprises and the financial industry, making real businesses more susceptible to systemic risks from the financial sector. When corporate financial investments fail, the credit risk of companies can spread along the supply chain, adversely affecting upstream suppliers (Jorion and Zhang, 2009). Suppliers are unable to share in the excess profits from financial assets, yet they bear the risk of bad debt losses in trade credit due to the financial investment failures of companies. Suppliers may decrease the provision of trade credit due to risk aversion.

In summary, corporate financialization may negatively affect trade credit financing by impacting the development of the company's main business and operational risks. Therefore, the following hypotheses are proposed in this paper.

Hypothesis 1: As corporate financialization increases, companies will obtain less trade credit financing.

2.2. The moderating role of market position

Market position is an important characteristic that reflects the comprehensive competitiveness of companies, significantly influencing their financing and operations. High market position enables companies to secure trade credit more easily from suppliers. The reasons are as follows: First, suppliers have more trust in the high market

position companies' ability and willingness to fulfill their commitments. Companies with higher market position typically exhibit more rational resource allocation, lower product substitutability, and stronger brand effects (Datta et al., 2013), resulting in higher market share and profit margins. This strength enables them to maintain robust debt repayment capacity and reduce the risk of default. Moreover, managers of high market position companies value their reputation and brand highly, understanding that a good corporate image significantly lowers transaction costs (Smith et al.,2010). Hence, even in case of financial investment failure, these companies will actively fulfill their debt obligations to safeguard their reputation. Second, companies with high market positions have greater long-term investment value for suppliers. Suppliers are more willing to sign stable purchase and sales contracts with companies that have a high market share, transferring liquidity to customers through the establishment of lenient trade credit agreements, thereby seeking to establish good and lasting business relationships (Dass et al., 2015). Under a good cooperative relationship, companies with high market positions can offer suppliers substantial order volumes and income stability. Simultaneously, high market position companies also possess robust risk management, mitigating the dangers of financialization. Therefore, even facing risks from customer financial investments, suppliers maintain the supply of trade credit out of consideration for preserving long-term cooperation. Third, companies with higher market position hold an advantageous position in negotiations, limiting suppliers' decision-making power over trade credit supply. During the negotiation of purchase and sale contracts, the psychological game between both parties gives companies with high market position more bargaining power in the process. Leveraging their market dominance, these companies may employ tactics such as halting supply or switching suppliers to coerce trading partners into providing more trade credit (Fabbri and Klapper, 2016; Lee et al., 2018). According to the above analysis, this paper proposes hypothesis:

Hypothesis 2: Enhanced market position mitigates the negative impact of corporate financialization on trade credit financing.

2.3. The moderating role of financing constraints

When companies face higher financing constraints, engaging in financial investments may more adversely affect their ability to obtain trade credit. On one hand, companies experiencing financing constraints inherently pose higher credit risks (Kling,2018). If companies invest substantial capital in high-risk financial sectors, they become vulnerable to external factors like exchange rate fluctuations and government policy adjustments. The risk contagion effect of financial assets will transmit to the companies themselves (Wang et al., 2019), further exacerbating their credit risk. Consequently, suppliers adopt a more prudent attitude in providing credit financing to minimize the risk of bad debt, potentially reducing the trade credit available to companies. On the other hand, financing constraints faced by companies can affect their repayment capability and willingness. When companies face high financing constraints, obtaining funds from banks and other financial institutions becomes much harder (Musso and Schiavo, 2008), making companies highly susceptible to liquidity crises due to funding shortages. Although corporate financialization generates some cash flow, its effectiveness in alleviating financing constraints is limited (Yang et al.,2023). In this context, it is difficult for companies to rely on internal funds or external financing to satisfy the needs of their real entity development, compelling them to abandon some promising investment opportunities. If companies allocate substantial financial assets, it will further squeeze out the funds needed for industrial investment and the development of main business operations. In other words, high financing constraints can intensify the crowding-out effect of financialization on corporate real investment, which undermines real development of companies (Li et al., 2024). Moreover, as main business performance declines and real investments decrease, companies' ability to provide collateral diminishes, affecting their loan repayment capacity. Suppliers may reduce trade credit extended to companies to safeguard their interests. Based on this, this paper proposes hypothesis:

Hypothesis 3: Increased financing constraints exacerbate the adverse impact of corporate financialization on

trade credit financing.

3. Study design

3.1. Sample and data

This study selects companies listed on China's A-share market from 2010 to 2022 as the initial sample. The initial sample is processed as follows: (1) Removed companies in the financial and real estate industries; (2) Excluded ST and *ST companies; (3) Missing data were initially supplemented by consulting relevant financial statements. Severe cases of data loss were handled by deletion, while interpolation was used for minor omissions; (4) Winsorized all continuous variables at the 1th and 99th percentiles. Finally, 18170 observations were obtained. All data are sourced from the CSMAR database.

3.2. Variable definition

3.2.1. Dependent Variable

Trade credit financing (TCF): In this paper, trade credit financing refers to the demand for trade credit, which is the trade credit funds that companies obtain from upstream companies in the supply chain. Building on the methodologies of Li et al. (2024), this study measures trade credit financing by using the ratio of the sum of accounts payable, notes payable, and accounts collected in advance to total assets.

3.2.2. Independent Variable

Corporate financialization (FIN): Following the approaches of Qi et al. (2023), this paper measures corporate financialization by the proportion of financial assets to total assets. Financial assets include trading financial assets, derivative financial assets, loans and advances issued, available-for-sale financial assets, held-to-maturity investments, investment real estate, long-term equity investment.

3.2.3. Moderating Variables

Market position (MP): Referring to the works of Xu et al. (2022), the Lerner index is used to measure a company's market position, where MP = (Operating Revenue - Operating Costs - Sales Expenses - Management Expenses) / Operating Revenue.

Financing constraint (Fc): Drawing on the research of Kaplan and Zingales (1994), this paper uses the KZ index to evaluate the level of corporate financial constraints, where a higher KZ index indicates a higher level of financing constraints.

3.2.4. Control Variables

Integrating existing research, we control for other variables that may affect trade credit financing, including corporate age (Age), corporate size (Size), cash flow of operating (Cfo), ownership concentration (Top1), fixed asset ratio (Fix), corporate growth (Growth), management expense ratio (Expense). The definitions of relevant variables are shown in A1.

3.2. Model design

To test Hypothesis 1, the following model is constructed (model 1).

$$TCF_{i,t} = \alpha_0 + \alpha_1 FIN_{i,t} + \sum_{k=2}^{8} \alpha_k Controls_{i,t,k} + Year_t + Industry_i + \varepsilon_{i,t} \quad (1)$$

Where *TCF* represents trade credit financing, *FIN* denotes corporate financialization, *Controls* denotes the control variables. *Year* is the year fixed effect, *Industry* is the industry fixed effect, and ε is the random error term.

To investigate Hypothesis 2 and 3, model (2) is constructed.

$$TCF_{i,t} = \beta_0 + \beta_1 FIN_{i,t} + \beta_2 FIN_{i,t} \times M_{i,t} + \beta_3 M_{i,t} + \sum_{k=4}^{10} \beta_k Controls_{i,t,k} + Year_t + Industry_i + \varepsilon_{i,t} \quad (2)$$

Where *M* represents the market position and financing constraints of company.

4. Results and analysis

4.1. Descriptive statistical analysis

Table 1 reports the descriptive statistics for the main variables. The mean of TCF is 0.1574, and the minimum and maximum values are 0.005 and 0.5255, respectively. This indicates that there are large differences in the scale of trade credit among different companies. The mean of FIN is 0.0835, with a standard deviation of 0.1073. The maximum and minimum values are 0.5639 and 0, respectively. It shows that companies generally have different degrees of financial investment behavior, and there is a phenomenon of excessive financialization.

Table 1. Descriptive statistics.

Variable	N	Mean	SD	Min	Max
TCF	18,170	0.1574	0.1161	0.0050	0.5255
FIN	18,170	0.0835	0.1073	0.0000	0.5639
Age	18,170	2.3714	0.7561	0.0000	3.3673
Size	18,170	22.4740	1.3208	20.1181	26.4045
Cfo	18,170	0.0480	0.0662	-0.1457	0.2417
Top1	18,170	33.8199	15.1301	7.9504	73.8021
Fix	18,170	0.2094	0.1540	0.0038	0.6865
Growth	18,170	0.1581	0.3420	-0.5016	1.9782
Expen	18,170	0.0874	0.0687	0.0070	0.4129

4.2. Regression analysis

Table 2 shows the baseline regression results. Among them, column (1) presents the results only accounting for industry and annual fixed effects. It can be observed that the coefficient of FIN is -0.1913, which is significantly negative at the 1% level. Column (2) displays the results with control variables included. After controlling the characteristics of companies, the regression coefficient has not changed significantly. This indicates that there is a significantly negative correlation between corporate financialization and trade credit financing. The results support hypothesis 1.

4.3. Robustness checks

4.3.1. Replacing independent variable

According to Du et al. (2022), long-term equity investment is part of the business strategy for real enterprises,

rather than a short-term behavior of companies. Therefore, we measure corporate financialization by using the ratio of financial assets excluding long-term equity investments to total assets, and conduct baseline regression again. The results in column (1) of Table 3 confirm the robustness of our findings.

Table 2. Baseline results.

	(1) TCF	(2) TCF
FIN	-0.1913***	-0.2146***
	(-7.0872)	(-9.3226)
Age		0.03329***
		(6.8972)
Size		0.009486***
		(3.2971)
Cfo		0.01474
		(0.4090)
Top1		0.0003282**
		(2.1557)
Fix		-0.1150***
		(-4.4506)
Growth		-0.004724
		(-1.3565)
Expen		-0.3546***
		(-11.8602)
_cons	0.1734***	-0.07282
	(76.9165)	(-1.0946)
Year	Yes	Yes
Industry	Yes	Yes
N	18170	18170
R^2	0.3083	0.4110

*Notes: * p < 0.1, ** p < 0.05, *** p < 0.01.*

4.3.2. Replacing dependent variable

Referencing the studies of Zhou et al. (2023) and Li et al. (2024), we recalculate trade credit financing as follows: (accounts payable + notes payable) / total assets, (accounts payable) / total assets, (accounts collected in advance + accounts payable + notes payable) / operating revenue, (accounts payable + notes payable) / operating revenue, and (accounts payable) / operating revenue. The test results in columns (2) -(6) of Table 3 indicate that the original conclusions are robust.

4.3.3. Sub-sample regression

Due to manufacturing industry's unique industry properties and organizational methods, scale and frequency of trade credit usage exceed other industries. Therefore, this paper only includes the manufacturing industry in the sample scope and re-conducts the regression analysis. The results in column (1) of Table 4 suggest that our conclusion remains unchanged.

4.3.4. Adjust model settings

To minimize endogeneity bias caused by omitted variables, this paper employs the following methods. First, we control for individual and year fixed effects. Second, we employ the high-order joint fixed effects method by Moser and Voena (2018), controlling for industry and year joint fixed effects. The results in columns (2) and (3) of Table 4 indicate that our findings still hold after adjusting model settings.

Table 3. Alternative variables.

	(1) TCF	(2) TCF1	(3) TCF2	(4) Tcf	(5) Tcf1	(6) Tcf2
Fin	-0.2205***					
	(-7.6862)					
FIN		-0.1314***	-0.1912***	-0.1623***	-0.1228***	-0.1818***
		(-10.6555)	(-9.6920)	(-2.9935)	(-5.8920)	(-6.6194)
_cons	-0.04756	-0.008593	-0.03784	-0.3566**	-0.1426*	-0.2147*
	(-0.6943)	(-0.2811)	(-0.7680)	(-2.2663)	(-1.7981)	(-1.9488)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
N	18170	18170	18170	18170	18170	18170
R^2	0.3968	0.3906	0.4099	0.2986	0.3430	0.3290

*Notes: * p < 0.1, ** p < 0.05, *** p < 0.01*

4.4. Addressing Endogeneity

4.4.1. Lagged variable method

Since trade credit financing by companies may affect financialization behavior, resulting in endogeneity caused by reverse causality. To address this, the paper draws on the approach of Chen et al. (2023), using the one-period lagged FIN for empirical testing. Additionally, to mitigate potential interference from control variables, we further conducted regression analysis using control variables lagged by one-period. The results are shown in columns (4) and (5) of Table 4, which are consistent with the above baseline regression.

Table 4. Other robustness test.

	(1) TCF	(2) TCF	(3) TCF	(4) TCF	(5) TCF
FIN	-0.1939***	-0.08925***	-0.2194***		
	(-11.4250)	(-6.3297)	(-8.8383)		
L.FIN				-0.2089***	-0.2130***
				(-8.3702)	(-8.3111)
_cons	-0.1060	0.06789	-0.07366	-0.07168	-0.06725
	(-1.2984)	(1.0354)	(-1.0878)	(-1.0793)	(-1.0277)
Controls	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes
Industry	Yes		Yes	Yes	Yes
Year×Industry			Yes		
Id		Yes			
N	11640	18170	18095	16607	16607
R^2	0.3475	0.1003	0.4337	0.4112	0.4048

*Notes: * p < 0.1, ** p < 0.05, *** p < 0.01*

4.4.2. Instrumental variable method

To reduce potential endogeneity interference, we use the instrumental variable method. Referring to the research of Xu et al. (2023), we use the average financialization levels of other companies in the same industry (FinInd) and the same province (FinPro) as instrumental variables, and conduct two-stage least squares regression. Column (1) of Table 5 shows the first-stage regression results. The coefficients for FinInd and FinPro are both significant at the 1% level, validating the relevance condition of the instrumental variables. In Table 6, column (2), the second-stage regression results indicate that the coefficient of Fin remains significantly negative. Additionally, the underidentification test, weak identification test, and overidentification test meet the statistical requirements, suggesting that the instrumental variables are valid. Therefore, after considering endogeneity issues, the conclusions of this paper remain robust.

Table 5. Endogeneity analysis.

	(1) TCF the first-stage	(2) TCF the second-stage	(3) TCF PSM
FIN		-0.1873***	-0.2108***
		(-6.07)	(-8.73)
FINInd	0.4703***		
	(5.57)		
FinPro	-46.059***		
	(-4.27)		
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Industry	Yes	Yes	Yes
K-P LM statistic	46.829		
KP rk Wald F statistic	29.653		
Hansen J	0.2061		
N	18170	18170	9564
R^2	0.3475	0.1003	0.4337

*Notes: * p < 0.1, ** p < 0.05, *** p < 0.01*

4.4.3. Propensity score matching

To address the problem of sample selection bias, this paper employs the propensity score matching. Drawing on Wang et al. (2022), this study divides the sample based on the median proportion of financial assets in total assets, designating the lower proportion group as the control and the higher proportion group as the treatment. This paper sets control variables as covariates, uses the Logit model to estimate the propensity score, and matches samples using the 1:1 nearest neighbor matching method. The kernel density plots before and after propensity score matching are shown in Figure 1. After conducting nearest-neighbor matching, the kernel density distributions of the treatment and control groups began to resemble each other, indicating a good quality of matching. The regression results after PSM are shown in Column (3) of Table 5. It can be seen that the conclusions remain unchanged.

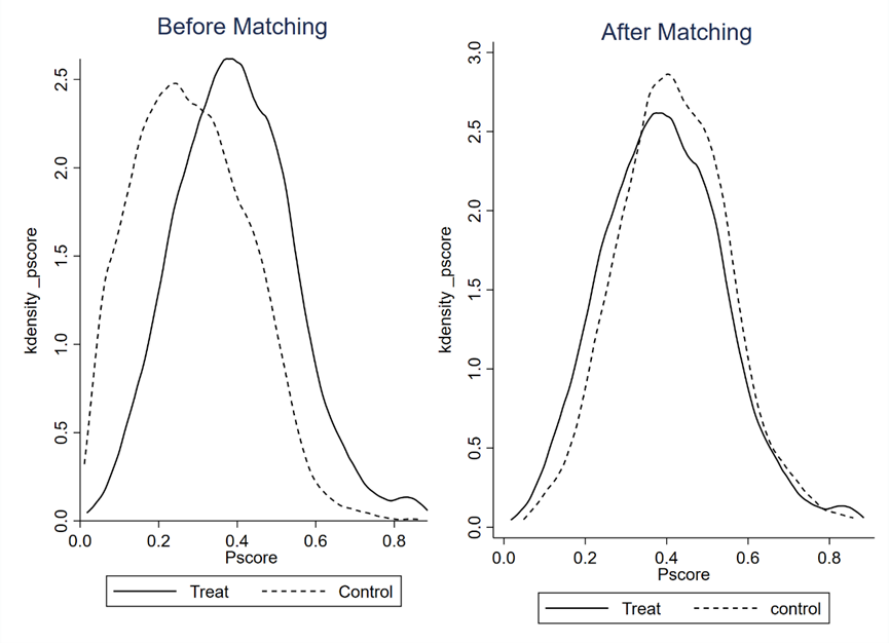

Figure 1. Propensity score kernel density.

5. Additional analysis

5.1. Moderating effect test

5.1.1. Market position

Column (1) in Table 6 presents the moderating effect regression results of market position. The interaction term coefficient between corporate financialization and market position is 0.4038, which is significantly positive at the 1% level. This indicates that higher market position can mitigate the negative impact of corporate financialization on trade credit financing. Hypothesis 2 is validated.

Table 6. Moderating effect test.

	(1) TCF	(2) TCF
FIN	-0.1997***	-0.1825***
	(-9.4833)	(-8.6700)
FINMp	0.4038***	
	(3.0590)	
Mp	-0.2492***	
	(-11.1437)	
FINFc		-0.01910***
		(-3.4223)
Fc		0.01720***
		(14.9434)
_cons	-0.05509	-0.1968**
	(-0.9416)	(-2.6291)
Controls	Yes	Yes
Year	Yes	Yes
Industry	Yes	Yes
N	18168	17852
R^2	0.4531	0.4153

*Notes: * p < 0.1, ** p < 0.05, *** p < 0.01.*

5.1.2. Financing constraints

Column (2) in Table 6 shows the moderating effect regression results for financing constraints. It can be seen that the interaction term coefficient between corporate financialization and financing constraints is -0.01910, which is significantly negative at the 1% level. This suggests that higher financing constraints lead to a stronger negative impact of corporate financialization on trade credit financing. The results support Hypothesis 3.

5.2. Further analysis

5.2.1. Mechanism Exploration

Empirical results show that corporate financialization decreases trade credit financing, but the mechanisms at play are still to be investigated. Based on the theoretical analysis presented earlier, this paper explores the impact pathway of corporate financialization on trade credit financing from the perspective of operational risk and main business performance by constructing Model (3) and (4).

$$Risk_{i,t} = \alpha_0 + \alpha_1 FIN_{i,t} + \sum_{k=2}^{8} \alpha_k Controls_{i,t,k} + Year_t + Industry_i + \varepsilon_{i,t} \quad (3)$$

$$Main_{i,t} = \alpha_0 + \alpha_1 FIN_{i,t} + \sum_{k=2}^{8} \alpha_k Controls_{i,t,k} + Year_t + Industry_i + \varepsilon_{i,t} \quad (4)$$

Where Risk represents operational risk and Main represents main business performance. The definitions of relevant variables are shown in A1.

Column (1) of Table 7 presents the test results for operational risk. The results show that the regression coefficient of corporate financialization and operational risk is 0.01816, which is significant at the 1% level. This indicates a significant positive correlation between corporate financialization and operational risk, suggesting that financialization exacerbates operational risk for companies. Operational risk directly impacts the assessment of trade credit granting decisions by suppliers. As operational risk increases, trade credit financing that a company can secure decreases. Thus, the influence pathway is 'Corporate financialization→(increased) operational risk→(reduced) trade credit financing'.

The regression results in column (2) of Table 7 show that the coefficient for corporate financialization on main business performance is -0.04159, which is significantly negative at the 1% level. This indicates that corporate financialization has a negative impact on main business performance. Suppliers consider a company's main business operations and long-term development when making trade credit supply decisions. When financialization exerts a crowding-out effect on a company's main business operations, suppliers' willingness to sustain future cooperation with these companies through trade credit diminishes. Thus, the influence pathway is 'Corporate financialization → (reduced) main business performance → (reduced) trade credit financing'.

5.2.2. Property rights nature

Given that the nature of property rights is a vital characteristic of China's ownership economy, the relationship between corporate financialization and trade credit financing may be influenced by companies' property rights nature. To this end, this paper divides the sample into state-owned and non-state-owned companies based on property rights nature, and conducts group regression. Table 7, columns (3) and (4), display results for property rights heterogeneity, showing that the coefficients for both state-owned and non-state-owned companies are significantly negative at the 1% level. The inter-group coefficient difference test is also significant, indicating that financialization more strongly inhibits trade credit financing in state-owned companies. Possible reasons for this result include:

First, State-owned companies have stronger guarantee capabilities, leading to easier access to favorable bank loans and reduced reliance on trade credit financing. Second, state-owned companies undertake responsibilities such as addressing employment, upholding social stability, and ensuring the preservation and appreciation of state-owned assets. Once corporate financial investments fail, they will not only damage business performance but also trigger cascading effects, causing significant shocks to the supply chain. Finally, state-owned companies face issues like 'soft budget constraints' and 'absence of ownership', which amplify managerial control excessively. This can exacerbate financial risks associated with corporate financialization due to managers' short-sighted agency problems.

Table 7. Further analysis.

	(1)	(2)	(3)	(4)
	Risk	Perf	SOEs TCF	Non-SOEs TCF
FIN	0.01816***	-0.04159***	-0.2757***	-0.1668***
	(3.3815)	(-5.8587)	(-6.6534)	(-11.1342)
_cons	0.1844***	-0.2098***	0.09746	-0.1184
	(12.5878)	(-11.1259)	(1.3075)	(-1.4364)
Bdiff-test			0.109***	
P-value			(0.000)	
Controls	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
N	18170	18170	7853	10277
R^2	0.1508	0.4439	0.5062	0.3503

*Notes: * p < 0.1, ** p < 0.05, *** p < 0.01*

6. Conclusions and implications

Focusing on non-financial companies listed on China's A-share market during the period from 2010 to 2022, this study explores the impact of corporate financialization on trade credit financing. The results are as follows: (1) Corporate financialization has an inhibitory effect on corporate trade credit. (2) Financing constraints and market position play a moderating role in the relationship between corporate financialization and trade credit financing. (3) Mechanism analysis reveals that corporate financialization reduces trade credit financing by crowding out main business performance and increasing operational risks. (4) the negative impact of corporate financialization on trade credit financing is greater in state-owned companies.

The research provides the following implications: First, companies should carefully engage in financialized investments in line with their financing environment, avoiding excessive financialization that crowds out funds needed for production and operations. By repaying debts promptly, enhancing the transparency and accuracy of financial reporting, and establishing long-term, stable cooperative relationships with suppliers, companies can strengthen the confidence of external stakeholders and effectively address the challenges posed by financialization. Second, the government should provide increased credit support to SMEs by establishing special credit programs and lowering financing thresholds to alleviate financing pressures. Complemented by innovation subsidies and tax relief policies, this will encourage SMEs to increase their R&D investment, drive technological progress and industry upgrades, thereby enhancing their market position and strengthening their credibility within the supply chain.

Funding Statement

This research received no external funding.

Conflict of interest

The authors claim that the manuscript is completely original. The authors also declare no conflict of interest.

Author contributions

Conceptualization: Xiaohua Huang; Investigation: Xiaohua Huang, Benhuan Nie, Zhehao Huang; Methodology: Xiaohua Huang; Formal analysis: Zhehao Huang; Writing – original draft: Xiaohua Huang, Benhuan Nie; Writing – review & editing: Xiaohua Huang, Zhehao Huang.

Appendix

A1. Variables definition.

Symbol	Definition
Age	Ln (current year-listing year + 1)
Size	Ln (total assets)
Cfo	Net cash flows from operating activities /total assets
Top1	Percentage of shares held by the company's largest shareholder
Fix	Net Fixed Assets /total assets
Growth	Growth rate of main business revenue
Expen	Management expense/operating revenue
Risk	Profitability volatility calculated based on the standard deviation of the return on total assets over three consecutive years
Main	Operating profit- investment income-gains from changes in fair value +income from investments in associated and joint venture enterprises. / total assets

References

Wang, J., and Mao, N. (2022). Does financialization of non-financial corporations promote or prohibit corporate risk-taking? *Emerging Markets Finance and Trade*, 58, 1913-1924. https://doi.org/10.1080/1540496X.2021.1944853

Duchin, R., Gilbert, T., Harford, J., and Hrdlicka, C. (2017). Precautionary savings with risky assets: When cash is not cash. *The Journal of Finance*, 72, 793-852. https://doi.org/10.1111/jofi.12490

Tori, D., and Onaran, O. (2018). The effects of financialization on investment: evidence from firm-level data for the UK. *Cambridge Journal of Economics*, 42, 1393-1416. https://doi.org/10.1093/cje/bex085

Deng, M., Fang, X., Lyu, Q., and Luo, W. (2023). How does corporate financialization affect operational risk? Evidence from Chinese listed companies. *Economic Research-Ekonomska Istraživanja*, 1-21. https://doi.org/10.1080/1331677X.2023.2165526

Dass, N., Kale, J. R., and Nanda, V. (2015). Trade credit, relationship-specific investment, and product market power. *Review of Finance*, *19*, 1867-1923. https://doi.org/10.1093/rof/rfu038

Xu, X., and Xuan, C. (2021). A study on the motivation of financialization in emerging markets: The case of Chinese nonfinancial corporations. *International Review of Economics & Finance*, *72*, 606-623. https://doi.org/10.1016/j.iref.2020.12.026

Lyu, Y., Zhang, J., Qing, X., and Bai, Y. (2023). The influence of non-financial enterprises' financialization on total factor productivity of enterprises: Promotion or inhibition? *International Journal of Finance & Economics,* 1-18. https://doi.org/10.1002/ijfe.2912

Levine, R., Lin, C., and Xie, W. (2018). Corporate resilience to banking crises: The roles of trust and trade credit. *Journal of Financial and Quantitative Analysis*, *53*, 1441-1477. https://doi.org/10.1017/S0022109018000224

Clarke, T. (2014). The impact of financialisation on international corporate governance: the role of agency theory and maximising shareholder value. *Law and Financial Markets Review*, 8, 39-51. https://doi.org/10.5235/17521440.8.1.39

Benmelech, E., and Bergman, N. K. (2009). Collateral pricing. *Journal of financial Economics*, 91, 339-360. https://doi.org/10.1016/j.jfineco.2008.03.003

Davis, G. F., and Kim, S. (2015). Financialization of the Economy. *Annual Review of Sociology*, 41, 203-221. https://doi.org/10.1146/annurev-soc-073014-112402

Chen, Y., and Sun, R. (2023). Corporate financialization and the long-term use of short-term debt: Evidence from China. *Finance Research Letters*, 58, 104602. https://doi.org/10.1016/j.frl.2023.104602

Jorion, P., and Zhang, G. (2009). Credit contagion from counterparty risk. *The Journal of Finance*, 64, 2053-2087. https://doi.org/10.1111/j.1540-6261.2009.01494.x

Datta, S., Iskandar-Datta, M., and Singh, V. (2013). Product market power, industry structure, and corporate earnings management. *Journal of Banking & Finance*, 37, 3273-3285. https://doi.org/10.1016/j.jbankfin.2013.03.012

Smith, K. T., Smith, M., and Wang, K. (2010). Does brand management of corporate reputation translate into higher market value? *Journal of Strategic Marketing*, 18, 201-221. https://doi.org/10.1080/09652540903537030

Fabbri, D., and Klapper, L. F. (2016). Bargaining power and trade credit. *Journal of Corporate Finance*, 41, 66-80. https://doi.org/10.1016/j.jcorpfin.2016.07.001

Lee, H. H., Zhou, J., and Wang, J. (2018). Trade credit financing under competition and its impact on firm performance in supply chains. *Manufacturing & Service Operations Management*, *20*, 36-52. https://doi.org/10.1287/msom.2017.0640

Kling, G. (2018). A theory of operational cash holding, endogenous financial constraints, and credit rationing. *The European Journal of Finance*, 24, 59-75. https://doi.org/10.1080/1351847X.2016.1225590

Wang, C. (2019). A literature review on corporate financialization. *American Journal of Industrial and Business Management*, *9*, 647-657. https://doi.org/10.4236/ajibm.2019.93044

Musso, P., and Schiavo, S. (2008). The impact of financial constraints on firm survival and growth. *Journal of Evolutionary Economics*, 18, 135-149. https://doi.org/10.1007/s00191-007-0087-z

Yang, J., and Chen, S. (2023). Corporate financialization, digitalization and green innovation: A panel investigation on Chinese listed firms. *Innovation and Green Development*, 2, 100068. https://doi.org/10.1016/j.igd.2023.100068

Li, Y., Wang, Y., Ma, R., and Wang, R. (2024). Research on the impact of financialization of high-tech manufacturing listed companies on real investment. *Applied Economics*, 1-14. https://doi.org/10.1080/00036846.2024.2311060

Li, H. Q., Yang, Y., Xue, F. W., and Liu, Z. Y. (2024). Annual report readability and trade credit financing: Evidence from China. *Research in International Business and Finance*, 69, 102220. https://doi.org/10.1016/j.ribaf.2024.102220

Qi, B., and Fang, P. (2023). Dynamic changes in corporate financialization during CEO tenure. *Finance Research Letters*, 58, 104456. https://doi.org/10.1016/j.frl.2023.104456

Xu, F., Liu, Q., Zheng, X., Cao, L., and Yang, M. (2022). Research on the impact of China's high-speed rail opening on enterprise market power: Based on the perspective of market segmentation. *Transport Policy*, 128, 121-137. https://doi.org/10.1016/j.tranpol.2022.09.019

Kaplan, S. N., and Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints? *The Quarterly Journal of Economics*, 112, 169-215. https://doi.org/10.1162/003355397555163

Du, P., Zheng, Y., and Wang, S. (2022). The minimum wage and the financialization of firms: Evidence from China. *China Economic Review*, 76, 101870. https://doi.org/10.1016/j.chieco.2022.101870

Zhou, Z., and Li, Z. (2023). Corporate digital transformation and trade credit financing. *Journal of Business Research*, 160, 113793. https://doi.org/10.1016/j.jbusres.2023.113793

Moser, P., and Voena, A. (2012). Compulsory licensing: Evidence from the trading with the enemy act. *American Economic Review*, 102, 396-427. https://doi.org/10.1257/aer.102.1.396

Xu, S., and Guo, L. (2023). Financialization and corporate performance in China: Promotion or inhibition? *Abacus*, 59, 776-817. https://doi.org/10.1111/abac.12213