

On Social Trust, Financing Environment and Enterprises' Short-Term Funds used for Long-Term Investment (SFLI) Decision

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Abstract:

In this paper, China's listed a-share enterprises from 2007 to 2019 are taken as the research sample. Based on the perspective of financing constraints and debt financing cost, this study empirically analyzes the impact of social trust on SFLI (hereinafter SFLI). The results show that social trust can reduce the occurrence of SFLI, mainly by lessening financing constraints and reducing debt financing costs. Meanwhile, the relationship among managerial competence, industrial policy and social trust is substitution, which can control the degree of SFLI to a certain extent by mutual choice. This paper enriches the research in the field of social trust and the influencing factors of short-term fund for long-term investment, and has a certain reference significance for managers to arrange the investment and financing period reasonably.

Keywords: *Social trust, Short-term financing for long-term investment (SFLI), Financing constraints, Debt financing cost*

I. INTRODUCTION

In recent years, with the continuous improvement of financial market, corporations attach great importance to the potential risks in the financial field, and the prevention and control of financial risks are an important part of corporate governance. As for enterprise fund raising in the financial sector, the risk caused by financing term mismatch, that is, SFLI, has gained more and more attention, and there are more studies on this topic. Most scholars pay attention to the influencing factors of short-term funds for long-investment. According to the existing research, most scholars focus on the formal system, such as the level of integration of industry and finance^[1], manager ability^[2], and the appropriate level of monetary policy^[3], while less attention has been paid on the informal system. As one of the important informal systems, inter-regional social trust has been gradually increased in recent years, although scholars have recognized the importance of social trust earlier^[4,5]. Some studies have pointed out that social trust supports investors' psychological expectations, thus affecting the financing environment of enterprises^[6,7], but studies on social trust are still insufficient, so are the financing constraints and debt financing costs. Therefore, it is of practical significance to explore the influence of social trust on SFLI from the two paths of financing constraints and debt financing cost.

Based on this, this paper selects the data of China's A-share listed companies from 2007 to 2019 and the data of social trust between different regions as research samples. Using the method of empirical analysis, the research finds that: the level of social trust between different regions affects the short-term funds for long investment through affecting financing constraints or debt financing constraints. The higher level of social trust alleviates the SFLI behavior of enterprises to a certain extent. The marginal contributions of this paper are as follows: (1) the influencing factors of SFLI in the existing literature mainly focus on the influence of formal system, while the informal system is less studied. Therefore, this paper analyzes the impact of social trust on SFLI in informal system, and tests the robustness of the results through a series of tests, which is a useful supplement to the existing research on short-term funds and long-term investment. (2) Financing constraints and debt financing costs are used as intermediary mechanisms to supplement and improve the impact mechanism of social trust on SFLI. (3) It is found that the relationship between managers' ability and social trust, or industrial policy and social trust is substitution, which is helpful for enterprises to deepen their understanding of the relationship from the "characteristics of managers inside the enterprise" and "policy environment outside the enterprise --- industrial policy" respectively, and adjust the level of SFLI. (4) The research on social trust to short-term funds and long-term investment in this paper, on the one hand, makes the influencing factors of short-term funds and long-term investment more perfect, on the other hand, makes the company managers realize the importance of social trust to the matching of enterprise financing term, and helps the managers to think about the investment and financing mode and proportion of enterprise.

The rest of this paper is arranged as follows. The second part is theoretical analysis and research hypothesis. Through the research of scholars, this paper gradually analyzes and puts forward the hypothesis of regional social trust and SFLI. The third part is the research design, including sample selection, variable definition and model construction. The fourth part is empirical analysis. This paper from descriptive statistics, correlation analysis, regression analysis, two kinds of intermediary path research and analysis; The fifth part is further analysis, from the perspective of regulating effect analysis; The sixth part is the robustness test, including the study of substitution variables and one-stage lag. The seventh part is the conclusion and enlightenment.

II. THEORETICAL ANALYSIS AND THE RESEARCH HYPOTHESIS

Based on previous research^[8-10], in the field of enterprise financing, the basic principle of investment and financing maturity matching should be followed, that is, short-term funds should be used to support activities with strong liquidity within limited time, while long-term funds should be used to support long-term investment activities, so as to reduce the financial risk caused by insufficient cash flow. However, in practical development, there is a widespread problem of relatively radical financing maturity mismatch^[11,12], mainly refers to the behavior that enterprises often use short-term funds to support long-term investment, namely the SFLI.

For the radical investment strategy of SFLI, scholars have found that this behavior is more a forced behavior than the independent choice of enterprises^{[3][11]}. Therefore, the influencing factors of SFLI are more concerned.

Based on the existing literature, it is found that the influencing factors of SFLI can be roughly divided into governance level and system level. In terms of governance, on the one hand, it is related to the characteristics of managers themselves. For example, managers' overconfidence^[13] makes them underestimate the liquidity risk of short-term financing, and then choose SFLI. Differences in managers' abilities will also affect enterprises' behavior of short funds and long investment^[2]. On the one hand, it is related to the characteristics of corporate management and control. For example, by embezzlement effect, the stronger the family control, the higher the level of short funds and long investment^[14]. And the weak degree of creditor governance^[15] also affects the application of SFLI. On the one hand, it is also related to local government intervention. For example, different levels of local government debt affect the level of SFLI^[16]. And Government officials' visits also influence enterprises' expansion of investment to some extent and aggravate the degree of it^[17].

However, after all, the influencing factors of short-term funds and long-term investment are more caused by the system level, and the system problem is the main incentive^[2]. The phenomenon of short-term funds and long-term investment is due to the forced behavior that the financing needs of enterprises cannot be fully met. Bai et al.^[11] found that SFLI are more forced alternative financing options due to incomplete financial markets, incomplete monetary policies and other systems by analyzing the maturity mismatch of financing at home and abroad. Lu and others^[18] also pointed out that the domestic interest rate structure is unreasonable. In order to reduce liquidity risk, banks are more willing to provide short-term funds and reduce the issuance of long-term funds, which will also force enterprises to choose short-term funds and long-term investment to a certain extent. At the same time, Zhong et al.^[3] also pointed out that SFLI is an alternative behavior of enterprises to solve financial repression, and the level of SFLI is affected by monetary policy. Therefore, the financing environment or the level of financing difficulty is an important factor affecting the choice of SFLI.

Most scholars have analyzed the influencing factors of financing constraints from the perspective of formal system^[19,20]. From the perspective of informal system, the level of social trust is also an important influencing factor of financing constraints, which mainly affects the psychological expectations of investors, improves the investment willingness of investors to enterprises, and then affects the financing environment of enterprises^[6,7]. In the existing literature on financing environment, there are few studies based on social trust, which has certain research significance, so this paper chooses the perspective of social trust to study.

Social trust refers to the way and form of culture's influence on economy^[21], which reflects a social phenomenon influenced by social structure and social norms in the process of interpersonal communication. As an important informal system, social trust increases the communication between people and promotes the exchange and dissemination of information^[22]. It can reduce the return on capital

risks caused by information asymmetry and agency problems between different regions^[23], thus enhancing the ability of enterprises to obtain credit^[24]. Enterprises can choose banks with lower interest rates and lower risks to carry out credit, and as many financing terms as possible can be matched. Therefore, from the perspective of financing environment, social trust reduces the level of SLFI by reducing the degree of financing constraints.

At the same time, social trust can also stabilize investors' psychological expectations to a certain extent and reduce the use cost of funds^[25,26]. High social trust makes securities companies such as banks more willing to conduct transactions and trust each other, reducing the uncertainty and expectation of transactions, that is, reducing the transaction cost of enterprises^[27,28]. Lower transaction cost brings more choices for enterprise debt financing, enhances enterprise's ability to obtain credit, and alleviates the problem of debt financing cost to a certain extent. Specifically, high social trust promotes a variety of selectivity in transactions, which makes enterprises face lower debt financing constraints, and enterprises "long-term investment activities reduce their dependence on short-term credit^[3]", thus reducing the occurrence of SFLI. Therefore, from the detailed analysis of financing environment, social trust can reduce the cost of debt financing, and then alleviate the degree of SFLI.

Based on the above analysis, social trust can alleviate the SFLI by reducing the degree of financing constraints or alleviating the cost of debt financing. Therefore, this paper puts forward the following hypothesis:

H: Social trust reduces the behavior of enterprises investing in SFLI.

III. RESEARCH DESIGN

3.1 Sample Selection

The samples selected in this paper are China's A-share listed companies from 2007 to 2019 due to the new accounting standards issued in 2007, and the financial data of China's listed companies, which are relatively complete, standardized, open and easy to obtain. Among them, the social trust data comes from the questionnaire survey of Chinese Entrepreneur Survey System (CESS) on trust degree in various regions of the country and the Credit Environment Index (CEI) compiled by Center for Honesty and Credit Evaluation, Chinese Academy of Management Sciences. The financial data came from Wind database and CSMAR database, and the samples were screened according to the following procedures: (1) ST and *ST companies were screened out; (2) The financial industry companies were excluded; (3) Companies with total liabilities greater than total assets were removed; (4) The samples with missing data were deleted. Winsorize the continuity variable up and down 1%. Finally, 29,659 observational samples were obtained.

3.2 Variable Definition

3.2.1 Short-term funds for Long-term Investment (SFLI)

With reference to the research of Frank et al.^[29], Ma et al.^[11] and Zhong et al.^[3] this paper defines SFLI level (SFLI) as (Cash expenditure of long-term investment such as fixed assets - (current increment of long-term debt + current increment of equity + net cash flow from operating activities + cash inflow generated by disposal of long-term assets such as fixed assets)), and divides it by the total assets at the beginning of the period to eliminate the scale effect, i.e.:

$$SFLI = \frac{INV - (\Delta LONGDEBT + \Delta EQUITY + OCF + SCF)}{ASSET} \quad (1)$$

Among them, SFLI refers to short term funds for long term investment; $\Delta LONGDEBT$ refers to the current increment of long-term debt, $\Delta EQUITY$ represents current EQUITY increment; OCF represents net cash flow from operating activities; SCF represents the cash inflow generated by the disposal of long-term assets such as fixed assets; If the short-funds long-term investment (SFLI) data is positive, it indicates that the enterprise has short-funds long-term investment behavior. If not, the condition must be the opposite.

3.2.2 Trust1

For this part, it is worthwhile to focus on the research on social trust conducted by scholars in recent years, the research of Cao et al.^[26], Liu et al.^[30], Zhang et al.^[31] was used for reference. As for the measure of social trust, this paper uses the questionnaire data of CESS on the level of trust in the whole country, which includes 31 provinces, autonomous regions and municipalities directly under the Central Government. The questionnaire is distributed to more than 15,000 enterprise managers, and more than 5,000 valid questionnaires are collected. The question about social trust in the questionnaire is "Based on your experience, which five regions (provinces) do you think are more trustworthy enterprises (in order)?" The final trust data is based on the ranking given by enterprise managers, and the score is sorted out and the mean is calculated to represent the trust index of each region. Where, a higher value indicates a higher level of social trust in the region (province). In order to visualize and standardize the subsequent regression analysis results, this paper processed the trust data and reduced it by 100 times.

3.2.3 Trust index

As for the Trust Index, the study further refers to the method of Cao et al.^[32], and to measure the level of social trust, the CEI is adopted, which is compiled by the Center for Honesty and Credit Evaluation, Chinese Academy of Management Sciences. This data measures the credit level of major cities in China from various scenarios, and reflects the urban trust situation and the construction of social trust system. The data comprehensively analyzes and evaluates the trust situation of 284 cities in China in 2010, and comprehensively reflects the level of regional trust, and the higher the value, the better the social trust

between regions. In order to visualize and standardize the subsequent regression and other analysis results, this paper reduces the trust data by 100 times.

3.2.4 Control variables (controls)

With regard to the studies of Lai et al.^[33], Xiao et al.^[34] and Zhong et al.^[35], this paper adds control variables, including enterprise SIZE (SIZE), future growth opportunities (SalesG), annual stock return (YRETURN), shareholding ratio of the largest shareholder (First), shareholding ratio of senior executives (Top), interest coverage ratio (Intcov), proportion of independent directors (INDEP), total Number of directors (Number), Corporate governance Level (Level), two-job enterprise (Power1), two-job integration (Power2), power integral variable (Power3). At the same time, Year and Industry are controlled. Main variables are defined in Table I.

TABLE I. Definition of main variables

Variable type	Variable	Variable name	Definition
Explained variable	SFLI	SFLI	Cash expenditure of long-term investment such as fixed assets (increase of long-term funds in the current period+increase of equity in the current period+net cash flow of operating activities+cash inflow generated from disposal of long-term assets such as fixed assets), and divided by total assets at the beginning of the period to eliminate scale effect
Explanatory variable	Social trust	Trust1	The CESS questionnaire data on trust in various regions of the country is adopted, processed, and then divided it by 100
		Trust3	This paper uses CESS to measure the social trust level of domestic cities, and processes the data and divides it by 100
Variables Control	Enterprise size	SIZE	Natural logarithm of ending asset balance
	Future growth opportunities for the company	SalesG	Historical one-year growth rate of operating income
	Annual return on stock	YRETURN	Annual stock return considering reinvestment of cash dividends
	Shareholding ratio of the largest shareholder	First	Number of shares held by the largest shareholder divided by the total number of shares of the enterprise
	Shareholding ratio of senior management	Top	Executive Holdings divided by total corporate shares
	Interest protection multiple	Intcov	In order to visualize and standardize the analysis results such as follow-up regression,

			the enterprise's profit before interest and tax is divided by the interest expense, and the data is processed on this basis and divided by 100
Proportion of independent directors	INDEP		Number of independent directors divided by the total number of Directors of the Company
Total Board of Directors	Number		Number of board members
Level of corporate governance	Level		Drawing lessons from the practice of Zhang Huili et al ^[36] and using principal component analysis, we construct comprehensive indicators from supervision, incentive and decision-making to measure the level of corporate governance
Double-job enterprise	Power1		If the chairman and the General Manager are the same person, 1 shall be taken, otherwise 0 shall be taken
Integration of two duties	Power2		If the two positions of Chairman and general manager are integrated, 1 shall be taken, otherwise 0 shall be taken; The sum of that sum of the three is great than or equal to 2, and 1 is taken as the power Virtual variable, otherwise 0 is taken
Power integral variable	Power3		If the two positions of Chairman and general manager are integrated, 1 shall be taken, otherwise 0 shall be taken; The sum of that three is a POW integral variable
Year Fixing Effect	Year		Year dummy variable, that is, year dummy variable
Firm Fixed Effect	Industry		Industry dummy variable

3.3 Basic Model Construction

This paper uses the following regression model to empirically test the impact of social trust on SFLI.

$$SFLI_{i,t} = \beta_0 + \beta_1 Trust_{i,t} + \beta_2 Controls_{i,t} + \sum Year + \sum Industry + \varepsilon_{i,t} \quad (2)$$

Among them, SFLI refers to the SFLI level of the Ith enterprise in period T; Trust represents the social Trust degree of the Ith enterprise in phase T; Controls represents the control variable of phase T of the Ith enterprise, which includes company SIZE (SIZE), company future growth opportunities (SalesG), annual stock return (YRETURN), shareholding ratio of the largest shareholder (First), shareholding ratio of senior executives (Top), interest coverage ratio (Intcov), proportion of independent directors (INDEP), and total Number of directors (Number), corporate governance Level (Level), dual position enterprise (Power1), power dummy variable (Power2), power integral variable (Power3).

IV. EMPIRICAL ANALYSIS

4.1 Descriptive Statistics

Table II is a descriptive statistic of the main studied variables. The data show that in China's A-share listed companies from 2007 to 2019, the average value of short-funds for long-term investment (SFLI) is 0.087, the 75th quantile is 0.012, and the 75th quantile is close to 0, indicating that about one quarter of the companies are in the state of short-funds long-term investment, which is basically consistent with the existing research^{[1][3]}. It also further shows that it has certain practical significance to study the influencing factors of short-term loans and long-term investment. The average values of social trust (Trust1 and trust3) were 0.849 and 0.745, respectively, which were basically consistent with the existing literature^{[26][31,32]}; At the same time, the data of control variables are basically consistent with the relevant literature.

TABLE II. Descriptive statistics

Variable	Measured Value	Mean Value	Minimum Value	p25	Median	p75	Maximum Value	Standard deviation
SFLI	29659	-0.087	-0.715	-0.149	-0.058	0.012	0.341	0.175
Trust1	29659	0.849	0.041	0.188	0.777	1.187	2.189	0.641
Trust3	29659	0.745	0	0.700	0.728	0.808	0.906	0.110
SIZE	29659	22.000	19.340	21.050	21.820	22.750	26.050	1.316
SalesG	29659	0.159	-0.567	-0.011	0.114	0.268	1.767	0.329
YRETURN	29659	0.244	-0.699	0.249	0.016	0.471	3.520	0.768
First	29659	0.355	0.088	0.235	0.337	0.459	0.755	0.151
Top	29659	0.068	0	0	0.000	0.051	0.615	0.138
Intcov	29659	0.151	-0.181	0	0.025	0.089	3.748	0.486
INDEP	29659	0.372	0.308	0.333	0.333	0.429	0.571	0.052
Number	29659	8.698	5.000	7.000	9.000	9.000	15.000	1.726
Level	29659	-0.021	-2.026	-0.740	-0.155	0.610	2.414	0.969
Power1	29659	0.250	0	0	0	1.000	1.000	0.433
Power2	29659	0.311	0	0	0	1.000	1.000	0.463
Power3	29659	1.137	0	1.000	1.000	2.000	3.000	0.833

4.2 Correlation Analysis

Table III and table IV respectively show the correlation coefficients between the main variables in this paper under the two measurement methods of social trust. The respective correlation coefficients between SFLI and social trust (Trust1 and trust2) are significantly negative, which provides preliminary empirical support for the research hypothesis of this paper.

TABLE III. Correlation analysis 1

	SFLI	Trust3	SIZE	Sales G	YRET URN	First	Top	Intcov	INDE P	Number	Level	Power 1	Power 2	Power 3
SFLI	1													
Trust3	-0.057 ***	1												
SIZE	0.045* **	0.002	1											
SalesG	-0.196 ***	0.003	0.034* **	1										
YRET URN	-0.170 ***	0	-0.110 ***	0.074* **	1									
First	-0.062 ***	-0.015 ***	0.252* **	0.016* **	0.005	1								
Top	-0.123 ***	0.118* **	-0.266 ***	0.075* **	0.008	-0.066 ***	1							
Intcov	-0.171 ***	-0.003	-0.020 ***	0.088* **	0.051* **	0.038* **	0.061* **	1						
INDEP	0.014* *	0.018* **	0.074* **	0.057* **	-0.028*	0.133* **	0.101* **	-0.016 ***	1					
Number	0.036* **	-0.038 ***	0.221* **	-0.027 ***	0.010*	-0.037 ***	-0.190 ***	-0.019 ***	-0.445 ***	1				
Level	-0.107 ***	0.084* **	-0.415 ***	0.077* **	0.023* **	-0.189 ***	0.663* **	0.037* **	0.433* **	-0.599 ***	1			
Power1	-0.088 ***	0.055* **	-0.122 ***	0.073* **	0.003	0.010*	0.474* **	0.019* **	0.172* **	-0.194 ***	0.523 ***	1		
Power2	-0.165 ***	0.044* **	-0.080 ***	0.037* **	0.016* **	-0.371 ***	0.268* **	0.008	-0.015 ***	-0.062 ***	0.325 ***	0.494 ***	1	
Power3	-0.170 ***	0.056* **	-0.087 ***	0.051* **	0.026* **	-0.396 ***	0.312* **	-0.001	0.023* **	-0.097 ***	0.376 ***	0.546 ***	0.838 ***	1

*, **, *** are significant at the levels of 10%, 5% and 1%, respectively. The following tables are consistent.

TABLE IV. Correlation analysis 2

	SFLI	Trust3	SIZE	Sales G	YRET URN	First	Top	Intcov	INDE P	Number	Level	Power 1	Power 2	Power 3
SFLI	1													
Trust3	-0.086 **	1												
SIZE	0.045* **	0.119 ***	1											
SalesG	-0.196 ***	0.037 ***	0.034* **	1										
YRET URN	-0.170 ***	0.051 ***	-0.110 ***	0.074* **	1									
First	-0.062 ***	0.014 **	0.252* **	0.016* **	0.005	1								
Top	-0.123 ***	0.090 ***	-0.266 ***	0.075* **	0.008	-0.066 ***	1							
Intcov	-0.171 ***	0.001	-0.020 ***	0.088* **	0.051* **	0.038* **	0.061* **	1						
INDEP	0.014* *	0.024 ***	0.074* **	0.057* **	-0.028*	0.133* **	0.101* **	-0.016 ***	1					
Number	0.036* **	0.014 **	0.221* **	-0.027 ***	0.010*	-0.037 ***	-0.190 ***	-0.019 ***	-0.445 ***	1				
Level	-0.107 ***	0.035 ***	-0.415 ***	0.077* **	0.023* **	-0.189 ***	0.663* **	0.037* **	0.433* **	-0.599 ***	1			

Power1	-0.088 ***	0.055 ***	-0.122 ***	0.073* **	0.003	0.010*	0.474* **	0.019* **	0.172* **	-0.194 ***	0.523 ***	1		
Power2	-0.165 ***	0.065 ***	-0.080 ***	0.037* **	0.016* **	-0.371 ***	0.268* **	0.008	-0.015 ***	-0.062 ***	0.325 ***	0.494 ***	1	
Power3	-0.170 ***	0.095 ***	-0.087 ***	0.051* **	0.026* **	-0.396 ***	0.312* **	-0.001	0.023* **	-0.097 ***	0.376 ***	0.546 ***	0.838 ***	1

4.3 Regression Analysis

Table V is the regression analysis results of model (2), showing the multivariate linear analysis results of the influencing factors of short-funds long-term investment (SFLI). As shown in the table, the regression coefficient between social trust (Trust1) and short-funds long-term investment (SFLI) is 0.006, and it is significant at the level of 1%. To some extent, this confirms that inter-regional social trust (Trust1 and trust3) significantly reduces the behavior of short-funds long-term investment (SFLI), which basically supports hypothesis H. This lays a Foundation for further exploring the path of social trust (Trust1 and trust3) affecting short-funds long-term investment (SFLI).

TABLE V. Regression analysis

VARIABLES	(1) SFLI	(2) SFLI
Trust1	-0.006*** (-3.78)	
Trust3		-0.036*** (-3.98)
SIZE	0.005*** (5.30)	0.005*** (5.32)
SalesG	-0.080*** (-20.71)	-0.079*** (-20.70)
YRETURN	-0.034*** (-17.08)	-0.034*** (-17.08)
First	-0.211*** (-25.94)	-0.211*** (-25.93)
Top	-0.059*** (-4.94)	-0.058*** (-4.87)
Intcov	-0.039*** (-17.57)	-0.039*** (-17.59)
INDEP	-0.112*** (4.86)	0.114*** (4.95)
Number	-0.003*** (-3.48)	-0.003*** (-3.40)
Level	-0.015*** (-6.46)	-0.015*** (-6.52)
Power1	0.058*** (17.30)	0.057*** (17.22)
Power2	-0.012***	-0.012***

	(-3.07)	(-3.02)
Power3	-0.048***	-0.048***
	(-20.92)	(-20.97)
Constant	0.008	0.010
	(-0.35)	(0.43)
Observations	29,659	29,659
R-squared	0.152	0.153
r2_a	0.151	0.151
F	97.31	97.38

Note:***,**and*indicate significant at 1%, 5% and 10% levels respectively, t value is in brackets, and standard error is adjusted by cluster at company level. The following tables are consistent.

4.4 Path Regression Test of the Effect of Social Trust on SFLI

From the previous theoretical analysis and the research hypothesis, it can be seen that social trust can reduce the degree of financing constraints or alleviate the cost of debt financing, and finally alleviate the SFLI. Therefore, regression tests are performed from two paths respectively.

4.4.1 Social trust, financing constraints and SFLI

According to Kaplan and Zingales^[37], financing constraint index is used to reflect the degree of enterprise financing constraint, i.e., to calculate part of enterprise financial situation indicators first, then to qualitatively express the level of enterprise financing constraint, and then to express the quantitative relationship between the level of financing constraint and the variables reflecting enterprise characteristics. In the existing literature, Studies by Lamont et al.^[38], Whited and Wu^[39], Shi et al.^[40] and Wei et al.^[41] are referred to measure the degree of financing constraint. In this paper, KZ index and WW index are taken to represent the degree of financing constraint.

Table VI shows the results of regression analysis of financing constraints as a mediator variable. Column (1) shows that the regression coefficient of social trust (Trust1) and SFLI is significantly negative at the 1% level. In column (2), the regression coefficient between social Trust1 and financing constraint (KZ index) is significantly negative at 1% level, indicating that social trust can alleviate financing constraint degree to some extent. In column (3), the regression coefficient of financing constraint (KZ index) and SFLI is positive and significant at 1% level, and the regression coefficient of social trust (Trust1) and SFLI is still negative. In column (4), the regression coefficient of social Trust3 and SFLI is significantly negative at 1% level. In column (5), the regression coefficient between social Trust3 and financing constraint (KZ index) is significantly negative at 1% level, which once again confirms that social trust can alleviate financing constraint degree to a certain extent. In column (6), the regression coefficient of financing constraint (KZ index) and SFLI is positive and significant at 1% level, and the regression coefficient of social Trust3 and SFLI is still negative.

TABLE VI. Analysis of intermediary effect of financing constraints KZ index

VARIABLES	(1) SFLI	(2) KZ	(3) SFLI	(4) SFLI	(5) KZ	(6) SFLI
Trust1	-0.006*** (-3.78)	-0.049*** (-4.16)	-0.004*** (-2.80)			
Trust3				-0.036*** (-3.98)	-0.216*** (-3.44)	-0.028* (-3.27)
KZ			0.033*** (50.03)			0.033*** (50.07)
SIZE	0.005*** (5.30)	-0.112*** (16.70)	0.001 (1.34)	0.005*** (5.32)	0.111*** (16.69)	0.001 (1.37)
SalesG	-0.080*** (-20.71)	-0.119*** (-5.14)	0.076*** (-20.59)	-0.079*** (-20.70)	-0.118*** (-5.09)	0.076*** (-20.58)
YRETURN	-0.034*** (-17.08)	0.061*** (5.12)	-0.036*** (-18.40)	-0.034*** (-17.08)	0.061*** (5.12)	-0.036*** (-18.40)
First	-0.211*** (-25.94)	-0.800*** (-13.94)	-0.184*** (-22.85)	-0.211*** (-25.93)	-0.806*** (-14.08)	-0.184*** (-22.81)
Top	-0.059*** (-4.94)	-0.593*** (-7.11)	-0.039*** (-3.27)	-0.058*** (-4.87)	-0.594*** (-7.11)	-0.038*** (-3.20)
Intcov	-0.039*** (-17.57)	-0.136*** (-8.34)	-0.035*** (-15.71)	-0.039*** (-17.59)	-0.136*** (-8.36)	-0.035*** (-15.72)
INDEP	-0.112*** (4.86)	0.859*** (5.08)	0.083*** (3.75)	0.114*** (4.95)	0.874*** (5.16)	0.085*** (3.82)
Number	-0.003*** (-3.48)	-0.031*** (-5.39)	-0.002** (-2.21)	-0.003*** (-3.40)	-0.031*** (-5.29)	-0.002** (-2.16)
Level	-0.015*** (-6.46)	-0.102*** (-6.04)	-0.012*** (-5.13)	-0.015*** (-6.52)	-0.103*** (-6.10)	-0.012*** (-5.18)
Power1	0.058*** (17.30)	0.029 (-1.26)	0.059*** (17.99)	0.057*** (17.22)	-0.031 (-1.33)	0.058*** (17.93)
Power2	-0.012*** (-3.07)	(0.033) (1.12)	-0.013*** (-3.46)	-0.012*** (-3.02)	0.034 (1.16)	-0.013*** (-3.42)
Power3	-0.048*** (-20.92)	0.034* (1.95)	-0.049*** (-22.18)	-0.048*** (-20.97)	(0.033) (1.89)	-0.049*** (-22.22)
Constant	0.008 (-0.35)	-1.311*** (-8.20)	0.036 (1.63)	0.010 (0.43)	-1.202*** (-7.49)	0.050** (2.24)
Observations	29,659	29,659	29,659	29,659	29,659	29,659
R-squared	0.152	0.100	0.208	0.153	0.100	0.208
r2_a	0.151	0.0989	0.207	0.151	0.0986	0.207
F	97.31	76.62	177.6	97.38	76.32	177.6

Table VII is the regression analysis result of WW index as financing constraint variable. Column (1) shows that the regression coefficient of social trust (Trust1) and SFLI is significantly negative at 1% level.

In column (2), the regression coefficient between Trust1 and financing constraint (WW index) is significantly negative at 1% level, indicating that social trust can alleviate financing constraint degree to a certain extent. In column (3), the regression coefficient of financing constraint (WW index) and short loan and long investment (SFLI) is positive and significant at 1% level, and the regression coefficient of social trust (Trust1) and SFLI is still negative. In column (4), the regression coefficient between Trust3 and SFLI is significantly negative at the 1% level. In column (5), the regression coefficient of Trust3 and financing constraint (WW index) is significantly negative at 1% level, reassuring that inter-regional social trust can alleviate financing constraint degree to a certain extent. In Column (6), the regression coefficient of financing constraint (WW index) and SFLI is positive and significant at 1% level, and the regression coefficient of social trust (Trust3) and SFLI is still negative.

TABLE VII. Analysis of intermediary effect of financing constraints WW index

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	SFLI	WW	SFLI	SFLI	WW	SFLI
Trust1	-0.006*** (-3.78)	-0.003* (-1.66)	-0.006*** (-3.67)			
Trust3				-0.036*** (-3.98)	-0.029** (-2.38)	-0.033*** (-3.75)
WW			-0.082** (14.42)			-0.082** (14.39)
SIZE	0.005*** (5.30)	-0.037*** (-34.39)	0.008*** (8.25)	0.005*** (5.32)	-0.037*** (-34.30)	0.008*** (8.34)
SalesG	-0.080*** (-20.71)	-0.045*** (-9.40)	0.076*** (-19.77)	-0.079*** (-20.70)	-0.045*** (-9.40)	0.076*** (-19.72)
YRETURN	-0.034*** (-17.08)	0.000 (0.05)	-0.034*** (-17.18)	-0.034*** (-17.08)	0.000 (0.05)	-0.034*** (-17.16)
First	-0.211*** (-25.94)	-0.067*** (-7.35)	-0.200*** (-24.06)	-0.211*** (-25.93)	-0.067*** (-7.28)	-0.206*** (-25.42)
Top	-0.059*** (-4.94)	-0.044*** (-4.87)	-0.055*** (-4.68)	-0.058*** (-4.87)	-0.042*** (-4.73)	-0.054*** (-4.61)
Intcov	-0.039*** (-17.57)	-0.001 (-0.49)	-0.039*** (-17.58)	-0.039*** (-17.59)	-0.001 (-0.50)	-0.039*** (-17.59)
INDEP	-0.112*** (4.86)	-0.027 (1.09)	-0.112*** (4.85)	0.114*** (4.95)	0.029 (1.15)	-0.112*** (4.87)
Number	-0.003*** (-3.48)	-0.003*** (-3.51)	-0.003*** (-3.30)	-0.003*** (-3.40)	-0.003*** (-3.48)	-0.002*** (-3.09)
Level	-0.015*** (-6.46)	-0.005** (-2.36)	-0.015*** (-6.44)	-0.015*** (-6.52)	-0.005** (-2.40)	-0.015*** (-6.37)
Power1	0.058*** (17.30)	0.015*** (4.55)	0.053*** (14.28)	0.057*** (17.22)	0.014*** (4.49)	0.056*** (16.96)
Power2	-0.012*** (-3.07)	-0.002 (-0.49)	-0.013*** (-3.27)	-0.012*** (-3.02)	-0.002 (-0.45)	-0.012*** (-2.99)
Power3	-0.048***	-0.010***	-0.043***	-0.048***	-0.010***	-0.047***

	(-20.92)	(-3.87)	(-12.52)	(-20.97)	(-3.88)	(-20.69)
Constant	0.008	-0.117***	0.001	0.010	-0.103***	0.018
	(-0.35)	(-4.93)	(0.06)	(0.43)	(-4.21)	(0.79)
Observations	29,659	29,659	29,659	29,659	29,659	29,659
R-squared	0.152	0.210	0.159	0.153	0.210	0.159
r2_a	0.151	0.209	0.158	0.151	0.209	0.158
F	97.31	112.7	96.85	97.38	112.6	99.17

Based on the above regression analysis results, it can be seen that financing constraints (KZ index and WW index) play an intermediary role between social trust and SFLI. More elaborately, social trust can further reduce the level of SFLI by reducing the degree of corporate financing constraints. It supports the social trust, financing constraints, short loans, long investments path, supports the hypothesis.

4.4.2 Social trust, debt financing cost and SFLI

Reference to existing literature^[42,43], in this paper, the proportion of corporate financial expenses in the total ending debt represents the debt financing cost (Costdebt1), and in order to enhance the credibility of the paper, the proportion of corporate interest expenses, commission expenses and other financial expenses in the total ending debt represents the debt financing cost (Costdebt2).

Table VIII is the regression analysis result of debt financing cost represented by Costdebt1. Column (1) shows that the regression coefficient of social trust (Trust1) and SFLI is significantly negative at the level of 1%. In column (2), the regression coefficient between Trust1 and Costdebt1 is significantly negative at 1% level, indicating that social trust can reduce debt financing cost to a certain extent. In column (3), the regression coefficient of debt financing cost (Costdebt1) and SFLI is positive and significant at 1% level, and the regression coefficient of social trust (Trust1) and SFLI is still negative. In column (4), the regression coefficient between Trust3 and SFLI is significantly negative at the 1% level. In column (5), the regression coefficient between Trust3 and Costdebt1 is significantly negative at the level of 1%, indicating that social trust can reduce debt financing cost to a certain extent. In column (6), the regression coefficient of debt financing cost (Costdebt1) and SFLI is positive and significant at 1% level, and the regression coefficient of social Trust3 and SFLI is still negative.

TABLE VIII. Analysis of intermediary effect of debt financing cost financial expenses

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	SFLI	Costdebt1	SFLI	SFLI	Costdebt1	SFLI
Trust1	-0.006***	-0.004***	-0.004***			
	(-3.78)	(-10.87)	(-2.89)			
Trust3				-0.036***	-0.022***	-0.029***
				(-3.98)	(-6.94)	(-3.19)
Costdebt1			0.330***			0.329***
			10.17			(10.18)
SIZE	0.005***	0.004***	0.004***	0.005***	0.004***	0.004***

	(5.30)	(20.45)	(3.86)	(5.32)	(20.60)	(3.88)
SalesG	-0.080***	0.001*	-0.080***	-0.079***	0.001*	-0.080***
	(-20.71)	(1.79)	(-20.86)	(-20.70)	(1.96)	(-20.85)
YRETURN	-0.034***	0.000	-0.034***	-0.034***	0.000	-0.034***
	(-17.08)	(-0.41)	(-17.13)	(-17.08)	(-0.40)	(-17.13)
First	-0.211***	-0.022***	-0.204***	-0.211***	-0.023***	-0.204***
	(-25.94)	(-12.47)	(-25.16)	(-25.93)	(-12.61)	(-25.14)
Top	-0.059***	-0.031***	-0.048***	-0.058***	-0.031***	-0.048***
	(-4.94)	(-9.33)	(-4.07)	(-4.87)	(-9.30)	(-4.01)
Intcov	-0.039***	0.001***	-0.040***	-0.039***	0.001***	-0.040***
	(-17.57)	(4.74)	(-17.68)	(-17.59)	(4.67)	(-17.70)
INDEP	-0.112***	0.014***	0.107***	0.114***	0.015***	-0.109***
	(4.86)	(2.63)	(4.68)	(4.95)	(2.89)	(4.76)
Number	-0.003***	-0.001***	-0.002***	-0.003***	-0.001***	-0.002***
	(-3.48)	(-5.43)	(-3.10)	(-3.40)	(-5.14)	(-3.04)
Level	-0.015***	-0.005***	-0.013***	-0.015***	-0.005***	-0.013***
	(-6.46)	(-7.92)	(-5.81)	(-6.52)	(-8.06)	(-5.86)
Power1	0.058***	0.001	0.057***	0.057***	0.001	0.057***
	(17.30)	(1.61)	(17.26)	(17.22)	(1.41)	(17.19)
Power2	-0.012***	-0.002**	-0.011***	-0.012***	-0.002**	-0.011***
	(-3.07)	(-2.49)	(-2.88)	(-3.02)	(-2.37)	(-2.83)
Power3	-0.048***	0.002***	-0.048***	-0.048***	0.002***	-0.048***
	(-20.92)	(3.05)	(-21.20)	(-20.97)	(2.90)	(-21.24)
Constant	0.008	-0.037***	0.004	0.010	-0.027***	0.019
	(-0.35)	(-8.58)	(0.19)	(0.43)	(-5.79)	(0.80)
Observations	29,659	29,659	29,659	29,659	29,659	29,659
R-squared	0.152	0.128	0.158	0.153	0.128	0.158
r2_a	0.151	0.127	0.157	0.151	0.126	0.157
F	97.31	94.46	96.65	97.38	93.27	96.69

Table IX is the result of regression analysis of debt financing cost represented by Costdebt2. Column (1) shows that the regression coefficient of social trust (Trust1) and SFLI is significantly negative at the level of 1%. In column (2), the regression coefficient between Trust1 and Costdebt2 is significantly negative at 1%, indicating that social trust can reduce debt financing cost to a certain extent. In column (3), the regression coefficient of debt financing cost (Costdebt2) and SFLI is positive and significant at 1% level, and the regression coefficient of social trust (Trust1) and SFLI is still negative. In column (4), the regression coefficient between Trust3 and SFLI is significantly negative at the 1% level. In column (5), the regression coefficient between Trust3 and Costdebt2 is significantly negative at the level of 1%, again indicating that social trust can reduce debt financing cost to a certain extent. In column (6), the regression coefficient of debt financing cost (Costdebt2) and SFLI is positive and significant at 1% level, and the regression coefficient of social trust (Trust3) and SFLI is still negative.

TABLE IX. Analysis of intermediary effect of debt financing cost – tax interest expenditure

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	SFLI	Costdebt2	SFLI	SFLI	Costdebt2	SFLI
Trust1	-0.006***	-0.001***	-0.005***			
	(-3.78)	(-9.57)	(-3.54)			
Trust3				-0.036***	-0.013***	-0.032***
				(-3.98)	(-13.41)	(-3.61)
Costdebt2			0.254***			0.246***
			(3.41)			(3.30)
SIZE	0.005***	0.002***	0.005***	0.005***	0.002***	0.005***
	(5.30)	(18.21)	(4.77)	(5.32)	(18.63)	(4.79)
SalesG	-0.080***	-0.003***	-0.079***	-0.079***	-0.003***	-0.079***
	(-20.71)	(-10.64)	(-20.53)	(-20.70)	(-10.55)	(-20.52)
YRETURN	-0.034***	-0.001***	-0.034***	-0.034***	-0.001***	-0.034***
	(-17.08)	(-4.54)	(-17.00)	(-17.08)	(-4.53)	(-17.00)
First	-0.211***	-0.011***	-0.208***	-0.211***	-0.011***	-0.209***
	(-25.94)	(-13.88)	(-25.53)	(-25.93)	(-13.68)	(-25.53)
Top	-0.059***	-0.011***	-0.056***	-0.058***	-0.010***	-0.055***
	(-4.94)	(-11.01)	(-4.70)	(-4.87)	(-10.45)	(-4.65)
Intcov	-0.039***	-0.003***	-0.039***	-0.039***	-0.003***	-0.039***
	(-17.57)	(-19.77)	(-17.07)	(-17.59)	(-19.83)	(-17.10)
INDEP	-0.112***	-0.003	0.113***	0.114***	-0.003	0.115***
	(4.86)	(-1.50)	(4.89)	(4.95)	(-1.17)	(4.98)
Number	-0.003***	0.000	-0.003***	-0.003***	0.000	-0.003***
	(-3.48)	(-1.41)	(-3.45)	(-3.40)	(-1.25)	(-3.37)
Level	-0.015***	0.001***	-0.015***	-0.015***	0.001***	-0.015***
	(-6.46)	(2.93)	(-6.52)	(-6.52)	(2.73)	(-6.58)
Power1	0.058***	0.000	0.058***	0.057***	0.000	0.057***
	(17.30)	(0.06)	(17.30)	(17.22)	(-0.26)	(17.23)
Power4	-0.012***	0.000	-0.012***	-0.012***	0.000	-0.012***
	(-3.07)	(-0.80)	(-3.05)	(-3.02)	(-0.60)	(-3.00)
Power5	-0.048***	0.000	-0.048***	-0.048***	0.000	-0.048***
	(-20.92)	(1.22)	(-20.95)	(-20.97)	(1.15)	(-21.00)
Constant	0.008	0.003	-0.009	0.010	0.009***	0.008
	(-0.35)	(1.34)	(-0.38)	(0.43)	(4.13)	(0.33)
Observations	29,659	29,659	29,659	29,659	29,659	29,659
R-squared	0.152	0.115	0.153	0.153	0.119	0.153
r2_a	0.151	0.114	0.152	0.151	0.118	0.152
F	97.31	106.2	95.14	97.38	107.2	95.18

Based on the above regression analysis results, it can be seen that debt financing cost (Costdebt1, Costdebt2) plays an intermediary role between social trust and short loan and long investment, that is, social trust can further reduce the level of short loan and long investment by reducing debt financing cost of enterprises. It supports the social trust, the cost of debt financing, and the SFLI, and further verifies the hypothesis.

V. FURTHER ANALYSIS

5.1 The Moderating Effect of Manager Ability

According to the research of Sun Fenge^[13], Wang Dongqing et al^[2], manager ability (MA) also has a significant impact on the SFLI. With reference to Wang Dongqing et al^[2], MA is introduced as a variable to enhance the accuracy. MA is a relevant index that reflects the operation and financial situation of the enterprise from the side, as well as one of the factors to be considered in measuring the SFLI of an enterprise. Therefore, the paper introduces the multiplicative interaction term of MA and social trust (Trust1 and trust3) to study the moderating effect of MA. On the measurement of MA, referring to the research of Demerjian et al^[44], the paper adopts a two-stage model combining Data Envelopment Analysis and Tobit Model.

The results of the relevant regression analysis are listed in Table X, showing that the results of including the multiplicative interaction term of MA and social trust (Trust1 and Trust3) remain significant. But the coefficients of the multiplicative interaction term are significantly positive, which indicates that a substitute relation lies between MA and social trust, namely that this moderating effect is of timely assistance. Therefore, when the MA is low, strengthening the social trust can restrain the SFLI.

TABLE X. Regression analysis of MA

VARIABLES	(1) SFLI	(2) SFLI	(3) SFLI	(4) SFLI
Trust1	-0.006*** (-3.78)	-0.006*** (-3.68)		
MA*Trust1		0.050*** (3.89)		
Trust3			-0.036*** (-3.98)	-0.036*** (-4.00)
MA*Trust3				0.182 (2.53)
MA		-0.166*** (-12.30)		-0.260*** (-4.78)
SIZE	0.005*** (5.30)	0.005*** (5.05)	0.005*** (5.32)	0.005*** (5.03)
SalesG	-0.080*** (-20.71)	-0.075*** (-19.56)	-0.079*** (-20.70)	-0.075*** (-19.54)
YRETURN	-0.034*** (-17.08)	-0.034*** (-16.88)	-0.034*** (-17.08)	-0.034*** (-16.89)
First	-0.211*** (-25.94)	-0.210*** (-25.85)	-0.211*** (-25.93)	-0.210*** (-25.87)
Top	-0.059*** (-4.94)	-0.055*** (-4.63)	-0.058*** (-4.87)	-0.054*** (-4.56)
Intcov	-0.039***	-0.039***	-0.039***	-0.039***

	(-17.57)	(-17.45)	(-17.59)	(-17.47)
INDEP	-0.112***	-0.103***	0.114***	-0.105**
	(4.86)	(4.49)	(4.95)	(4.56)
Number	-0.003***	-0.003***	-0.003***	-0.003***
	(-3.48)	(-3.82)	(-3.40)	(-3.75)
Level	-0.015***	-0.016***	-0.015***	-0.016***
	(-6.46)	(-6.79)	(-6.52)	(-6.85)
Power1	0.058***	0.058***	0.057***	0.058***
	(17.30)	(17.53)	(17.22)	(17.44)
Power2	-0.012***	-0.012***	-0.012***	-0.012***
	(-3.07)	(-3.15)	(-3.02)	(-3.13)
Power3	-0.048***	-0.048***	-0.048***	-0.048***
	(-20.92)	(-21.30)	(-20.97)	(-21.35)
Constant	0.008	0.000	0.010	0.018
	(-0.35)	(-0.01)	(0.43)	(0.79)
Observations	29,659	29,659	29,659	29,659
R-squared	0.152	0.159	0.153	0.159
r2_a	0.151	0.158	0.151	0.158
F	97.31	99.67	97.38	99.59

5.2 The Moderating Effect of Industrial Policy

Industrial policy (IP) can affect the level of financing constraints to a certain extent^[45,46], furthering influencing more areas of enterprises' development. Therefore, IP is also a factor that should be considered in measuring the SFLI, which may have a moderating effect on the impact of regional social trust on the SFLI. According to the relevant industries and planning contents mentioned in the Five-year Plan, the paper uses whether to significantly support the industry as the data of industrial policy, with yes as 1, no as 0. Therefore, the paper introduces multiplicative interaction term of IP and regional social trust (Trust1 and trust3) to study the moderating effect of IP.

The results of the correlation regression analysis are listed in Table XI, showing that the results of including the multiplicative interaction term of IP and social trust (Trust1 and Trust3) remain significant. But the coefficients of the multiplicative interaction term are significantly positive, which indicates that a substitute relation lies between IP and social trust, namely that this moderating effect is of timely assistance. Therefore, when the industry is not significantly supported, strengthening the social trust can restrain the SFLI.

TABLE XI. Regression analysis of IP

VARIABLES	(1)	(2)	(3)	(4)
	SFLI	SFLI	SFLI	SFLI
Trust1	-0.006***	-0.009***		
	(-3.78)	(-4.25)		
IP*Trust1		0.006**		
		(2.14)		

Trust3			-0.036***	-0.056***
			(-3.98)	(-5.14)
IP*Trust3				0.058***
				(3.09)
IP		-0.002		-0.040***
		(-0.67)		(-2.85)
SIZE	0.005***	0.005***	0.005***	0.005***
	(5.30)	(5.33)	(5.32)	(5.33)
SalesG	-0.080***	-0.080***	-0.079***	-0.080***
	(-20.71)	(-20.73)	(-20.70)	(-20.73)
YRETURN	-0.034***	-0.034***	-0.034***	-0.034***
	(-17.08)	(-17.13)	(-17.08)	(-17.13)
First	-0.211***	-0.211***	-0.211***	-0.211***
	(-25.94)	(-25.82)	(-25.93)	(-25.77)
Top	-0.059***	-0.059***	-0.058***	-0.058***
	(-4.94)	(-4.96)	(-4.87)	(-4.92)
Intcov	-0.039***	-0.039***	-0.039***	-0.039***
	(-17.57)	(-17.59)	(-17.59)	(-17.59)
INDEP	-0.112***	0.113***	0.114***	0.113***
	(4.86)	(4.88)	(4.95)	(4.90)
Number	-0.003***	-0.003***	-0.003***	-0.003***
	(-3.48)	(-3.52)	(-3.40)	(-3.39)
Level	-0.015***	-0.015***	-0.015***	-0.015***
	(-6.46)	(-6.52)	(-6.52)	(-6.53)
Power1	0.058***	0.057***	0.057***	0.057***
	(17.30)	(17.26)	(17.22)	(17.15)
Power2	-0.012***	-0.012***	-0.012***	-0.012***
	(-3.07)	(-3.08)	(-3.02)	(-3.02)
Power3	-0.048***	-0.048***	-0.048***	-0.048***
	(-20.92)	(-20.88)	(-20.97)	(-20.95)
Constant	0.008	-0.007	0.010	0.022
	(-0.35)	(-0.31)	(0.43)	(0.94)
Observations	29,659	29,659	29,659	29,659
R-squared	0.152	0.153	0.153	0.153
r2_a	0.151	0.151	0.151	0.152
F	97.31	93.09	97.38	93.21

VI. ROBUSTNESS TEST

6.1 Replace Explained Variables

In order to enhance the robustness of the results, with reference to the research of Zhong Kai et al^[44], the turnover variable (SFLI1) of SFLI in an accounting year is used to replace the SFLI, that is the result of the cash expenditure of long-term investment such as fixed assets - (the increase of long-term loan in the current period + the increase of equity in the current period + the net cash flow of operating activities + the

cash inflow generated by the disposal of long-term assets such as fixed assets) is divided by the average value of short-term loans at the beginning of the year and the end of the year. Among them, the larger SFLI1, the more the turnover, the more serious the phenomenon of SFLI with a large number of short-term rolling financing to support long-term investment plans within a year in an enterprise. The relevant regression results are listed in Column (1)(2) of Table XII, showing that social trust (Trust1 and trust3) has a 1% significant negative impact on the SFLI1 of SFLI of enterprises, indicating that social trust can alleviate the level of SFLI, further providing robustness evidence for the results in Table V above.

6.2 Replace Explanatory Variables

To further enhance the robustness of the results, the explanatory variables are replaced in the following ways. Drawing on existing documents^{[26][32][41]}, the paper uses the question “Generally speaking, do you agree that the vast majority of people can be trusted in this society?” in the comprehensive nationwide China General Social Survey (CGSS) to evaluate the social trust level. Five choices from “totally disagree” to “totally agree” symbolize 1 to 5 points respectively. The average of the year in this region represents the social trust level. The higher the average, the higher the social trust level. Since the surveys that meet this requirement have been made five times during the sample period, respectively in 2010,2011,2012,2013 and 2015, and the regional social trust has been relatively stable for a period of time, the data of 2010 represent the social trust level from 2007 to 2009, the average data of 2013 and 2015 the social trust level in 2014, and the date of 2015 the social trust level from 2016 to 2019. This is the first alternative method (Trust2-1). In order to enhance the reliability of data, all averages based on this data represent the trust level of the data interval (Trust2-2), while the medians based on this represent the trust level of the data interval (Trust2-3).

The relevant regression results are listed in Columns (3),(4) and (5) of Table XII, showing that social trust (Trust2-1, Trust2-2 and trust2-3) has a significant negative impact on SFLI. It further indicates that social trust can alleviate the level of SFLI of enterprises providing robustness evidence for the results in Table V above.

TABLE XII. Regression analysis of SFLI1

	(1)	(2)	(3)	(4)	(5)
VARIABLES	SFLI1	SFLI1	SFLI	SFLI	SFLI
Trust1	-0.553*** (-3.89)				
Trust3		-3.774*** (-4.83)			
Trust2-1			-0.010** (-1.99)		
Trust2-2				-0.017*** (-2.63)	
Trust2-3					-0.012** (-2.35)

SIZE	-0.357***	-0.353***	0.005***	0.005***	0.005***
	(-4.47)	(-4.42)	(5.17)	(5.21)	(5.22)
SalesG	-2.302***	-2.288***	-0.079***	-0.080***	-0.079***
	(-7.53)	(-7.49)	(-20.68)	(-20.72)	(-20.70)
YRETURN	-0.548***	-0.547***	-0.034***	-0.034***	-0.034***
	(-2.96)	(-2.95)	(-17.09)	(-17.08)	(-17.08)
First	-6.798***	-6.793***	-0.213***	-0.213***	-0.213***
	(-8.21)	(-8.23)	(-26.22)	(-26.15)	(-26.18)
Top	-1.595	-1.489	-0.061***	-0.061***	-0.061***
	(-1.41)	(-1.32)	(-5.16)	(-5.17)	(-5.13)
Intcov	-2.359***	-2.362***	-0.039***	-0.039***	-0.039***
	(-7.97)	(-7.98)	(-17.60)	(-17.57)	(-17.58)
INDEP	4.368**	4.594**	-0.112***	0.110***	0.111***
	(2.11)	(2.22)	(4.83)	(4.77)	(4.80)
Number	-0.072	0.066	-0.003***	-0.003***	-0.003***
	(-0.96)	(-0.88)	(-3.31)	(-3.26)	(-3.28)
Level	-0.322	-0.336	-0.015***	-0.015***	-0.015***
	(-1.47)	(-1.53)	(-6.46)	(-6.40)	(-6.40)
Power1	1.181***	1.153***	0.057***	0.057***	0.057***
	(3.86)	(3.77)	(17.27)	(17.25)	(17.24)
Power2	-0.490	-0.469	-0.012***	-0.012***	-0.012***
	(-1.33)	(-1.27)	(-3.06)	(-3.07)	(-3.06)
Power3	-1.026***	-1.035***	-0.048***	-0.048***	-0.048***
	(-4.70)	(-4.75)	(-21.02)	(-21.03)	(-21.01)
Constant	9.913***	11.776***	0.012	(0.042)	0.029
	(5.18)	(6.05)	(0.48)	(1.44)	(1.08)
Observations	29,659	29,659	29,659	29,659	29,659
R-squared	-0.024	-0.024	0.152	0.152	0.152
r2_a	0.0223	0.0224	0.151	0.151	0.151
F	11.71	11.75	97.15	97.32	97.28

6.3 One Phase Delay

In order to test the robustness of the results and eliminate the possible endogenous problems of the variables, the SFLI variables are delayed by one period. The regression analysis results are shown in Table XIII. The social trust (Trust1 and trust3) is tested at the trust level of 1%, and compared with Table V, the results are basically unchanged, which effectively supports that the social trust (Trust1 and trust3) can alleviate the SFLI of enterprises.

TABLE XIII. Regression analysis of one phase daley

VARIABLES	(1)	(2)
	SFLI	SFLI
Trust1	-0.007***	
	(-4.65)	

Trust3		-0.045***
		(-5.44)
SIZE	0.017***	0.017***
	(16.78)	(16.77)
SalesG	-0.029***	-0.029***
	(-8.33)	(-8.29)
YRETURN	-0.016***	-0.016***
	(-8.51)	(-8.52)
First	-0.051***	-0.050***
	(-6.39)	(-6.37)
Top	-0.060*	-0.059***
	(-5.64)	(-5.51)
Intcov	-0.016***	-0.016***
	(-7.95)	(-7.97)
INDEP	-0.164***	-0.162***
	(-7.53)	(-7.41)
Number	0.004***	0.004***
	(5.02)	(5.11)
Level	0.031***	0.031***
	13.47%	(13.40)
Power1	0.002	0.002
	(0.60)	(0.49)
Power2	0.017***	0.017***
	(4.66)	(4.72)
Power3	-0.013***	-0.013***
	(-5.98)	(-6.02)
Constant	-0.286***	-0.264***
	(-11.86)	(-10.87)
Observations	26,208	26,208
R-squared	(0.061)	(0.061)
r2_a	0.0592	0.0595
F	33.02	33.12

VII. CONCLUSIONS AND ENLIGHTENMENT

The paper uses the data of A-share enterprises listed in China from 2007 to 2019 to carry out research, showing that higher social trust alleviates the SFLI level of enterprises, which contributes to enterprise development. SFLI behaviors of enterprises are affected by social trust through two intermediary paths, financing constraints and debt financing costs. At the same time, social trust has a substitute relation with MA and IP, which can be selected to a certain extent, so as to lower the level of SFLI and promote the development.

The research brings some enlightenment for managers to govern enterprises and improve the life cycle. Managers should attach more importance to enterprise development, avoid SFLI and financial risks,

analyze crisis, and try their best to control risks from the source. In terms of the enterprise development, managers should pay attention to not only the formal system, but also the informal system such as the regional social trust index. The level of social trust in the financing sector should also be considered, because social trust affects the degree of financing constraints and debt financing costs. At the same time, as is mentioned above, SFLI is a forced substitute behavior, so managers should plan with deep thinking, reduce the phenomenon of information asymmetry, avoid financial and financing difficulties, make good use of social trust, and develop enterprises comprehensively.

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