The Empirical Evidence of the Effects of Social Trusts on Corporate Investment Decision in an Emerging Market

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ABSTRACT
This paper introduces the sociological concept of Social Trust, empirically studying the influence of Chinese cross provincial levels of social trust on listed company's investment decisions, equity investment types, and the degree of diversification in investments from the micro perspective. Besides, this paper discusses the substitute effects of social trust and government-enterprise relationships on corporate investment decisions. We find that listed companies in provinces with high level social trust have more desire for external investments and are more willing to establish joint ventures with other company. Furthermore, social trust and government-enterprise relationships are mutually substituted in influencing corporate investment decisions. That is, when a company has no government-enterprise relationship, social trust has more influence on corporate investments, and vice versa. Our study has not only enriched the research of social trust in financial area, but also extended current literature to examine social trust and government-enterprise relationships in the interdisciplinary research.

KEY WORDS: Social Trust; Government-enterprise relationships; Investment Decision
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1. Introduction

Allen et al. (2005) raised the famous "China Puzzle," that is, China's legal and financial systems are both under-developed, but its economy has been growing at a very fast rate, which contradicts the theories of legal environment and economic growth La Porta et al. (1997, 2000). After examining the investment behaviors of Chinese listed companies, we find that according to investors' legal protection indicators published by World Bank (Kaufmann et al.,2003), China's legal protection level is far lower than most countries and regions in the world, ranked 95 out of 195 countries worldwide, however, there is an average 30% increase rate of investment between 1999 and 2008 by the listed companies in China. Two theories have been offered in recent literature on this issue. Allen et al. (2005) raised the view that China's relationship (especially political relationship) and reputation are substitutes for legal protection, while Ang et al. (2015) examine the function of social trust in attracting foreign high-tech enterprises' investment, indicating that social trust is also a substitute for legal protection. There have been a great many literatures supporting the first idea from micro perspective (Park and Luo, 2001; Sun et al., 2005; Wu et al., 2008; Luo and Tang, 2009). But there have been very few studies on the second idea. Can social trust foster China's fast-growing economy despite poor investors' legal protection? Are social trust and political relationship substitutes affecting corporate investment?

This paper discusses the mechanism and effect of social trust on corporate investment decision, as well as the substitute effects of social trust and government-enterprise relationships from a micro perspective. Our research not only helps to understand the systematic and cultural reasons of China's fast-growing economy, but also provides new evidence for the government to make better decisions on culture construction, improving investment environment and finally promoting corporate investment.

Building on the theoretical analysis of the concept and principle of social trust, we propose four hypotheses. Then we collect samples of listed companies in Shanghai and Shenzhen stock markets from 2014 to 2016, and empirically studying the influence of Chinese cross provincial levels of social trust on listed company's investment decisions, equity investment types, and the degree of diversification in investments. Furthermore, we discuss the substitute effects of social trust and government-enterprise relationships on corporate investment decisions. Our study contributes to the literature in several ways. First, we extend the research field of social trust. Most of the prior research focuses on the influence of social trust on economic growth (LLSV, 1997), financial development (Guiso et al., 2004), stock investment (Guiso et al., 2008a), cross-border investment (Guiso et al., 2008b; Ang et al., 2015) and risk investment (Bottazzi et al., 2016), etc; while few studies examine the effect of social trust on corporate investment and investments of diversification.   Second, we extended previous literature by examining the impact of social trust on government-enterprise relationships. This paper examines the substituted effect of government-enterprise relationship and social trust, which has never been discussed in previous literature. From this perspective, our study helps various parties to understand the micro mechanism of government-enterprise relationship and social trust in the field of corporate finance.

The remainder of the paper is organized as follows. Section 2 is theoretical analysis and hypothesis. Section 3 describes our empirical framework. Section 4 presents the empirical results. Section 5 is the robustness checks. Section 6 concludes the paper.

2. Theoretical analysis and hypothesis

2.1 The economic concept and mechanism of social trust

Social Trust is originally presented as a sociological concept (see details in Adler and Kwon, 2009). Adler and Kwon (2009) mainly discusses the economic definition and mechanism of social trust. La Porta et al. (1997) extend the research of Gambetta (1988),

Coleman (1990), Putnam (1993) and Fukuyama (1995), and point out that social trust refers to people's inclination of cooperation in the society. This means that, in the society of high-level social trust people tend to trust each other and cooperate to achieve the highest social efficiency while in the society of low-level social trust people tend to be suspicious of each other and thus lead to "prisoner dilemma", Knack and Keefer (1997) go further to emphasize that ethics and teamwork spirits all belong to the economic concept of social trust.

Social trust can promote cooperation among people. According to Portes (1998), social trust improves social honesty in two ways. First, moral standards set restrictions on people's dishonest behavior. Second, public opinion provides a kind of punishment for dishonest behavior. Based on an overall review of literature about social trust in economic field, Wu (2009) extend the mechanism and effect of social trust in economic and financial field. First, social trust emphasizes honesty and cooperation among strangers. In a society with high level social trust, people contact each other much easier, and less cheat happens. This is especially true among strangers, or under unfamiliar circumstances.

Second, by improving the honesty level, social trust may reduce opportunism and Moral Hazard in carrying out commercial contract, and thus have the contract performed efficiently. For example, Guiso et al. (2004) maintain that honesty plays an equally important role as law in carrying out contracts.

Social trust has many economic and financial benefits. The lack of social trust has serious implications for the economy as trust is foundational to business. A business thrives on the trust each party place in it. A trusting business environment can reduce costs and free up funds to increase business investment. Enforcing contracts, monitoring performance, and implementing protocols cost money. Building trust with stockholders enables a company to reallocate investment in oversight and monitoring toward other parts of the business. Similarly, strong social trust in the financial section makes capital more readily available and . Banks lacking trust face more withdraws during time of distress. Prior literature has found that societal trust is positively related to both financial reporting conservatism and financial reporting transparency, that is, bank managers are more likely to invest in high trust countries than in low trust country because the perceived risk for investments in high trust region is lower compared to those in low trust region (Kanagaretnam et al. 2019).   Kanagaretnam, et al. (2019) also document that banks in countries with higher societal trust exhibit lower risk-taking and that these banks also experienced less financial trouble and fewer failures during the 2007–2009 financial crisis.

Therefore, the influence of social trust on corporate external investment is significant. We believe that in the region with high level social trust, investors are more likely to trust others and are more willing to invest forwardly. Similarly, companies in the region with high level social trust are more trustworthy, which enable them to be accepted easily when they make outward investment. In view of the above-mentioned reasons, we make the following hypothesis.

***Hypothesis 1*: In the provinces or regions with high level social trust, local companies are more likely to increase the proportion of external investment.**

2.3 Social trust and corporate equity investment types

According to the influence on the operational control of invested firms, long-term equity investment usually can be categorized into four groups. (1) Total Control, which means investors have the power to decide the invested firm's financial and operational policies. (2) Joint control, which means investors establish a jointly controlled enterprise with the invested firm and share the control power. (3) Significant influence, which refers to that investors have the significant influence on the financial and operational decision-making

process but have no total control. (4) Having no control, which means investors have no control or significant influence on the invested firms.

Among the above four types of equity investments, we focus on the second one, that is, establishing a jointly controlled enterprise. The reasons we only focus on the second type of investment type rather than examining all four investment types are as follows. For investment type 1 (total control) and investment type 4 (no control), the impact of social trust on investment decision is meaningless. Comparing investment type 3 (significant influence) vs. investment type 2 (jointly controlled), we believe investment type 2 (jointly controlled) provide a better platform to examine the impact of social trust on investment decisions because social trust plays a key role when neither party is in control and every decision has to be made jointly. A jointly controlled enterprise is established by several entities jointly and the financial and operational decisions must be made by all the related parties together. Therefore, mutual trust among partners is the key in maintaining a successful jointly controlled enterprise. If partners distrust each other and they battle for corporate control, there is little chance that the jointly controlled enterprise would survive. Consequently, we believe there are more jointly controlled enterprises in high level trust regions than in low level trust regions.

> *Hypothesis 2:* **In the provinces or regions with high level social trust, local companies are more likely to establish jointly controlled enterprises with other entities.**

2.4 Social trust and diversification investment

Specialization or diversification is not only a company's vital strategic choice but is also an important investment decision. What exactly affects a company's diversification investment? This question has been widely discussed in previous literatures (Martin and Sayrak, 2003). Different from prior literature, this paper considers the function of social trust in investment diversification decision.

Social trust influences corporate diversification investment decision in three ways. First, prior literature show that social trust can improve corporate information quality and market response (Pevzner et al., 2015). Due to limited resources, firms may not be able to finance all potential projects Therefore, firms must choose to fund only a portion of the potential projects. Hubbard (1998) states that the cost of raising capitals and the selection of projects are significantly associated with by information availability. LaFond and Watts (2008) believe that social trust helps mitigate the information asymmetry issue. Prior study show that high social trust reduces information asymmetry issues between firms and investors and therefore improves investor commitment to provide capital for firms to finance their projects (Wittenberg-Moerman ,2008; and Kim et al., 2013). As a result, it is easy for firms in high trust regions to obtain effective information on investment opportunities and thus increase their willingness to diversified investment than those in other regions.

Second, if a firm chooses diversified investment, chances are they must run part of the business in an unfamiliar industry. As high-level social trust regions tend to have less "fraud" and "bullying strangers" phenomenon, firm are more than likely to diversify their investments in high social trust regions. A society with higher trust implies that firms can be able to fulfill their commitment to protecting investor interest and to satisfy corporations investment expectations (Zhujun et al., 2015).

Third, cross-industry investment requires outstanding professionals. Companies need to employ professionals to manage their new investment. Prior research show that there is stronger ethical strength in the regions with high level social trust than in low level social trust (Putnmam, 1993, 2). In every society, people are guided by certain norms and values. People in high level social trust regions tend to uphold a set of moral values that they commonly deem as appropriate which create regular and sincere conduct. Therefore, professionals in high level trust regions are believed to act in the best interest of investors. Firms in high level social trust regions tend to be more willing to diversify their investments than those in low level trust regions. According to the analysis above, we provide our third hypothesis.

Hypothesis 3: **In the provinces or regions with high level social trust, local companies are more willing to promote diversified investments.**

2.5 The substitute effects of social trust and government-enterprise relationships on corporate investment decisions

Social trust plays a key role in promoting the signing and execution of a contract effectively. However, LLSV (1997) points out that social trust becomes less important if a transaction is done among people who know each other. They argue that relationship and reputation play the function of maintaining cooperative relationship among relatives, friends, and business partners. Hence, if cooperation is conducted depending on the relationship, then the function of social trust in maintaining cooperation is no longer important.

The "relationship" mentioned by LLSV (1997) mainly refers to blood relationship, personal relationship and so on. As a generally known relationship, government-enterprise relationships can also take place of social trust in affecting cooperation to some extent. Faccio (2006) examines samples from 42 countries worldwide and finds that it is common to have government-enterprise relationships for companies in every country. The influences of government-enterprise relationships on corporate investment decision are as follows. The company can not only obtain benefits by making use of government-enterprise relationships, but also can promote corporate investments. Furthermore, if its partners break the contract or the agreement, it can make use of political power to prevent it from happening, or even inflict severe punishment on the defaulting party by influencing the law so that the investment contract can be implemented effectively. Considering all the influences above, partners dare not break the contract in haste, which eventually enhances corporate investment willing. According to LLSV (1997), the reason why personal relationship plays a more important role than social trust does in maintaining cooperation is that the punishment of personal relationship is much more severe, that is, losing reputation among acquaintance is more unacceptable than among strangers, so personal relationships set more restrictions for maintaining cooperation compared with social trust does. Similarly, government-enterprise relationships exert more severe punishment——administrative penalty or legal sanction than ethics and public opinions do when default happens. Such mechanism of punishment enables the company with government-enterprise relationships considers less about a region's level of social trust when invests a local company. In the region with low level social trust, local partners dare not break the agreements, even though they might be dishonest to investors with no government-enterprise relationships. Thus, under the circumstances with government-enterprise relationships, the function of social trust is weakened, or even become inactive. This is especially true in countries such as China, which legal protection is relatively poor and people depend more on relationship to maintain business (Allen et al.,

2005). Given such consideration, our fourth hypothesis is stated as follow.

Hypothesis 4: Social trust and government-enterprise relationships are substitute factors in affecting corporate investment decisions. That is, companies that have government-enterprise relationship rely less on social trust when they make investment decisions than companies that does not have the relationship and vice versa.

3. Empirical framework

3.1 Sample and data resource

This paper chooses listed companies in Shanghai and Shenzhen stock market from 2014 to 2016 as samples. The reasons we chose this period as our sample period are as follows: 2014-2016 period is one of the fasting growing periods for enterprises in China. Companies have a significant amount of capital to invest and therefore must make decisions on where to invest and how to invest. We therefore think this is an appropriate period to examine our hypotheses. The following Companies are excluded from the samples: (1) Financial companies. (2) Companies with extremely anomalous financial data. (3) Companies with missing data. We finally get is 3501 samples in total, with 1165 samples of 2014, 1138 samples of 2015 and 1198 samples of 2016.

In this paper, social trust data come from Zhang and Ke (2002) and Zhang and Zeng (2005). The data on jointly controlled entities, investment, and government-enterprise relationships are manually collected from the disclosed related parties, business segment reports and executive resumes respectively in the listed companies' annual report. The provincial controlled variables come from NERI Index of Marketization of China's Provinces Report. The remaining data are collected from CSMAR database and WIND database.

3. 2. Regression Models and variables

We construct two basic models to test the theoretical hypotheses given in this paper.

Model1

$$Investment_{i,t} \ / \ Jo\text{int} Dum_{i,t} \ / \ DiverDum_{i,t} = a + b_1 social \ trust + b_2 \ provincial\_controls_{i,t-1}$$
$$+ b_3 \ firm\_controls_{i,t-1} + b_4 industry + b_5 year + \varepsilon_{i,t}$$

Model2

$$Investment_{i,t} \ / \ Jo\text{int} Dum_{i,t} \ / \ DiverDum_{i,t} = \alpha + \beta_1 social \ trust + \beta_2 \ social \ capital \times PcDum$$
$$+ \beta_3 \ provincial\_controls_{i,t-1} + \beta_4 \ firm\_controls_{i,t-1} + \beta_5 industry + \beta_6 year + \beta_7 PcDum + \varepsilon_{i,t}$$

Table I summarizes the definitions of related variables. To avoid the endogenous problem, corporate political variables, provincial controlled variables, and corporate controlled variables are all lag 1.

TABLE I: The definition and calculation of variable

	Variable name	Definition
Outward investment	Investment	(Transactional financial assets + The investments which will be held to their maturity + Financial assets available for sale + Long-term equity investments)/Total assets

Equity investment type	JointDum	If a company has a joint venture, JointDum equals 1, otherwise 0
Diversification investment	DiverDum	If the investment is diversified, DiverDum equals 1, otherwise equals 0
Explanatory variable		
Social trust 1	Social trust 1	Based on the survey about China's provincial credit degrees
Social trust 2	Social trust 2	The rate of blood donation per person in different provinces （Instrumental variable）
the government-enterprise r elationship	PcDum	Chairman of the board or managers who used to work or is working in the government, People's Congress or Committee of the Chinese People's Political Consultative Conference can be seen as having the government-enterprise relationship. Company with such relationship is labeled 1, otherwise 0.
Provincial controlled variable		
Financial development level	FinDum	If the score of province in which the sample company located is higher than the average level nationwide, FinDum equals 1, otherwise equals 0
Legal protection level	LawDum	If the score of province in which the sample company located is higher than the average level nationwide, FinDum equals 1, otherwise equals 0
Corporate controlled variable		
Size of the company	Size	Log（Total asset of the company）
Disposable cash flow	CF	(EBITDA – Tax – Interests – Dividends)/Net fixed assets at the beginning of the sample year
Growth of the company	Gowth	(Operating income in sample year/Operating income the year before sample year) – 1
company age	Age	log（Sample year – the year when the company set up）
Equity type	Top	The biggest shareholder's ownership proportion
Type of the company	Pridum	If it is a private enterprise, Pridum equals 1, otherwise equals 0

3.2.1 Dependent variables

In this paper, variables about corporate investment decisions involve outward investment, equity investment type and diversification investment. The exact methods for measurement are as follows.

(1) Investment: It is measured by outward investment ratio, which equals the amount of investment to total assets.

(2) JointDum: It is denoted by whether the company has established a jointly controlled enterprise. If there are any jointly controlled enterprises according to the disclosed information about related parties in annual report, then JointDum equals 1, otherwise equals 0.

(3) DiverDum: It is denoted by whether a company chooses to operate diversified business. Using the research of Sevaes (1996) for reference, if there are more than 1 business segments and they all belong to different industry according to the disclosed information in a company's annual report, then we regard the company as operating diversified business in which situation DiverDum equals 1, otherwise equals 0.

3.2.2 Explanatory variables

(1) Social trust: Most research in the field of social trust such as Putnam (1993), Guiso et al. (2004) and so on generally believe people in regions with higher level social trust tend to be honest with each other. In the classical research of Knack and Keefer (1997)

also use honesty degree to measure a country's social trust. To be more exact, they use data from Word Value Survey on what proportion of respondents believe "most people are trustworthy" in a country.

Most studies that investigate the effects of social trust in China using the trust index from Zhang and Ke (2002), which obtain the trust index at the province level. There is another survey conducted by the Chinese General Social Survey (CGSS) to obtain a new trust index at the city level (Jin et al. (2022). However, our main task of this paper is to study China's provincial investment problems of listed companies. In addition, this study examines firms' diversified investment decisions. We believe that it is more appropriate to examine those issues in our paper at the province level than at the city level. In addition, China is a vast country. Each province in China could be equivalent to a small country. Each province has its own dialect and own culture. The social aspects of changes over time at providence level is insignificant. Therefore, we adopted the corporate **credit degree** at province level from Zhang and Ke (2002) to measure social trust level. The credit degree is measured as the degree of trustworthiness of companies in each province. Zhang and Ke (2002) commissioned the China Entrepreneur Investigation Unit to preform a credit investigation among 15,000 companies in mainland China and then rank the corporate credit degrees for 31 administrative regions in China accordingly. Our study adopts the credit degree ranking from Zhang and Ke (2002) to measure the social trust level in all administrative regions in Chinese mainland.

Social ethics is widely considered as an important component of social trust (Putnam, 1993; Guiso et al., 2004). According to Guiso et al. (2004), a region's blood donation rate can reflect people's civism in a region. So we choose China's provincial blood donation rate in 2000 (which will be used as instrumental variable in Section 5, Robustness checks) as another substitute indicator for social trust. The provincial blood donation rate is calculated by a region's population divided by that region's blood donation amount (ml.) in the sample year.

(2) PcDum: This paper adopts the generally used method in prior research to describe the government-enterprise relationship. Faccio (2006) points out that if the Controlling stockholders or managers of a company are congressmen, premier or have close relationship with political parties, we regard the company as owning the government-enterprise relationship. Wu et al. (2008), Wu et al. (2009) also define the government-enterprise relationship as the situation in which managers have government background, for example, the chairman of the board or managers used to work in the central or local government of ministry. Like the research mentioned above, this paper defines the government-enterprise relationship as a situation in which the chairman of the board or managers used to work in the government, People's Congress, or etc. PcDum equals 1if it is true otherwise equals 0.

3.2.3 Controlled variables

(1) Provincial controlled variable: As the regional difference of social trust may contain the information about the economic and financial development level in different regions, if we do not control the factors about regional development, chances are we get pseudo consequence. Besides, corporate investment decisions may be affected by other institutional variables besides social trust. To control the effect of other provincial institutional variables, we add variable of provincial financial development and variable of legal protection in the regression model. Data for provincial controlled variables come from "NERI index of Marketization of China's Provinces Report" (Fan et al., 2011). We use "marketization of financial industry index" to measure China's provincial financial development level, and use "the index of protecting legitimate interests of producers" to

measure legal protection level in different provinces. The higher scores the above two indices get, the higher financial development level and legal protection level are in a region. We use dummy variable FinDum to denote regional financial development level, and if the score of the province where the listed companies located is higher than the average score nationwide that year, then FinDum equals 1, otherwise equals 0. Similarly, we use dummy variable LawDum to denote regional legal protection level.

(2) Corporate controlled variables: According to the literatures on corporate investment decisions, we choose several corporate controlled variables concerning investment decisions, including Size, CF, Growth, Age, Top and Pridum.

(3) Other controlled variables: We use dummy variables to control industry effect and time effect. Dummy variable "Industry" is set according to the industry categories issued by China Securities Regulatory Commission; Dummy variable "Year" is set according to different year.

3.2.4 Explanation of the model

Model 1 tests the effect of social trust in Chinese provinces on investment decisions of the listed companies. The results will provide insight on hypotheses 1-3, that is, social trust in different provinces significantly influence the corporate investment decisions, which means that in the regions having high levels of social trust, companies have a higher proportion of outward investments, a stronger willingness to establish jointly controlled enterprises with other companies and more likely to diversify investments. If the hypotheses are true, then the β_1 is expected to be significantly positive in Model 1, corresponding to the following dependent variables: Investment, Jointdum and DiverDum.

Model 2 tests the substitution effects of government-enterprise relationships and social trust. According to hypothesis 4, if   companies   have government-enterprise relationship, then the effect of social trust on investment decisions will be weakened. If the hypothesis is true, then β_2 in Model 2 is expected to be negative significantly, while β_1 in Model 2 is still expected to be significantly positive, which means that companies having government-enterprise relationships are less dependent on social trust to make investment decisions, compared with companies which do not have government-enterprise relationships.

4. Empirical results

4.1 Descriptive statistics
4.1.1 Cross-provincial social trust

Chart 1 shows the distribution of the indicator of social trust – trust metric, in different regions of China. It is evident that there is a big difference among the social trust in different parts of China and the developments of social trust in different regions are uneven.

Chart 1. Social trust score in different regions
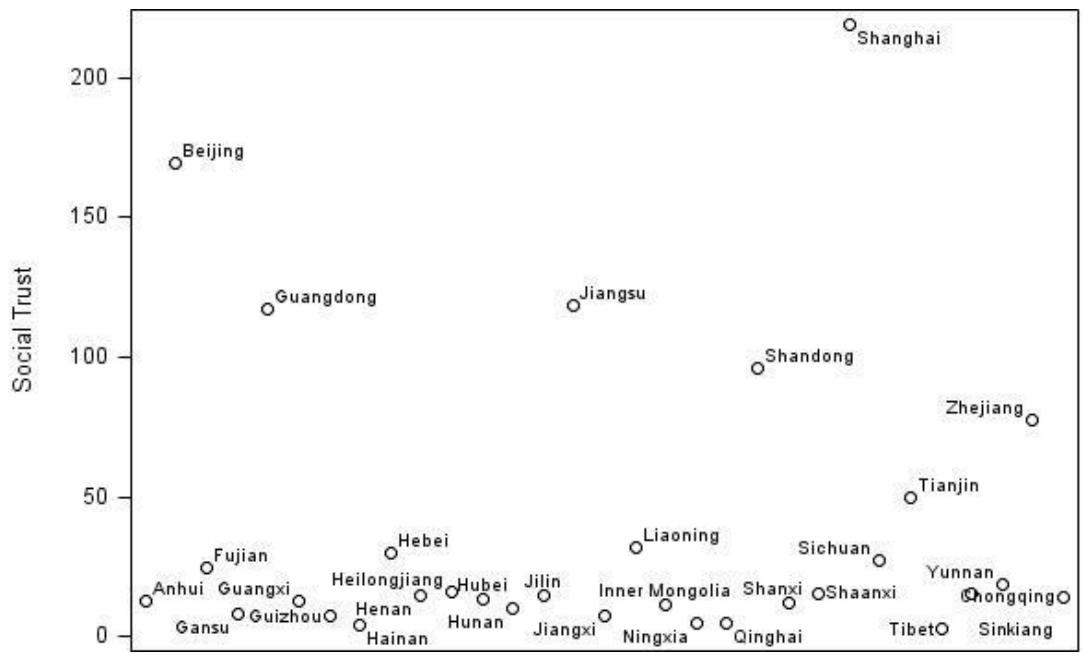
4.1.2 Descriptive statistics for main variables

We divide the total samples into two parts according to the level of the social trust that is measured by trust metric. Table II reports descriptive statistics for relative variables.

It can be seen from the Table II that, on average, compared with companies located in regions with low levels of social trust, companies in regions with high levels of social trust tend to invest outwards more and are more likely to establish jointly controlled enterprises and diversify their investments significantly. In addition, social trust does not influence government-enterprise relationships according to Table II, but in the regions with high level of social trust, the level of legal protection and financial development are also high.

TABLE II. Descriptive statistics and univariate tests

	High Social Trust			Low Social Trust			Mean Value
	Minimum	Maximum	Mean	Minimum	Maximum	Mean	P Value
Investment	0	0.8188	0.0803	0	0.7782	0.0608	<.0001
JointDum	0	1	0.6297	0	1	0.5651	<.0001
DiverDum	0	1	0.4816	0	1	0.4429	0.0214
PcDum	0	1	0.2061	0	1	0.2268	0.1361
LawDum	0	1	0.6481	0	1	0.1899	<.0001
FinDum	0	1	0.8622	0	1	0.1188	<.0001
Size	16.702	28.405	22.047	16.520	26.059	22.021	0.5723
CF	-453.07	114.11	-5.7307	-643.25	189.42	-3.4337	0.0192
Growth	-0.9532	357.09	1.1225	-0.9997	349.46	1.1232	0.9991
Age	1.3863	4.7095	2.8237	1.7918	3.5264	2.7896	0.0002
Top	0.0225	0.9087	15.940	0.0853	0.8117	16.006	0.0469
PriDum	0	1	0.4690	0	1	0.3678	<.0001

Due to space limitations, this paper does not present the results of the correlation table.

But reports the important findings. First, there is no **endogeneity concern.** Second, the ratio of social capital (Social Capital) to foreign investment (Investment), whether it is a joint venture (JointDum) or whether it is a diversified (DiverDum), and other corporate investment decision-making variables are significantly positively corrected, that is, social capital has a positive impact on corporate foreign investment decision, which is consistent with our hypotheses. Third, social capital and political relations (PcDum) have a significant negative correlation, that is, the role of social capital and political relations can be substitute for each other in the corporate investment decision making process.

4.2 Regression analysis
4.2.1 The effect of social trust on corporate investment decisions

Table III presents the estimated results of Model 1 and Model 2. In models which dependent variable is Investment, we use OLS regression method, while in models which dependent variables are JointDum and DiverDum, we use probit functions. We have heteroskedasticity adjustment for standard error and autocorrelation adjustment for observations of companies, so that we can get a more precise t-value.

The first three columns show the effect of social trust on corporate investment decisions. Column 1 presents the effect of provincial social trust level on local listed companies' outward investment amount. It can be seen from Column 1 that after controlling provincial variables, corporate variables, "Year" and "Industry", the coefficient of social trust is significantly positive, which means the higher the social trust level is in a province, the more likely a company invest outwards. We can also see that there is no significant effect of legal protection level and financial development level on listed companies' outward investment decisions. When we examine the effect of corporate controlled variable, we find that: (1) The smaller a company is, the higher the proportion of corporate investment is. (2) The longer a company has been founded, the higher the proportion of corporate investment is. (3) The lower proportion of shares the biggest shareholder holds, the higher the proportion of corporate investment is.

Table III. Result of Hypotheses Tests

Dependent variable （Method）	The effect of social trust on corporate investment decision			The substitution interaction between the government-enterprise relationship and social trust		
	Investment OLS	Jointdum Probit	Diverdum Probit	Investment OLS	Jointdum Probit	Diverdum Probit
Social trust	0.0002***	0.0020***	0.0009*	0.0002***	0.0019***	0.0009*
	(4.2663)	(3.8159)	(1.8657)	(4.3082)	(3.2697)	(1.6813)
Social trust ×PcDum				-0.0001*	-0.0511*	-0.0016*
				(-1.6585)	(-1.7222)	(-1.6671)
LawDum	0.0069	0.0398	0.1360**	0.0045	0.0474	0.1560***
	(1.5784)	(0.6772)	(2.5584)	(1.0214)	(0.7443)	(2.9297)
FinDum	0.0019	-0.0076	-0.0791	0.0031	-0.0330	-0.0565
	(0.4286)	(-0.1219)	(-1.4420)	(0.6672)	(-0.4855)	(-1.0105)
Size	-0.0046***	0.2141***	0.0185	-0.0047***	0.2599***	0.0171
	(-3.1181)	(10.2156)	(1.0343)	(-3.1368)	(11.4901)	(0.9293)
CF	-0.000002	0.0009	0.0016**	0.000069	0.0011	0.0016*
	(-0.0218)	(1.0830)	(1.9901)	(1.0934)	(1.1668)	(1.9394)

Growth	-0.000033	0.0016	0.0002	-0.000005	0.0017	0.0003
	(-0.2837)	(1.0762)	(0.1797)	(-0.4402)	(1.0976)	(0.2316)
Age	0.0360***	0.0521	0.3683***	0.0342***	0.2322**	0.3585***
	(4.6992)	(0.4976)	(3.9700)	(4.5304)	(2.1936)	(3.8850)
Top	-0.0004***	-0.0039**	-0.0024	-0.0004***	-0.0031*	-0.0029*
	(-3.5305)	(-2.2888)	(-1.5654)	(-3.3894)	(-1.6593)	(-1.8536)
PriDum	-0.0066*	-0.2164***	-0.0463	-0.0107***	-0.1390**	-0.0904*
	(-1.6494)	(-4.0023)	(-0.9522)	(-2.6652)	(-2.3899)	(-1.8136)
PcDum				0.0169***	0.4076	0.1933**
				(2.5930)	(1.0777)	(2.3643)
Industry & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3501	3501	3501	3501	3501	3501
Adj-R^2/Pseudo R^2	0.0684	0.2392	0.0287	0.0551	0.2354	0.0181

Notes：T-statistics are reported in parentheses。***, **, * Statistically significant at the 1%, 5%, and 10% levels, respectively.

Column 2 in Table III presents the effect of provincial social trust level on whether local listed companies tend to establish jointly controlled enterprises. The results of the probit function show that when other possible variables are controlled, the coefficient of social trust is always significantly positive at 1% level, which means in places with high level social trust, listed companies are more likely to establish jointly controlled enterprises with other companies. Except size of the company, the biggest shareholder's ownership proportion and type of the company, other corporate variables and provincial variables have no effect on whether companies choose to establish jointly controlled enterprises. A possible explanation is that the key consideration of establishing jointly controlled enterprises is mutual trust. As the interest relationships in jointly controlled enterprises cannot be balanced by law, social trust thus plays a more important role.

Column 3 in Table III examines the effect of provincial social trust on corporate diversification investment. Consistent with prior results, the coefficient of social trust is always significantly positive, which means in the regions with higher level of social trust, listed companies are more likely to invest diversely. Although the effect of financial development level is not significant, legal protection has obvious positive effect on corporate diversified investment decisions. Among all the corporate controlled variables, only company age affects the possibility that the company invests diversely. That is, the longer a company has been founded, the more likely the company invests diversely. This result is consistent with that of Hong and Xiong (2006).

The results in Model 1 are very robust. Consistent with hypothesis 1, hypothesis 2 and hypothesis 3, when controlling all the affecting factors, the social trust level in a province affects local companies' investment decisions significantly. Besides, in provinces with high level social trust, local companies are more willing to invest outwards, more likely to establish jointly controlled enterprises and have stronger willing for diversified investments.

4.2.2 The substitute effect of social trust and government-enterprise relationships

The last three columns in Table III test whether government-enterprise relationships influence the companies' dependence on social trust when companies make investment decisions. This paper specifically examines the following investment activities: outward

investment decisions, equity investment type decisions and diversified investment decisions.

It can be seen from Table III that the regression coefficient of the product of social trust and government-enterprise relationships - Social trust×PcDum, is negative and statistically significant at the 10% level in all three investment activities. These results suggest that, when companies having government-enterprise relationships make investment decisions, they are less dependent on social trust, which means that the effects of government-enterprise relationship and social trust can substitute mutually. Social trust plays an important role in corporate investment decision when companies do not have government-enterprise relationships, but, if companies establish government-enterprise relationships, then companies are less dependent on social trust to make investment decisions, for companies could use government-enterprise relationships to exert more severe punishment, that is, administrative penalty or legal sanction on dishonest behaviors and thus reduce default in cooperation. This result supports hypothesis 4. Besides, the effect of controlled variables in Model 2 is almost the same with that in Model 1.

5. Robustness checks

As pointed out by Ang et.al (2015), Foregoing analysis may have Reverse Causality, which means that not higher social trust attracts investments, but investments promote local social trust. In addition, there may be an omitted variable which determines both social trust and investments, leading to a positive correlation between the two. To solve this problem, referencing the research of Ang et al. (2015), we use IV method, choosing blood donation rates as the instrument variable.

According to Guiso et.al (2004), high blood donation rates reflect a high level of public morality in a region, and social trust is higher in such region. What is the most important is that blood donation rates do not influence by investments, so it can avoid the interference of the Reverse Causality. Using IV method, Table IV shows the results of the empirical tests about the two problems in this paper. The valid confirmation values are presented in the last row of Table IV, including partial R2 and partial F-statistics in first stage. Blood donation is an effective instrument variable, and our results are robust. Using blood donation as the instrument variables does not change the basic conclusion of our study.

Table IV. The Result of Robustness Checks——IV Method

Dependent variable	Investment		JointDum		DiverDum	
	1	2	3	4	5	6
Instrument Variable	0.0002***	0.0002***	0.0018***	0.0015**	0.0009*	0.0014**
	(3.9477)	(4.2881)	(2.9286)	(2.2746)	(1.7260)	(2.1138)
Instrument Variable ×PcDum		-0.0002**		-0.0559*		-0.0028*
		(-2.4707)		(-1.9087)		(-1.6675)
LawDum	0.0061	0.0049	0.0487	0.0661	0.1210**	0.1600***
	(1.3273)	(1.0729)	(0.7913)	(0.9561)	(2.1926)	(2.6873)
FinDum	0.0010	0.0043	0.0059	0.0032	-0.0896	-0.0540
	(0.2040)	(0.8795)	(0.0891)	(0.0434)	(-1.5597)	(-0.8338)
Size	-0.0046***	-0.0052***	0.2131***	0.2458***	0.0148	-0.0090
	(-3.1116)	(-3.5679)	(10.1928)	(10.5838)	(0.8516)	(-0.4659)
CF	-0.0000	0.0001	0.0009	0.0009	0.0017**	0.0026**
	(-0.0289)	(1.5294)	(1.0803)	(0.9629)	(1.9830)	(2.4667)

Growth	-0.0000	-0.0001	0.0016	0.0026	0.0002	0.0008
	(-0.2823)	(-0.4682)	(1.0636)	(1.4212)	(0.1652)	(0.5334)
Age	0.0358***	0.0366***	0.0566	0.1628	0.3068***	0.3313***
	(4.6641)	(5.0848)	(0.5417)	(1.4826)	(3.4179)	(3.5825)
Top	-0.0004***	-0.0004***	-0.0039**	-0.0037*	-0.0020	-0.0033**
	(-3.5491)	(-3.4432)	(-2.2602)	(-1.9449)	(-1.3041)	(-1.9795)
PriDum	-0.0064	-0.0128***	-0.2184***	-0.1463**	-0.0642	-0.1511***
	(-1.5953)	(-3.1840)	(-4.0278)	(-2.4229)	(-1.3274)	(-2.8809)
PcDum		0.0210***		-0.4862**		0.2675**
		(3.0744)		(-2.4116)		(2.2414)
Industry & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3501	3501	3501	3501	3501	3501
Adj-R^2/Pseudo R^2	0.0677	0.0486	0.2380	0.2318	0.0201	0.0376
Partial R^2	0.8713		Partial F（P Value）		870.60（0.0000）	

Notes：T-statistics are reported in parentheses。***, **, *Statistically significant at the 1%, 5%, and 10% levels, respectively.

6. Conclusion

As China has a vast territory and the social and cultural differences are obvious among different districts and social trust levels differ from one another. Such special sociocultural environment provides out research a perfect context to examine the function of social trust on corporate investment decisions. We collect samples of listed companies in Shanghai and Shenzhen stock market from 2012 to 2014, and systematically examine the influence of Chinese cross provincial levels of social trust on listed company's investment decisions, equity investment types, and the degree of diversification in investments. To understand the mechanism of social trust influencing corporate investment decisions better, this paper continues to study the influence of listed companies' government-enterprise relationships on the effect of regional social trust. Our conclusions are as follows.

(1) Social trust affects the listed companies' investment decisions significantly and widely in China. After controlling variables such as provincial legal protection level, financial development level and factors that influence corporate features, we find that compared with companies in provinces with lower-level social trust, the listed companies located in provinces with higher level are more willing to invest outward, more willing to establish jointly controlled enterprises, and more willing to promote diversified investments.

(2) Social trust and government-enterprise relationships are mutually substituted in affecting corporate investment decisions. When a company has no government-enterprise relationship, social trust will affect corporate various investment decisions. But things changed when a company has government-enterprise relationships. Such company rely less on social trust to help it make investment decisions, for it can take advantage of political power to exert administrative penalty or legal sanction on dishonest behaviors in business cooperation.

Our research provides insights on several areas. First, to attract foreign investment, the government should carry out supporting policies to improve social trust level in the region. Measures should be taken to encourage mutual trust, social ethics, and teamwork spirits so that we can improve the investment environment. Second, this paper provides new evidence

for the academic arguments of "China Puzzle". The reason why China experienced a fast-growing economy during recent 30 years, though lacking the well-established legal protecting system, is because that there is substitute for legal protection. The high-level social trust under Confucianism culture and the harmonious government-enterprise relationship between businessmen and politicians are both vitally important substitutes for legal protection and are both the cultural drives lying behind the fast-growing economy.

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