

Research on Top Management Incentive and Supervision under the Framework of Principal-Agent Based on Social Trust

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Abstract

This paper investigates the impact of social trust, an extremely important informal institution, on corporate governance. We use the data of 2008-2016 China's A share listed private companies, to study how the regional social trust environment affect the efficiency of salary incentive mechanism on CEOs. We find that social trust can significantly improve the effect of executive compensation incentive, namely the compensation of the senior executive is more sensitive to performance in a firm with higher social trust. In particular, social trust can be an effective alternative to formal institution and plays an important role in corporate governance when the formal institution faced by the company is undeveloped.

Keywords

Social Trust, Pay-for-Performance, Principal-Agent Framework

1. Introduction

Many scholars have begun to discuss the moral basis of the market economy and believe that a well-functioning market order requires some moral support. So what is this moral support? Economists tend to think that the so-called market moral foundation is the most important thing of credibility or social trust [1]; among economists, Adam Smith is probably the first scholar to systematically pay attention to the relationship between social trust and human economic behavior. In his important book, *The Theory of Moral Sentiments*, Smith pointed out that economic activities are based on social habits and morals. If you leave these habits and ethics, the trading activities between people will be greatly affected, and the basis of the transaction will be shaken. Weber also pointed out

the differences in social trust between different cultures and their impact on the formation of capitalism. Social trust is considered to be related to factors such as culture, communication, property rights, level of community participation, and level of economic development. As Adam Smith mentioned very early, a business-developed society is often a credit-worthy society. Social trust is a major social capital that determines a country's economic growth and social progress in addition to physical capital and human capital. This paper argues that there may be a mechanism in which social trust promotes internal efficiency of the organization. Chami & Fullenkamp [2] proposed a formal proxy model, which uses social trust as a substitute for the supervisory mechanism. Agents will work harder to care more about the interests of the principals, and the overall interests of the company will increase. This result is consistent with the view that social trust will optimize the company's operations [3].

In the management process of listed companies, the ownership structure determines the choice of corporate governance structure. The operation result of the governance model depends on the results of the rights and interests of the company. The rights of shareholders are derived from capital, which is mainly reflected in the claim of surplus value. The management directly participates in the management of the company, which directly affects the development of the company. The relationship between shareholders and management is closely connected and there is a game relationship. Only the two can be fully coordinated. Benefits, to ensure that all parties can correctly perform their duties, and not to exceed the authority, can ensure the smooth operation of the company. The principal-agent problem of listed companies is an important reason hindering the development of the company. The key to this problem is moral hazard. Incomplete supervision of the agent by the principal will increase the manager's opportunistic behavior. In order to solve this principal-agent problem, two methods have been proposed in the existing literature. The first is to increase the consistency of the interests of the agent and the principal. The client is the remainder of the request and the agent pursues his own salary allowance income, luxury consumption and leisure time maximization. The agent is only the principal to perform the task for himself through paid employment. Because the level of effort of the agent is not directly observable, there is a performance-based compensation contract. Increasing compensation incentives will allow the agent to make greater efforts, but at the same time increase the risk that the agent bears. Due to the agent's own risk aversion, the cost of the compensation contract will be very high. The second method is to reduce the information asymmetry between the principal agents. For example, some prohibited actions will be listed on the contract with the agent. The client will increase the investment in the supervision mechanism. This approach is based on detailed anticipation of actions that may occur to the client in the future, and the availability of supervisory mechanisms. This paper believes that relying on social trust, to be sure that the agent will not make opportunistic behavior that harms the client's interests, is also an incentive and supervision of the client.

Macro economically, the impact of social trust on economic development is receiving more and more attention. We further study the impact of social trust on social and economic welfare by studying the impact of social trust on the principal-agent problem of listed companies. Although the sample of this study is a company individual, the indirect substitution of regional social trust as the individual social trust of the firm can also find the impact of social trust on the transaction behavior. Moreover, the research in this paper provides empirical evidence and inspiration from the relationship between cross-regional social trust in the incentive and supervision of executive contract, and the characteristics of social trust transfer between enterprises in the region and region. This will help to understand the relationship between internal governance and inter-provincial social trust in China at this stage. Social trust is considered to be an important factor affecting social capital and institutions.

Micro-level research on social trust is mostly at the regional level or at the individual company and small group level. This paper combines the two to study the impact of informal institutional social trust factors on executive compensation sensitivity and performance-based executive dismissal in the human factors of the company's external environment, and improve the research of social factors and governance of corporation relationships. It also provides a reference for the company's incentives or supervision of executives, as well as the trade-off between incentives and supervision.

At present, the influence of domestic and foreign social trust on this non-institutional factor is mainly studied from two aspects. One is to study the impact of macro-regional social trust on the economy. The other is to study the impact of social trust within a company or small group. There is no empirical test of the impact of cross-regional social trust on internal corporate governance. The sensitivity of executive compensation performance and the performance sensitivity of executive dismissal are mostly in the study of internal characteristics or institutional background. This paper combines social trust with the two to study whether social trust can be used as an alternative mechanism for compensation. The role of incentives and supervision, to a certain extent, alleviate the problem of principal-agent.

The article is organized as follows:

The first part is the introduction. It mainly introduces the research background of the article and briefly summarizes the main contents of the article. The second part is literature review. This section reviews relevant literature at home and abroad, including: existing research on corporate performance volatility. The third part is the theoretical analysis and hypothesis. This part mainly proposes three main hypotheses based on relevant theories. The fourth part is the selection of samples and the measurement of variables. This section summarizes the source of the sample, as well as the measurement of related variables and the selection of control variables. The fifth part is the model design. This section focuses on two main regression models. The sixth part is the empirical

result, which mainly analyzes the regression results. The seventh part is the conclusion. The empirical results of this paper are summarized and the future research directions are proposed.

2. The Structure of This Paper and Literature Review

2.1. The Definition of Social Trust and the Development of Social Trust

Gambetta [4] social trust is the probability that an individual subjectively believes that the actions of the opponent are beneficial or at least harmless to them. There are many sources of social trust. For example, some individuals have a strong psychological tendency to social trust others. Engle-Warnick & Slonim [5] describe that social trust is generated in repeated games between individuals and individuals, and that social trust can be nurtured by managers in individual organizations. This article focuses on the social trust generated by the culture of the company's region. The social trust of some groups is relatively high in itself. For example, the social trust degree of Shanghai in the questionnaire survey is higher than that of Guangdong. Partial social trust is innate [6], and social trust is influenced by many other factors, such as ethnic diversity [7] and religious beliefs [8]. Dohen *et al.* (2012) social trust is strongly positively correlated between parents and children, and the child's perception is also significantly related to the prevailing perceptions in the region.

The social trust between members of society is the way in which culture influences the economy and its manifestation. It directly affects and even determines economic efficiency [9]. Social trust can reduce the supervision and execution costs of all parties to the transaction afterwards, and can reduce the resources spent on ex post bargaining and disputes [10]. However, in the absence of social trust, due to the possibility of ex ante and after-the-fact opportunistic behavior, trading partners will conduct long-term and difficult negotiations on possible future situations; parties to the transaction may also arrange contractual and structural defenses to protect themselves [11]. The role of social trust in economic development is also getting more and more attention.

Arrow [12] wrote in the article that most of the reasons for the economic backwardness in the world are probably due to the lack of mutual social trust. With the increase of social trust, social development accelerated and investment rates rose [13]. Part of the reason for driving development can be explained by the positive role of social trust in social development, administration, and economic institutions. Social trust is a major social capital that determines a country's economic growth and social progress in addition to physical capital and human capital. Studies have shown that at the macro level, the social trustworthiness of a country plays an important role in its long-term social stability and sustained economic growth and even economic efficiency [14]; A bad initial impression will become an important criterion affecting the behavior of enterprises and individuals. The regional social trust environment will have a systemic impact

on enterprises and individuals in the region. Enterprises and individuals in low-social trust areas will bear higher transaction costs. The lower the regional social trust, the more profitable commercial credit models will be adopted by enterprises in the region.

As an important informal system, social trust is the “lubricant” of social systems and important social capital [15]. It is also an important factor affecting economic growth and organizational performance [16]-[21], which can effectively reduce The information asymmetry between the principal and the agent constrains the agent’s moral hazard behavior and reduces the cost of supervision and enforcement of the contract [22] [23]. Akerlof emphasizes [24] that the more people in society who recognize and follow certain types of norms, the higher their incentives for individuals to follow such norms. Therefore, in areas with high levels of social trust, people will pay more attention to integrity, and there will be less information hiding and fraudulent behaviors, thus alleviating the degree of information asymmetry in the region. At the same time, the “sitting system” of reputation-based social trust will amplify individuals. Ethical behavior increases the punishment it receives, which effectively reduces individual opportunistic behavior, thereby reducing regional information asymmetry and potential moral hazard issues. Specifically, the organization in which an individual is located is an important source of social trust. The reputation of the organization directly affects the external social trust of its internal members, and the behavior of individual members within the organization will also deeply affect the reputation and image of the organization. And then form a reputational social trust similar to “sitting” [3] [24]. In this case, the unethical behavior of the individual affects the reputation of the organization (region or group) in which it is located, causing its unethical behavior to be magnified, and the reputation of the organization affects the perception of the individual members (especially the initial impression), making it more likely that it is not social trusted.

2.2. Social Trust and Business

At the micro level, high levels of social trust between members and companies can improve business competitiveness and improve business performance [25]. Different from developed countries, the impact of informal institutions is particularly important for countries with transitional economies such as laws that are not yet well-established. This largely guarantees the smooth signing and performance of trading contracts and promotes socio-economic development [26]. [27] describe that social trust is a state of mind that is “directly expressed. High levels of social trust are expected to lead to positive attitudes, high levels of cooperation, other forms of workplace behavior, and higher levels of performance”. [7] found that employee satisfaction was related to financial reporting transparency and company performance. Many economists expect social trust to have a positive effect. La Porta *et al.* [9] believes that social trust can improve partnerships, especially for large organizations. Knack & Keefer [4] pointed out

that written contracts may not be needed and the contract does not have to describe all possible situations in detail. Social trust under formal conditions can be a better option than standard tools to alleviate agency problems: increasing supervision and incentives. It is necessary to social trust under the condition of incomplete contract, and there is a monotonous relationship between the level of social trust of the principal and the expected profit. Social trust in this framework reduces the risk that agents bear, and the total surplus of this relationship is greater.

2.3. Domestic Research on Social Trust

Many scholars have begun to discuss the moral basis of the market economy and believe that a well-functioning market order requires some moral support. So what is this moral support? Economists tend to think that the most important thing about the so-called market ethics foundation is the higher the social trust between people in the theory of credibility or social trust. The longer the principal-agent chain can be. The study habits of economics on social trust issues are analyzed from the perspective of repeated games. Under certain systems, if the game happens repeatedly, people will prefer mutual social trust [1]. The more social trusted the region, the more developed the division of labor and transactions, the more regional advantages can be exerted, and the faster the economic growth; the more economically developed regions, the more social trustworthy, because the reputation is higher in high-income areas than in low-income areas. In high-income areas, enterprise with high value cherishes the reputations. The more economically developed, the more social trustworthy, because credit has higher value in high-income areas than in low-income areas, and companies in high-income areas cherish themselves their reputations [1]. First, the social trustee social trusts the agent, and then the company is handed over to the agent. When the client finds that he has been deceived, the agent will be expelled and will no longer be used, and other companies are not willing to hire a fraudulent act. The agent, so the manager must consider his own reputation. The manager market is a double-edged sword. On the one hand, the manager market provides incentives for managers to talk about credibility: if the manager performs well, the market price will be high, so the manager is willing to perform well. But on the other hand, if the manager has betrayed the behavior of the existing company, so that the manager is not social trustworthy, the manager will not get the chance of the second game [1]. Some research on employees also found that the employee's prior social trust in the company affects the employee's response to the business. Specifically, the pre-existing sense of social trust can alleviate the adverse effects of psychological contract damage. When people social trust each other, they will have confidence in the outcome of future exchanges, and therefore look lighter at the current exchange results. Conversely, if people don't social trust each other, they are skeptical about future outcomes, reinforcing the impact of current outcomes on satisfaction. Social trust can reduce the integration

of information generated by parties to the transaction in advance to obtain trading opportunities, the supervision and execution costs of the parties to the transaction, and the flexibility to make more concessions by allowing each party to expect the other party to reduce negotiation cost in the future [5]. If a region's social trust is relatively high, it is considered that social capital is better. For any organization, its economic behavior is always embedded in its social relations and social structure, which is bound to be influenced by the social relationship structure embedded in it. Institutional social trust will also be influenced by individualized and traditional cultural factors in society. Institutionalized social trust and private social trust are mutually reinforcing rather than mutually exclusive. Yan Xuewei [7] believes that the modernity of Chinese society should of course be established through weak social trust relationships, that is, it should be a society that improves the authenticity of public information, because only the integrity of social integrity can be improved, and the market operation mechanism can be improved. Trading risk will be reduced. One's social trust tendency, system-based social trust, and cognition-based social trust will lead to his initial social trust in the other party.

2.4. Pay Performance Sensitivity

The separation of residual control rights and residual claims, and the asymmetry of information distribution, led to the problem of principal-agent in modern enterprises. A well-designed manager's compensation contract is considered to be one of the primary mechanisms for achieving managerial and shareholder objectives. Lu Dan and Dong Jiayu [7] found that corporate performance is still a major factor affecting executive compensation of state-owned enterprises. The two are positively related, and government intervention will weaken this relationship. Higher pay can ease the negative impact of longer control chains on company performance. Management's compensation—performance sensitivity, turnover—performance sensitivity is low when family members do not serve as chairman. Private equity participation has increased the sensitivity of the management of state-owned enterprises and the sensitivity of turnover to performance. From the perspective of salary performance sensitivity, the greater the power of management, the greater the sensitivity between compensation and manipulative performance, indicating that with the growth of power, management will tend to use earnings to obtain performance compensation.

2.5. Performance Sensitivity of Executive Dismissal

The possibility of executive change is significantly negatively correlated with the company's accounting performance, examining the company's operating performance and executive change. The relationship between them is a feasible way to evaluate whether corporate governance mechanisms are effective. Warner [8] found that stock returns were significantly negatively correlated with company changes. It was found that boards with a majority of outside directors were able

to fire executives when the company's performance was poor. It was found that companies are more likely to change when the company's performance is lower than the industry average. Gong Yuchi [9] found that the possibility of unconventional changes in executives was significantly negatively correlated with industry-adjusted return on assets and negative operating income. [12] believes that the age of executives, the previous year's operating performance and changes in major shareholders are important reasons for the change of executives. The deterioration of company performance is positively related to the dismissal of the chairman, and the good relationship between the controlling shareholder and the chairman can reduce the probability of being dismissed.

3. Theoretical Analysis and Hypothesis Proposed

Based on the relevant theoretical analysis and the review of the existing literature, this paper proposes two hypotheses. The Shanghai and Shenzhen stock exchanges will be excluded from the financial industry and ST companies in the 2007-2016 A-share listed companies, as well as the 2012 Worldview survey data. From the two levels of incentives and supervision, through empirical research on the impact of cross-provincial social trust indicators on corporate governance, try to test: 1) The higher the social trust degree of the province, the lower the sensitivity of pay performance; 2) The higher the social trust of the province where the company is located The more people do not fire agents because of poor performance. Thus, constructive comments can be given on corporation governance.

Individual characteristics may be influenced by the behavior of the group. Geis [27] describes that most of the characteristics of individuals originate from group members, and we adopt and internalize the norms, values, and attributes of our group. The group's tendency to lead values and behavior has an impact on corporate behavior. People choose to work in organizations that they believe are most helpful in helping them achieve valuable results. Holland [28] points out that people choose a career environment that tends to be similar to those who choose them. This series of studies shows that organizations should be fairly balanced societies. The culture of an organization is often consistent with the company's local environment. Management style, director and shareholder value, corporate behavior should also be consistent. More specifically, parties involved in the company have consistent behavior toward social trust. This paper argues that investors, directors, managers and employees show a consistent attitude towards social trust.

As mentioned earlier, we define social trust as the probability that an individual subjectively believes that a potential partner will do something that is good for him or at least harmless to himself. Individuals in a group are bound to be influenced by factors in their environment. Hilary & Hui [29] shows a model similar to risk aversion. If the client has a high degree of confidence that the agent will not engage in opportunistic behavior, the client will not spend too

much on the supervisory mechanism and will not sign a contract with the agent that has a high risk return. Agents may abuse this social trust. But there are good reasons why this may not happen. First, this behavior is contrary to social norms, and the psychological cost of paying is also high. This misuse of social trust is costly even if it is not discovered, and the cost is enormous once it is discovered in a place with high social trust. Relatively speaking, the client's commitment to the agent will not be rumored.

According to the economic literature and the psychology literature, the "discharge effect": external monetary incentives and punishments, undermines the inherent internal incentives of agents. Irlenbusch & Sliwka [30] emphasize that fairness and reciprocity can become vulnerable when there are clear incentives, and that the incentives for power and fast tenure should not occur in a high-social trust environment. That is to say, if the principal believes that the agent only reacts to the external incentives at the beginning, the principal will formulate different contracts to motivate the agent, which may undermine the internal incentives of the agent. Brockner *et al.* [15] pointed out that perception of process fairness leads to a sense of social trust in the exchange of objects and then mitigates the negative effects of adverse exchange outcomes.

The executive compensation contract is considered part of the agency cost. Performance-based compensation contracts will encourage managers to maximize personal rewards while maximizing corporate performance and shareholder wealth. The existing literature has found a significant positive correlation between executive compensation and company performance [3]. The executive compensation of listed companies in China is gradually related to business performance, and with the deepening of the marketization process, the sensitivity of executive compensation performance has gradually increased. The continued rise in US listed company executives over the past 40 years may be a compensation for increased executive capacity and increased risk. Secondly, agents are reluctant to incur high costs in violation of regulations under high supervision environment and risk contracts. If the principal is willing to social trust the agent and the agent is also social trusted, then this situation is the best choice to solve the agency cost. Traditional contractual constraints have become sub-optimal choices. Therefore, we assume that social trust is a substitute for the traditional incentive supervision mechanism compensation contract. Research on employee psychological contract perception and work behavior found that previous social trust can reduce the negative impact of psychological contract rupture.

H1: Higher social trust will reduce the sensitivity of pay performance.

If the principal is informed that the agent has acted dissatisfied with his own social trust, the principal will return to the use of the contractual constraints, and it is very likely that the agent will be fired. The accumulation of social trust is a process that takes a long time, and social trust largely determines the speed of development of the enterprise and the scale of the enterprise. Unlike entrepreneurs and professional managers, entrepreneurs can't rely on selling services and just getting paid. Professional managers get paid by selling knowledge and

services. The professional manager is responsible for “negligent responsibility” and the entrepreneur is responsible for the remaining liability. Entrepreneurs can social trust professional managers, but they can also dissocial trust. If entrepreneurs don’t social trust, there is no possibility of cooperation. When the game is over, everyone gets zero. In reality, contracts are very incomplete. It is often impossible to establish such a contract, because many events that will occur in the future are unpredictable when signing contracts. There is often no clear boundary between deception and non-spoofing. The cost of getting fraudulent information is very high. One mechanism for building social trust is the reputation mechanism, and the establishment of credibility depends on punishment. That is to say, if the agent deceives the principal, the principal may not cooperate with the agent next time. In order not to lose the job, the agent has the enthusiasm to establish a credibility of cooperation. Social trustees with high social trust will be more willing to believe that the decline in corporate performance is due to external uncontrollable factors, which will reduce the punishment for executives.

H2: Higher social trust will reduce the performance sensitivity of executive dismissal.

4. Sample Selection and Variable Measurement

4.1. Sample Selection and Data Source

The data on compensation in this paper comes from the comprehensive information document of governance in the CSMAR database. The data on executive change comes from the change of the chairman and general manager in the CSMAR database. The database covers all stock exchanges in 2008-2016 A-shared listed companies in Shanghai and Shenzhen. The measure of social trust comes from the 2012 National Citizenship Values Survey Questionnaire of Peking University China National Studies Center. The data processing software used in the study was stata11. The samples were screened as follows: 1) Due to the particularity of financial listed companies and ST companies, financial and ST listed companies were excluded; 2) companies that lacked the required information for the database were excluded. 3) In order to control the influence of extreme values, the extreme values of the 1% level of the five financial indicators of lev_t, size, mb, roe, and capex_at were processed by winsorize.

4.2. Variable Selection and Measurement

This paper measures the incentives of executives with the sensitivity of compensation performance. The compensation contract encourages executives beforehand, and high-level compensation beforehand can promote the efforts of the company’s senior management. The evaluation mechanism that uses ex-ante executive compensation incentives and post-employee compensation and performance is a common incentive for executives. Compensation performance sensitivity is an effective means for the company to reduce agency costs and

improve performance. The optimal compensation contract model based on agency theory is the basis of the theory. The company can form the optimal compensation contract by establishing the performance-based compensation system to link the interests of shareholders and executives.

According to the principal-agent theory, a good corporate governance mechanism can punish managers of underperforming companies in a timely manner. Therefore, examining the relationship between the company's operating performance and executive dismissal is a feasible way to evaluate whether the corporate governance mechanism is effective.

4.3. Variable Definitions (Table 1)

Executive pay (lnpay 3): This article uses the total amount of compensation of the top three executives who disclose the highest salary amount of the listed company to measure executive compensation. In order to make the explanatory variables more consistent with the normal distribution, this paper selects the top three highest paid companies. The executive compensation variable ln pay 3 is constructed in the form of a natural executive log and a natural logarithm.

Executive dismissal: senior management turnover. Drawing on the definition of Shen Yifeng *et al.* [7], this paper excludes executive changes due to health reasons, retirement, death, changes in corporate governance structure, and changes in corporate control. If the executive change occurred in the current year, the return value is 1, otherwise it is 0.

This article uses ROE to measure performance.

Social trust: From the questionnaire to the question in general, you think that most people can be social trusted, or to be more careful with others, the data statistics, if you choose most people can The value of social trust is 1, if you choose to be more careful, the value is 2. Social trust = 2-statistical data (the greater the turst value, the higher the social trust).

The control variables of this paper are: company size, earnings per share, company's listing years, chairman or general manager whether two jobs are combined, board size, proportion of independent directors, asset-liability ratio, capital expenditure, shareholding ratio of senior management, audit opinion The total shareholding ratio of the top ten shareholders.

4.4. Model Design

Hypothesis 1:

$$\ln \text{pay}_{3,i,t} = \alpha_1 \text{roe}_{i,t} + \alpha_2 \text{trust}_{i,t} + \alpha_3 \text{trust}_{i,t} * \text{roe}_{i,t} + \sum \text{controls}_{i,t} + \varepsilon_{i,t}$$

Hypothesis 2:

$$\text{turnover}_{i,t} = \beta_1 \text{roe}_{i,t} + \beta_2 \text{trust}_{i,t} + \beta_3 \text{trust}_{i,t} * \text{roe}_{i,t} + \sum \text{controls}_{i,t} + \varepsilon_{i,t}$$

Hypothesis 2 dependent variable is 0, 1, so the logit model is used for regression. The control variables are $\text{controls}_{i,t}$, i represents for different companies, and t represents for different years.

Table 1. Table type styles.

Variable name	Variable description
lnpay3	The logarithm of the total amount of compensation of the top three executives who disclosed the highest salary amount in the listed company
Turnover	If a listed company has changed CEOs during the year, the value is 1, otherwise is 0
social trust	Social trust indicators of different provinces, the greater the value, the higher the social trust
roe	The net profit/Average balance of shareholders' equity
size	Company size, the logarithm of total assets
mb	Earnings per share = net profit/total number of shares
logfirmage	The logarithm of years of company listing
dual	When the chairman and general manager are in one, the value is 1, otherwise is 0
boardsize	Number of board members
indpdr1	Board independence, proportion of independent directors = number of independent directors/number of board members
lev_t	Asset-liability ratio = total liabilities/total assets
capex_at	Capital expenditure/total assets
eshared	Executive shareholding ratio = number of shares held by executives/total number of shares
audoptyp	If standard without reservation, the value is 0, otherwise is 1
Herfendal10	The sum of the squares of the shareholding ratio of the top 10 major shareholders of the company

5. Descriptive Statistics and Empirical Results

5.1. Descriptive Statistics

In this paper, according to the research of Liu Fengwei *et al.* [31], the model is regressed by the mixed least squares method (POLS). Taking the data of China's, A-share listed companies from 2008 to 2016 as a sample, using descriptive statistics and multiple regression analysis to verify hypothesis 1 and hypothesis 2.

Table 2 is a descriptive statistic for the variables. The value of social trust is generally less than 1, indicating that the social trust levels of the provinces are generally low. Turnover's average is 0.15, indicating that the company's probability of executive dismissal is not high.

Table 3 is a table of correlation coefficients. It can be seen from the table that social trust is negatively correlated with turnover and lnpay 3, which is in line with the expectations of this paper. Roe is negatively related to turnover, and roe is positively related to lnpay 3. The correlation coefficient between Social trust and roe is 0.01, indicating that the correlation between social trust and performance is weak.

5.2. Regression Analysis

Please note that $\text{social trust}_r = \text{social trust} * \text{roe}$ in **Table 4**.

Table 2. Descriptive statistics.

Variable	N	sd	mean	p50	min	max
lnpay 3	13,391	0.73	14.04	14.04	10.40	17.35
roe	13,391	0.11	0.07	0.07	-0.57	0.36
social trust	13,391	0.12	0.64	0.66	0.46	0.91
size	13,391	1.17	21.82	21.68	19.45	25.22
mb	13,391	0.46	0.37	0.28	-0.82	2.17
logfirmage	13,391	0.56	2.49	2.48	0.69	3.33
dual	13,391	0.44	0.26	0.00	0.00	1.00
boardsize	13,391	1.70	8.74	9.00	3	18
indpdr	13,391	0.05	0.37	0.33	0.13	0.71
lev_t	13,391	0.21	0.43	0.42	0.05	0.89
capex_at	13,391	0.05	0.06	0.04	0.00	0.25
eshared	13,391	0.14	0.07	0.00	0.00	0.81
audoptyp	13,391	0.16	0.03	0.00	0.00	1.00
herfendal10	13,391	0.12	0.17	0.14	0.00	0.80
turnover	13,404	0.36	0.15	0.00	0.00	1.00

Table 3. Descriptive statistics.

(obs = 13,391)															
	turnover	Inpay 3	roe	trust1	size	mb	logfirmage	dual	boardsize	indpdr	lev t	capex at	eshared	audopytp	Herfendal 10
turnover	1														
Inpay3	-0.03	1													
roe	-0.06	0.26	1												
trust1	-0.01	-0.14	0.01	1											
size	0.04	0.46	0.12	-0.01	1										
mb	-0.07	0.32	70	0.03	21	1									
logfirmage	0.08	-0.02	-0.08	-0.02	0.28	-0.15	1								
dual	-0.09	0.01	0.02	-0.03	-0.17	0.03	-0.24	1							
boardsize	0	0.12	0.04	-0.01	0.27	0.07	0.16	-0.24	1						
indpdr	0	0	-0.03	-0.06	-0.01	-0.03	-0.06	0.11	-0.43	1					
lev t	0.08	0.06	-0.14	0.01	0.48	-0.17	0.45	-0.16	0.16	-0.03	1				
capex at	-0.04	-0.01	0.09	0	-0.04	0.1	-0.14	0.06	0.05	-0.02	-0.1	1			
eshared	-0.07	-0.02	0.05	-0.05	-0.263	0.1	-0.17	0.46	-0.15	0.12	-0.31	0.1	1		
audopytp	0.05	-0.1	-0.2	-0.03	-0.09	-0.15	0.09	-0.01	0.01	0	0.12	-0.06	-0.05	1	
herfendal 10	0	0.04	0.13	0.02	0.18	0.15	-0.14	-0.01	0	0.04	-0.02	0.03	0	-0.07	1

Table 4. Hypothesis 1. Hypothesis 2 regression results.

	Panel A		Panel B
	Lnpay 3		turnover
social trust	-0.139*** (-13.42)	social trust	-0.119** (-2.13)
roe	0.499*** (6.88)	social trust_r	0.839** (1.98)
social trust_r	-0.001*** (-4.17)	roe	-0.691** (-2.21)
size	0.257*** (37.89)	size	0.017 (0.60)
mb	0.275*** (15.10)	mb	-0.235*** (-2.66)
logfirmage	-0.010 (-0.82)	logfirmage	0.260*** (4.15)
dual	0.081*** (6.33)	dual	-0.571*** (-7.61)
indpdr1	0.002* (1.92)	indpdr1	-0.000 (-0.03)
boardsize	0.027*** (7.37)	boardsize	-0.043** (-2.53)
lev_t	-0.359*** (-10.77)	lev_t	0.375** (2.44)
capex_at	0.506*** (4.70)	capex_at	0.019 (0.04)
eshared	-0.095** (-2.37)	eshared	-0.024 (-0.09)
audoptyp	-0.031 (-0.82)	audoptyp	0.465*** (3.38)
herfendal10	-0.359*** (-7.68)	herfendal10	0.229 (1.02)
_cons	7.687*** (53.46)	_cons	-2.203*** (-3.61)
years	controlled	years	con-trolled
industries	con-trolled	industries	con-trolled
N	13,391	N	13,404
adj. R-sq	0.366	adj. R-sq	0.029

It can be seen from the first two columns of **Table 4** that the coefficient of social trust in model one is significantly negative; the coefficient of roe is significantly positive, indicating that the better the performance, the higher the salary of the executive; the social trust_r coefficient of the intersection is significantly negative, with our Assuming a consistent, social trust reduces the sensitivity of pay performance.

It can be seen from the last two columns of **Table 4** that the coefficient of social trust in model one is significantly negative; the coefficient of roe is significantly negative, indicating that the better the performance, the less the change of the senior management will occur; the social trust_r coefficient of the intersection term is significantly positive, and Our assumptions are consistent, and social trust reduces the performance sensitivity of executive changes.

6. Conclusions

It is proved that social trust can act as an alternative mechanism for compensation to encourage and supervise executives, and to a certain extent, can alleviate the problem of principal-agent between shareholders and executives.

The research in this paper examines the impact of cross-regional social trust on executive contract incentives and supervision, and it has certain theoretical contribution:

Different from the previous formal system level of the salary system to study the issue of executive incentives and supervision of enterprises, this paper examines the incentive and supervision of executives from the perspective of the informal system of social trust.

This paper studies the impact of social trust on executives' salary sensitivity and executive change to clarify the relationship between social trust and compensation systems.

The macro-index of regional social trust level is used as a substitute for social trust to study the principal-agent problem of enterprises. On the one hand, it excludes the endogenous problem of mutual causality to a certain extent. On the other hand, it links the macro social environment with micro-enterprise behavior and provides empirical experience for regional development and corporate governance.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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