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An Investigation of Trust in Mutual Funds Investment

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ABSTRACT

In this paper, a different approach is applied which investigate the role of trust at three levels in fund managers' investment process, namely interpersonal networks, organizations and market system. The impacts of different levels of trust on mutual funds' performance are then examined empirically.

Through an in-depth investigation on 96 actively managed Chinese mutual funds, this paper reveals how trust is formed between fund managers and listed companies. Rich insights are generated using data collected from face-to-face and telephone interviews. Fund managers' portfolio performance is measured using both risk-adjusted measurement and simple absolute returns. The performance of fund managers' market timing is also provided.

Using cross-sectional regression analysis, a positive relationship is found between Chinese fund managers' portfolio performance and interpersonal trust, while a negative association emerges between fund mangers' performance and system trust. No evidence is found between portfolio performance and institutional trust. Overall, fund managers' trust building strategies exert significant impact on funds' performances. Two implications can be drawn on that first is for investors of mutual funds to choose which fund to invest in; second is for market regulator to improve credibility of market information.

Keywords: performance of mutual funds, private information, trust

JEL Classifications: G10, G19, D82

I. Introduction

Trust is commonly studied at only interpersonal level by sociologists. However, trust could go beyond interpersonal level. One simple example is this. When you want to make a deposit to a bank, which bank would you choose? Will you choose a bank where one of your friends is working in the bank, and you feel your money is safer with him? Will you choose a bank that has a high reputation according to your experience? It is also possible that you want to give it to the branch which is closest to you for convenience. You might only deposit a small amount of money first as you do not have any experience of that branch. The point I try to make here is that impersonal trust between an individual and a formal institution is avoidable in the process of modernization and everyone uses it more and more frequently in their daily life. Therefore, it is something that is worth looking at.

In most sociological research, there is a clear line between generalised trust and personalised trust. Some scholars emphasize only the importance of generalised trust, whereas others tend to agree that interpersonal trust is more important. So far, however, there has been little discussion about how generalised trust and personalised trust interact in a society.

Trust studies have been expanded lately by organizational scholars who claim the importance of impersonal trust. Institutional trust and system trust both constitute impersonal trust. In terms of institutional trust, it emphasizes institutions alone are objectives of trust. Similar to the creation of interpersonal trust, requires the ability and commitment on both sides. Whether an institution can be trusted depends on its ability and its willingness to do a proper job as well.

To exercise organizational trust requires the protection provided by macro-level legal environment. This is also called system trust. It refers to formal, socially produced macro-structures which can guarantee trust. One would expect that in a country with stronger legislation enforcement the institutions will systematically behave more trustworthy than countries with weaker legal enforcement and vice versa.

In any society, the above three levels of trust interact with each other. Therefore studying them simultaneously would provide better insights of the dynamic of trust in a society, and also enable us to find out which level of trust has greater impact on improving institution's performance.

Following Casson(1991)'s definition of trust, in this paper trust is defined as "a warranted belief that other agent will provide true information".

The research field is located on the Chinese stock markets. Research question focuses on how a mutual fund manager bridges trust with listed companies. We believe that the pair of the fund manager and the listed company provides the best setting to achieve the research goal. First, stock markets represent the highest form of institutional development. One obvious characteristic of stock markets is the provision of transparency which guaranteed by market regulator. Such transparency implies that shareholder should be able to make investment decision based on the public information that published by listed companies. It is basically the best example that impersonal trust can be tested with. Second, even with the better provision of impersonal trust in stock markets, it is common to see that investors who connected with listed companies usually make better profits for the privileged access to private information.

This research employs data collected from several sources. Trust data was collected from face to face interviews with 96 Chinese actively managed fund managers. Data of funds' NAVs and institutional characteristics all came from annual reports of each fund that published on their companies' website. Additionally, all funds have been manually screened and index funds and fixed income funds were excluded.

Cross-sectional analysis has been employed in this paper. This approach has the disadvantage of requiring data on managers' characteristics and their investment behaviours which leaves it with a much smaller sample than the usual financial paper. However, it has a potential advantage by pooling information across managers together rather than treating each manager separately.

A number of results emerge from the empirical test. First, private information plays an important role to enhance trust between fund managers and listed firms. Second, fund managers access private information by visiting their investment objectives. Third, interpersonal relationship exerts significant impact on funds' performance.

The remainder of the paper is organized as follows. Section II provides a brief literature review. Section III states hypotheses. Section IV provides empirical framework. Section V presents predicted signs. Section VI provides source of data and sampling method. Section VII interprets result. Section VIII states robustness checks. Section X draws conclusions.

II. Trust and economic performance: the existing evidence

Our work links a large body of literature on the portfolio choices and investment performance of mutual fund managers with a growing literature on the role of social trust in economics and finance.

Different indicators have been employed to measure trust variables in past empirical papers. For example, Putnam (1993) measures social capital (which trust is at heart of) with membership of voluntary association as determinant of performance of local government across Italian regions, and concludes that northern Italy's economic success, when compared to southern Italy is a consequence of higher density of voluntary associations among northern people. He concludes that "social capital" improves economic success.

More recently, most empirical works on the impact of trust has employed self-reported trust data which generated from the General Social Survey (GSS) and World Values Survey (WVS). Knack and Keefer (1997) using WVS data find that trust has significant impacts on aggregate economic activity. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) demonstrate that increasing in trust increases judicial efficiency and reduce government corruption, then conclude trust promotes cooperation in large organizations. Evidence has also been provided by Bottazzi, Da Rin and Hellmann (2007) that trust has a significant effect on the likelihood that a venture capitalist invests in a company. Guiso, Sapienza and Zingales (2008) find a positive relationship between generalized trust and stock market participation.

One problem of using such WVS and GSS trust data is that as it only measures generalised trust, it is not able to provide any insight of how such trust is formed, although the positive association between generalized trust and different measures of economic performance are demonstrated.

Recent organizational researches appear to be more meaningful in terms of applying specific trust to explain the impact of trust on institutional performance and the importance of trust. Empirically, institutional trust has been found to enhance organizational performance in a number of ways. One empirical research conducted by Sako (1998) evidences that trust is associated with supplier performance particularly in just-in-time delivery and continuous improvement. A set of questionnaire-based survey data of first-tier automotive suppliers in USA, Japan, Britain and Germany is employed.

In financial market, trust has also been approved empirically that has direct positive impact on institutions' financial performance. Uzzi (1999) investigates the relationship between bankers and MSE owners. He presents evidence that small business owners who own

embedded ties with banks are more likely to get loans and to receive lower interest rates on loans. Cohen (2008) uncovers that mutual fund managers usually invest a larger amount of his asset into listed companies which he is connected with. Using the data shows the corporate board members who shared a common educational history with fund managers, he further evidenced that fund managers' investment in connected stocks outperform the investment in non-connected stocks by 8.4% per year.

However, among the above researches, they either study trust between individual and individual (interpersonal), or between institution and institution (inter-organizational). The study of trust between individuals and formal institutions is rare. Therefore, there is a gap need be filled, which is trust between individual within an institution and another formal institution which excludes MSEs. For example, when a mutual fund manager evaluates a listed company, where does his trust in this company lie on? Will his trust come from public information issued by the company and regulated by the authority? Will his trust simply come from an insider who he connected with, or come from his effort and time spent on communication with that company? These questions are this paper's core interests and we provide an empirical research to answer the above questions.

III.Hypotheses

Based on the discussion above, we draw testable hypotheses regarding the impact of different types of trust on fund managers' portfolio performance and market timing.

Interpersonal Trust vs. Institutional Trust

H1: Fund managers who incorporate more with interpersonal relations have better selective performances and inferior timing performance.

H2: Fund managers who place more emphasis on institutional arrangements have better selective performances but no worse timing performance.

System Trust

H3: The weight that fund managers rely on public information negatively relates to funds' selective performance, but no worse timing performances.

Interaction

H4: The frequency of visiting to listed firms will be positively related to a fund manager's selective performance and will be unrelated to his timing performance.

Culture

H6: Funds which are located in the north area of China have better performance than the ones located in the south area.

Personal characteristics of fund managers

H7: Older fund managers perform better than younger fund managers.

IV. Empirical framework

Fixed effects cross-section regression is used to analyze the impact of different types of trust on fund managers' portfolio performance under three different measures.

The first step of methodology design is to examine the performances of portfolios. Both risk-adjusted measures and none risk-adjusted measures are employed. First, Jensen's α is calculated as funds' risk-adjusted performance using the Shanghai Stock Market composite index as benchmark. Second, we also measured the absolute returns of portfolios without comparing to a benchmark. It is measured as three years' average of total amount of capital gain from equity investment and dividend received over the amount of equity investment in that year from 2004 to 2006. Third, standard deviation of Cash holding position for each portfolio from 2004 to 2006 is applied as an alternative measure of market timing in this thesis.

Next, three models are then constructed with the above three different dependent variables and a same group of explanatory variables. The three dependent variables are JENSEN, ABSTKRTN, and CASHSTDEV, respectively.

$$r_{ij} = \alpha_0 + \alpha_1 \text{INTPLT}_i + \alpha_2 \text{INST}_i + \alpha_3 \text{SYST}_i + \alpha_4 \text{VISITTOTAL}_i + \alpha_5 \text{VISITSMALL}_i + \alpha_6 \text{SOCIALIZEFIRMS}_i + \alpha_7 \text{TYPE}_i + \alpha_8 \text{STYLE}_i + \alpha_9 \text{LOCATION}_i + \alpha_{10} \text{SIZETOTAL}_i + \alpha_{11} \text{AVERAGESIZE}_i + \alpha_{12} \text{MGRAGE}_i + \alpha_{13} \text{GENDER}_i + u_i \quad (1)$$

j= JENSEN, ABSTKRTN, CASHSTDEV, respectively

Dependent variables

1. Jensen's measurement

$$R_{it} - R_{ft} = \alpha_i + \beta_i [R_{mt} - R_{ft}] + u_{it} \quad (2)$$

where R_{it} is monthly return of fund i at time t ,

R_{mt} is monthly return of market benchmark at time t ,

R_{ft} is monthly risk free rate.

u_{it} is random errors which have zero mean and should be serially independent¹.

2. Simple absolute return of equity investment

$$R_i = \left(\sum_t \frac{\text{CapitalGain}_i + \text{Dividend}_i}{\text{InvestmentinEquity}_i} \right) / 3 \quad (3)$$

where $i = 1, 2, \dots, 100$

$t = 2004, 2005, 2006$ respectively

3. Timing

$$\text{CASHSTDEV}_{it} = \sqrt{\frac{1}{2} \left(\sum_{t=2004}^{2006} (X_{it} - \bar{X}_{it})^2 \right)} \quad (4)$$

where X_i = Amount of cash holding at year t / Total net asset at year t

$t = 2004, 2005, 2006$

$i = 1, 2, \dots, 96$

$$\bar{X}_{it} = \frac{1}{3} \sum_t X_{it}, \quad (5)$$

¹ According to Jensen (1986, page 394) If u_{it} were not serially independent the manager could increase his return even more by taking account of the information contained in the serial dependence and would therefore eliminate it.

where $t = 2004, 2005, 2006$

$i = 1, 2, \dots, 96$

Explanatory variables

First, we include three variables which might be able to explain fund managers' performance. Consistent with previous studies, we construct two aggregated trust variables, such as INTPLT and INST as the average of the sum of sub-measures that are reflections of single unidimensional trust. The components of aggregated interpersonal trust (INTPLT) are: VISITFRI, INSIDERINF, VISITLONG and HIGHTRUST. The components of aggregated institutional trust (INST) are: OWNERSHIP, PROFESSIONAL, REPUTATION, OPENNESS and LEADERSHIP. Details about these componential variables can be seen in appendix.

Second, to capture the importance of interaction between fund managers and listed companies, we consider the frequency of fund managers' site visit, whether they socialized with listed firms and whether they prefer to visit small listed firms.

In addition to the above trust variables and trust related variables, we also include a number of control variables in our empirical specifications. We include type which indicates whether the fund is an open-end fund or closed-end fund; style which indicates whether the fund is growth fund or balance fund; size of a fund and of a fund family; and location which differentiate whether the fund is headquartered in the north or the south area of mainland China. We also include age and gender of fund managers in our regression models to control their impact on performance.

V. Predicted signs

Table1: Predicted sign

	Risk-adjusted portfolio performance (predicted sign/actual sign)	Absolute return of portfolio performance (predicted sign/actual sign)	Timing (predicted sign/actual sign)
Characteristics of Funds			

TYPE (open=1, close=0)	+	+	-
STYLE	+	+	+
LOCATION	+	+	+
SIZETOTAL	+	+	+
AVERAGESIZE	-	-	-
Process Trust			
VISITTOTAL	+	+	-
VISITSMALL	+	+	-
SOCIALIZFIRM	+	+	-
Interpersonal Trust			
INTPLT	+	+	-
Organizational			
INST	+	+	-
System Trust			
SYST	-	-	+
Characteristics of Fund Managers			
GENDER	+	+	+
MNRAGE	+	+	+

VI.Data

To test the hypotheses in the previous section, we use a dataset based on questionnaire-based survey that was collected between 2006 and 2008. Data of funds' NAVs and institutional characteristics is collected from annual reports of each fund which was published on their companies' website. Criteria for selecting the sample funds are: equity fund that has been established since 1st, January, 2004.

Questionnaire-based survey

In total 96 interviews were conducted during 2006 to 2008. Principally I interviewed 'Fund Managers', those who make portfolio invest decisions and interface with listed firms. I also interviewed 10 general managers and financial researchers to understand and cross-examine the view of other types of personnel who also play an important role in mutual funds' investment activities. I focused on "fund managers" because they make the judgment as to whether to invest in a particular listed firm and consequently can reveal how the relationship between fund managers and listed firms affect their funds performances.

Table2: Profile of interviewees

Characteristics of fund managers			Total
Gender	Male	90	96
	Female	6	
Age	<30 years old	7	96
	30-40 years old	76	
	>40 years old	13	

Snowball sampling

Interviewees' names were obtained from each fund's annual financial report. I used my personal contacts to set up initial interviews, and then a 'snowball' method has been applied to get access to more interviewees.

Most interviews were held during 2006-2007 in the three main cities where 99% fund companies are headquartered, namely Beijing, Shanghai and Shenzhen. The interviews were conducted either face to face or via the telephone. Further follow-up interviews were conducted when I was programme coordinator of Chinese senior fund managers' training programme at the ICMA centre during the summer of 2007 and 2008. With the population of active fund managers is about 300 by the time we conducted interview, we have covered about 1/3 of population.

VII.Results

Table 3: regression results

	JENSEN	ABSTKRTN	CASHSTDEV
	(Model 1)	(Model2)	(Model3)
CONSTANT	-0.378 (0.45)	-0.036 (0.188)	-0.036 (0.419)
TYPE	0.03 (0.069)	0.112 (0.026)***	-0.082 (0.058)
STYLE	-0.004 (0.063)	0.031 (0.024)	0.073 (0.053)
LOCATION	-0.016 (0.063)	-0.017 (0.024)	0.036 (0.053)
SIZETOTAL	0.003 (0.001)***	0.005 (0.000)	-0.001 (0.001)
AVERAGESIZE	-0.006 (0.002)**	-0.003 (0.001)***	-0.003 (0.002)
VISITTOTAL	0.003 (0.001)**	0.000 (0.000)	-0.001 (0.001)**
VISITSMALL	0.017 (0.064)	-0.012 (0.024)	-0.065 (0.054)
SOCIALIZEFIRM	-0.007 (0.069)	0.021 (0.026)	0.01 (0.006)**
INTPLT	0.186 (0.063)***	0.074 (0.024)***	0.183 (0.053)***
INST	0.121 (0.067)	-0.032 (0.025)	0.078 (0.056)
SYST	-0.492 (0.230)**	-0.258 (0.087)***	-0.059 (0.193)
GENDER	-0.030 (0.123)	-0.049 (0.046)	-0.189 (0.103)**
MNRAGE	0.008 (0.09)	0.002 (0.003)	-0.001 (0.007)
Adjusted R ²	0.229	0.492	0.226
Number of observations	96	96	96

Notes: Cell entries are parameter estimates; standard errors in parentheses; *** and ** denote significance at the 1% and 5% levels respectively.

Discussion on Model 1

Risk-adjusted performance with interpersonal, institutional and system trust

As can be seen from the results of model 1 in Table 3, interpersonal trust INTPLT is positively related to fund managers' selectivity performance. The result is significant at the $p=0.01$ level. This finding has the predicted sign and confirms our hypothesis. Since interpersonal trust is measured by fund managers' attitudes to their inter-personal relationships, the higher the value, the more fund managers have a positive attitude to engage in interpersonal relationships. The result indicates that fund managers who engage more in personal relationships or contacts are able to obtain better investment returns. The financial market imperfection and the lack of investment protection force investors in the Chinese financial market to rely on seeking private information through their inter-personal relationships to protect themselves. This result is consistent with those of Lane (2001) who suggested that inter-personal trust is usually stronger when institutional infrastructure is weak. Moreover, it is also consistent with another branch of Chinese cultural study which suggests that China has traditionally had a cultural and historical emphasis on interpersonal relations.

Results of model 1 also show a positive correlation between institutional trust variable INST and fund managers' performances. This is also consistent with our prediction. As variable INST is an indexed variable based on the measurement of variable OWNERSHIP, PROFESSIONAL, REPUTATION, OPENNESS and LEADERSHIP. And these five variables measures fund managers' self-perception of listed companies. Therefore, the more fund manager trust in his self-perception, the better his portfolio performance. However, the survey data received from responses on the indicators of institutional trust has very low dispersion. The low variation of data failed to produce a significant coefficient.

As can be seen from the results of model 1, system trust variable-SYST is negatively related to funds' performance. The result is significant at $p=0.05$ level. System trust is measured by how much fund managers apply formal public information such as regular financial reports of listed companies in their decision making process. In a fund manager's investment process, he uses a mixture of public information and private information. Private information which is obtained through interpersonal networks has advantages of accuracy, timeliness and exclusivity, whereas the provision of public information is uniform and publically free to anyone. It is hypothesized that the more engagement with private information, the less engagement with public information, and vice versa. The result is consistent with the

expected sign and reveals that fund managers who apply more public information in their investment have negative reward. It further confirms that in a market with incomplete institutional development and weak legal system enforcement, investors are better off obtaining information advantage by exploring private information rather than relying on publicly available information.

Risk-adjusted performance with process-based trust

As shown results of model 1 in Table 3, a significant positive relationship is found between the frequencies that fund managers visit listed companies and their investment performances. The positive and significant estimate coefficient indicates that the more often a fund manager visits their investment objectives the better their investment performances. This finding is in agreement with Dasgupta's (2001) proposition that face to face communication is a key to building a trust relationship and it is also consistent with our predicted sign.

Furthermore, two dummy variables are applied to investigate further the association between communication and fund managers' stock investment returns. One is whether fund managers prefer to visit smaller companies or to visit large companies. Another is whether fund managers socialize with listed companies or not. As can be seen from table 3-model 1, socializing with listed firms has a negative sign associated with the risk-adjusted returns, although the association is not statistically significant. In terms of whether fund managers benefit more if they visit small firms rather than large firms, it can be seen from the Table 3 that the correlation coefficient is positive but not significant. A large amount of research on trust suggests the information advantage of dealing with small firms. In stock market investment, fund managers go to visit small firms more often than they go to large firms since in small firms they are more likely to be able to meet the top management team and this will bring them better knowledge of the company. However, for Chinese fund managers, it was not found with the current dataset that visiting small rather than large companies helps their investment returns. There are several factors which might explain these findings. First, small companies have less outstanding shares than large companies. Therefore, they are limited to meet the huge demand of shares of mutual funds. For instance, if a fund manager invests in a well-connected listed company, although the return for a single share of this company is quite high, with only a limited number of shares are available comparing to large listed companies, the investment in small companies is not able to make a large contribution to the performance of a fund even though a fund manager has information advantage of a small listed firm.

Second, according to the Chinese market regulation, there is a so-called two-10% rules imposed on all funds. That is, a single fund cannot hold shares of a single listed firm over 10% of its net asset and all single funds within one fund management family cannot hold shares of a listed firm over 10% of this listed firm's total market share. This further reduced the advantage of possession of better information of small companies by fund managers.

Risk-adjusted performance with characteristics of funds

A set of variables of characteristics of funds are also examined since they have shown great effects on funds' performances in previous research.

As shown in the results, whether a fund is a closed-end or an open-end fund shows no difference in the association of their risk-adjusted performances. This finding is inconsistent with our expectation that open-end funds may do better than closed-end funds.

Style is an indicator of the level of risk that a fund manager is willing to take. Consequently, it is an implied indicator of a fund manager's return under the corresponding risk level. There are basically three investment styles of portfolios that are applied by fund managers, namely, growth fund, balance fund and income fund. Risks associated with these three styles of funds decrease accordingly. In our current dataset of this research, only two styles of funds were captured, namely growth fund and balance fund. All funds in the sample are actively managed funds which aim not only to pursue capital gains from investment but also to obtain dividend payments allocated by listed companies. The results of Model 1 suggest an insignificant correlation between fund managers' investment styles and their performances. This finding is inconsistent with Chen et al's (1992) empirical findings which were conducted with 92 American mutual funds. One possible explanation of the insignificance of the coefficient in this research is that the style of a fund as its investment objective is more likely to be related to the fund's beta, which is the indicator of a funds' risk profile, rather than the fund's alpha, which is a mere indicator of return, although the effect of style is significantly related to absolute fund returns, which will be discussed further below.

Location is picked up as a potential determinant of a fund manager's performance. China has a population of 1.3 billion people and has a large geographical scope. There is a distinct cultural difference between northern Chinese and southern Chinese. These distinctions include people's personal characteristics and the way they deal with others (Lin, 1939). For

example, northern Chinese are said to be more straightforward and bold, southern Chinese are more reticent and delicate. Moreover, northern Chinese are said to be more relationship oriented, while people from the south are more contract oriented. Therefore, locations of fund management companies are applied as an indicator of culture to examine the effect of cultural difference among funds on their performances. The results present an insignificant association between such geographical cultural differences and fund managers' risk-adjusted performances suggesting that where the fund management company is headquartered has no impact on their fund's performance. Although there is no evidence found to support our hypotheses, the negative sign indicates that closeness to policy makers may help to avoid system risk, but may not help very much on firm specific information.

As can be seen from the results of Model1, SIZETOTAL which is measured as the total size of a fund company is positively related to a fund's performance. The possible explanation is that the large company has an economy of scale advantage than a smaller company in sharing resources among all individual funds within a fund company.

In terms of the average size of funds, a negative correlation can be seen from the results. It is significant at the 5% level. This finding is consistent with Grinblatt and Titman (1989) and Ippolito (1989) who found that performance is inversely related to a fund's size. In the Chinese market, larger funds perform worse than smaller funds because large funds prefer to buy shares of listed companies who have larger market capitalization. First, large capitalized listed companies provide good liquidity. Second, they are much more stable than smaller listed companies and less risky. However, the return of investing in large companies is usually lower.

Risk-adjusted performance with characteristics of fund manager

Fund manager's personal characteristics are well addressed in behaviour finance research. For instance, Chevalier and Ellison (1999) found that younger managers like to hold less unsystematic risk and have more conventional portfolios by "herding" into popular sectors. The reason they do so is their strong incentive to be safe in order to keep their current position. In terms of the relationship between fund managers' age and their performance, they show that the age of fund managers is inversely related to a fund's simple excess return. In contrast to the past literature, Results of model 1 shows no significant association between the age of fund managers and their performance. The explanation could be that there is not enough variation in fund managers' ages which is derived from the short history of the

Chinese fund management industry. The Chinese fund management industry has a very short history which is less than 10 years, so the ages of fund managers are concentrated within a very small range.

Niessen and Ruenzi (2007) found female American fund managers are more risk averse. In our regression analysis, we examined the relationship between gender and fund managers' performance. It is found that the association is insignificant.

Discussion on Model 2

Absolute performance with interpersonal, institutional and system trust

In Model 2, the dependent variable is the absolute investment return of fund managers-ABSTKRTN. The reason for applying both of these two performance measurements are: first, Jensen's alpha is the most common measurement applied in evaluation of performance of mutual funds. Second, absolute return is used in this research as it fits the purpose of this research most.

There are a number of important similarities and differences of results between Model 1 and Model 2.

From the empirical results of model 2, interpersonal trust variable INTPLT is found to be positively and significantly related to fund managers' absolute investment returns. The coefficient is statistically significant at the 1% level. This finding confirms our expectations and is consistent with our hypotheses.

In terms of the institutional trust variable-INST, the results of Model 2 present a negative relationship between variable INST and fund managers' absolute performances. Compared to the predicted sign, it is the wrong sign. However, the coefficient is not statistically significant.

As can be seen from the results of Model 2, the estimated coefficient between the system trust variable SYST and funds' absolute returns is negative and is statistically significant at the 1% level. The result suggests that there is a strong inverse association between fund managers' attitude towards public information and their investment performance. The more they trust public information, the worse their absolute investment returns. The result confirms our expectation of predicted sign and it is also consistent with the result produced with risk-adjusted returns.

Absolute performance with process-based trust

In contrast to the regression result of Model 1 which is run on risk-adjusted performance, the frequency of visiting variable VISITTOTAL- also presents the predicted, positive but not significant sign in relation to funds' absolute returns. One possible explanation could be that the variable VISITTOTAL only measures the quantity of communication, but it is not able to measure the quality of communication. The variable is measured by the total number of visits that fund managers make to listed companies per year. The inconsistency with our predicted sign indicates that fund managers' absolute investment returns are not sensitive to the number of communications. As material information is usually exclusive, therefore the quality of information is more important than the quantity of communications. We find a positive significant association in Model 1 between risk-adjusted returns and the total number of visits, but the coefficient is very small.

The coefficient between variable VISITSMALL and funds' absolute returns shows a negative association, which is inconsistent with our expectations and inconsistent with the result of model 1. However, in both models, the results are insignificant. The same reason is applied as explained in the interpretation of Model 1 for the insignificant association.

A positive sign is shown between variable SOCIALIZEFIRM and fund managers' absolute returns, which is consistent with our predicted sign, although it is not statistically significant.

Absolute performance with characteristics of fund

As shown from the previous results of Model 1, types of funds TYPE do as not show any impact on funds' risk-adjusted performances. On the contrary, from the results of Model 2, it shows that types of funds have a significant effect on fund managers' absolute equity investment returns and is statistically significant at the 1% level. The result is consistent with our expectation and predicted sign. In the Chinese stock market open-end funds usually perform better than closed-end funds which derive from the motivation difference between open-end and closed-end fund managers. For open-end funds, the managers' compensation depends on the size of the asset under his management. A good performance is the only and direct reason to attract more investment. Therefore, open-end fund managers have a much stronger motivation to produce superior performance. Nevertheless, for a closed-end fund, the number of issued shares is fixed during its life. Therefore, closed-end fund managers have less incentive to pursue a superior return.

Another significant estimate coefficient is found between average size of funds- AVERAGESIZE and their performances. This finding is the same as the finding in Model 1 suggesting an inverse relationship between size and performance. The result is consistent with most empirical financial research which claims that the transaction cost is larger for large size of funds.

The rest of the variables- for instance, style of a fund-STYLE, location of a fund management company-LOCATION, total size of a fund company SIZETOTAL- do not show any significant impact on funds' absolute performances. The results are the same as the results in Model 1. The same interpretations are applied.

Absolute performance with characteristics of fund managers

Gender and age of fund managers show no significant correlation with their performances, although in the financial literature, female managers are found more risk averse. In terms of the impact of fund managers' ages on their performances, scholars do not agree with each other about the direction of relationship based on different datasets.

Discussion on Model 3

Model 3 aims to examine the impacts of different types of trust on fund managers' market timing performances.

Timing with interpersonal, institutional and system trust

As can be seen from the results of Model 3 in Table3, one unanticipated finding is that the system trust variable SYST shows a negative sign in relation to the market timing variable, which is contrary to our expectations, although the result is not statistically significant. It was hypothesized in Hypothesis 3 that fund managers who have more trust in the system would do no worse in predicting market movement. However, no evidence was found with the current dataset between SYST and fund managers' market timing.

Surprisingly, the results show that the interpersonal trust variable is positively related to fund managers' timing performance and is significant at the 1% level. The finding seems to indicate that fund managers who place more trust on interpersonal relationships also have a larger cash position adjustment. It suggests that fund managers might predict market movement based on private information from interpersonal relationships and the more they incline toward private relationships the larger the adjustment of their investment and cash

holding. One of the issues that emerge from this finding is that interpersonal trust involves every aspects of performance.

Variable INS shows a positive sign in relating to fund managers' market timing, but the coefficient is not statistically significant. Variable INS is designed to capture organizational trust, which is supposed to be directly related to fund managers' judgment on publically traded companies. This is therefore supposed to influent more a fund managers' investment returns rather than their market timing.

Timing with process trust

As can be seen from the results of Model 3, variable VISITTOTAL shows a negative association with fund managers' cash position adjustment and is statistically significant. The result indicates that the more visits made by a fund manager, the less adjustment of their cash position they make, which is consistent with our hypothesis that if managers possess more firm specific information, they will be less concerned about market movements. This result seems conflict with the positive and significant sign between interpersonal trust and fund managers' timing, however, it can be explained by the difference between variable VISITTOTAL and variable interpersonal trust INTPLT.

VISITSMALL also shows an inverse relationship with fund managers' market timing, which is also consistent with our predicted sign. However, the association is not statistically significant. The insignificance might derive from the indirect association between the two variables. Obviously, dependent variable-cash position adjustment depends mainly on a fund manager's prediction of the market movement in the future, whereas dummy variable VISITSMALL only measures whether a fund manager visits small companies more than large companies. As suggested by a number of researches into small firm effect, the variable is most likely related to investment returns. However, no evidence is found with our dataset that variable-VISITSMALL has impact on either the investment returns variable or the market timing variable.

SOCIALIZEFIRM presents a positive significant association with the market timing variable which is different from our predicted sign. As we hypothesized, a fund manager who is deeply engaged in socializing with listed companies might undermine their ability of market timing. However, the result seems to suggest that fund managers who socialize with listed firms adjust their cash position more actively in a larger range.

VIII. Robustness checks

This study is one of the first empirical tests to show a relationship between trust and fund managers' portfolio performance. While it is not possible in this research to test all of the factors that account for differences in fund managers' performance, the factor that interpersonal trust is positively and strongly linked to fund managers' performance, suggests that fund managers' interpersonal trust in listed companies improves their performance.

In this research, trust variables are mostly measured with Likert-scale measurement, which is consistent with research of this kind. Scaled data is checked with Cronbach's alpha test, the result shows data is reliable. The correlation matrix of independent variables in models applied also shows there is no problem of multicollinearity.

The results are robust across different models that used, although the direction of causality between trust and performance is debatable due to the limitation of using fixed-factor models.

For example, one can argue that fund managers with better performance may be leaked with more information by listed company in order to get reciprocal benefit. However, interpersonal trust is measured as the extent to which fund managers prefer interpersonal trust. It is less convinced to think that performance determines the way how fund managers observe better information for making investment decision. Furthermore, thinking of the question whether listed company would leak information to better performed fund managers or whether the information will only be shared by someone who he trusts, it seems more logic and reliable that trust will influence performance rather than the other way around. Nevertheless, caution should be taken on the limitation of the models derived by the cross-sectional nature of the research design. In the future, longitudinal research would be preferred to shed light on the validity of the causal links.

IX. Conclusion

One of the most significant findings emerges from this study is that interpersonal trust has a positive and significant impact on both fund managers' portfolio performance and market timing. This finding indirectly questions the proposition proposed by Zuck (1986) that there is a general trend that modern societies generate more institutional trust and lower levels of

characteristic-based trust which is created through families and friends. On the contrary, it validates previous theoretical arguments that trust can be used as a governance mechanism to create value and improve business performance. In particular, our findings indicate that trust via interpersonal networks can help to overcome the problem of information asymmetry in Chinese stock markets where lack of reliable information. It also indicates that in current China, trust in personal networks is still very strong and they are important component of Chinese culture. The empirical results show that interpersonal trust has positive impact on fund managers' market timing indicating that fund managers' broad forecasting of the market's movements were related on interpersonal trust too. We also find that fund manager who is a public information user has worse portfolio returns.

Institutional trust as proposed by this paper failed to produce any significant association with either fund managers' stock selective performance and asset allocation. The insignificant results may be caused by the low dispersion of data of investors' trust on institutional characteristics.

A positive significant association is found between the frequency that fund managers visited listed companies and their total risk-adjusted returns. The result indicates that the more often a fund manager visited their investment objectives, the better was their performance.

The main contributions of this research are as follows:

First, this research has incorporated social trust in financial institutions' performance evaluation and has provided empirical evidence that interpersonal trust improve Chinese fund mutual funds' portfolio performance. It is not only provides one alternative explanation, which attached with fund managers' cultural background and their social behaviour, in explaining cross-sectional performance of mutual funds, but also implies well connected funds enjoy better investment performance. The implication then lies on mutual fund investors to choose which mutual fund to invest in. On the side of mutual funds, an implication is that being well-connected should be an important strategic consideration for a fund management, especially in the Chinese financial markets.

Second, while trust is traditional studied at interpersonal level, namely, specific trust and generalized trust. This research tries to measure impersonal trust by employing a group of characteristics that represent the trust of an institution. In addition, this research studies trust at three levels, namely, interpersonal trust, institutional trust and system trust. This research

claims that three levels of trust should be examined simultaneously in a society as they interact with each other.

Third, this research has disagreed with Fukuyama's proposition that Chinese society is a low trust society but has claimed that China is a country with a high level of interpersonal trust but a low level of institutional and system trust. As China's economy is still in a transitional period, there is a mismatch between business's increasing demand for impersonal trust and the provision of formal, efficient macro-structure which can guarantee trust. It is a task for the Chinese government to eliminate the mismatch gradually.

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Appendix

(1) Structure of questionnaire

Characteristics of fund	Question	Property	Value
TYPE (fund type, open-end=1, or 0 otherwise)	whether a fund is open-ended, or closed-end	binary	0, 1
STYLE (style of a fund, 1=growth, 0 = otherwise)	investment style is a growth fund or a balance fund	binary	0, 1
AGE(age of fund, in year)	how many years a fund has been established	interval	3-8
SIZETOTAL(total net asset of a fund)	total net asset of a fund management company	interval	10-180
AVERAGESIZE	Three year average net asset of a fund	interval	2-100
LOCATION (northern area =1, or 0 otherwise)	Whether a fund company is located in northern area or southern area of China	binary	0,1
System trust			
SYST	How much weight would you like to give to listed firms' regular disclosures	interval	50%-100%
Interpersonal trust	(Likert scale 1=strongly disagree,2,3,4,5=strongly agree)		
VISITFRIEND	can get useful information when have friends in listed firms	integer	1,2,3,4,5
INSIDERINF	get insider information is essential	integer	1,2,3,4,5
VISITLONG	can get useful information when maintaining a	integer	1,2,3,4,5

	long relationship with them		
HIGHTRUST	When bad news comes, is it important to contact firms first then take further action	integer	1,2,3,4,5
INTPLT	Average score of visitfriends, visitlong, hightrust and insiderinf	interval	1-5
Organizational trust	(Likert scale 1=strongly disagree,2,3,4,5=strongly agree)		
OWNERSHIP	ownership of a listed firm is essential	integer	1,2,3,4,5
PROFESSIONAL	professional standards of a listed firm is essential	integer	1,2,3,4,5
REPUTATION	reputation of a listed firm is essential	integer	1,2,3,4,5
OPENNESS	openness of a listed firm is essential	integer	1,2,3,4,5
LEADERSHIP	leadership of a listed firm is essential	integer	1,2,3,4,5
INST	average score of ownership, professional, reputation, openness and leadership	interval	1-5
Interaction			
TIMETOTAL (times of total visiting)	how many times visit listed firms per year	interval	0-100
VISITSMALL(1= yes, or 0 otherwise)	whether go to small listed firms more than go to large listed firms	binary	0,1
SOCIALIZEFIRM(1=yes, or 0 otherwise)	whether socialize with firms	binary	0,1
Characteristics of fund managers			
GENDER	male or female	binary	0,1
MNRAGE	Age of fund manager	interval	25-45

(2) Regression results of predicted signs vs. actual signs

	Risk-adjusted portfolio performance (predicted sign/actual sign)	Absolute return of portfolio performance (predicted sign/actual sign)	Timing (predicted sign/actual sign)
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Characteristics of Funds			
TYPE (open=1, close=0)	++	+(+)	-/-
STYLE	+/-	++	+/+
LOCATION	+/-	+/-	+/+
SIZETOTAL	+(+)	++	+/-
AVERAGESIZE	-/(-)	-/(-)	-/-
Process Trust			
VISITTOTAL	+(+)	++	-/(-)
VISITSMALL	++	+/-	-/-
SOCIALIZFIRM	+/-	++	-/(+)
Interpersonal Trust			
INTPLT	+(+)	+(+)	-/(+)
Organizational			
INST	++	+/-	-/+
System Trust			
SYST	-/(-)	-/(-)	+/-
Characteristics of Fund Managers			
GENDER	+/-	+/-	+/(-)
MNRAGE	++	++	+/+

Notes: actual signs in brackets are statically significant