

# **An Investigation of Trust in Chinese Mutual Funds Investment**

*Xiaowen Gao*

*Coventry University London, E1 7JF, London, UK*

*Charles Ward*

*University of Reading, RG6 6BA, Reading, UK*

## **ABSTRACT**

The paper investigates the role of trust in fund managers' investment process. Three types of trust - personal trust, organizational trust and system trust have been identified in Chinese fund managers' investment practice. The impacts of different types of trust on mutual funds' performance are then examined empirically.

Through an in-depth investigation of 96 actively managed Chinese mutual funds, this paper reveals how trust is formed between fund managers and listed companies. 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 personal trust, while a negative association emerges between fund managers' 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. One major implication of this paper is that European fund managers should be aware of the local cultural environment should they intend to find Chinese partners in the mutual fund business.

**Keywords:** performance of mutual funds, private information, trust

**JEL Classifications:** G10, G19, D82

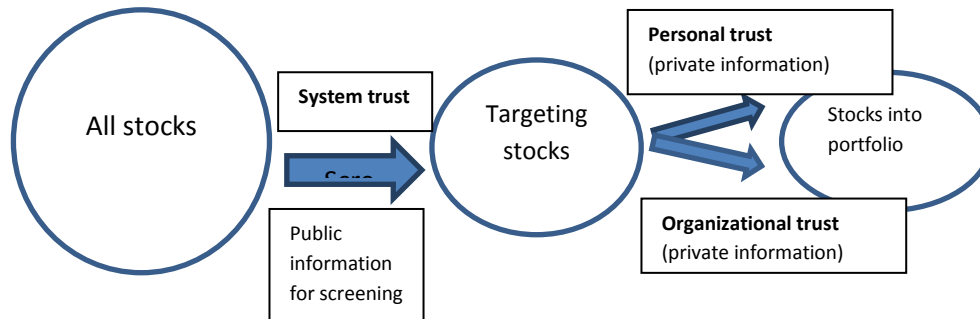
**EFM Classification Codes:** 320, 330, 380

## **I. Introduction**

This paper is motivated by an increased appreciation of the importance of trust in improving business performance in competitive markets. In recent organizational studies trust is generally believed as “cooperation mechanism” to foster cooperation among partners and to reduce risks under uncertainty. The mutual funds industry is no exception. Mutual fund managers exercise trust all the time when making investment decisions, but they may not be aware of it. In stock markets, information moves prices. It is hard to deny that the information required in making a good investment decision can usually only be obtained through extensive social interactions. While most financial papers promote the idea that using financial models to make investment decisions, this paper explores the relationship between mutual fund managers and listed companies from a perspective of trust studies. We aim to reveal how trust as a non-financial mechanism helps mutual fund managers to reduce investment risk and improve their portfolio returns. The concept of trust seems far away from the world of finance which is usually built upon complicated mathematical models. It was however a word often repeatedly stressed by market practitioners and regulators when financial models failed to work.

While trust has become a hot topic in organization studies in recent years, countless definitions have been raised by scholars from different perspectives. Following Casson's definition of trust, ‘Trust is a confident and warranted belief that the other party will fulfil their obligations’. (2006, p343), this paper defines trust as “a warranted belief that other agent will provide true information”. We further propose a three-dimension model of trust to mirror how trust facilitates information dissemination in finding a good investment opportunity in stock markets. These three dimensions are personal trust, organizational trust and system trust. Personal trust refers to one's trust in his/her personal network. Organizational trust refers to one's trust in an organization. In recent organizational studies, an institution can be the object of trust and it is usually established through its market reputation, brand management, etc. System trust refers to one's trust in a country's legal system. For instance, when you want to make a deposit to a mutual fund, which particular fund would you prefer to choose? Will you choose one that one of your friends work for, thus you may feel your money is safer with him? Will you choose a fund which has a high reputation in the market? Or you might deposit only a small amount of money to a fund which you do not have any direct or indirect experience of that fund in the past. It is similar

when a mutual fund manager deciding which listed companies to invest in. We consider the investment decision made by mutual fund manager is based upon a three-dimension trust model. The diagram below demonstrates our model.



This paper set the Chinese stock markets as the test bed of the proposing trust model and concentrates on how mutual fund managers bridge trust with listed companies. We believe that the pairing of the Chinese fund manager and listed companies provides the best setting to achieve the goal. First, stock markets represent the highest form of institutional development. One obvious characteristic of stock markets is information transparency. Each listing company by regulation has to publish their financial performance regularly to public. As the information is audited and it is freely available, it is basically the best indicator of impersonal trust and should be able to allow us to test how much investors rely on such information in making their investment decision. Second, even with the provision of better information in stock markets than in other markets, Chinese investors often ignored such public information, but to obtain private information to pursue investment returns. It is common that investors who are connected with listed companies usually make better returns than others.

This research employs data collected from several sources. Trust data was collected from a combination of face-to-face and telephone interviews with 96 Chinese actively managed equity fund managers. Data of funds' NAVs and mutual funds' 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. Although 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, 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, therefore improving investment returns. Second, fund managers access private information by visiting their investment objectives extensively. Third, interpersonal relationship exerts significant impact on funds' performance.

The remainder of the paper is organized as follows. Section II provides a review of recent relevant literature. Section III proposes the hypotheses. Section IV states the empirical framework. Section V presents the predicted signs. Section VI provides source of data and the sampling methods. Section VII interprets the results. Section VIII states robustness checks. Section IX draws conclusions. Finally, X presents contributions and recommendations.

## **II. Trust and portfolio performance: the existing evidence**

It is commonly believed that stock markets listed companies, as information providers, tend to give information to their favoured users (investors). Therefore, information users who are closer to information providers are likely get better information. For example, Kacperczyk and Seru(2007) found that fund managers who rely less on information in the public domain and more on private information tend to exhibit significantly higher returns. A trust relationship however, is needed to facilitate the channel of information flow. Exchange of better information demands mutual commitment of both providers and users of information. At the macro-level, the enforcement of the legal system in a market is also needed, as it determines the dominant channel through which information is distributed in the market.

The aim of this research was to investigate the main drivers that can explain the differences in fund managers' investment performance using established theories of trust. Given that possession of better information is the key for any successful investment, this paper examines fund managers' trust in different types of information and how the differences in trust were associated with the differences in their investment returns.

Our work links a large body of literature on the performance of investment of mutual funds with a growing literature on the role of social trust in financial investment.

## **Conceptualization of trust**

### System trust

System trust is an inevitable source in determining a trustor's trust in an organization due to the reason that all organizations are influenced by the macro environment in which they are operating. System trust was suggested by Luhmann (1979; 1988), Barber (1983) and Giddens (1990) for its function of reducing the complexity of reality. Luhmann (1979) distinguishes between personal trust and trust in the reliable functioning of certain system trust. He claims that as the social order becomes more complex, personal trust is not sufficient to control relationships effectively. Therefore system trust has become more important. For Luhmann, system trust is trust or confidence in a highly abstract system, such as the political system or legal system, therefore system is both an object and source of trust (Luhmann, 1979, cited in Lane, 1998, p.16). Bachmann (2001) also emphasises the importance of system trust. He points out that trust studies should be based on '...a sufficiently deep understanding of social reality' and regards that '...mass-production' of system trust is a precondition of a high level of trust between organizations.

It is also recognized by Bachmann (2001), Lane and Bachmann (1996) and Zucker (1986) that inter-organizational trust is especially dependent on and mediated by the institutional framework in which the relationship is embedded. In Bachmann (1999)'s work, he echoed Luhmann (1979)' and Giddens (1990)'s 'system trust' based on 'systems theory' and 'structuration theory' and further addresses that a wider view of inter-organizational trust would identify a pre-requisite for trust in the contracts, regulations, promises, legal recourse, process, or procedures that exist in the market framework. For example, investors need to trust the system of banking, exchange, currency and legal enforcement before they trade. For Zucker (1986), system trust is a type of trust which is not dependent on interpersonal familiarity and common history but where reliance is on formal, socially produced and legitimate structures that guarantee trust. Bachmann (1999, 2005) compared the German and UK system, he arguing that the German system is generally characterised by a high capacity to produce system trust.

### Personal trust

Personal trust, as used in this paper, refers to trust in other people. Extensive research has stressed the importance of individuals and their relationship in inter-organizational trust. It is

not only because trust originally exists at personal level, but also organizations are made up of individuals and these individuals play a crucial role in organizations. More importantly, it is through those individuals that the inter-organizational relations come into effect (Aulakh et al. 1996). Personal trust can be further divided into two broad categories - one is trust in family members and close friends, this type of trust is also called 'thick trust' by Putnam (2000, p.136). Another is trust in non-family and non-friend members. It is also called 'thin trust' by Putnam (2000, p.136).

### Organizational trust

Organization trust is another important source in determining whether or not a trustor will place trust in an organization. Organizations always have strong motivation to keep a brand name and maintain their reputation (Casson, 1991). The impersonal trust towards organizations as trustees has been developed further by Nootboom (2001, 2003), who believes that '...like people, organizations can be the object of trust, in both their competence and their intentions. For example, organizations have an interest in maintaining their reputation and brand name.' (Nootboom, 2003, p.5). From his point of view, trust in an organization may be based on two aspects. First, trust is based on technological, innovative, commercial, organizational and managerial competence offered by this organization, which can be called 'competence trust'. Second, trust is based on the willingness of keeping a reputable name by an institution, which can be called 'intentional trust'. Although the proposed competence of trust and intentional trust views of an organization have not been empirically tested, it opens up the opportunities to test these specific organizational trusts empirically in so far that they are distinct from characteristics at personal level.

In light of the above, organizational trust should be considered as one important indicator of trust to facilitate a trustor's trust in this particular organization apart personal trust presented previously.

In financial market, trust has 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 place a larger bet on listed companies which they are connected with. Using the data showing 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.

Both of the above papers focused purely on trust between individuals - personal trust. However, as investors in stock markets, they also have access to more information disseminated through other channels, such as financial disclosures and company visiting. Only by adding these channels one can provide a full picture of an investor's decision making process. For example, when a mutual fund manager evaluates a listed company, where does his trust in this company come from? Will his trust come from public information disclosed by the company and regulated by the authority? Will his trust simply come from an insider who he is connected with, or will it 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. By measuring personal trust *via* fund managers' attitudes to private information, measuring system trust *via* managers' attitudes to public information and measuring organizational trust *via* a group of selected institutional characteristics including reputation, openness, leadership and governance structure, we hypothesises:

#### *Personal Trust vs. Organizational 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  $\alpha$  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. Third, standard deviation of Cash holding position for each portfolio 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 independent<sup>1</sup>.

## 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

$$\text{CASHSTDEV}_{it} = \sqrt{\frac{1}{3} \left( \sum_{t=2004}^{2006} (X_{it} - \bar{X}_{it})^2 \right)} \quad (4)$$

where  $X_i = \text{Amount of cash holding at year } t / \text{Total net asset at year } t$

$t = 2004, 2005, 2006$

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

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

where  $t = 2004, 2005, 2006$

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

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<sup>1</sup> 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.

## 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**

	<b>Risk-adjusted portfolio performance</b> (predicted sign/actual sign)	<b>Absolute return of portfolio performance</b> (predicted sign/actual sign)	<b>Timing</b> (predicted sign/actual sign)
<b>Characteristics of Funds</b>			
TYPE (open=1, close=0)	+	+	-
STYLE	+	+	+
LOCATION	+	+	+
SIZETOTAL	+	+	+
AVERAGESIZE	-	-	-
<b>Process Trust</b>			

VISITTOTAL	+	+	-
VISITSMALL	+	+	-
SOCIALIZFIRM	+	+	-
Personal 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 1<sup>st</sup>, 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
Male	90	

Gender	Female	6	96
	<30 years old	7	
Age	30-40 years old	76	96
	>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 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	ABSTKRTRN	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 <sup>2</sup>	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 Organizational 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 model1 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**

Trust variables are mostly measured with Likert-scale measurement, which is consistent with researches of this kind. The correlation matrix of independent variables in models applied also shows there is no problem of multicollinearity.

The results are robust across different models. Although fixed-factor models were used, the direction of causality in this research is plausible.

For example, one can argue that fund managers with better performance may be provided with private information by listed company in order to get reciprocal benefit. However, personal trust is measured as the extent to which fund managers prefer interpersonal trust. It is less convincing to argue 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 that emerged from this study was that personal trust has a positive and significant impact on both fund managers' stock selection performance and market timing. It suggests that in Chinese stock markets where there is a lack of reliable public information, trust via interpersonal networks can help to overcome the problem of information asymmetry. It is also consistent with the view that in contemporary China, trust within close personal networks is still very strong and remains an important component of Chinese culture. This finding indirectly questions the proposition advanced by Zuck (1986) that there is a general trend for modern societies to generate more organizational trust and lower levels of the characteristic-based trust created through families and friends. Surprisingly, the results also show that personal trust has a positive impact on fund managers' market timing. It indicates that fund managers' broad forecasting of the market's movements was influenced by personal trust. This finding is unexpected given this paper's proposed

hypotheses, but confirms that Chinese stock markets have a strong interpersonal-based character.

System trust has an adverse impact on stock selection but shows no impact on fund managers' market timing. As system trust is measured by how much institutional investors trust public information, such as financial disclosures issued by listed companies, this finding indicates that a Chinese fund manager who relies heavily on public information in his decision making process will tend to have a worse portfolio return. However, no evidence was found that system trust is related to fund managers' timing ability.

Organizational trust as proposed by this paper failed to produce any significant association with either fund managers' stock selection performance or their market timing. The insignificant results are likely to have been caused by the low dispersion of data on investors' trust in institutional characteristics.

Interactions between fund managers and listed companies are also examined empirically in this research. 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. In contrast, process trust shows no correlation with fund managers' market timing.

It was found that the frequency of visiting correlated positively with fund managers' selection performance, but not with timing. When single item trust variables were applied in regressions, LOYALTY was positive and significantly related to absolute stock selection performances.

In the context of the efficient market hypotheses, the above findings suggest that the Chinese stock market is a strong-form inefficient market.

## **X. Contributions and Recommendations**

The first implication of this research is that personal trust has a positive and significant impact on both fund managers' stock selection performance and market timing. The finding not only identifies an important driver of cross-sectional differences in the performance of mutual funds, but also implies that socially well connected funds on average enjoy better

investment performance. The first implication is therefore that mutual fund investors should select well connected mutual funds for their investments. On the side of mutual funds, an implication is that being well-connected should be an important strategic consideration when the company is recruiting and training fund managers, especially in the Chinese financial markets.

The second implication can be drawn from the finding that system trust has an adverse impact on stock selection but shows no impact on fund managers' market timing. It implies that in the Chinese stock market, public information and private information are substitutes for each other. When private information is used mainly for checking the reliability of public information, particularly when private information is obtained by making visits to listed companies, it will induce additional costs that should not occur if the credibility of financial disclosure could be guaranteed by the legislation system. Therefore, one important policy implication is that Chinese market regulators have to improve constantly the credibility and transparency of public information. Although it is a tough job for regulators in different markets, the newly employed whistle blower programme in America (SEC) can be worth trying in Chinese market, even though the programme has its own flaws.

Third, as the global economy increasingly dominates national economies, it is particularly important for fund managers to equip themselves with a knowledge of how trust operates, which includes not only how to cultivate trust within an institution, but also how to govern trust with outside partners who may come from a different cultural background.

### **Limitations:**

Although several important findings emerged from this research, many questions still remain to be addressed by future research. For instance, firstly, how are personal ties formed between fund managers and the firms in which they invest, and what are the costs associated with becoming well-connected? Secondly, do the results obtained in this study generalize to other economies, and if so are they confined to non-western countries or countries which are still undergoing rapid development?

Given the evidence that the higher personal trust increases investment returns, comparative studies could be done in the future to further examine whether such a result is consistent among different cultures. Further studies could also be conducted using longitudinal data to examine the persistence of the impact of Confucian-based culture on business performance.



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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
<b>System trust</b>			
SYST	How much weight would you like to give to listed firms' regular disclosures	interval	50%-100%
<b>Personal trust</b>	(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 long relationship with them	integer	1,2,3,4,5
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
<b>Organizational trust</b>	( 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
<b>Interaction</b>			
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
<b>Characteristics of fund managers</b>			
GENDER	male or female	binary	0,1
MNRAGE	Age of fund manager	interval	25-45

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

	<b>Risk-adjusted portfolio performance</b> (predicted sign/actual sign)	<b>Absolute return of portfolio performance</b> (predicted sign/actual sign)	<b>Timing</b> (predicted sign/actual sign)
<b>Characteristics of Funds</b>			
TYPE (open=1, close=0)	++	+/(+)	-/-
STYLE	+/-	++	+/+
LOCATION	+/-	+/-	+/+
SIZETOTAL	+/(+)	++	+/-
AVERAGESIZE	-/(-)	-/(-)	-/-
<b>Process Trust</b>			
VISITTOTAL	+/(+)	++	-/(-)
VISITSMALL	++	+/-	-/-
SOCIALIZEFIRM	+/-	++	-/(+)
<b>Interpersonal Trust</b>			

INTPLT	+/(+)	+/(+)	-/(+)
Organizational			
INST	+/+	+/-	-/+
System Trust			
SYST	-/(-)	-/(-)	+/-
Characteristics of Fund Managers			
GENDER	+/-	+/-	+/(-)
MNRAGE	+/+	+/+	+/+

*Notes: actual signs in brackets are statically significant*