

# The Influencing Factors of Consistency Behavior in Investment Decisions Based on Big Data Institution Research

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**Abstract.** This article constructs the variable of institutional investor research information acquisition and investment decision consistency behavior. Research has found that institutional investors the confucian cultural atmosphere, governance level, increase in investment portfolio held, and ownership nature in the region can influence their behavior in making investment decisions based on research information. Institutional investors are deeply influenced by the confucian cultural atmosphere, the higher the level of governance, the better the increase in investment portfolio held. When the actual controller is a Chinese funded institution, the better it can achieve consistency between research information acquisition and investment decisions. This indicates the cultural atmosphere and their own characteristics are an important factor affecting the consistency of their research information acquisition and investment decision-making behavior.

**Keywords:** big data institution research; consistency behavior; investment decisions

## 1 Introduction

The cultural environment has a significant impact on decision-makers <sup>[1]</sup>. China as a cultural and cultural power transforming a strong country, the behavior of Chinese investors is subtly influenced and influenced by various cultures part of the essence of transformation has a unique rational logic <sup>[2]</sup>. Confucian culture has the deepest influence the informal system of distance <sup>[3]</sup> and the idea of "unity of knowledge and action" are important components of confucian culture. At the same time, there is a saying in China called "Southern Lao and Northern Kong", which means that the southern region of China places greater emphasis on Laozi's Taoist culture. The north places greater emphasis on confucian culture <sup>[4-5]</sup>. Although the southern region of China in terms of market-oriented reform, the concept is more advanced than in the northern region,

and the economic benefits obtained are better. However, the influence of traditional culture on investor behavior has a long history <sup>[6]</sup>, influenced by the "Southern old and Northern Confucius" in our country.

Institutional investors in northern China are more deeply influenced by Confucian culture, guided and constrained by it. They have a strong impact, and after obtaining research information, they are more able to invest based on the quality of the research information, achieving consistency between research information acquisition and investment decisions. Therefore, hypothesis H5-1 is proposed.

Institutional investors are composed of fund companies, securities firms, insurance companies, etc. They are consistent with general listed companies, having a sound corporate structure. As for fund companies, companies with different levels of governance participate in research and investment. The motives for investment behavior are also different, and the participation of the investment research department of fund companies in research is an important way for management to achieve their interests. Their on-site research can help improve salary and expand the power of management <sup>[7]</sup>. Due to the fact that the compensation of the management comes from the performance of the funds they manage, it is important for fund companies with high levels of governance more emphasis is placed on constraints and incentives. In order to improve their own compensation, the management will use the research information obtained to make rational investment decisions to achieve higher fund performance. For fund companies with low governance levels, the constraint mechanism is not sound, and the management blindly expands the fund size to achieve their own interests <sup>[8-9]</sup>, which may lead to irrational investment behavior. Based on the expected utility theory, the work motivation of investment executives among institutional investors is influenced by the target valence the impact of expectations. For fund companies, when the current expected value and target efficacy are high, it may stimulate the fund manager encouragement can be better utilized <sup>[10]</sup>. What are the expected values and target prices for fund managers through a compensation mechanism, the compensation of fund managers is directly related to fund performance. On the one hand, funds the better the performance of the fund managed by the manager, the higher the salary; on the other hand, better fund performance drives the fund's economy when investing, adopt a rational investment strategy to obtain higher personal compensation. Therefore, when the performance of the fund managed by the fund manager is good and the increase is high, it will further incentivize them to improve fund performance by judging research information as negative or positive news. Making investment decisions based on the good and bad news obtained, in order to obtain higher salaries.

## **2 Sample selection and research design**

To test the hypotheses proposed in this chapter, we selected fund firms that participated in the research from 2010 to 2016. All funds under the company are used as research samples. The survey information comes from the number of Choices. According to the terminal, the data related to the surveyed listed companies and funds are sourced from the CSMAR database. To ensure the robustness of the results, this chapter screened the samples as follows:

(1) Funds and their derivatives were excluded. Samples with missing main data on shareholding objects;

(2) Excluding holdings in financial and ST listed companies Samples of;

(3) Due to some research reports being overly simplified, such as simply stating "company performance" "Company's production and operation situation and business development strategy" or "Q1 production and sales situation, terminal price changes"

Therefore, samples with a total word count of less than 50 are excluded from this chapter due to factors such as the situation and inventory situation;

(4) This chapter discusses. All continuous variables are truncated at the 1% and 99% levels. Finally, this chapter includes a total of 1875 samples.

### **2.1 Definition of consistent behavior between institutional investor research information acquisition and investment decision-making**

Institutional investors invest their thinking and energy in understanding and identifying information content in practical behavior, and rationally adjust the basis gold asset allocation, achieving a balance between increased returns and risk control. Therefore, this chapter takes into account the information obtained by the fund company. Measuring whether a fund has achieved research information acquisition by aligning the content of research information with changes in its holdings in its subsidiary funds consistent behavior with investment decisions. When a fund company receives "optimistic news", it may adopt an increase in holdings or gain. When taking pessimistic news and reducing holdings, this chapter believes that fund companies should achieve research information acquisition and investment. The consistent behavior of decision-making. Therefore, fund companies obtain "optimistic news" and increase their holdings while obtaining "pessimistic news" and reducing their holdings When holding, set to 1, otherwise it is 0. In addition, previous studies have shown that the market is sensitive to "optimistic news" and "pessimistic sentiment." There are certain differences in the response of interest rates, and market investors can react promptly to optimistic news, but they are not satisfied with it. Insufficient response to pessimistic news. Therefore, this chapter also sets out when the fund company when obtaining "optimistic news" and taking an increase in holdings (PZXHY), it is 1; otherwise, it is 0.

### **2.2 The setting of cultural atmosphere in the location of institutional investors**

Due to the different locations of institutional investors and regional cultural differences. Therefore, this chapter is based on the "GIS based" "The Distribution Map of the North South Boundary Zone in China", with the Qinling Huai River as the boundary, preliminarily attempts to locate the registered location in the Qinling Mountains-The fund companies located north of the Huai River are divided into fund companies in the northern region, while those located south of the Qinling Mountains and Huai River are divided into Fund companies in the southern region.

### **2.3. Setting the Governance Level of Institutional Investors**

The evaluation indicators for the governance level of fund companies refer to Jiang Ping <sup>[11]</sup> et al. and Li Xuefeng <sup>[12]</sup> et al. in this chapter and according to Dong Yongqi's research <sup>[13]</sup>, fund companies were selected based on their quarterly size, number of managed funds, and managers number, average number of days a manager has served, company age, whether two positions are combined, proportion of independent directors, number of personnel changes perform principal component analysis on 10 variables: institutional holding ratio and internal holding

ratio. Firstly, standardize the data poor processing, calculate the KMO value to be 0.866 ( $>0.8$ ), indicating that the selected 10 variables are suitable for using principal components analysis. Based on the corresponding variance contribution, determine the weight of each principal component to obtain the final governance of the fund company. The horizontal score is  $GF=39.269\%+12.701\%+29.262\%$ , and the governance level score is set to be greater than the median 1, otherwise it is 0.

### 3 Inspection results and analysis

Table 1 shows the descriptive statistics of the samples. The mean of ZXHY is 0.52, with a median of 1, indicating that the sample. Most of the funds that obtain research information can make investment decisions based on the research information obtained. The mean value of is 0.38 of PZXHY, indicating that the proportion of funds that increase their holdings after obtaining more optimistic research information has reached one 38% of the total funds involved in sexual behavior. As for the culture and characteristics of the fund companies participating in the research. The eigenvectors Confu, Nature, and Governance have mean values of 0.24, 0.72, and 0.60, respectively, this indicates that the average number of Confucian schools within a 500 kilometer radius of the registered location of the fund companies participating in the survey is 240, participating fund companies have a high level of governance and are mostly Chinese funded enterprises. Earnings the mean value is 0.09, indicating that the funds managed by the participating fund companies have increased by 9%.

**Table 1.** The descriptive statistics of the samples

Variable	Mean	Median	standard	Maximum	Sample
ZXHY	0.52	1.0	0.6	1.0	1875
PZXHY	0.38	0.4	0.5	2.0	1875
Confu	0.24	0.2	0.3	0.8	1875
Earnings	0.09	0.1	0.12	0.15	1875
Nature	0.72	0.8	0.81	1.4	1875
Governance	0.60	0.0	0.62	0.89	1875
ROA	0.40	0.8	0.7	0.9	1875
Lev	0.37	0.7	0.75	1.2	1875
Tobin	4.52	5.6	4.95	6.02	1875
Size	22.6	23.4	23.6	25.8	1875
BM	5.73	7.6	7.2	8.31	1875
Fund Size	0.02	0.03	0.03	0.07	1875
Fund Age	0.37	0.4	0.41	0.67	1875
Hearding	0.58	0.6	0.54	0.89	1875
Market	0.92	0.87	0.88	1.46	1875

Table 2. shows the consistency between the acquisition of research information and investment decisions affecting institutional investors factors related to sexual behavior. In the northern regions of Table 2 in the sample of fund companies, the coefficients of Confu are 2.06 and 2.33. However, in the samples from the southern region, the coefficients of Confu were not significant, indicating that they were influenced by the influence of the "Southern Old and Northern Confucius" Xiang, fund companies located in northern China are deeply influenced by Confucian culture; The difference in cultural atmosphere makes. After participating in research, fund companies in the north are guided and constrained by Confucian culture, and are better

able to rely on research letters Invest based on the quality of interest, in order to achieve consistency between research information acquisition and investment decisions.

**Table 2.** The consistency between the acquisition of research information and investment decisions affecting institutional investors factors related to sexual behavior.

Variable	Northern regin		Southern regin	
	ZXHY	PZXHY	ZXHY	PZXHY
Confu	2.06	2.18	2.33	2.24
Roa	1.07	-0.51	3.60	-1.75
Lev	2.13	-2	4.11	-2.6
Tobin	1.67	-3.1	1.89	-1.75
Size	3.25	1.89	1.77	-2.1
BM	2.26	-1.77	2.35	-1.24
Fund Size	3.34	-2.13	3.13	-4.12
Fund Age	2.11	-0.78	1.07	-1.2

#### 4 Research Conclusion

With the rapid development of the Chinese stock market, fund companies, as an important component of institutional investors, have the model has also been rapidly expanded. This chapter focuses on the funds under the fund companies that participated in the research from 2010 to 2016 Sample, based on the conclusion of Chapter 4, continue to study the impact of institutional investor research and investment decision consistency behavior Su. Research findings: Confucian cultural atmosphere, governance level, and managed funds in the registered location of fund companies. The increase in performance and the nature of ownership can both affect their investment decisions based on the research information obtained, Specifically, due to the differences in cultural atmosphere between the North and South regions, the influence of Confucian culture has had a profound impact on the northern regions. After judging the research information obtained, investors are better able to achieve consistency between the acquisition of research information and investment decisions Behavior; At the same time, the higher the level of governance, the higher the increase in the performance of the managed fund, and the actual controller is Chinese funded machinery. The more consistent research information acquisition and investment behavior can be achieved during construction. The above conclusions are subject to a series of robustness tests.

The research in this chapter has both theoretical and practical significance: theoretically, there are currently few studies from a cultural perspective both domestically and internationally Studying the influencing factors of investor behavior, therefore, this chapter makes an attempt, which can serve as a reference for subsequent related studies

Research provides inspiration for ideas and methods. In practice, the research findings of this chapter can provide insights for institutional investors. The guiding role of Chinese Confucian culture in its cognition and behavior, and the improvement of management supervision and management efficiency among institutional investors.

**Acknowledgments.** Thank you to all the authors for their contributions to this paper, and also thank you to the teacher for providing resource support. I hope to further my research findings

in order to obtain deeper research.

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