

# *The Influence of Capital Market Openness on the Sentiment of Chinese Investors*

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**Abstract:** In recent years, China has been gradually and progressively promoting the opening of its capital markets to the outside world. In this study, a questionnaire survey and SEM (Structural Equation Modeling) model analysis were used to investigate the mechanisms and outcomes of capital market openness on Chinese investor sentiment based on the Land-Hong Kong Link Policy. The study reveals that following the opening of the capital markets, individual investor sentiment tends to become more rational due to factors such as changes in investor structure and shifts in value investment concepts. In the future, it is recommended that China's capital markets promote basic investment education and enhance the development of financial regulations to progress towards a deeper level of openness.

**Keywords:** capital market openness, investor sentiment, individual investors, SEM model

## 1. Introduction

Over the past 30 years, China's capital market has continuously increased its efforts in promoting two-way opening. The Chinese market is attracting attention from all over the world, and more and more foreign institutions are choosing to come to China for business development [1]. Investors can trade A-shares directly and anonymously, and establish a mutual connection between the mainland and Hong Kong capital markets. This signifies the beginning of a new era of openness in China's capital market. Cao and Yang found that China's capital market liberalization could significantly reduce corporate over-investment and under-investment behaviors [2]. Thus, the investment behaviors of corporate investors became more efficient in their views. A further study of the impact of capital market opening on corporate investment presented by Wang showed that Chinese capital market liberalization could improve the efficiency of capital market pricing and help optimize the investment decisions made by companies [3]. Another study made by Guo (2019) made clear that the opening of China's capital market could inspire companies to disclose more transparent, more comparable and high-quality accounting information [4]. It could be predicted that investors could have more confidence in trading shares while the opening of capital market reduced the level of information asymmetry between investors and listed companies. Generally speaking, individual investors are seldom considered comparing with listed company in this area and it is from the perspective of the individual investors that my research is based.

This article mainly studies the mechanism of the "capital market opening up" on "investor sentiment", and uses questionnaire surveys and SEM model to investigate investors' market expectations and willingness to buy and sell.

This paper builds a bridge between capital market liberalization and changes in investor sentiment from an area currently vacant in social research. The analysis of individual investors' investment behavior is used to determine the factors that influence individual investors' investment choices, allowing the government to formulate policies with more theoretical basis and empirical research support.

## 2. Research Design and Data Collection

First, questionnaires were designed for various indicators that may affect investor sentiment and distributed to retail investors through some financial institutions. Based on the data collected from the questionnaires, a preliminary assessment of various factors affecting investor sentiment is conducted to analyze the degree of influence of each factor on investor sentiment and the interrelationships among the factors, in preparation for the establishment of the SEM model. After that, the SEM model is constructed by using AMOS, R language and other related tools, taking into full consideration the interrelationship between variables, potential relationships and potential variables.

### 2.1. Questionnaire Data

The questionnaire was distributed and collected on November 8, 2022 and ended on November 23, 2022. The questionnaires were distributed simultaneously in several cities, and 423 questionnaires were collected. The following is a pie chart based on the basic information of the respondents, in order of their age, gender, education, whether they know the policy of Shanghai-Hong Kong-Shenzhen Stock Exchange, when they started to trade, and their annual income.

The gender distribution of respondents who filled out the questionnaire is slightly higher for women (50.31%) than for men (49.69%), which is close to 1:1. In terms of education, more than 90% of the respondents have a high school education or above, and more than 80% have a bachelor's degree or above, which shows that the investment industry requires a higher education threshold. In terms of age distribution, the highest percentage of respondents aged 41 to 50 was 44.65%, nearly half, followed by 31 to 40 with 25.16%, and the lowest percentage of respondents aged under 18 or over 60 was 0.63%. Considering when the respondents started trading, 68.55% started trading before 2014, meaning that more than two-thirds of the respondents have at least eight years of investment experience and started investing before the implementation of the Shanghai-Hong Kong Stock Connect policy. However, only 60.38% of all respondents were aware of the Land-Hong Kong Stock Connect policy, which means that not all of those who started investing in stocks before 2014 were aware of the Land-Hong Kong Stock Connect policy. In addition, less than 20% of the respondents have more than 20% of their stock holdings that contain the underlying stocks of the Shanghai-Shenzhen-Hong Kong Stock Connect, which is presumably related to whether or not the respondents are familiar with the Land-Hong Kong Stock Connect policy.

### 2.2. Model Construction

According to the following diagram, the SEM model is constructed, the policy of Shanghai-Hong Kong-Shenzhen Stock Connect, individual investors, and big firm events are the three aspects that affect investor's sentiment, among which individual investors include personal investment expectation and personal investment level, A1-A12 indicate the policy-related questions in the scale, B1-B5 indicate the investment level-related questions in the scale, C1-C5 indicate the investment expectation-related questions in the scale, D1-D6 indicate the investment expectation-related questions in the scale, and D1-D6 indicate the company event-related questions in the scale. D1-D6 are the questions related to major events in the scale. The questions are solved with the help of SPSS

AMOS and R language. The relationships among the factors are obtained from a quantitative perspective.

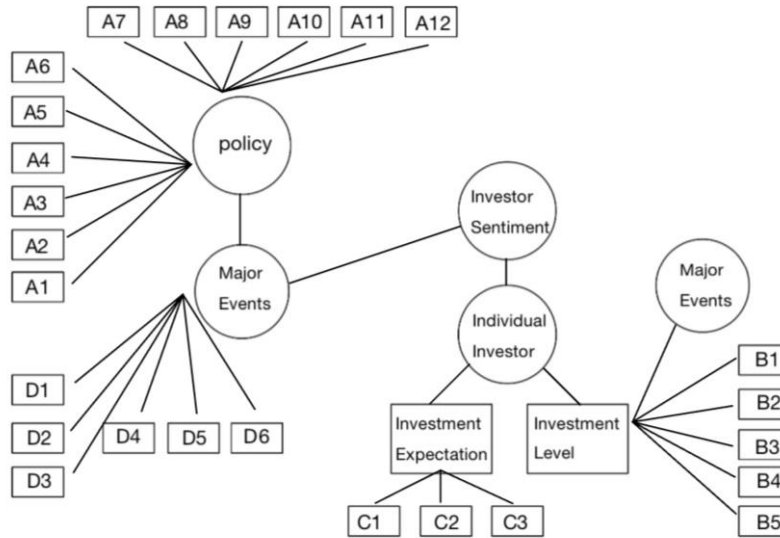


Figure 1: SEM model.

After obtaining the model, the author validates the fit of the model by performing a goodness-of-fit test. Among many tests, we choose the Chi-square test, Normed Chi-square test, Comparative Fit Index(CFI),the Root Mean Squared Error Coefficient (RMSEA), and the PGFI index. The results are as follows:

Table 1: Results of goodness-of-fit test.

Index	Ideal Standards	Coefficient	Applicable situations
X <sup>2</sup>	The smaller the better	855.745(p=0.000)	Explain the explanatory power of the model
$\frac{X^2}{df}$	<3	2.985(df=293)	Unaffected by model complexity
GFI	>0.9	0.904	Explain the explanatory power of the model
PGFI	>0.5	0.589	Illustrate the simplicity of the model
RMSEA	<0.08	0.079	Unaffected by sample size and model complexity

From the above analysis, it can be seen that all aspects of the model fitness tests pass and the results are convincing.

### 2.3. Path Analysis

The SEM model is constructed using SPSS Amos software to represent the relationship between the variables and to conduct path analysis. (Note: the following data are normalized)

To facilitate the study, the weight of "major events," "policy," and "individual investor" is set to 1 for investor sentiment, and the weight of "investment level" and "investment expectations" is set to 1

for "individual investor. The weight of "investment level" and "investment expectation" for "individual investor" is set to 1, and the weight of "investment level" for "investment expectation" is set to 1.

The following figure shows the coefficients after the standardization process.

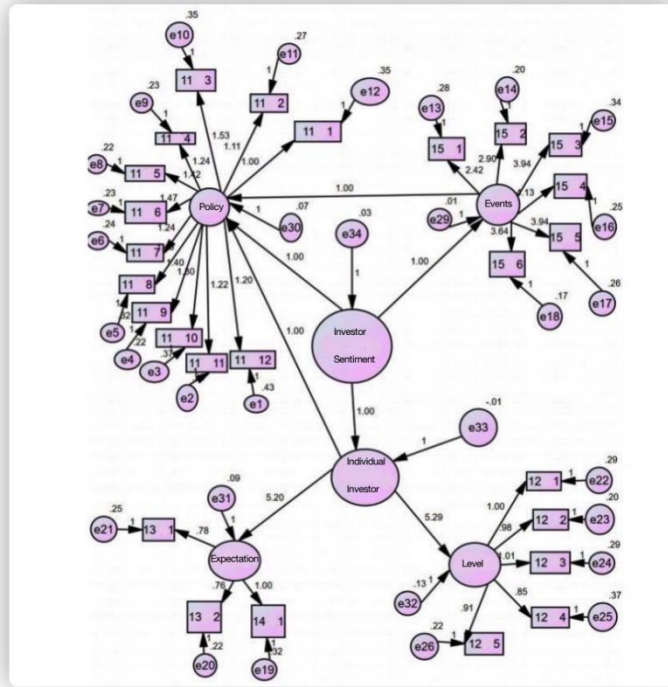


Figure 2: Coefficients after standardization process.

### 3. Interpretation of Data Results From Standardized Regression Weights

After analyzing the data from standardized regression weights, we get the following details: the personal factors of investors have the greatest influence on investor sentiment. Among the three factors influencing investor sentiment, the weight of Individual Investor s is 1.215, which is significantly greater than the influence of Policies (0.291) and Major Events (0.826), indicating that it is the main factor in investors' perception of the overall situation of the stock market.

The capital market liberalization policy had the least impact on investor sentiment. After the introduction of the Shenzhen-Hong Kong Stock Connect policy, investors generally paid more attention to the messages of Hong Kong stock investors and adopted a series of new investment strategies such as lowering stock liquidity levels. However, in the long run, its impact on investor sentiment is limited.

The effect of Investment Expectations on Individual Investor (0.918) is greater than the effect of Investment Level on Individual Investor (0.885). This indicates that investors certainly refer to investors' expectations about their own investments, but more importantly, their own expectations about the future stock market.

When exploring the impact of the "Land-Hong Kong Stock Connect" policy on investor sentiment, the most significant impact on investor sentiment was "improved information disclosure" and "when the stock market rises in general"; When exploring the impact of major events on investor sentiment, respondents generally believe that the most influential event is "the change of chairman of a company".

The impact of the implementation of the Shenzhen-Hong Kong Stock Connect policy is mainly realized through the impact on individual investor and major events, but it can also be influenced by other factors (e.g., changes in the external market environment).

The weight of the implementation of the Shenzhen-Hong Kong Stock Connect policy is 0.352 for the company's major events, which is greater than the weight of 0.240 for investors' personal factors, indicating that the policy factor affects investors' sentiment more through the influence of major events.

Investor sentiment is influenced by a number of factors, including policy implementation, personal factors, and major company events, but there are also other variables that have not been studied (e.g., internet opinion, national documents, etc.) that also influence it.

#### 4. Discussion

Based on the analysis of the questionnaire data, it is clear that investor sentiment is becoming more rational. On the one hand, this change in sentiment is indirectly influenced by policy and the change in sentiment is slow. This change is reflected in the fact that the entry of foreign investors into the domestic A-share market has accelerated the maturation of the domestic market, resulting in a significant change in the investor structure. Instead of the original composition of 80% individual investors and 20% institutional investors, the current composition is 60% individual investors and 40% institutional investors. Individual investors are more inclined to refer to professional advice and actively follow the flow of northbound funds in the stock market, instead of the previous way of understanding information through news media or gossip, causing collective sentiment fluctuations in the stock market. The research from Sun, Xu & Qi shows that the HFT trading system has increased the propensity and frequency of issuing voluntary earnings announcements by the underlying companies [5], which indicates that not only are individual investors more willing to invest with justification, but the improvement in the general environment brought about by the opening of the capital market has also provided a better investment environment for individual investors.

On the other hand, this change is reflected in the fact that the influx of foreign capital has brought about a change in investment values in China. As individual investors were more willing to pursue short-term economic benefits before the opening of the market, they now pay more attention to the importance of the intrinsic value of enterprises and focus on learning the concept of value investment. Compared to individual investors, institutional investors have more accurate information and more sophisticated analysis methods, and they are increasingly looking at value investing [6], so the overall investor sentiment tends to be rational.

In addition, the study finds that with the further opening of the capital market, the domestic market is gradually moving from infancy to maturity, and various financial regulatory systems are becoming more standardized. The better financial regulatory systems led to better information disclosure, diversified investments such as green investments [7], improved corporate governance and level of corporate social responsibility [8], and increased confidence in future investments [9]. Therefore, people's investor sentiment is more stable under good regulation.

#### 5. Conclusions

In conclusion, the results show that individual investor sentiment becomes more rational due to the Chinese capital market liberalization. The obtained results fill a gap in the research section on individual investors in this field. However, the requirement of interviews with financial practitioners can probably make the results more precise. Therefore, further research will be devoted to removing this limitation by connecting with some financial practitioners such as investment advisors of securities firms for interviews. According to the policy issued by Weihai government, the government

stressed the need to improve the training on financial knowledge for the leaders and to bring in the financial talents (Weihai Municipal People's Government, 2014) [10]. However, there are little policies about financial literacy for the public. Therefore, it is necessary for the government to popularize basic investment science education through financial institutions and schools, and to continue to increase cross-border financial regulation in the future.

## References

- [1] Zhang, MX 2022, 'Capital market opening dividends are gradually appearing, attracting foreign investors to China to develop their business', *China Trade News*, 2022-11-15(001).
- [2] Cao, HM & Yang, MR 2021, 'Does capital market opening alleviate corporate inefficient investment behavior -- based on the mediating effect of managerial myopia', *Friends of Accounting*, No. 8, pp. 114-120.
- [3] Wang, Y 2020, 'The impact of capital market opening on corporate investment behavior', *CO- Oerativeconomy & Science*, No. 24, pp. 57-59.
- [4] Guo, MX 2019, *Capital Market Opening, Internal and External Governance and Comparability of Accounting Information - Empirical Evidence Based on Shanghai-Hong Kong Stock Exchange*, Zhongnan University of Economics and Law, Wuhan.
- [5] Sun, JH, Xu, XL & Qi, BL 2022, 'Capital Market Opening and Voluntary Corporate Disclosure', *Journal of Accounting and Economics*, No. 36(06), pp. 51-63.
- [6] Pan, HF, Liu, XT & Zhou, XY 2018, 'Has the opening of capital markets to the outside world prompted the return of value investing? --Evidence from the Shanghai-Hong Kong Stock Exchange', *Studies of International Finance*, No.379(11), pp. 77-86.
- [7] Su, YH 2022, 'The impact of capital market opening on corporate green investment', *Dongbei University of Finance and Economics*.
- [8] Yuan, JX 2022, 'Analysis of the impact of capital market opening on the level of corporate social responsibility', *Dongbei University of Finance and Economics*.
- [9] Lv, CH 2023, 'What is the impact of financial regulatory reform on the capital market', *Times of Fortune*, No.216(05), pp. 15-17.
- [10] Weihai Municipal People's Government 2014, *Weihai Municipal People's Government on accelerating the development of financial innovation*.