

# Research on stock valuation of listed companies and influencing factors of stock price profitability

Ruixiao Zhao<sup>1,\*</sup>

<sup>1</sup> School of Economics and Management, China University of Petroleum, Tsingtao, Shandong Province, China

\*Corresponding author: netnews@upc.edu.cn

**Abstract.** Since the reform and opening up, China's capital market has made a rapid progress. At present, due to the lack of sound basic capital market system, stock prices fluctuate greatly. The stock price is determined by two main factors, that is, the company's profits and investors' valuation of the company. Among them, profit is generally affected by the analysis of the company's financial statements, and is determined by the company's operating conditions. If investors want to further determine the company's stock price, they need to solve a problem, which is how to reasonably and accurately value these listed companies. After analysing the situation and data in China, this paper gets some main factors affecting the company valuation. This paper introduces several stock valuation methods which are widely used in the industry, namely relative valuation methods and absolute valuation methods, and applies them with foreign ownership as an example analysis.

**Keywords:** Listed company; Stock valuation; Share price; Valuation method; Operating conditions.

## 1. Introduction

### 1.1 Research Background and Motivation

#### 1.1.1 Classical valuation theory

In economic theory and capital market, many scholars pay attention to an important issue is stock valuation. Over the years, on the basis of your economists' research, theories about corporate valuation have grown richer, more diverse and more rigorous. This section will analyze two methods of company valuation: absolute valuation method and relative valuation method [1].

##### 1.1.1.1 Relative valuation method

When valuing a company, some studies use the price-earnings ratio method. Because the price-to-earnings ratio is the simplest and most effective method of valuation, one of the most common indicators used by companies to determine whether their current stock price is accurate is the price-to-earnings ratio. Generally speaking, when investors see a company's P/E ratio is lower, they will know that the company is more valuable for investment. However, there are often high returns, but at the same time, it also brings high risks, and the payback period of stock investment will be relatively long. On the contrary, the higher the P/E ratio, the lower the risk, and the shorter the payback period of the stock investment. Generally speaking, there is no specific rule for the size of the P/E ratio. When the P/E ratio of an individual stock is 14-20, it indicates that it is normal [2,3].

##### 1.1.1.2 Absolute valuation method

The discounted cash flow model evaluates the intrinsic value of common stock by using discounted dividend model and free cash flow model.

The discounted cash flow method is widely used nowadays. Forecast and analyze the future financial data of the company to determine the intrinsic value of the listed company. Assuming that the future dividend distribution remains unchanged, the future discount rate can be determined at a reasonable level, and then discount the future annual cash flows. The current value of the future cash flows can be summed up as the real value of the enterprise. This method of discounting cash flow reflects the time value of the company and conforms to the present value principle, namely:

Where,  $D_0$  is the cash flow of each future period, and  $K$  is the discount rate. From this formula, it can be seen that the factors affecting the enterprise value are mainly the cash flow and discount rate of each period in the future. Compared with the relative valuation method, the absolute valuation

method reflects the intrinsic value of the company more accurately because it reflects the time value of the company. However, when using this method, how to select the right parameters is relatively difficult [4].

### 1.1.2 Background and implementation of China's repurchase policy reform

As shown in Figure 1, China's A-share main board market experienced significant stock market shocks around 2008 and 2015 respectively. With the decline of the A-share market index, investors' confidence is constantly frustrated, which further aggravates the slump of the stock market. Moreover, the fixed issue price inverted damages the interests of investors. Because of this, in order to help domestic listed companies to open up self-rescue channels, play the role of market value management of share repurchase, price discovery, and investor interests, our country has introduced many rebuys related policies and regulations according to the market development needs [5].

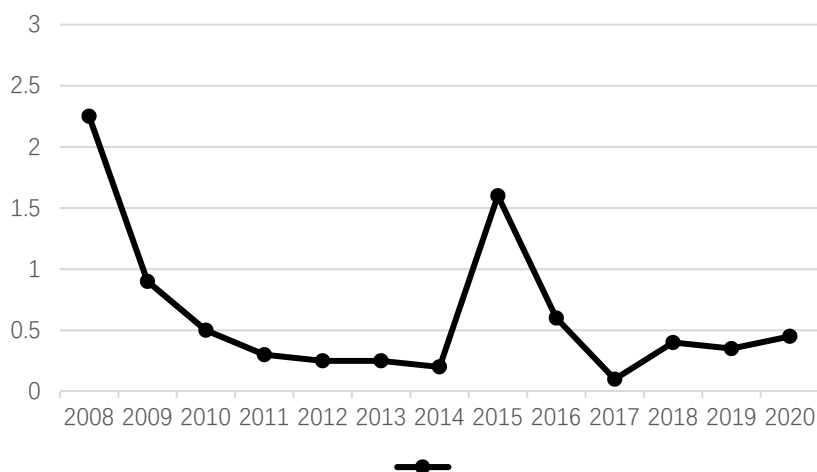


Fig. 1 A-share Main Board Market Index Volatility (%)

### 1.1.3 Analysis of the action mechanism of corporate repurchase behavior

For listed companies, stable stock prices help fully reflect the true value of enterprises and ensure that investors in the market get more authentic and transparent information. Therefore, a stable stock market environment will attract more investors, reduce the interference of market sentiment, and improve the efficiency of resource allocation. Naturally, a smooth and realistic price and a minimum noise level are the goals of public companies. However, China's stock market has been characterized by frequent stock price crash, serious phenomenon of simultaneous rise and fall, and prominent herding effect.

The role of buybacks on stock prices is mainly reflected in the following three aspects: first of all, when the stock price is undervalued or negatively impacted, the company communicates the information of the undervalued stock price to the market through buybacks to achieve the purpose of market value management, so as to effectively curb the continuous decline of stock prices; Second, share repurchase is an important channel for the company to reduce agency costs and reward shareholders. Therefore, through the buyback program can improve investor confidence. Third, when the stock market continues to be depressed, a large number of stock buybacks are conducive to stock market stability.

Share buybacks boost share prices, which in turn boost investor confidence. However, when the company that plans to repurchase faces the financing constraint problem, the company's repurchase plan may not be implemented smoothly or achieve the expected effect. The exact situation depends

on the source of funds used by the company to buy back shares. The company usually raises funds through debt financing [6-8].

## **1.2 The advantages and disadvantages of PE method**

### **1.2.1 Advantages of PE valuation method**

First of all, the ratio of price and income can reflect the relationship between input and output. Second, the price-earnings ratio is reliable.

### **1.2.2 Disadvantages of PE valuation method**

First, the over-reliance of price-earnings ratio on earnings per share is well known. However, earnings per share is only one of the many factors that affect the analysis of stock investment value. So, from the point of the measure of earnings, the limitations of valuation method are obvious, if the company have a large number of accounts receivable, which means that the company in terms of reserves of cash flow is insufficient, in this case, if the company earnings per share is still relatively high, the accuracy and authenticity of the earnings will be discounted. Second, the accuracy of the P/E relative valuation method has long been questioned. Because the relative valuation method of P/E selects some comparable companies for comparative analysis, and then determines the value of the companies to be evaluated. But in real life, in fact, no two companies are exactly the same, so the accuracy of P/E estimation method will be greatly questioned. As a result, investors are likely to choose other measures to buy stocks than the P/E ratio.

## **1.3 Research Framework**

Further analysis found that: first, the cyclical industry stock price in advance of the phenomenon is more obvious. The main reason is that this part of the empirical sample was taken from 2019 to 2021, during which China's macro economy recovered significantly under the government's stimulus fiscal and monetary policies, and cyclical industries had more investment value, so that market funds had a deeper involvement in cyclical industries. Secondly, by comparing the difference of the cumulative returns of the four groups in the industry ranked according to the unexpected earnings, it is found that there is little difference in the cumulative returns of different groups in the cyclical industry, indicating that the returns of individual stocks in the cyclical industry are less affected by the unexpected earnings of individual stocks in the sample period, and more benefit from the strong recovery of the macro economy [9,10].

Theoretical and empirical tests on the correlation between corporate performance and stock price. By adding real options, the theoretical model of corporate value is deduced, and then the empirical model is deduced, in which the current performance, profitability change, invested capital change, growth ability change and discount rate change are used as explanatory variables. At the same time, the existing literature model is used as the reference model. The conclusion shows that the coefficient of current performance conforms to the model hypothesis, and the coefficient of the three independent variables of profitability, growth ability and discount rate basically conforms to the model hypothesis [11].

Further analysis shows that the coefficients of the two independent variables of the cyclical industry are all larger than those of the non-cyclical industry, and the coefficients of the independent variable of the growth ability of the non-cyclical industry are all larger than those of the cyclical industry. This conclusion is consistent with the non-cyclical industry stocks are mostly in the growth stage of the enterprise life cycle, and the growth ability has a greater impact on the non-cyclical industry. Cyclical industry stocks are more capital-intensive enterprises, capital input to the cyclical industry has a greater impact on the fact. At the same time, due to the large macro fluctuations in China from 2019 to 2021, the profitability of cyclical industries will fluctuate more, so investors will be more concerned about the profitability of stocks. [12-15].

## 2. The Empirical Analysis

### 2.1 Variable design

#### 2.1.1 Explained variable

In this paper, the standard deviation of stock returns is chosen to measure the volatility range of stock prices, denoted as  $V$ . The calculation formula is as follows:

$$r_{i,t} = \ln P_{i,t} - \ln P_{i,t-1} \quad (1)$$

$$V = \sqrt{\frac{1}{n-1} \sum_{t=1}^n (r_{i,t} - \bar{r})^2} \quad (2)$$

Where:  $r_{i,t}$  is the logarithmic return rate of stock of listed company  $i$  at time  $t$ ;  $P_{i,t}$  is the stock price of listed company  $i$  at time  $t$ ;  $P_{i,t-1}$  is the stock price of listed company  $i$  at time  $t-1$ ;  $V$  is the standard deviation of stock return, namely the fluctuation of stock price;  $n$  is the number of trading days.  $\bar{r}$  is the average log return of stock prices across constituencies.

#### 2.1.2 Explanatory variables

The explanatory variable is the proportion of foreign ownership among the top ten shareholders of listed companies, denoted as  $FS$ . Further, when analyzing the impact of different types of foreign shareholding on stock price volatility, it will be divided into foreign legal person shareholding and foreign natural person shareholding, which are respectively denoted as  $FIS$  and  $FPS$ .

#### 2.1.3 Control variables

Company SIZE = LN (total assets /10000), denoted as **SIZE**.

Asset-liability ratio = total liabilities/total assets, denoted as **LEV**.

Ownership concentration = the sum of shares held by the top three shareholders of a listed company, denoted as **HER**.

Turnover rate = current trading volume/total number of shares, denoted as **HS**.

Price-to-book ratio = stock price/book value, denoted **PB**.

When analyzing the influence of different types of foreign shareholding on stock price fluctuations, the proportion of domestic legal person shareholding and the proportion of domestic natural person shareholding among the top ten shareholders of listed companies will be taken as control variables and recorded as **DIS** and **DPS** respectively.

## 2.2 Model establishment and determination

### 2.2.1 Model establishment

Step 1: Test the influence of foreign shareholding on stock price volatility, and establish linear regression model 1 as follows:

$$V = \beta_0 + \beta_1 FS + \beta_2 SIZE + \beta_3 LEV + \beta_4 HER + \beta_5 HS + \beta_6 PB + \varepsilon \quad (3)$$

Where:  $V$  is stock price fluctuation;  $FS$  is the proportion of foreign ownership; **SIZE** is the scale of the company; **LEV** is asset-liability ratio; **HER** is ownership concentration degree; **HS** is turnover rate; **PB** is market to book ratio;  $\varepsilon$  is the random error term.

Step 2: Test the influence of different types of foreign shareholding on stock price volatility. Based on Model 1, the proportion of foreign shareholding  $FS$  is divided into  $FIS$  held by foreign legal person and  $FPS$  held by foreign natural person. At the same time,  $DIS$  held by domestic legal person and  $DPS$  held by domestic natural person are introduced as control variables to establish model 2:

$$V = \beta_0 + \beta_1 FIS + \beta_2 FPS + \beta_3 DIS + \beta_4 DPS + \beta_5 SIZE + \beta_6 LEV + \beta_7 HER + \beta_8 HS + \beta_9 PB + \varepsilon \quad (4)$$

Where: **FIS** is the shareholding ratio of foreign legal entity; **FPS** is the shareholding ratio of foreign natural person; **DIS** is the shareholding ratio of domestic legal person; **DPS** is the shareholding ratio of domestic natural persons.

### 2.2.2 Determination

The data used in this paper are panel data, and panel data models mainly include mixed effect model, fixed effect model and random effect model. Through several tests, the optimal model is selected.

The significance of the individual effect can be tested with the F-statistic and the null hypothesis was that there was no individual effect. If it was true, the mixed effect model was used. If not, the Hausman test is further performed. The F-test results of Model 1 and Model 2 are shown in Table 1.

**Table 1.** Results of individual effect test

| Model       | Model 1 | Model 2 |
|-------------|---------|---------|
| F statistic | 1.8261  | 1.7826  |
| P value     | 0.4326  | 0.3267  |

As can be seen from the above table, both models 1 and 2 accept the null hypothesis, so it is unnecessary to carry out Hausman test, and the mixed-effect model can be directly used for regression.

### 2.3 Descriptive statistics

For direct comparison with foreign holdings of listed companies with foreign equity of the difference between the indexes of listed companies, this paper will all the samples are divided into A, B two groups, among them, the group A for the top ten shareholders of listed companies with foreign equity in quarterly data, group B for no foreign ownership in the top 10 shareholders of the quarterly data of listed companies. The descriptive statistical results of the two groups of samples are shown in Table 2.

**Table 2.** Descriptive statistical results

| Variable | Sample group | Sample size | Minimum  | Maximum   | Mean value | Standard deviation |
|----------|--------------|-------------|----------|-----------|------------|--------------------|
| V        | A            | 4152        | 0.007572 | 0.097424  | 0.025229   | 0.01006398         |
|          | B            | 36885       | 0.004566 | 1.608434  | 0.027261   | 0.01495682         |
| FS       | A            | 4152        | 0.0064   | 0.8118    | 0.2496     | 0.1963778          |
|          | B            | 36885       | 0        | 0         | 0          | 0                  |
| FIS      | A            | 4152        | 0.0000   | 0.8118    | 0.2301     | 0.202875           |
|          | B            | 36885       | 0        | 0         | 0          | 0                  |
| FPS      | A            | 4152        | 0.00000  | 0.61190   | 0.01947    | 0.07679674         |
|          | B            | 36885       | 0        | 0         | 0          | 0                  |
| SIZE     | A            | 4152        | 9.946    | 20.885    | 13.360     | 1.753351           |
|          | B            | 36885       | 5.584    | 21.682    | 13.162     | 1.48419            |
| LEV      | A            | 4152        | 0.007969 | 0.949812  | 0.408214   | 0.2009978          |
|          | B            | 36885       | -0.2272  | 1.3518    | 0.4704     | 0.2172758          |
| HER      | A            | 4152        | 0.1404   | 0.9260    | 0.5679     | 0.1526875          |
|          | B            | 36885       | 0.005648 | 0.983571  | 0.468608   | 0.1587543          |
| HS       | A            | 4152        | 0.03223  | 5.73724   | 0.68452    | 0.7007866          |
|          | B            | 36885       | 0.004594 | 12.187463 | 1.057420   | 0.9294039          |
| HP       | A            | 4152        | 0.445    | 39.561    | 3.319      | 2.175874           |
|          | B            | 36885       | 0.000    | 4362.715  | 5.334      | 41.54488           |
| DIS      | A            | 4152        | 0.0000   | 0.8324    | 0.1934     | 0.203142           |
|          | B            | 36885       | 0.0000   | 0.97490   | 0.07742    | 0.1789725          |
| DPS      | A            | 4152        | 0.0000   | 0.66930   | 0.04093    | 0.1070074          |
|          | B            | 36885       | 0.00000  | 0.88570   | 0.03892    | 0.1205259          |

Based on a lot of test data, in some respects stock price fluctuations, the mean value of group A is 0.025, which is less than 0.027 of group B, and the standard deviation of group A is also smaller, indicating that the stock price volatility of listed companies with foreign ownership is usually smaller than that of listed companies without foreign ownership. In terms of company size, the mean value

of group A is 13.360, and that of group B is 13.162, indicating that foreign investors generally prefer companies with larger investment scale. In some respects, asset-liability ratio, the mean value and standard deviation of group A are 0.41 and 0.20, all of them are lower than those of group B, indicating that listed companies with foreign shareholding usually have lower asset-liability ratio and more stable capital structure. In terms of ownership concentration, the average value of group A is 0.5679 and that of group B is 0.468608, indicating that foreign investors prefer listed companies with relatively high concentration. In terms of turnover rate, the mean value of group A is 0.68452, which is less than 1.057420 of group B, and the standard deviation of group A is 0.7007866, which is also smaller than that of group B, indicating that the stock liquidity of listed companies with foreign ownership is usually lower than that of listed companies without foreign ownership. In terms of price-to-book ratio, the mean value of group A is smaller than that of group B, indicating that foreign investors prefer to invest in listed companies with relatively higher value. In addition, in terms of foreign ownership, the mean and standard deviation of foreign legal person ownership are significantly larger than that of foreign natural person ownership, indicating that the proportion of foreign natural person ownership is usually small but relatively stable.

## 2.4 Analysis of correlation

**Table 3.** Table of correlation between variables

|        | V      | FS     | FIS    | FPS    | SIZE   | LEV    | HER    | HS     | PB     | DIS    | DPS   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| V      | 1.000  |        |        |        |        |        |        |        |        |        |       |
| FS     | -0.033 | 1.000  |        |        |        |        |        |        |        |        |       |
| FIS    | -0.09  | 0.926  | 1.000  |        |        |        |        |        |        |        |       |
| FPS    | 0.061  | 0.110  | -0.272 | 1.000  |        |        |        |        |        |        |       |
| SIZE   | -0.220 | -0.278 | -0.220 | -0.127 | 1.000  |        |        |        |        |        |       |
| LEV    | -0.080 | -0.248 | -0.180 | -0.158 | 0.752  | 1.000  |        |        |        |        |       |
| HER    | -0.029 | 0.538  | 0.512  | 0.026  | -0.062 | -0.072 | 1.000  |        |        |        |       |
| Equity |        |        |        |        |        |        |        |        |        |        |       |
| HS     | 0.643  | -0.067 | -0.087 | 0.054  | -0.198 | -0.047 | -0.316 | 1.000  |        |        |       |
| PB     | 0.473  | -0.018 | -0.019 | 0.003  | -0.217 | -0.185 | -0.022 | 0.240  | 1.000  |        |       |
| DIS    | -0.059 | -0.320 | -0.258 | -0.137 | 0.101  | 0.140  | 0.226  | -0.178 | -0.043 | 1.000  |       |
| DPS    | 0.161  | -0.156 | -0.167 | 0.045  | -0.150 | -0.091 | -0.153 | 0.024  | 0.208  | -0.218 | 1.000 |

According to the data in the figure above, his paper finds that foreign ownership is generally positively correlated with stock price volatility. Among them, foreign legal ownership is positively correlated with stock price volatility, while foreign natural person ownership is negatively correlated with stock price volatility. Meanwhile, domestic corporate ownership is negatively correlated with stock price fluctuations, while domestic natural person is positively correlated with stock price fluctuations. In addition, company size, asset-liability ratio and ownership concentration are negatively correlated with stock price volatility, while turnover rate and price-to-book ratio are positively correlated with stock price volatility.

## 2.5 Analysis of the influence of foreign shareholding on stock price fluctuation

### 2.5.1 Test for multicollinearity

From the table of correlation numbers, that stock price volatility is generally correlated with other variables. Therefore, to ensure the accuracy of model 1, this paper conducted a multicollinearity test on it, and the test results are shown in Table 4. It can be seen that VIF values of all variables are significantly less than 10, so there is no multicollinearity.

**Table 4.** Results of Model 1 multicollinearity test

| Variable  | FS       | SIZE     | LEV      | HER      | HS       | PB       |
|-----------|----------|----------|----------|----------|----------|----------|
| VIF Value | 1.552871 | 2.528436 | 2.362405 | 1.595003 | 1.265962 | 1.112632 |

### 2.5.2 Regression analysis

The mixed-effect model was used to regression model 1, and the regression results are shown in Table 5.

**Table 5.** Regression results of Model 1

|                    | Estimated  | Standard error | t value | p value     |
|--------------------|------------|----------------|---------|-------------|
| FS                 | -9.577e-04 | -9.577e-04     | -2.932  | 0.0087***   |
| SIZE               | -4.782e-04 | 2.155e-04      | -2.217  | 0.0269**    |
| LEV                | 3.358e-03  | 1.518e-03      | 2.210   | 0.0273**    |
| HER                | 1.186e-02  | 1.965e-03      | 6.041   | 2.35e-09*** |
| HS                 | 8.714e-03  | 3.817e-04      | 22.823  | <2e-16***   |
| PB                 | 1.153e-03  | 8.718e-05      | 13.208  | <2e-16***   |
| Intercept          | 1.395e-02  | 2.838e-03      | 4.915   | 1.08e-06*** |
| Adjusted R-squared | 0.5488     |                |         |             |

Note: \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% levels, respectively.

As can be seen from the table, foreign ownership has a significant negative impact on stock price volatility, that is, foreign ownership among the top ten shareholders can reduce the fluctuation range of stock price, which confirms the hypothesis of hypothesis 1. At the same time, company size is also negatively correlated with stock price volatility, indicating that larger companies usually have less stock price volatility. Asset-liability ratio, ownership concentration, turnover rate and price-to-book ratio have significant positive effects on stock price volatility. In addition, the R2 value of the model was 0.5489, indicating a good overall fit.

## 2.6 Analysis of the influence of different types of foreign capital on stock price fluctuation

### 2.6.1 Test for multicollinearity

The model used here is Model 2, and the results of multicollinearity test are shown in Table 6. It can be seen that VIF values of all variables are significantly less than 10, so there is no multicollinearity.

**Table 6.** Results of Model 2 multicollinearity test

| Variable  | FIS   | FPS   | SIZE  | LEV   | HER   | HS    | PB    | DIS   | DPS   |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| VIF Value | 2.482 | 1.383 | 2.670 | 2.438 | 2.047 | 1.300 | 1.155 | 1.683 | 1.235 |

### 2.6.2 Regression analysis

The mixed-effect model was used to regression model 2, and the regression results are shown in Table 7.

**Table 7.** Regression results of Model 2

|                    | Estimated  | Standard error | t value | p value     |
|--------------------|------------|----------------|---------|-------------|
| FIS                | -3.451e-03 | 1.497e-03      | -2.305  | 0.021374**  |
| FPS                | 5.657e-03  | 3.591e-03      | 2.174   | 0.0348**    |
| SIZE               | -2.515e-04 | 2.186e-04      | -1.150  | 0.249949    |
| LEV                | 2.788e-03  | 1.519e-03      | 1.829   | 0.066662*   |
| HER                | 1.036e-02  | 2.186e-03      | 4.720   | 2.84e-06*** |
| HS                 | 8.959e-03  | 3.804e-04      | 23.490  | <2e-16***   |
| PB                 | 1.081e-03  | 8.757e-05      | 12.323  | <2e-16***   |
| DIS                | -2.090e-03 | 1.819e-03      | -2.234  | 0.0237**    |
| DPS                | 1.174e-02  | 2.435e-03      | 4.826   | 1.65e-06*** |
| Intercept          | 1.0010e-02 | 2.905e-03      | 3.481   | 0.000528*** |
| Adjusted R-squared | 0.5613     |                |         |             |

Note: \*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% levels, respectively.

As can be seen from the table, the shareholding of foreign legal person has a negative impact on the stock price volatility, while the shareholding of foreign natural person has a positive impact on the stock price volatility. Both of them are in line with the hypothesis of Hypothesis 2. Both at the same time, the contrast effect, can be found on the strength of the foreign natural person intensifying effect of share price volatility is greater than the foreign legal person weakening effect of share price volatility, but according to the results of regression model a, foreign ownership for general weakening effect, this is due to corporate ownership is often much larger than the natural person holding. In addition, the domestic legal person shares can also stabilize the effect of share price volatility, but strength is lower than the foreign legal person shares, while domestic natural person shares the same exacerbate share price volatility, and intensifying effect is greater than the foreign natural person holding, indicating that domestic investors, compared with foreign trade more frequently, are more likely to have speculation, Conforms to the above theoretical analysis. In general, the R2 value of the model is 0.5612, which shows a good fitting effect.

### **3. Results And Dicussion**

Because foreign legal entities have broader information channels and richer investment experience and technology, they prefer value investment and pay attention to long-term interests, so they have a certain inhibitory effect on stock price fluctuations. Foreign natural persons are more likely to frequent trading and irrational investment, thus exacerbating the volatility of stock prices. Based on the above conclusions, this paper puts forward the following policy recommendations:

#### **3.1 Further expand the shareholding ratio of foreign shareholders in listed companies**

Through the empirical study of this paper, this paper finds that foreign ownership is conducive to reducing the volatility of stock prices, and the higher the proportion of foreign ownership, the more stable the stock prices. Therefore, foreign policy makers should appropriately further expand the shareholding ratio of single foreign shareholder in listed companies and improve the enthusiasm of shareholders to participate in corporate governance [16].

#### **3.2 Advocate value investment and enhance market effectiveness**

This paper argues that the key to the positive effect of shareholding from different sources of funds on stock price volatility lies in the concept of value investment, which promotes information transmission and enhances market effectiveness. At present, there are many irrational investment behaviors in the domestic stock market and the weak effectiveness of the market, which is an important reason for the frequent fluctuation of stock prices. Therefore, it is necessary to strengthen the value investment concept of domestic investors, so as to maintain a good market investment environment [17,18].

#### **3.3 The theoretical analysis**

The theoretical framework of valuation view appears after the theoretical framework of information view, which means that investors pay more attention to the intrinsic value of stocks, not only limited to statistical significance, but also begin to deeply study how the market reflects accounting information into the company value. The concept of valuation originated from the classical Feltham - Ohlson model.

##### **3.3.1 Change in profitability**

It is precisely because the profitability of a company determines the level of performance of a company, which in turn determines the stock price of a company. In essence, assuming the foreseeable a company's future performance level, the great changes compared with the current level of performance is currently the company's share price that should include the consideration of significant changes in future performance levels, then the correlation between current share prices and current



earnings levels will change. Therefore, it is necessary to investigate the change of profitability of listed companies when examining the influence of current performance on current stock price. Other things being equal, the profit margin of the company with high profitability is also high, so the company's stock price is more likely to rise [19,20].

### 3.3.2 Changes in invested capital

Changes in invested capital are added to account for the relationship between the balance sheet and the income statement. Changes in profitability can affect the profit margin on future results, which affects the company's share price. The invested capital affects the absolute value of the company's performance. For two listed companies with the same profitability, the increase of the invested capital and the improvement of the efficiency of the invested capital will increase the performance of the listed companies. On the other hand, this paper assumes that all the invested capital comes from the accumulation of its own equity, that is, there is no external debt financing, so the increase of invested capital means the level of dividends paid in the current period, thus affecting the valuation of the company in the current period. Therefore, the change of invested capital has the above two influencing factors on the change of corporate performance, and the specific effect which dominates the position in a specific period needs the empirical test [21].

### 3.3.3 Changes in growth opportunities and changes in discount rates

The valuation of a company depends on its ability to grow, and if a company is capable of growing, it is more likely to expand, thereby increasing its value by taking advantage of expansion options held by the company. In all kinds of absolute valuation methods, such as cash flow discount method, dividend discount method and residual value discount method, discount rate affects the value of the company. In the practice of this paper, considering the change of discount reflects that the empirical model adopted in this paper considers important external factors besides the characteristics of listed companies. Moreover, the discount rate increases, reflected in the company's valuation level decline [22].

## 4. Conclusion

Company valuation is an important part of company development and investor investment. When studying the influencing factors of stock price, the research on company valuation needs to pay more attention to. However, the company valuation is not judged by a single factor, and every influencing factor needs to be fully considered. Only through such analysis can this paper more accurately approach the truth of the stock price and obtain the most reasonable and accurate company valuation.

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