

Journal of Business Administration Research

http://ojs.bilpublishing.com/index.php/jbar



REVIEW

Research on Property Rights, Revenue Transparency and Equity Financing Costs

—Based on the Perspective of CEO Overconfidence

Jin Luo*

Business School, Lingnan Normal University, Zhanjiang, Guangdong, 524048, China

ARTICLE INFO

Article history:

Received: 12 October 2018 Accepted: 20 December 2018 Published: 31 December 2018

Keywords:

CEO overconfidence Accounting information quality Revenue transparency Earning Smoothness Equity financing costs

ABSTRACT

This paper takes the Chinese listed company with the equity refinancing qualification from 2012 to 2013 as the research object, and uses the residual revenue model to calculate the equity financing cost. This paper discusses the impact of the overconfidence of executives on the equity financing cost and its impact mechanism. The unique institutional background examines the differences in property rights characteristics. The research found that: (1) executive overconfidence has a negative impact on the cost of equity financing, executives tend to be overconfident, the higher the equity financing cost of the company; (2) the overconfidence of executives to state-owned enterprises compared to private enterprises The negative impact of financing costs is more significant; (3) in addition, this paper also examines the potential impact mechanism of executive overconfidence on the cost of equity financing. The quality of information disclosure and the risk of investor prediction have a mediating effect on the impact of executive overconfidence on equity financing costs.

1. Introduction

he influencing factors of equity financing costs are long-term hot issues in capital market research. As the main basis for enterprise investment and financing decision-making, the accurate measurement of equity financing cost is not only beneficial to guide the flow of funds in the capital market, but also has important practical significance for improving the financial decision-making level and performance value of the company. The research on the factors affecting the cost of equity financing, domestic and foreign scholars mainly from the micro and macro levels: the micro level includes factors such as company characteristics, information disclosure and corporate governance; the macro level considers ex-

ternal governance environmental factors such as investor protection and political relations. A large number of domestic and foreign literatures examine the impact of information disclosure on equity financing costs. Based on the theory of information asymmetry, the existing theoretical research believes that due to the information asymmetry between the management and investors of the enterprise and the existence of the investor's predicted risk, the lower level of corporate information disclosure makes the information between the enterprise and the investor. Asymmetry is further aggravated. Investors will face higher estimated risks when estimating future earnings. Potential investors will inevitably demand higher return on investment, which in turn will lead to an increase in

Jin Luo

Business School, Lingnan Normal University, Zhanjiang, Guangdong, 524048, China

Email: 57884629@gq.com

^{*}Corresponding Author:

corporate financing costs. That is, the lower the level of corporate information disclosure, the higher the cost of equity financing^[1,2,3].

As mentioned above, the academic research on the cost of equity financing is based on the rational human hypothesis of the neoclassical economic theory. The influencing factors are mainly limited to the internal and external aspects of the enterprise, and less attention is paid to the individual psychological characteristics of the executive group. Equity financing cost research has achieved more results, but the rational person hypothesis does not match the management's prevailing tendency of overconfidence. In addition, most of the research on management's overconfidence is limited to the internal financial decision-making level, and less on how executive overconfidence affects the judgment of external stakeholders, including potential investors, on corporate value and risk.

Since Hambrick et al. proposed management's high-level theory, research scholars have begun to pay attention to the impact of managerial characteristics on corporate behavior and external stakeholders. Behavioral finance introduces psychology into the field of corporate finance research, explaining how managerial personality traits influence management's behavioral decisions. Overconfidence is one of the most robust findings in psychology. A large body of research literature shows that people tend to show a tendency to be overconfident in economic activities. Psychology and behavioral finance studies have also confirmed that people's behavior is not completely rational due to the existence of overconfident cognitive bias. Because the manager is at the top of the organizational structure of the enterprise and is in the core decision-making position, he will have more information than the average employee, plus the successful management experience accumulated over the years. Therefore, managers are more likely to show excessive self-confidence in the process of business decision-making. A lot of empirical research has also proved that management does have the characteristics of overconfidence, which is characterized by their easy systemic cognitive bias on the project's benefits and risks, which is reflected in the fact that overconfident executives can easily overestimate the project's benefits. Level or underestimate the risk level of the project, overestimate your ability level and master the accuracy of the information^[4,5]. The above performance must be reflected in the irrationality of corporate decision-making^[3]. The irrational decision-making caused by the overconfidence of executives, many scholars at home and abroad have conducted a lot of research and achieved a series of research results. The research found that executive overconfidence can affect the company's dividend distribution, investment

mergers and acquisitions, earnings forecast, company performance, accounting stability, etc^[4,5,6,7,8,9]. From recent research, scholars have been paying attention to the economic consequences of irrational decision-making by executive overconfidence companies. The research found that executives' overconfidence led the company to adopt a radical financing strategy by influencing the company's investment behavior, and its economic consequences were the rise in equity financing costs^[10].

Different from the existing research, this paper explores the impact of the overconfidence bias of executives on the cost of equity financing of enterprises based on the perspective of information disclosure. The answer to the above questions helps us to deepen the irrational psychological characteristics of managers. It has theoretical and practical value to influence external stakeholders and their corresponding economic consequences. Therefore, this paper attempts to explain three questions: (1) How does the overconfidence bias of executives affect the cost of equity financing? (2) What is the mechanism of the influence of executive overconfidence on the cost of equity financing? (3) In the enterprises with different property rights, is there any difference in the influence of the overconfidence bias of the executives on the equity financing costs of the enterprises?

The possible contributions of this paper are: firstly, using behavioral finance theory to extend the influence of executive overconfidence on other stakeholders to the level of potential investors, providing empirical data on the relationship between executive overconfidence and equity financing costs. Research has made up for the shortcomings of the existing literature; secondly, based on the transmission mechanism of information disclosure affecting the cost of equity financing, this paper helps to understand the decisive factors of the pricing of equity financing market and provide the deep motivation for the overconfidence of executives to affect the cost of equity financing. Moreover, the existing research on the cost of equity financing is mainly localized in the internal characteristics of the company and the external environment, and the internal characteristics of the company are closely related to the executives. This paper extends the research to the individual characteristics of management and may further deepen the research results in this field.

2. Theoretical Analysis and Research Hypothesis

Many domestic and foreign literatures examine the impact of information disclosure on equity financing costs from both theoretical and empirical perspectives.

The theoretical research level agrees that the princi-

ple of information disclosure affecting the cost of equity financing can be described as two types of mechanisms: First, the perspective of information disclosure. The hypothesis believes that information disclosure can reduce information asymmetry between management and investors, reduce the transaction cost of stocks, enhance stock liquidity, and thus reduce the cost of equity financing; second, the perspective of investor risk prediction. When information disclosure is low, investors will bear the risk of predicting future utility. If this risk is not diversified, investors will demand a higher return on the information risk, that is, information disclosure will reduce the cost of equity financing by reducing the estimated risk of stock returns.

The empirical research level measures information disclosure from the aspects of quantity and quality of information disclosure, and empirically tests the relationship between information disclosure and equity financing costs. Botosan et al., Wei Wang and Gaofeng Jiang are scholars who have carried out related research earlier at home and abroad. They choose the amount of information disclosure as a surrogate indicator of information disclosure. The empirical results show that there is a negative correlation between information disclosure and the cost of equity financing[11,12,13]. In the recent research literature, the quality indicators of earnings disclosure quality have begun to be adopted by research scholars. Bhattacharya and other scholars try to use income smoothness to measure the transparency of earnings, and examine the impact of information disclosure quality on the cost of equity capital from the national level. Their research found that the more opaque the country, the higher the cost of equity capital^[14]. Domestic scholars have used the data of listed companies in China to conduct empirical tests. The conclusions of Bhattacharya and other scholars have reached the same conclusion. The quality of information disclosure of listed companies in China is significantly positively correlated with the cost of equity financing^[15,16].

Based on the foregoing analysis, there are two types of mechanisms for the influence of managerial overconfidence on the cost of equity financing: First, the information disclosure mechanism. Executives with overconfidence are more likely to adopt aggressive earnings management. Hriber and Yang's research found that when executives are overconfident, companies tend to release optimistic earnings forecasts and adopt more aggressive business strategies. When actual earnings fail to reach predictive targets, they are forced by capital market pressures. It is forced to report earnings through aggressive positive earnings management^[17], which will inevitably reduce the quality of information disclosure and worsen the

information asymmetry between enterprises and investors, and enterprises will face higher equity financing costs. Second, in order to whitewash the report, overconfident executives may have a motive for smooth performance for earnings management. The reason is that overconfident managers tend to overestimate their own ability level or the accuracy of the information they have, thus over-optimistic expectations of corporate earnings, overestimating the probability of revenue growth, and underestimating the probability of a decline in earnings. Therefore, when the company's performance is not good (such as below the refinancing conditions), overconfident managers tend to report more surplus by accelerating the recognition of income, delaying the reporting fee and other accruals management methods, and the company's performance is better (such as exceeding refinancing conditions, overconfident managers will understate more surplus as a future profit reserve. Therefore, compared with other companies, overconfident managers adopt more income smoothing methods to cover the real fluctuations of income, the income of the enterprises is smoother, and the information asymmetry between enterprises and investors is more serious. Enterprises must face higher equity financing costs.

Secondly, from the perspective of investors' predictive risk mechanism, overconfident executives believe that their ability is higher than the industry average, tend to overestimate the expected cash flow and return on investment of the company's projects, and underestimate the risk level of project investment. At this point the company's risk is increasing. Investors are bound to face higher estimated risks when estimating future earnings. Potential investors will inevitably demand higher return on investment, which in turn will represent an increase in corporate financing costs. Guangguo Sun and other researchers found that managers' overconfidence is negatively correlated with the level of corporate accounting stability. Especially when the company is in financial distress, the overconfident management is more likely to adopt unreliable accounting methods such as recognizing income in advance and delaying the confirmation of losses. Increase the risk that investors estimate future earnings, and thus increase the return on investment requirements of potential investors^[18].

Based on the above analysis, the overconfident management has a more aggressive incentive for earnings control, and investors estimate that the risk increases, leading investors to demand a higher return on investment for managers with overconfidence, so we propose hypothesis H1:

H1: There is a significant negative correlation between executive overconfidence and equity capital costs.

Because the situation of corporate governance supervision and restriction faced by state-owned enterprises and non-state-owned enterprises is very different, the degree of overconfidence of executives with different property rights has different effects on the cost of equity financing. The high concentration of equity in state-owned listed companies and the absence of owners are likely to lead to internal control, and managers have great rights. Compared with private enterprises, executives are more likely to form "one-word situation" (deciding everything by one man's words) when making decisions. Moreover, executives of state-owned listed companies enjoy administrative levels and are more prone to overconfidence. As a result, the degree of executive overconfidence is more pronounced in state-owned enterprises. The following is an analysis from the information mechanism and on the one hand, from the perspective of the information mechanism. Due to the imperfect corporate governance structure and internal and external regulatory mechanisms of stateowned enterprises, it is easy to aggravate the degree of overconfidence of state-owned enterprise executives. As a result, the overconfidence of state-owned enterprise executives has a greater impact on corporate behavior decisions, and there is more room for earnings manipulation. When the management of state-owned enterprises faces greater financing motives and political pressures, in order to cover up the real income situation of enterprises, they will adopt more aggressive earnings control methods, thus aggravating the information asymmetry between stateowned enterprises and investors. Further reducing the quality of accounting information of state-owned enterprises will eventually lead to higher equity financing costs for state-owned enterprises. On the other hand, Garmaise et al. found that when ineffective corporate governance is combined with management opportunistic behavior, the company's systemic risk will rise and the cost of equity financing will increase. [19] Huang's research findings further confirm that higher levels of management encroachment will result in higher equity financing costs, as the investment itself will bear additional agency risks and higher monitoring costs [20]. Therefore, from the perspective of risk mechanism, compared with other enterprises, because the degree of overconfidence of executives is more prominent in state-owned enterprises, state-owned enterprise executives have greater jurisdiction over corporate decision-making, leading to greater risks for state-owned enterprises. Estimating the risk of future earnings is higher, which in turn will increase the return on investment requirements of potential investors^[21].

Based on the above analysis, we further propose hypothesis H2:

H2: Other conditions remain unchanged. Compared with private enterprises, the overconfidence of senior executives of state-owned listed companies has a more significant impact on the cost of equity financing.

3. Research Samples and Research Variables

3.1 Research Samples

This paper selects non-financial A-share listed companies with refinancing qualifications in 2012 and 2013 as research samples, and excludes the following companies: (1) Companies with CEO changed during the research year; (2) Companies with missing financial data, abnormal financial indicators, and have been specially treated; (3) The companies in the financial and insurance industry; (4) Companies that issue B shares and H shares at the same time; (5) Listed companies but listed for less than 3 years. After the above elimination, there are 553 in 2014 and 612 in 2015, a total of 1,165 observations. Among them, 53 CEOs were overconfident in 2014 and 69 in 2015, with a total of 122 observations.

3.2 Research Variables

3.2.1 Managers with Overconfidence

Senior managers with overconfidence: How to accurately measure managerial overconfidence is a problem in academia^[4,5]. From the macro environment to the micro-enterprise level, domestic and foreign scholars use many alternative indicators to measure manager's overconfidence. The most representative surrogate indicators include CEO holding status; company earnings forecast deviation; media evaluation of CEO; business climate indicator; CEO's relative compensation, etc. But whether these alternative indicators are reasonable is still debatable. Considering that investment opportunities have a key impact on the growth of the company, this paper draws on the methods of Malmendier and Tate^[4] and Ying Hao^[6] to select investment opportunities to represent the growth opportunities of enterprises. Considering the unobservable investment opportunities, this paper draws on the methods of domestic and foreign scholars to use the market value book to measure the growth opportunities of enterprises than the MBA. The MBA for each sample company for each research year is adjusted to the industry median.

Therefore, the criterion for judging the overconfidence of executives in this paper is that if the growth of the current period is lower than that of the previous period, and the number of CEOs' growth increases or remains unchanged, the stock trading behavior reflects the CEO's growth of the company. Excessively optimistic estimates can be used to judge executives' overconfidence, and vice

versa to judge that executives are not overconfident.

3.2.2 Information Disclosure Quality Indicators and Control Variables

Referring to relevant research, this paper uses the income smoothness to measure the quality of information disclosure of listed companies. Since the accrual items do not match the cash flow (that is, the correlation coefficient between the two is close to zero) is a common phenomenon in listed companies. If the directions of the two changes are inconsistent and the absolute values of the correlation coefficients are large, It may be that the listed company is using the difference between the two to smooth the income return smoothness, so the degree of correlation between the earnings and cash flow of the listed company in a certain period of time can be used to measure the degree of smoothness of the income. This paper draws on the ideas of Leuz et al.[22] and Myers et al. [23] to measure the smoothness of returns by using the correlation coefficient between quarterly accruals and quarterly cash flow changes.

In the research model below, we also control other factors that may affect the interpreted variables. Previous studies have shown that company characteristics such as company size and solvency are important factors influencing earnings management. In addition, we also control corporate characteristic variables such as profitability, growth, operating efficiency, and fixed asset ratio. Many studies have shown that the quality of earnings information is closely related to the corporate governance mechanism. The ownership structure, board structure and executive shareholding affect the level of motivation for management to implement earnings management. Therefore, we use equity concentration, the proportion of independent directors and the proportion of CEOs. These factors are controlled.

3.2.3 Equity Financing Costs and Control Variables

Referring to the existing estimation method of equity financing cost, this paper uses the residual income model of Gebhardt et al. [24], and uses the method of Kangtao Ye et al. [25] to estimate the cost of equity financing. In order to make the empirical research more accurate, this paper also controls the two important variables of β coefficient and book market value ratio BM which may affect the cost of equity financing.

4. Research Methods and Empirical Results

4.1 Descriptive Statistics

Descriptive statistics for the study variables showed that the average cost of equity financing was 6.5%, with a median of 5.4%, a maximum of 11.5%, and a minimum of 1.2%. The sample company's average return smoothness is 0.850, and the median is 0.930, which indicates that the sample company's refinancing qualification is smoother, which is consistent with the research results of Ying Zeng and Zhengfei Lu^[17].

4.2 Univariate Grouping Test

In order to test hypothesis H1, we divide the sample companies into over-confident enterprise groups and non-overconfident enterprise groups according to whether the CEO is overconfident. The difference between the two groups was significant, and the smoothness of the overconfident group was greater than that of the non-overconfident group. Further, the T-test and Wilcoxon test results of the mean and median differences between the two groups showed that the yield smoothness of the two groups was significantly different at the 1% significance level. This result shows that the profit smoothness of overconfident enterprises is significantly greater than that of non-overconfident enterprises, so that our hypothesis H1 is initially supported by the univariate test. As a result of the difference between the group financing costs, the mean and median of the equity financing costs of the two groups passed the T test and the Wilcoxon significance test, which shows that the CEO's overconfidence of corporate equity financing costs is also significantly greater than CEO non-overconfident enterprises. Since no control variables were added, the results of the univariate test may be overestimated. To make the study more meaningful, we further performed a multivariate regression analysis of the multivariate test.

4.3 Analysis of CEO with Overconfidence Related to Earning Smoothness

4.3.1 Analysis of the Impact of CEO Overconfidence on Earning Smoothness

To test hypothesis H1, we establish the following model to test the impact of CEO overconfidence on Earning Smoothness:

$$\begin{split} ES_{i} &= \alpha_{0} + \alpha_{1}Con_{i} + \alpha_{2}Size_{i} + \alpha_{3}Lev_{i} + \alpha_{4}Turn_{i} + \alpha_{5}Roa_{i} + \alpha_{6}Grow_{i} \\ &+ \alpha_{7}Tan_{i} + \alpha_{8}Board_{i} + \alpha_{9}Hold_{i} + \alpha_{10}Control_{i} + \alpha_{11}Herf_{i} + \varepsilon_{i} \end{split}$$

Among them, the interpreted variable ES is the income smoothness indicator defined above, and the explanatory variable Con is the CEO overconfidence dummy variable. To make the inspection more accurate, we control other factors that may affect the smoothness of the earnings of listed companies. The multi-collinearity test results of the

regression model show that the variance expansion factor of the regression model is less than 2, Therefore, there is no multi-collinearity problem in the setting of the regression model.

In order to ensure the robustness of the test results, we introduce control variables step by step for regression. With the introduction of control variables, the significance of the coefficients is significantly enhanced. When the income smoothness ES is the explanatory variable, the coefficient is always positive and significant at the 1% level, which shows that the more CEOs tend to be overconfident, the smoother the earnings of listed companies and the lower the transparency of earnings. So our hypothesis 1 passes the test.

4.3.2 Analysis of the Impact of CEO Overconfidence on the Correlation between Earning Smoothness and Equity Financing Cost

After analyzing the impact of CEO overconfidence on the smoothness of listed companies' earnings, we join the CEO overconfidence variable and establish the following joint multiple regression models to further examine whether CEO overconfidence will increase (or weaken) the positive correlation between earnings smoothness and equity financing costs:

$$\begin{split} r_{i} &= \alpha_{0} + \alpha_{1}ES_{i} + \alpha_{2}Con_{i} \times ES_{i} + \alpha_{3}\beta_{i} + \alpha_{4}Size_{i} \\ &+ \alpha_{5}BM_{i} + \alpha_{6}Lev_{i} + \alpha_{7}Turn_{i} + \alpha_{8}Roa_{i} + \alpha_{9}Grow_{i} + \varepsilon_{i} \end{split}$$

Among them, the dependent variable r is the equity financing cost, the income transparency ES is the income smoothness indicator defined above, and Con is the CEO overconfidence dummy variable. To test the hypothesis proposed, we establish an interaction term between the income smoothness ES and the CEO overconfidence dummy variable Con. If the coefficient of the interaction term is significantly positive, then our hypothesis H2 holds. In order to make the inspection more accurate, we also control other factors that may affect the cost of equity financing of listed companies. The multi-collinearity test results of the regression model show that the variance expansion factors of each variable in the regression model are less than 2; therefore, there is no multicollinearity problem in the setting of the regression model.

The empirical results show that the size of the firm, the book value of the market value and the cost of equity financing are significant at the level of 1%, but the relationship between the beta coefficient and the cost of equity financing is not significant, which is consistent with the empirical results of Ying Zeng and Zhengfei Lu.^[17] Finan-

cial leverage is significantly positively correlated with equity financing costs, indicating that the risk of bankruptcy failure increases with the increase of financial leverage, and investors must demand higher risk compensation, resulting in an increase in equity financing costs^[26]. The asset turnover rate is significantly negatively correlated with the equity financing cost, and the symbol is also in line with theoretical expectations. Because the lower the asset turnover rates, the worse the business efficiency of the company, the more serious the agency problem, the higher the investment risk of investors, and therefore the higher risk return^[27]. The return on assets and the growth rate of operating income are significantly related to the cost of equity financing. The symbol is consistent with the existing research[17,28], indicating that the profitability and growth of the enterprise are important factors affecting investors' investment decisions.

To test hypothesis H2, we adopt a joint multivariate analysis method to test whether CEO overconfidence increases the impact of earnings smoothness on equity financing costs. The empirical results show that the income smoothness is significantly positively correlated with the equity financing cost at 5%, indicating that the smoother the return and the higher the cost of equity financing, which is consistent with the expected research conclusion. [8,11] More importantly, the coefficient of CEO overconfidence dummy variable Con and income smoothness ES interaction term Con*ES is significantly positive at 5% level, which shows that CEO overconfidence enhances the positive correlation between earnings smoothness and equity financing costs, and Hypothesis H2 is verified.

4.3.3 Analysis of the Impact of CEO Overconfidence on the Correlation between Earning Smoothness and Equity Financing Costs

In order to further test whether the hypothesis H3 is established, on the basis of the above regression analysis, the sample companies are classified into state-owned enterprises and non-state-owned enterprises in groups according to the characteristics of ownership. The results show that the coefficient of the interaction term Con*ES in the state-owned enterprise group is significantly positive at the level of 1%, and in the group of private enterprises, the coefficient is only significant at the level of 10%; the full sample empirical results show that CEO overconfidence enhances the impact of earnings smoothness on equity financing costs. Further analysis of ownership analysis shows that compared with private enterprises, the influence of CEO overconfidence is significantly reflected in state-owned listed companies. This empirical analysis supports hypothesis H3.

4.4 Robustness Test

In order to enhance the robustness of the research results, the paper conducted the following tests: (1) According to the existing research and data availability, the CEO's evaluation and CEO relative salary are used to measure CEO overconfidence, and the empirical results are still valid; (2) Using the annual accrual item and cash flow correlation coefficient to measure the return smoothness indicator^[10], the empirical results are still valid; (3) all variables in the regression model are tailed out, eliminating 1% of the abnormal value before and after, the empirical results Still true, the model fit has improved. The above tests show that the empirical results of this paper have good robustness.

4.5 Further Analysis: the Potential Mechanism of Senior Managers with Overconfidence Affecting the Cost of Equity Financing

From the previous theoretical analysis, the underlying mechanisms of executive overconfidence affecting the cost of equity financing are: On the one hand, from the perspective of information disclosure, overconfident executives have more intense aggressive earnings management and income smoothing motives, leading to the company. The decline in the quality of accounting information has aggravated the information asymmetry between managers and investors, making enterprises face higher equity financing costs^[28].

On the other hand, from the perspective of investors' predictive risk, overconfident executives believe that their ability is higher than the industry average, tend to overestimate the expected cash flow and return on investment of the company's projects, and underestimate the risk level of project investment. The risk increases. Investors are bound to face higher estimated risks when estimating future earnings. Potential investors will inevitably demand higher return on investment, which in turn will represent an increase in corporate financing costs.

4.5.1 Analysis of Information Disclosure Machine: Executive Overconfidence and Quality of Information Disclosure

From the regression results, the influence of executive overconfidence on the quality of information disclosure is significantly positive at the 10% significance level; the over-confidence of executives and the quality of information disclosure are simultaneously added to the regression analysis of the cost of equity financing, executive over-extension Confidence in the cost of equity financing is significant at the 10% level, and the quality of information disclosure is significant at the level of 5% equity

financing. After the quality of information disclosure, the influence of over-confidence of executives on the cost of equity financing is still significant, and the quality of information disclosure on the cost of equity financing and over-confidence of executives is significant for information disclosure. Combined with the above regression results, the quality of information disclosure is The influence of executive overconfidence on the cost of equity financing has a partial mediating effect.

4.5.2 Investor Forecasting Risk Perspective Analysis: Executive Overconfidence and Corporate Risk

From the above analysis, investors predict that risk is another potential mechanism for executives' overconfidence to affect the cost of equity financing. When executives are overconfident, they will overestimate the expected cash flow and return on investment of the company's projects, and underestimate the risk of project investment. Levels lead to increased company risk. When investors predict that the company's risk will increase, potential investors will inevitably demand a higher return on investment, which in turn will increase the cost of corporate finance, so it can be expected that the risk of executives with overconfidence will increase. The empirical results show that the level of surplus volatility is used to represent the company's risk. The influence of executive overconfidence on earnings volatility is significantly positively correlated at the 10% level, indicating that the executive's overconfidence tends to increase the level of surplus volatility and increase the company's Corporate risk; joining the company's risk factors, executive overconfidence is significantly positive for equity financing costs at 5%, while corporate risk is significant at 5% for equity financing costs, in summary the investor's forecast risk is also high The influence of overconfidence on the cost of equity financing has a partial mediating effect.

5. Conclusion

This paper takes the Chinese listed company with the equity refinancing qualification from 2012 to 2013 as the research object, and uses the residual income model to calculate the equity financing cost, drawing on the research ideas of Bhattacharya et al.^[11] This paper uses the income smoothness index to measure the transparency of listed companies' earnings, and examines the impact of CEO overconfidence on the quality of listed companies' information disclosure and the economic consequences.

Notes: Since the research sample selected in this paper is an already listed company, the first financing has been completed. Therefore, unless otherwise stated, the equity financing cost in this article refers to the cost (or potential financing cost) of the listed company's equity refinancing.

Fund Projects:

- 1. Guangdong Provincial Quality Engineering Construction Project "Application- oriented Talent Cultivation Demonstration Specialty——Financial Accounting Education" (Project No.: 0003014041);
- 2. Zhanjiang Municipal Philosophy and Social Science Planning Project (Project No.: ZJ17YB19);
- 3. South Sea Silk Road Collaborative Innovation Center in Lingnan Normal University (Project No.: 2017SL03);
- 4. School-level Teaching Reform Project——"Research on the Cultivation Mode of Management-type Accounting Talents" in Lingnan Normal University (Project No.: LSJG1718).

References

- Cooper A.C, Carolyn Y.Woo, William C.Dunkelberg. Entrepreneurs Perceived Chances for Success[J]. Journal of Business Venturing, 1988, 2(1):97-108.
- [2] Russo J., Schoemaker P. Managing Overconfidence[J]. Sloan Management Review, 1992, 33(2): 7-17.
- [3] Baker M., Ruback R., Wurgler J.. Behavioral corporate finance: A survey[C]. In The Handbook of Corporate Finance: Empirical Corporate Finance edited by Eckbo, E., New York: Elsevier /North Holland, 2006:145-186.
- [4] Malmendier U., Tate G.. CEO Overconfidence and Corporate Investment[J]. Journal of Finance, 2005, (6):2661-2700.
- [5] Malmendier U., Tate G.. Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction[J]. Journal of Financial Economics, 2008, 89(1):20-43.
- [6] Ying Hao, Xing Liu, Chaonan Lin. An Empirical Study on Overconfidence and Investment Decisions of Top Managers in China's Listed Companies[J]. China Management Science, 2005, (5):142-148. (in Chinese)
- [7] Minggui Yu, Xinping Xia, Zhensong Zou. Manager Overconfidence and Corporate Radical Debt Behavior[J].Management World,2006,(8):104-112. (in Chinese)
- [8] Xia Wang, Min Zhang, Fusheng Yu. Managerial Overconfidence and Alienation of Corporate Investment Behavior-Evidence from China's Securities Market[J].Nankai Management Review, 2008,11(2):77-83. (in Chinese)
- [9] Fuxiu Jiang, Min Zhang, Zhengfei Lu, Caidong Chen. Manager overconfidence, corporate expansion and financial distress[J]. Economic Research, 2009, (1):131-143. (in Chinese)
- [10] Fusheng Yu, Sheng Zhang, Yan Li. Overconfidence of Managers and Cost of Equity Capital: Empirical Evidence from China's Securities Market[J]. Audit and Economic Research, 2011(1):72-80. (in Chinese)
- [11] Bhattacharya U.,Daouk H., Welker M.. The World Price of Earnings Opacity[J]. The Accounting Review,

- 2003(78):641-678.
- [12] Barry C. B., Brown S. J.. Differential Information and the Small Firm Effect[J]. Journal of Financial Economics, 1984, 13(2):283-295.
- [13] Diamond.D., Verrecchia R. Disclosure, Liquidity, and the Cost of Capital[J]. Journal of Finance, 1991, 46(4):1325-1359.
- [14] Kim O., Verrecchia R. Market Liquidity and Volume around Earnings Announce ments[J]. Journal of Accounting and Economics, 1994, (17):41-68.
- [15] Botosan C.A. Disclosure Level and the Cost of Equity Capital[J]. The Accounting Review, 1997, 72(3):323-350.
- [16] Botosan C. A., Plumlee M.. A Re-examination of Disclosure Level and the Expected Cost of Equity Capital[J]. Journal of Accounting Research, 2002(40):21-40.
- [17] Wei Wang, Gaofeng Jiang. Information Disclosure, Transparency and Capital Costs[J]. Economic Research, 2004, (7):107-114. (in Chinese)
- [18] Ying Zeng, Zhengfei Lu. Quality of Information Disclosure and Equity Financing Costs[J]. Economic Research, 2006, (2):69-79. (in Chinese)
- [19] Juanjuan Huang, Wei Xiao. Information Disclosure, Transparency of Income and Cost of Equity Capital[J]. China Accounting Review, 2006, 4(1):69-84. (in Chinese)
- [20] Hribar P., Yang H.. Does CEO Overconfidence Affect Management Forecasting and Subsequent Earnings Management? [DB/OL]. SSRN Working Paper, 2010.
- [21] Leuz C.,D.Nanda,P.D.Wysocki.Earnings management and investor protection: an international comparison[J].Journal of Financial Economics, 2003(69):505-527.
- [22] Yuetang Wang, Liangliang Wang, Caiping Gong. Income Tax Reform, Earnings Management and Its Economic Consequences[J]. Economic Research, 2009, (3): 86-98. (in Chinese)
- [23] Myers S.Determinants of corporate borrowing[J].Journal of Financial Economics, 1977,(5):141-175.
- [24] Tim A., Vidhan K., Goya. The investment opportunity set and its proxy variables [J]. Journal of Financial Research, 2008(31):41-63.
- [25] Myers, James N., Linda A. Myers, Douglas J. Skinner. Earnings momentum and earnings management [J]. Journal of Accounting, Auditing and Finance, 2007, 22(2): 249-284.
- [26] Gebhardt, W., C.Lee, B.Swaminathan. Toward an Implied Cost of Capital[J]. Journal of Accounting Research, 2001(39):135-176.
- [27] Kangtao Ye, Zhengfei Lu. Analysis of Factors Affecting Equity Financing Cost of Chinese Listed Companies[J]. Management World, 2004(5):127-142. (In Chinese)
- [28] Modigliani F.,Miller M.H.The cost of capital, corporation finance and the theory of investment[J].The American Economic Review, 1958(3):261-297.