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Accounting Comparability and Debt Cost

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Abstract: This paper takes China's A-share listed companies in 2010-2017 as the research object to explore the impact of accounting comparability on deb t costs. First, adopt De Franco's model to measure companies' accounting comparability. Then, establish the multivariate regression model of accounting comparability and debt cost to implement an empirical study on the relationship between them. Further, property rights and audit quality are taken into account as internal and external factors to examine whether these two factors have impacts on the relationship between accounting comparability and debt cost. The results show that: (1) Accounting comparability is significantly negatively correlated with debt cost; (2) Compared with state-owned enterprises, the negative correlation between accounting comparability and debt cost is more significant in non-state-owned enterprises; (3) Compared with enterprises of higher audit quality, the negative correlation between accounting comparability and debt cost is more significant in enterprises of lower audit quality. This shows that accounting comparability is useful in decision-making, but the property rights of state-owned enterprises weakens the impact of accounting comparability on debt costs, and audit quality is an alternative to accounting comparability for the impact on debt costs.

The results of this paper provide some theoretical references for relevant departments to improve accounting standards and auditing regulations so that accounting comparability and audit quality can be improved, and accelerate the property rights reform of state-owned enterprises.

Keywords: Accounting Comparability; Debt Cost; Property Rights; Audit Quality

Introduction

In October of 2018, the Ministry of Finance formulated and published the Government Accounting Standard No.7-Accounting Adjustment, and its implementation date. The period is January 1, 2019. The second chapter of this standard has the following two clauses: government accounting entities shall adopt the same accounting policies for the same or similar economic business or events; Accounting policies adopted by government accounting entities.

Vertical comparability requires enterprises to adopt consistent accounting policies or methods to deal with the same or similar transactions in different periods from the perspective of time, so as to ensure the comparability of accounting information of enterprises in different periods. Since the comparability of accounting information is based on comparison, it is directly measured has great difficulties. Compared with other characteristics of accounting information quality, the research on comparability of accounting information has developed very slowly. The convergence of accounting standards at the national level provides a window for the study of comparability of accounting information, which is also the main way of measuring comparability of accounting information in early literature. Li (2010)[1] based on this method, this paper examines whether the cost of equity capital has decreased after EU countries have enforced international accounting standards. The results show that the cost of equity capital has dropped by 47 basis points in countries with strong enforcement of international accounting standards. However, this method has great limitations because the country.

The convergence of standards does not necessarily lead to comparability of accounting information at the individual

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level. It was not until De Franco and others (2011)[2] creatively put forward a method to measure the comparability of accounting information at the company level that the measurement of comparability of accounting information took a big step forward and the research on it was gradually carried out.

At present, the main focus of these studies on comparability of accounting information is on the impact of comparability of accounting information on economic consequences such as analyst follow-up, investment efficiency, earnings management, etc. Previous studies have shown that the quality of accounting information will affect the capital of enterprises.

Francis and others (2004)[3], Vander and others (2015)[4] examined the impact of accounting information quality on the cost of capital from the perspectives of accrual quality, durability, predictability and smoothness. It was found that the lower the above-mentioned characteristic values, the higher the cost of capital. Huang Juanjuan and Xiao Min (2006) [5], Yu Fusheng and Zhang Min (2007)[6] studied the quality of information disclosure of listed companies in China.

On the impact of capital cost, it is concluded that there is a significant negative correlation between the two. Roychowdhury and Watt (2007)[7], Zhang (2008)[8] examined its impact on the cost of debt from the perspective of accounting conservatism, and concluded that accounting conservatism passed through the analysis reduces the degree of information asymmetry and reduces the company's debt cost. Li Zhengguang and others (2016)[9] took A shares in China from 2007 to 2012. Listed companies are the research object. Empirical research shows that the higher the accounting conservatism, the lower the cost of equity financing. Armstrong etc.(2010)[10], Zhang Xiaofei *et al.* (2015)[11], Cao Jinli et al. (2018)[12] Based on the perspective of financial reporting transparency, the research found that: transparency of accounting information can effectively reduce the cost of debt. Most of these documents study the impact of accounting information quality on the cost of capital of enterprises from the perspectives of accrual quality, accounting information disclosure, accounting conservatism and transparency of financial reports. Then, as an important evaluation index of the quality of accounting information, will the comparability of accounting information also affect the cost of capital of the enterprise?

Theoretically, the comparability of accounting information can provide different enterprises' comparative information or a certain enterprise's comparative information in different periods for the enterprise's creditors, investors and other stakeholders, help them compare the financial situation and operating results of different enterprises or a certain enterprise in different periods, and judge the advantages and disadvantages of different enterprises or analyze and predict the development trend of a certain enterprise based on this, so as to make corresponding credit or investment decisions. Therefore, from a theoretical perspective, the comparability of accounting information has an impact on the cost of capital of enterprises. Yang Zhonghai et al. (2015)[13], Imhof et al. (2017)[14], Xin Wang et al. (2018)[15] Scholars have confirmed from the perspective of the cost of equity capital: the comparable performance of accounting information significantly reduces the cost of equity capital of the company. Xin Wang et al(2018) further pointed out that comparability of accounting information can play an alternative role in corporate governance. And corporate governance can protect investors and reduce financing costs[16]. Reviewing the literature, it is found that few scholars probe into the impact of comparability of accounting information on capital cost of enterprises from the perspective of debt cost.

This paper enriches the research literature on the comparability of accounting information at the company level, and provides theoretical basis for relevant departments to improve accounting standards and auditing regulations, improve the comparability of accounting information and the quality of external auditing of enterprises, and accelerate the property right reform of state-owned enterprises.

1. Theory analysis and research assumption

Under normal circumstances, the consideration received by creditors for lending funds to borrowers includes not only the cost of occupying the funds, but also the various expenses incurred in the borrowing transaction and the risk premium[17-22] caused by the principal-agent problem and information asymmetry.

In order to select high-quality loan recipients, creditors need to collect information from different enterprises, compare and analyze them. The creditors will pass on the relevant expenses incurred in this process to the debtor by raising the debt cost. High comparability can help investors to better evaluate the company's quality[23] through better comparison with companies in the same industry, reduce the information acquisition cost of external personnel of the enterprise, and increase the overall quantity and quality of available information[24].

In addition to transaction costs, the pricing of debt costs also includes the risk premium demanded by creditors. A high level of comparability of accounting information can help creditors compare the financial indicators of different periods before and after an enterprise, analyze and judge the development trend of the enterprise, predict the outstanding business performance of the enterprise, etc[25], thus easing the agency conflict between creditors and shareholders and managers and reducing the supervision cost of creditors to shareholders and managers. The reduction of supervision cost will promote the reduction of debt cost.

Information asymmetry is also another major cause of creditor risks. Comparability of accounting information can provide creditors with comparative information of different companies, thus reducing the uncertainty of corporate credit risk, reducing the pricing[26] of corporate credit risk by debt market participants, and alleviating the degree of information asymmetry between the debtor and other similar enterprises or their own comparative information in different periods by continuously providing creditors with comparative information of the debtor and other similar enterprises, and reducing the supervision cost[27]. There is a long-standing phenomenon in China's credit market, namely, state-owned enterprises are easier to obtain bank loans than non-state-owned enterprises[28-31]. Although China has carried out a series of property rights system reforms, they are not complete. State-owned enterprises still have obvious advantages in bank financing, and the problem of financing difficulties for non-state-owned enterprises is still grim.

On the one hand, compared with non-state-owned enterprises, state-owned enterprises often serve the country's strategic planning and have certain commonweal characteristics. On the other hand, the property rights and economic interests of the state-owned enterprises belong to the state, and the actual controllers of the state-owned enterprises often lack sufficient sense of responsibility and direct economic interest motivation to supervise the managers, resulting in more serious agency problems of the state-owned enterprises and lower comparability of accounting information[32].

On the one hand, high-quality external audit can play a supervisory role on managers, thus inhibiting managers' opportunistic behavior and easing agency conflicts with external creditors and investors; On the other hand, high-quality external audit can urge enterprises to disclose accounting information more fully, greatly easing the degree of information asymmetry between external creditors, investors and managers[33-35]. As can be seen from the first subsection of theoretical analysis in this chapter, comparability of accounting information is mainly achieved by alleviating creditor's rights.

Agency conflict and information asymmetry between people and managers can reduce debt cost. There are many ways to measure audit quality, and whether auditors come from reputable large accounting firms is one of them. If auditors come from large clubs, they may be trained more professionally and have stronger practicing ability. In addition, large clubs pay more attention to reputation, and their requirements for auditors' ethics will also be higher[36]. Therefore, auditing by auditors of large-scale institutes often means higher auditing quality. Based on the methods of Pittman and Fortin (2004)[37], this paper uses whether the auditor hired by the enterprise comes from six major accounting firms in China as the proxy variable of audit quality.

2. Research design

2.1 Variable design

This paper uses the model of de Franco (2011) for reference to measure the comparability of accounting information at the company level. This model regards the enterprise's accounting system as a function of transforming the enterprise's economic affairs into accounting statements.

2.2 Model setting

In order to explore the relationship between comparability of accounting information and debt cost of a listed companies in China, this paper selects the above control variables and establishes a multiple regression model.

In the whole sample, it indicates the cross-product of the comparability of accounting information and the nature of property rights.

Similarly, in the whole sample, it indicates the cross-product of accounting information comparability and audit quality.

2.3 Data source and sample selection

This paper selects A listed companies in China from 2010 to 2017 as the initial research sample, and obtains the final research sample after the following treatment: (1) excluding financial and insurance listed companies. Financial and insurance companies are very different from the real economy due to their industry particularity, so they are eliminated. (2) exclude ST companies. This kind of company has poor operating results and financial status, which is not general, so it is eliminated. (3) exclude companies with missing relevant variables. The sample data in this paper are from the national Taian database and the wind information database. In order to eliminate the influence of extreme values, all variables in this paper are subject to 1% tail reduction.

3. Empirical analysis

3.1 Descriptive statistics

The maximum value of the debt cost (Dept) is 0.0638, the minimum value is -0.1537, the average value is 0.0111, and the standard deviation is 0.0319. The difference between the maximum value and the minimum value is large, and the standard deviation is larger than the average value, which indicates that the debt cost of listed enterprises in China is quite different. This means that in the eyes of creditors, the risks of listed companies in China are quite different. Therefore, it is of great significance to study the influencing factors of debt cost, explore effective methods to reduce the debt cost of enterprises, and alleviate the problem of difficult and expensive financing for enterprises. The maximum value of accounting information Comparability (comp) is -0.0088, the minimum value is -0.0790, and the average value is -0.0229, median -0.0194. The difference between the maximum value and the minimum value is large, which indicates that the comparability of accounting information of listed enterprises in China is obviously different. However, the median is greater than the average, which indicates that the comparability of accounting information of listed companies in China is mostly high. Descriptive statistics of control variables are basically consistent with previous studies.

3.2 Regression analysis

In order to verify the hypothesis, two methods are adopted: one is to introduce the cross-product term Compsoe of property right nature and comparability of accounting information to the whole sample, and the other is to carry out grouping test according to property right nature.

The regression coefficient of the cross-product term Compsoe of property right nature and comparability of accounting information is 0.1089 and the value of t is 2.87, which is significant at the level of 1%. At the same time, in the grouping test, the regression coefficient of accounting information comparability of state-owned enterprises is not significant, while that of non-state-owned enterprises is -0.0638, T value is -2.83, which is significant at the level of 1%, indicating that in non-state-owned enterprises, accounting information comparability is significantly negatively related to debt cost, while in state-owned enterprises, accounting information comparability is not significantly related to debt cost. Based on the results of cross-multiplication and grouping tests, it can be concluded that in non-state-owned enterprises, the comparability of accounting information has a more significant impact on debt cost than in state-owned enterprises.

This is because, on the one hand, compared with non-state-owned enterprises, state-owned enterprises often serve the country's strategic planning, with a certain public welfare attribute, and its development does not fully follow the laws of the market. If the development is not good, the country may rescue it through various means, even providing implicit guarantee, and the risks faced by creditors are relatively low. At this time, it is no longer so important for creditors whether the debtor is superior to other similar enterprises and whether the profitability is stronger. Therefore, creditors' attention to the comparative information between debtors and other similar enterprises transmitted by the comparability of accounting information is greatly reduced. On the contrary, the development of non-state-owned enterprises completely follows the laws of the market. If they do not develop well, they will face the fate of being eliminated by the market, which means that creditors will not be able to recover the principal and interest. In this case, the comparability of enterprise accounting information becomes extremely critical. Comparability of accounting information provides comparative information between the debtor and other similar enterprises or their own comparative information in different periods, thus helping creditors to judge whether the debtor is competitive with other similar enterprises, whether it has strong profitability and whether the profitability is sustainable, so that creditors can identify, control and reduce risks in time. The higher the comparability of accounting information, the lower the creditor's risk, the lower the risk premium it requires and the lower the debt cost. On the other hand, the property rights and economic interests of the state-owned enterprises belong to the state, and the actual controllers of the state-owned enterprises often lack sufficient sense of responsibility and direct economic interest motivation to supervise the managers, resulting in more serious agency problems of the state-owned enterprises and lower comparability of accounting information. The superposition of the two factors leads to no obvious relationship between the comparability of accounting information and the debt cost in state-owned enterprises, while in non-state-owned enterprises, the comparability of accounting information has a significant negative correlation with the debt cost.

4. Conclusion

Based on the data from 2010-2017 of listed companies with A shares in China, this paper measures the comparability of accounting information at the company level and empirically studies the impact of the comparability of accounting information on debt cost by using the model based on the comparability of accounting information at the company level established by De Franco and others(2011). Further, by introducing two internal and external factors of property right nature and audit quality, and examining their impact on the relationship between comparability of accounting information and debt cost, the following three conclusions are drawn:

(1) Comparability of accounting information is significantly negatively related to the cost of corporate debt. This shows that the comparability of accounting information plays a positive role in the credit market. Comparability of accounting information can provide creditors with comparative information of the debtor and other similar enterprises or their own comparative information in different periods, thus helping creditors to select high-quality loan objects, judging whether the relevant indicators of the debtor are normal, and whether the debtor has any potential non-agreed matters that damage the rights and interests of creditors. Therefore, the comparability of accounting information reduces the transaction cost and the risk premium caused by the principal-agent problem and information asymmetry.

(2) Compared with state-owned enterprises, in non-state-owned enterprises, the comparability of accounting information has a more significant impact on the cost of debt. In other words, creditors are more sensitive to the comparability of accounting information of non-state-owned enterprises, and the comparability of accounting information plays a more active role in non-state-owned enterprises.

(3) Compared with enterprises with higher quality of external audit, in enterprises with lower quality of external audit, the comparability of accounting information has a more significant impact on debt cost. This shows that audit quality plays a substitute role in reducing debt cost for comparability of accounting information.

This article enriches the research literature on comparability of accounting information at the company level. Secondly, previous researches on the factors affecting the cost of corporate debt mainly focus on the transparency, robustness and reliability of accounting information, and few people study its impact on the cost of debt from the perspective of comparability. Starting from the comparability of accounting information, this paper explores its impact on debt cost, providing a new perspective for the study of factors affecting corporate debt cost. The inspiration of this paper is that relevant departments should continuously improve accounting standards and auditing regulations, improve the comparability of accounting information and the quality of external auditing of enterprises, so as to enhance the confidence of creditors and reduce their pity.

The behaviors of lending, withdrawing and breaking loans. Finally, promote the healthy development of enterprises. In addition, speeding up the transformation of property rights of state-owned enterprises and providing a fair competitive environment for enterprises are also of great significance for optimizing the allocation of debt capital.

References

1. Li S. Does Mandatory adoption of international financial reporting standards in the european union reduce the cost

of equity capital? The Accounting Review, 2010, 85(2): 607-636.
2. De Franco, Kothari P, Verdi R. The benefits of financial statement comparability. Journal of Accounting Research, 2011, 49(4): 895-931
3. Francis J, Lafond R, Olsson P M, et al. Costs of equity and earnings attributes. Accounting Review, 2004, 79(4): 967-1010.
4. Vander Bauwhede H, De Meyere M, Van Cauwenberge P. Financial reporting quality and the cost of debt of SMEs. Small Business Economics, 2015, 45(1): 149-164.
5. Huang J, Xiao M, Information disclosure, income opacity and cost of equity capital. China Accounting Review, 2006(1).
6. Yu F, Zhang M. Information disclosure quality and debt cost, empirical evidence from China's securities market. Audit and Economic Research,2007.22(5): 93-96.
7. Roychowdhury S, Watts R L. Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. Social Science Electronic Publishing, 2007, 44(1-2): 2-31.
8. Zhang J. The contracting benefits of accounting conservatism to lenders and borrowers. Journal of Accounting and Economics, 2008, 45(1): 27-54.
9. Li Z, Cao F, Zhao X, Etc. Heterogeneity of institutional investors, Accounting Conservatism and Cost of Equity Financing-Experience from Chinese Listed Companies Evidence. Management Review, 2016, 28(7): 42-52.
10. Armstrong C S, Guay W R, Weber J P. The role of information and financial reporting in corporate governance and debt contracting. Journal of Accounting and Economics, 2010, 50(2-3): 0-234.
11. Zhang X, Liu F, Hulgang, Research on the relationship between transparency of accounting information and debt cost, Friends of Accounting, 2015(15): 38-44.
12. Cao J, Song Y, Xu M, et al. Information transparency and debt capital cost-based on Shenzhen stock exchange, Empirical Data of Listed Companies. Times Finance; 2018(18).
13. Yang Z, Zhang L, Li Y. Research on the relationship between comparability of financial reports and cost of equity capital, Empirical Evidence from China, A Stock Market, Dang Acting Accounting Review, 2015,8(02): 83-103.
14. Imhof M J, Seavey S E, Smith D B. Comparability and cost of equity capital. Social Science Electronic Publishing, 2017, 31(2).
15. Xin W, Cui X, Pan L. Can improving the comparability of accounting information reduce the cost of beneficial capital? China Will Assess On, 2018,16(01): 107-128.
16. Klock M S, Mansi S A, Maxwell W F. Does Corporate Governance Matter to Bondholders? Journal of Financial and Quantitative Analysis, 2004, 40(4): 693-719.
17. Ahmed A S, Billings B K, Morton R M, et al. The Role of Accounting Conservatism in Mitigating Bondholder-Shareholder Conflicts over Dividend Policy and in Reducing Debt Costs. Accounting Review, 2002, 77(4):867-890.
18. Sufi, A. 2007. Information Asymmetry and Financing Arrangements: Evidence from Syndicated Loans. Journal of Finance, 62 (2): 629~668.
19. Ivashina, V. 2009. Asymmetric Information Effects on Loan Spreads. Journal of Financial Economics, 92(2): 300 ～ 319.
20. Lin B, Sunyeh, Liu J. Internal Control, Information environment and cost of capital, empirical evidence from Chinese listed companies. Securities Market Guide Newspaper, 2012(11): 26-31.
21. Zhang Shengli. Property Rights Characteristics, Steady Accounting Policies and Corporate Debt Financing Costs-Empirical Evidence from China's Securities Market. Economics and Management, 2014(6): 45-50.
22. Liu W, Chen L, Cai Q. Industry environment, audit opinion and debt cost. Audit Research, 2018, 203(03): 82-88.
23. Shane P, Smith D B, Zhang S. Financial statement comparability and valuation of seasoned equity offerings. Social Science Electronic Publishing 2013.
24. Habib, Ahsan, Hasan M, et al. Financial statement comparability and corporate cash holdings. Social Science Electronic Publishing, 2017, 13.
25. Choi, Jong-Hag, Choi, Sunhwa, Myers, Linda A, et al. Financial Statement Comparability and the Informativeness of Stock Prices About Future Earnings. Social Science Electronic Publishing, 2015.

26. Kim S, Kraft P, Ryan S G. Financial statement comparability and credit risk[J]. Social Science Electronic Publishing, 2013, 18(3): 783-823.
27. Chan LC, Hsieh YT, Lee E. Does financial statement information affect cross-border lending by foreign banks in the syndicated loan market? Evidence from a natural experiment. Journal of Accounting and Public Policy, 2015, 34(5):520-547.
28. Li G, Liu L, Debt financing cost and private credit discrimination. Financial Research, 2009(12):137-150.
29. Yang M. Ownership structure, financial risk and debt capital cost-a study based on mediating variable transmission effect. Economic Issues, 2010(9):104-108.
30. Shailer G, Wang K. Government ownership and the cost of debt for Chinese listed corporations. Emerging Markets Review, 2015, 22:1-17.
31. Jing L, Li J, Gu G. credit ownership discrimination, political connection effect and information release effect. China's Economic Problems, 2018(3).
32. Xue Y ,Zhang P. Research on influencing factors of comparability of accounting information, empirical evidence from listed companies. Friends of Accounting ,2015(22):17-21.
33. Hu Y, Tang S. Auditing, information transparency and bank loan interest rate. Audit Research, 2007(6):74-84.
34. Zhu K, Chen X. Financial development, audit opinions and financing constraints of listed companies. Financial Research, 2009(7):66-80.
35. Wei Z, Wang C, Wu Y, et al. Financial ecological environment, audit opinions and debt financing costs. Audit Research, 2012(3):98-105.
36. DeAngelo L, Auditor size and audit quality. Journal of Accounting and Economics, 1981, (3): 183-199.
37. Pittman J A, Fortin S. Auditor choice and the cost of debt capital for newly public firms. Journal of Accounting & Economics, 2004, 37(1):113-136.