

Auditor Industry Expertise, Internal Control and Debt Financing Costs

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Abstract

Capital is the blood of enterprise development, and debt financing has become an important financing channel for enterprises. Different enterprises face different financing constraints, which is mainly due to the different internal and external governance of enterprises. This paper uses the quality of internal control and the industry expertise of external auditors to measure the impact of internal and external governance mechanisms on debt financing. This paper selects the data of Shanghai and Shenzhen A-share listed companies from 2014 to 2019, takes 10782 observations as the research object, and verifies the operation mechanism of internal control quality and auditor industry expertise on debt financing cost through multiple regression and other methods. The results show that the higher the quality of internal control and the stronger the professional ability of auditors, the more obvious the effect of reducing the cost of debt financing. After the robustness test, the result is still valid.

Keywords

Auditor Industry Expertise; Internal Control Quality; Debt Cost.

1. Introduction

Under the assumption of neoclassical perfect capital market equilibrium, enterprise financing is only linked to capital demand. However, in the actual capital market, due to the existence of various noise factors and information asymmetry, and China's capital market is in the development stage, the financing cost has become the key to measure the financing ability of enterprises. Compared with the high threshold and strict supervision of equity financing, debt financing is fast and has relatively few restrictions, so it has also become a preferred financing method for enterprises. As the blood of an enterprise, how to obtain funds at a low cost is a difficult problem faced by every enterprise, as well as both practical and academic sessions. Then, to explore how to reduce the debt financing cost, we should start from the source and find out what the influencing factors of debt financing cost are.

According to the existing literature, the influencing factors of debt financing cost include corporate financial characteristics, information robustness, internal control quality, external supervision mechanism and so on. (1) From the perspective of company characteristics, most scholars analyze from all the entrances of company financial characteristics, such as cash flow, company scale and profitability. Sinkey (1998) [1] believes that the size of the company is directly proportional to the ability to resist risks, and the cost of debt financing is low. Zhou Qin et al. (2006) [2] believe that the solvency of a company is affected by the size of the company. The larger the size is, the higher the anti-risk ability is, the lower the debt financing cost and the longer the term is. Petersen (1994) [3] found that enterprises with high financial leverage have heavy debt burden and poor capital flexibility, and creditors' requirements for investment income will increase, so the financing cost will increase. (2) From the perspective of accounting information conservatism, Ahmed (2002) [4] found that accounting information conservatism can alleviate information asymmetry, improve the quality of accounting information, reduce

creditors' risk perception and reduce debt financing costs. Zheng Dengjin et al. (2016) [5] found that accounting conservatism transmits the signal of accounting information quality when accounting conservatism and external audit quality affect debt financing costs. With high conservatism and information quality, investors trust enterprises, which will reduce risk premium and debt cost. (3) In terms of internal governance, doyer [6] internal control defects will affect the normal operation of enterprises and the quality of accounting information. The quality of accounting information cannot be guaranteed and cannot obtain the trust of creditors, so the cost of debt financing will increase. Li Wanfu et al. (2011) [7] took investment efficiency as the starting point to explore the role of internal control. The research found that the lower the quality of internal control, the more off track the investment of enterprises, and the more serious the inefficient investment in enterprises. Chen Hanwen et al. (2014) [8] [9] [10] [11] took listed companies in the capital market as a sample and found that enterprises with high quality of internal control have lower bank debt financing costs. Most domestic scholars, including Jiang Yan, have found that high quality of internal control will reduce management opportunism, obtain lower loan interest rate, improve enterprise value and play a positive role in the company. (4) Externally, external auditors are an effective means of external supervision. Balsam et al. (2003) [12] believe that auditors with industry expertise can more accurately disclose material misstatement in financial statements by using their knowledge reserves. Cai Chun (2007) [13] found that on the premise of maintaining independence, the higher the professional competence of auditors, the higher the audit quality. Liu Wenjun et al. (2010) [14] found that auditors with industry expertise are more cautious and have higher audit quality in the process of audit services than those without industry expertise. Song Changzai et al. (2016) [15] found that auditors, as a governance mechanism, can alleviate the principal-agent problem and reduce the Cost Stickiness of the company. Xie Shengwen (2011) [16], fan Jinghua (2013) [17] and other studies have found that auditor industry expertise can reduce the agency cost of shareholders and safeguard the interests of minority shareholders.

The existing literature mostly analyzes the impact on debt financing cost from a single perspective, ignoring the research on the comprehensive governance effect of internal and external governance. Taking A-share companies listed in Shanghai and Shenzhen from 2014 to 2019 as a sample, this paper studies the impact of internal control and external auditor industry expertise on debt financing costs.

2. Theoretical Analysis and Research Hypothesis

2.1. Auditor Industry Expertise and Debt Financing Costs

From the perspective of creditors, the authenticity and integrity of the debtor's financial information is very important. Because of information asymmetry and agency costs, it is difficult for creditors to intuitively judge the actual operation of the company. In order to reduce risks, creditors will focus on the external governance mechanism of the company. In the relevant literature, many scholars believe that the external auditor is an important external governance mechanism. Audit has two governance functions: one is to provide reasonable assurance for financial reports and review whether there are violations and misrepresentations. The stronger the professional competence of auditors, the more sensitive they are to the risk of important misstatement in financial reports, and the timelier they find unreasonable investment and on-the-job consumption of the company. Similarly, external audit can effectively supervise the management, reduce its opportunistic behavior and its unnecessary investment behavior. Second, auditors can reduce the degree of information asymmetry with creditors. Auditors' audit of financial statements is equivalent to opening the "black box" of risk for creditors, providing incremental information for creditors and alleviating uncertainty and information risk.

Auditor industry expertise means that auditors put their practical experience into a specific industry. Auditors use professional knowledge to collect evidence in the audit process. The more professional auditors are, the higher the quality of service they provide and the more efficient they are. At the same time, auditors are also faced with reputation risk. Once auditors conduct illegal operations and are exposed by the media, their own reputation and their firms will suffer huge losses. Therefore, for auditors, they will be more active in developing their professional knowledge and ability and more cautious in evaluating customers' financial statements. Enhance the trust of creditors to their debtors, and then reduce the cost of debt financing.

Based on the above analysis, this paper puts forward the first hypothesis:

H1: under the control of other conditions, the higher the auditor's industry expertise, the lower the debt financing cost.

2.2. Internal Control Quality and Debt Financing Cost

Hypothesis 1 has demonstrated the role of external governance mechanism in reducing the cost of debt financing, then from the internal perspective of the enterprise, the internal control system is an important part of the normal operation and management of the enterprise. The effective operation of internal control can standardize the daily operation of enterprises, and effectively prevent and control the weak points in the operation links, so as to improve the overall operation of enterprises and improve the quality of enterprise accounting information. The improvement of accounting information is conducive to creditors to make more effective judgments, so as to reduce the cost of debt financing. In addition, the agency problem of the company is also affected by internal control. The effectiveness of internal control will affect the agency cost of the company. As the internal supervision mechanism of the company, high-quality internal control will effectively supervise the behavior of the management and reduce inefficient investment behavior. Hoitash et al. (2012) found that since the promulgation and implementation of SOX act, the CEO salary of enterprises with poor internal control has decreased significantly, and it is more obvious in enterprises with higher supervision level.

Therefore, the quality of internal control should be the quality of information disclosure and agency problems, which will affect the cost of debt financing.

Based on the above analysis, this paper puts forward the second hypothesis:

H2: under the control of other conditions, the higher the quality of internal control, the lower the debt financing cost.

3. Research Design

3.1. Sample Selection and Data Source

This paper selects Shanghai and Shenzhen A-share non-financial listed companies from 2014 to 2019 as the research sample. In order to make the data more accurate and convincing, this paper screens according to the following order: (1) eliminate st and st * samples; (2) Eliminate the samples that have been listed for less than five years; (3) Exclude samples with negative sales revenue; (4) Eliminate incomplete samples of internal control quality data; (5) Eliminate samples with incomplete other relevant variables. In addition, in order to avoid the influence of extreme values on the regression results, all continuous variables are reduced to less than 1% and more than 99%. Finally, 10782 valid data are obtained. The internal control index in this paper comes from Dibo database, the auditor industry expertise comes from cnrds database, and the rest data comes from CSMAR and restore databases.

3.2. Key Variable Definition

3.2.1. Explained Variable

The explanatory variable of this paper is debt financing cost (debt). Referring to the practice of Li Guangzi and Liu Li (2009) [18], it is expressed by the ratio of financial expenses to total liabilities. The greater the ratio, the higher the debt financing cost.

Debt financing cost = financial expenses / total liabilities

3.2.2. Explanatory Variable

Internal control quality

In this paper, the quality of internal control is expressed by the logarithm of internal control index. Through literature review, we find that there are many indicators to measure internal control, such as internal and external variable measurement, questionnaire survey and so on. The difference of internal control measured by internal and external variables is small, which is not suitable for empirical research; For the questionnaire survey, the workload is heavy and the subjectivity is strong. Therefore, this paper uses the internal control index in Dibo data. In order to better give economic significance and eliminate the influence of extreme values and outliers, this paper takes the logarithm of the internal control index to measure the quality of internal control. The larger the value, the higher the quality.

Auditor industry expertise

Auditor industry expertise refers to the professional skills of auditors in certain specific fields. Generally, there are two methods to measure auditors' industry expertise: industry market share method and industry market combination method. This paper adopts the method of fan Jinghua and others, adopts the industry market share method, expressed in MSA1, and the calculation formula is as follows.

$$MSA1 = \frac{\sum_{j=1}^J \sqrt{ASSET_{ikj}}}{\sum_{i=1}^I \sqrt{ASSET_{ikj}}}$$

3.2.3. Control Variable

Table 1. Variable definition

Variable name	Variable symbol	Variable definition
Explained variable	DEBT	Financial expenses / total liabilities
Explanatory variable	MSA1	The industry market share method is used to calculate the total assets of listed companies based on audit
	IC	Logarithm of internal control index
control variable	SIZE	Logarithm of total assets
	LEV	Total liabilities / total assets
	GROWTH	Growth rate of operating revenue
	TANG	Proportion of fixed assets
	TA	(inventory + fixed assets) / total assets
	TURN	Operating income / average assets
	ROE	Net assets / balance of shareholders' equity
	CFO	Operating cash flow / total assets
	BIG4	Big four is 1, non-big four is 0
	SOE	1 for state-owned enterprises and 0 for non-state-owned enterprises
	YEAR	Annual control variable
	IND	According to the industry classification of CSRC in 2012, the manufacturing industry is reclassified according to the secondary code, with a total of 21 industry virtual variables

Referring to relevant literature, this paper selects the following control variables: company size (SIZE), asset liability ratio (LEV), growth capacity (GROWTH), fixed assets ratio (Tang), tangible assets ratio (TA), asset turnover (TURN), return on net assets (ROE) and cash adequacy (CFO). Considering that the type of firm and the nature of property rights will affect the debt financing cost, in this paper, two dummy variables, Big4 and SOE, are added. The four variables are 1 and vice versa; The state-owned enterprise is 1, otherwise it is 0.

The definition of variables in this paper is shown in Table 1.

3.3. Model Design

This paper designs the following model for hypothesis 1 and hypothesis 2:

$$DEBT_{i,t} = \alpha_0 + \alpha_1 MSA1_{i,t} + \alpha_n \sum Controls_{i,t} + YEAR_t + IND_t + u_{i,t} \quad (1)$$

$$DEBT_{i,t} = \alpha_0 + \alpha_1 IC_{i,t} + \alpha_n \sum Controls_{i,t} + YEAR_t + IND_t + u_{i,t} \quad (2)$$

$$DEBT_{i,t} = \alpha_0 + \alpha_1 MSA1_{i,t} + \alpha_2 IC_{i,t} + \alpha_3 MSA1_{i,t} * IC_{i,t} + \alpha_n \sum Controls_{i,t} + YEAR_t + IND_t + u_{i,t}$$

3.4. Empirical Results and Analysis

3.4.1. Regression Analysis

According to the results shown in Table 2, from column (1), msa1 coefficient is -0.00912, which is significantly negatively correlated at the level of 1%, which verifies hypothesis 1. Column (2) shows that the IC coefficient is -0.00285, which is significantly negatively correlated at the 10% level, verifying hypothesis 2.

Table 2. Regression results

	DEBT	
	(1)	(2)
MSA1	-0.00912***	
	(-2.59)	
IC		-0.00285*
Control	Control	
Constant	-0.00509	0.01309
	(-1.10)	(1.32)
N	10,782	10,782
R-squared	0.319	0.318

t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

3.4.2. Robustness Check

According to the way of replacing variables, the conclusion of this paper is still robust.

4. Conclusion

Taking China's A-share listed companies in Shanghai and Shenzhen from 2014 to 2019 as the research object, this paper examines their impact on debt financing costs and their joint mechanism from the industry expertise of external auditors and the quality of internal control. The study found that: (1) the higher the auditor's industry expertise, the stronger the auditor's professional competence and the higher the audit quality, the higher the quality of accounting information, and then reduce the cost of debt financing; (2) The higher the quality of internal

control, the more effective the supervision mechanism of the management, which indirectly ensures the quality of accounting information and reduces the cost of debt financing.

According to the above research conclusions, we get the Enlightenment of this paper: for listed companies, we should respond to the call of national policies and strengthen the construction of their own internal control system, so that internal control can play an effective role, improve the quality of enterprise accounting information, protect investors' rights and interests and attract investors' investment; At the same time, enterprises should clarify the status of internal control. If there are defects in internal control, they must correct them in time and optimize the internal control system. For the choice of auditors, we should try to choose auditors with high industry expertise. The stronger the professional competence, the higher the sensitivity of risks and fraud, the higher the audit quality, improve the trust of creditors and reduce the cost of debt financing.

References

- [1] Ustry [J]. Upper Saddle River, N. J.: Prentice Hall, 1998,50: 521-526.
- [2] Zhou Qin, Xu Jie, Cheng Shuli An empirical study on the relationship between China's listing scale and debt financing [J] Financial research, 2006 (08): 41-55 NEW.
- [3] Petersen M A, Rajan R G. The Benefits of Lending Relationships: Evidence from Small Business Data[J]. Journal of Finance, 1994 :49(1): 3-37.
- [4] Ahmed A. S., Billings B. K., Morton R.M., etc. The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs[J]. The Accounting Review,2002,77(4): 867-890.
- [5] Zheng Dengjin, Yan Tianyi Accounting conservatism, audit quality and debt cost [J] Audit research, 2016 (02): 74-81.
- [6] Doyle J.T., Ge Weili., Vay S. M. Accruals Quality and Internal Control over Financial Reporting[J]. The Accounting Review, 2007 ,82(5): 1141-1170.
- [7] Li Wanfu, Lin bin, song Lu. The role of internal control in corporate investment - efficiency promotion or inhibition [J] management world, 2011 (2): 81-98.
- [8] Chen Hanwen, Zhou Zhongsheng Internal control quality and enterprise debt financing cost [J] Nankai management review, 2014, (03): 103-111.
- [9] Jiang Yan Equity cost, debt cost and Corporate Governance: A Study on the impact difference [J] Management world, 2009 (11): 144-155.
- [10] Zhang Jixun, Zhou ran, Sun Peng Internal control disclosure, audit opinion, investors' risk perception and investment decision: an experimental evidence [J] Accounting research, 2011, (09): 66-73.
- [11] Zhou Meihua, Lin bin, Lin Dongjie Management rights, internal control and corruption Governance [J] Accounting research, 2016, (03): 56-63,96.
- [12] Balsam S, Krishnan J, Yang J S. Auditor Industry Specialization and Earnings Quality[J]. Auditing: A Journal of Practice & Theory, 2003,22(2): 71-97.
- [13] Cai Chun, Xian Wenduo Test on the correlation between industry expertise of accounting firms and audit quality -- Empirical Evidence from China's listed company audit market [J] Accounting research, 2007, (06): 41-47.
- [14] Liu Wenjun, Millie, Fu Luoxuan Auditor industry expertise and audit quality -- from financial fraud companies Verification data [J] Audit research, 2010, (01): 47-54.
- [15] Song Chang, Yang Hualing, Li Qinyang Auditor industry expertise and Enterprise Cost Stickiness [J] Audit research, 2016 (6): 72-79.
- [16] Xie Shengwen The nature of ultimate controller, the professionalism of audit industry and the agency cost of controlling shareholders -- Empirical Evidence from Listed Companies in China [J] Audit research, 2011 (03): 64-73.

- [17] Fan Jinghua, Zhang yaman, Liu Qiliang Internal control, auditor industry expertise, accrual and real earnings management [J] accounting research, 2013, (04): 81-88.
- [18] Li Guangzi, Liu Li Debt financing cost and private credit discrimination [J] Financial research, 2009 (12): 137-150.