

Tax Planning of Crowdfunding Industry under Big Data

Jia Wu

Eastern Liaoning University, Dandong, Liaoning, China

153449233@qq.com

Keywords: Big Data Technology; Crowdfunding Industry; Tax Planning; VAT Tax

Abstract: With the application of big data and the development of information technology, the impact on tax planning and management is comprehensive and far-reaching. It not only affects the concept of tax planning and management of crowdfunding industry, but also changes the way of tax planning management and the object of tax planning management, and puts forward higher requirements for the tax planning system of crowdfunding industry. The purpose of this paper is to study the tax planning of crowdfunding industry under big data. Starting from the basic concept of tax planning informatization, this paper summarizes the related concepts of tax planning informatization management, analyzes the determination of the optimal capital structure and the tax planning of issuing stock crowdfunding. Taking the crowdfunding platform as an example, it analyzes the current situation and problems of Tax Planning Informatization of Renren investment, Combined with the tax planning problems of Renren investment crowdfunding platform, this paper puts forward some feasible suggestions on the construction of tax planning big data. The results show that the proportion of turnover tax paid by Renren investment company in the net cash inflow is 3:7, - 10:8, - 60:10, - 30:20, respectively. In 2019, the turnover tax paid by enterprises is all the expenditure of value-added tax. The implementation of reasonable VAT tax planning can help enterprises to alleviate the pressure of cash flow to a certain extent.

1. Introduction

As a new Internet financial model, crowdfunding provides a new way to solve the financing difficulties and high financing costs of start-ups, and its unique operation mechanism also provides a platform for the growth and development of creative projects [1]. Tax planning will not only not reduce the total tax revenue of the country, but may even increase it [2]. This is because, after enterprises carry out tax planning and reduce tax burden, their profits will increase, which will in turn increase investment and expand operation, and the national tax will naturally increase [3-4]. Therefore, from a long-term point of view, crowdfunding enterprises' tax saving and national tax revenue will not decrease at the same time, on the contrary, there is a relationship between them [5-6].

Tax planning is an important part of enterprise management [7]. Chen Y's estimation shows that there is a negative correlation between tax planning investment and tax liabilities. On average, an increase of \$1 in tax planning reduces tax liabilities by \$4 [8]. Kaminski J uses the exclusive compensation data obtained from the company's top management survey to model and estimate the relationship between the effective tax rate and the after tax performance indicators by using the two-step method. This method corrects the endogenous bias associated with the company's decision-making on executive compensation on a pre tax and after tax basis [9]. Shneor uses proprietary data sets and detailed executive compensation information to study the relationship between Tax Director's incentives and GAAP and effective cash tax rate, book tax gap and tax aggressiveness measures [10].

The innovation of this paper mainly lies in the organic combination of big data and tax planning, focusing on strengthening the information construction to realize the management of tax planning. Based on the existing information development situation, under the background of big data, fully combining with the determination of the optimal capital structure and the tax planning of issuing

stocks crowdfunding, the paper puts forward countermeasures according to the actual situation, The purpose is to improve the tax planning informatization level of Renren investment crowdfunding platform, and summarize the countermeasures to provide tax planning path for crowdfunding related platforms.

2. Research on Tax Planning of Crowdfunding Industry under Big Data

2.1 Determination of Optimal Capital Structure

We know that the financial leverage effect of debt crowdfunding is mainly reflected in tax saving and improving the return on equity capital. The tax saving function reflects that the interest on liabilities is included in the financial expenses to deduct the taxable income, thus reducing the taxable income tax. The higher the debt ratio is, the more obvious the tax saving effect will be. Of course, the most important leverage of debt is to improve the return on equity capital and the after tax earnings per share of common stock, which can be reflected from the following formula:

$$(EBIT - I)/S = EBIT/(S + B) + B/S \times [EBIT/(S + B) - I/B] \quad (1)$$

It can be seen from the above formula that as long as the rate of return on investment before interest and tax is higher than the cost ratio of liabilities, increasing the proportion of liabilities will bring about an increase in the level of return on equity capital.

2.2 Tax Planning of Stock Issuance Crowdfunding

Although increasing the amount of debt will reduce the tax burden and improve the return on equity capital, we can not ignore other constraints, especially the increase of risk factors and risk costs. Therefore, when we make tax planning for common stock financing, the key is to determine the appropriate debt scale and debt ratio, and further define the effective limit of equity financing based on this.

Determine the EPS of common stock of the enterprise

$$EPS = [(Kr - Bi)(1 - T) - U]/N \quad (2)$$

Where EPS is the earnings per common share.

Determine the target equity capital scale of the enterprise

$$S = K - B = K - [Kr - (EPS \times N + U)/(1 - T)]/I \quad (3)$$

In the formula, K is the total investment; R is the rate of return on investment before interest and tax; B is the total amount of liabilities;

Therefore, using the above formula, we can make the optimal decision of increasing capital or expanding liabilities by comparing the tax saving function of debt and equity capital according to the expectation of profitability.

3. Experimental Application of Tax Planning in Crowdfunding Industry under Big Data

Renren investment is an equity crowdfunding platform established in January 2015. Its main business is to set up branch crowdfunding financing for small and medium-sized physical stores, and to find high-quality entity enterprise projects for angel investors. Its essence is an internet financial service platform between investors and financiers. Renren investment's crowdfunding mode, which focuses on the financing of physical stores and the establishment of branches, is the first in the industry and has developed rapidly since its establishment. As of January 2020, Renren investment platform has more than 2 million registered investment users and nearly 500 successful crowdfunding entity chain projects, with a total financing amount of 1 billion yuan. The projects cover four major consumption areas: Hotel, catering, education and life.

4. Application Analysis of Tax Planning in Crowdfunding Industry under Big Data

4.1 Renmin Crowdfunding Tax Rate

VAT special invoice is the most important and decisive legal voucher in VAT payment and management. At present, Renren investment company's business involves Hotel, catering, education, life and other services, and the chain of operation links is long. In the process of providing services, we need to issue different forms of invoices; in the process of services, we will also obtain various kinds of invoices.

The reason why VAT can be implemented in many countries is that it can effectively solve the problem of repeated taxation in the process of commodity circulation. The purpose of the policy of "replacing business tax with value-added tax" is to prevent the repeated collection of business tax in turnover tax, including crowdfunding industry, and promote the sound and orderly development of modern service industry through structural tax reduction. For crowdfunding companies such as Renren investment company, which focuses on crowdfunding business, in the long run, the tax reform can reduce the tax burden of enterprises, reduce the capital outflow of enterprises, and promote the orderly development of modern service industry including crowdfunding industry. In the short term, due to the substantial growth of Renren investment company's crowdfunding business, if Renren investment company can not obtain sufficient input tax deduction, its tax burden will increase to a large extent.

The catering crowdfunding tax rate of Renren investment crowdfunding company increased from 2% to 8%, the education crowdfunding business increased from 2% to 6%, as shown in Figure 1, and the life service increased from 4% to 7%. Hotel crowdfunding has increased from 6% to 13%, as shown in Table 1, and these services are often in one supply chain business at the same time. According to the provisions of the tax law, the sales volume of VAT sales activities of taxpayers with different tax rates and collection rates shall be accounted for separately. If not, a higher tax rate should apply. However, when Renren investment company signs crowdfunding contracts with customers, it does not calculate its revenue separately for services involving different tax rates.

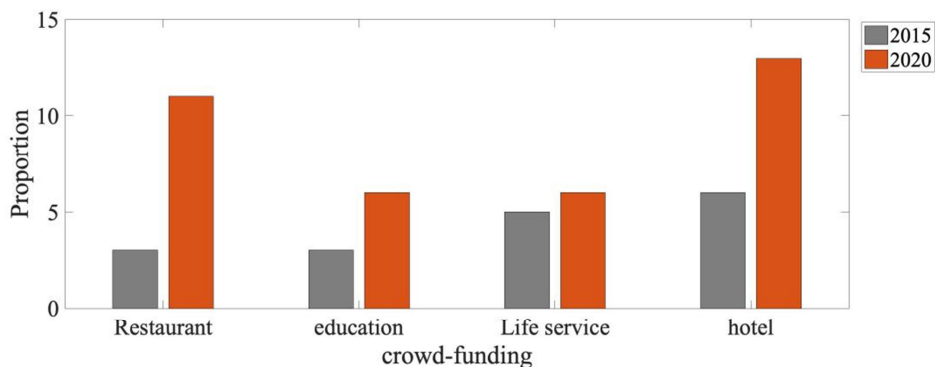


Figure 1. Crowdfunding tax rate of Renren investment crowdfunding company

Table 1. Crowdfunding tax rate of Renren investment crowdfunding companies

	2015	2020
Restaurant	3	11
education	3	6
Life service	5	6
hotel	6	13

Combined with the above analysis, in the past six years, the operating income of Renren investment company has fluctuated greatly, and there is a big gap between the profitability and operating capacity compared with the industry average value. The operating cash flow has been negative for five consecutive years. If the effective VAT tax planning plan is not implemented in time, the cash flow pressure of Renren investment company will be further increased, It is not conducive to improve the operating efficiency and profitability of the company, and can not occupy an advantage in the fierce competition of crowdfunding industry. Therefore, the planning of VAT is

very important to the healthy development of enterprises.

4.2 VAT Tax Planning

According to the analysis of the operation and financial situation of Renren investment company, it can be seen that after "replacing business tax with value-added tax", the tax burden of the enterprise has increased. In addition, the enterprise is also faced with greater cash flow pressure. Although the value-added tax is not directly reflected in the company's profit statement, it is the value-added tax that directly affects the cash outflow of the company. Reasonable tax planning can save the cash outflow caused by VAT, make enterprises have more funds for their daily business activities, and relieve the cash flow pressure of enterprises.

From 2015 to 2019, the relationship between net operating cash inflow and turnover tax paid by enterprises is shown in Figure 2. It can be seen that the turnover tax paid by the company every year is a large amount. From 2016 to 2019, the proportion of turnover tax paid by Renren investment company in the net operating cash inflow of the enterprise is 3:7, - 10:8, - 60:10, - 30:20, as shown in Table 1. In 2020, the turnover tax paid by enterprises is all the expenditure of value-added tax. Therefore, the implementation of reasonable VAT tax planning can help enterprises to alleviate the pressure of cash flow to a certain extent.

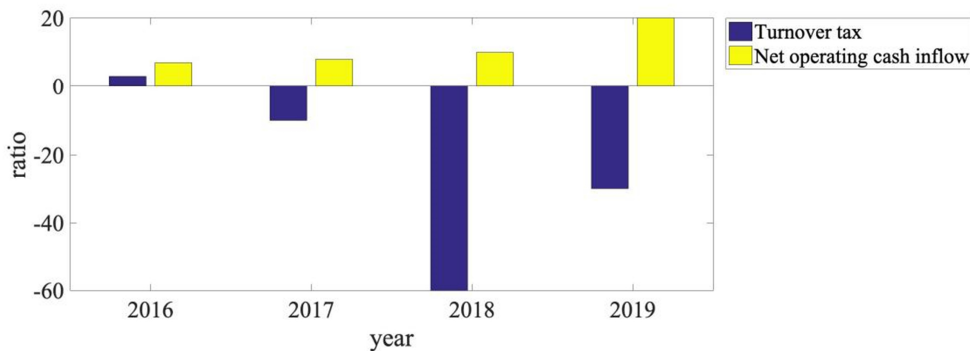


Figure 1. The relationship between turnover taxes paid by enterprises

Table 1. Relationship between turnover taxes paid by enterprises

	2016	2017	2018	2019
Turnover tax	3	-10	-60	-30
Net operating cash inflow	7	8	10	20

In the aspect of crowdfunding, enterprises can mobilize employees for crowdfunding from the outside to the inside. Especially when the production and operation of enterprises are in urgent need of working capital and external crowdfunding is difficult to meet the needs of enterprises in the short term, this kind of internal crowdfunding can play a good role. In addition, the enterprise can also mobilize the enthusiasm of employees and the consciousness of hard work, because only when the enterprise is in good condition can the interest be paid in full and on time, and the interests of employees can be protected.

5. Conclusions

There are few external financing channels and capital sources, which restrict the development of enterprises. The emergence of crowdfunding provides a new way to solve the financing difficulties of small and micro enterprises. Compared with banks and other financial intermediaries, the Internet crowdfunding platform has lower requirements on the collateral and information of financiers. Usually, the financing project side only needs to pass the examination of the crowdfunding platform and show the project on the platform, then they will have the chance of financing successfully. This paper studies the construction of tax planning under the background of big data, and through the research and analysis of the specific case of Renren investment, and collects a large number of relevant information about the informatization construction of Renren

investment, The problems of Tax Planning Informatization Construction of tax Renren investment and VAT tax planning can help enterprises to reduce the pressure of cash flow to a certain extent. This paper puts forward some new and more specific methods and measures, which has a strong theoretical height and practical significance.

References

- [1] A F K, B D M. The moderating effect of the board of directors on firm value and tax planning: Evidence from European listed firms [J]. *Borsa Istanbul Review*, 2019, 19(4):331-343.
- [2] Tijjani B, Peter Z. Journal of Accounting and Taxation Ownership structure and tax planning of listed firms: Evidence from Nigeria [J]. *Journal of Accounting and Taxation*, 2020, 12(3):99-107.
- [3] Bradley I, Bright J. International Tax Planning: The Stop-Loss Rules and Corporate Reorganizations—Interpretive Challenges [J]. *Canadian Tax Journal/Revue fiscale canadienne*, 2019, 67(2):383-410.
- [4] Fatimaleha W, Atichasari A S, Hernawan E, et al. Peran Tax Planning dan Konsultan Pajak[J]. *STATERA Jurnal Akuntansi dan Keuangan*, 2020, 2(1):81-96.
- [5] Purnamasari D. How the effect of deferred tax expenses and tax planning on earning management? [J]. *International Journal of entific & Technology Research*, 2019, 8(2):78-83.
- [6] Lagodienko N, Bondarenko A, Tarasenko V. Features of Tax Planning in Enterprise Management: Methods and Tools[J]. *Modern Economics*, 2019, 17(1):121-126.
- [7] Padalkin V Y, Strukov G N, Prygunkov A M, et al. The impact of tax planning on the level of economic security of the company [J]. *Proceedings of the Voronezh State University of Engineering Technologies*, 2019, 81(2):383-386.
- [8] Chen Y, Zhang W, Yan X, et al. The life-cycle influence mechanism of the determinants of financing performance: an empirical study of a Chinese crowdfunding platform[J]. *Review of Managerial ence*, 2020, 14(1):287-309.
- [9] Kaminski J, Hopp C, Tykvova T. New technology assessment in entrepreneurial financing - Does crowdfunding predict venture capital investments?[J]. *Technological forecasting and social change*, 2019, 139(FEB.):287-302.
- [10] Shneor R , Vik A A . Crowdfunding Success: A Systematic Literature Review 2010-2017[J]. *Baltic Journal of Management*, 2020, 15(2):149-182.