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A Study on the Debt Structure of Private Listed Enterprises in China

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Abstract

After China's reform and opening up, private enterprises have made great progress. It has become an important part of China's steady economic development. In the capital structure of the development of private enterprises, debt financing is an important way for enterprises to obtain funds, and also plays an important role in the management of private enterprises. In recent studies, many researchers put their research field of vision on the overall level of debt, but few researchers put aside the whole to study the internal composition of debt, such as debt maturity structure, debt source structure and so on. As an important part of an enterprise, debt structure plays an important role in the economic development of the enterprise, and it is also the top priority for its own development. In this paper, private listed companies in China are selected as the research object, and the influence of debt structure on the future growth of enterprises is analyzed. This paper takes the financial data of private listed companies from 2017 to 2019 as a sample, takes the development scale of enterprises and the growth of enterprises as a model for analysis, obtains that the growth of enterprises is a dependent variable, and takes the debt maturity structure of debt structure as an independent variable, and then studies how the debt structure of enterprises affects the growth of enterprises.

Keywords

Private listed enterprises,debt structure,research type.

1. Introduction

In recent years, many private listed companies have emerged in the development of China's economy, and private listed companies are a concentrated expression of the development of China's private economy, and also play an important role and responsibility in promoting China's national economy. Many scholars at home and abroad have a very deep research and clear understanding of the capital structure of private listed enterprises, but there is little research on the debt structure. The debt structure reflects the debt situation of an enterprise, and adjusting the debt structure of an enterprise is an important task of every enterprise's financial management. Under the situation that the asset liability ratio of domestic enterprises is increasing year by year and the structural characteristics of liabilities are changing constantly, it is necessary to fully study the changes related to the liability structure of private listed enterprises.

With the development of market economy, the relationship between debt structure and enterprise development becomes more and more complex. Debt is an important source of capital for an enterprise. Almost no enterprise needs to meet its capital needs without debt. Private listed companies have become an important force to promote the sustainable, rapid and healthy development of China's economy. Private listed companies are so important for the development of national economy and society, but there are many problems in the debt

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structure of private listed companies. The purpose of this study is to reveal the relationship between the debt structure and the growth of the private listed companies in China through empirical research and analysis, so as to find out the problems existing in the private listed companies in China, and put forward relevant suggestions, so as to provide theoretical basis for the decision-making of the private listed companies in China.

After analyzing the financial data of many private listed companies, the asset liability ratio of the company keeps rising year by year, which shows that the debt structure of the enterprise has more and more influence on the enterprise. Especially in the case of underdeveloped capital market in China, debt is the main financing channel for enterprises. Therefore, after studying the debt structure of China's private listed companies, we can improve the debt structure of private listed companies, strengthen the debt management of enterprises, and improve the utilization rate of funds through regulating the financing behavior of private enterprises, so as to optimize the debt structure of private listed companies, improve the management level of enterprises, enhance the competitive strength, and finally achieve the improvement of economic efficiency and promote The purpose of healthy development of enterprises. And it can promote the development of private enterprises and capital market, help the government to improve macro-control, improve the operation of the whole financial market.

Most of the existing researches at home and abroad only select the asset liability ratio as a reflection of the change of corporate debt structure.If asset liability ratio, long-term debt ratio and short-term debt ratio are selected to reflect the debt structure of an enterprise, the research on debt structure will be more abundant. In the study of the relationship between debt structure and its growth, not only the asset liability ratio, long-term debt ratio, short-term debt ratio and other indicators that reflect debt structure are taken as independent variables, but also the impact of the size of the company on the growth of the enterprise is considered, so as to conduct a more comprehensive regression analysis of the relationship between debt structure and growth of private listed companies Important practical significance.

2. Analysis of the Debt Structure of Private Listed Companies in China

2.1. Debt level of Private Listed Companies in China

In the past 50 years of reform and opening up, with the rapid development of China's economy, the development of private enterprises is also rapid. China's private listed companies formed relatively late, the foundation is relatively thin, but also by the national policy, financial credit and many other factors, many enterprises are listed after the emergence of financing problems can not be ignored, debt financing status is not very optimistic, restricting its healthy and rapid development. An in-depth analysis of the debt structure of private listed companies in China can help us understand how the debt structure of private listed companies in China affects their growth.

Table 1. Analysis of debt level of private listed companies

Proportion of assets and liabilities	mean value	N	standard deviation
2017	0.429	306	0.173
2018	0.438	306	0.173
2019	0.433	306	0.175
Total	0.433	918	0.174

The debt level is the proportion of total liabilities to total assets. It can be seen from the table that the average asset liability ratio of private listed companies in China is about 43% every

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year. Although there is a significant difference in the asset liability ratio of the sample companies, it is mainly concentrated between 20% and 70%, not much more than 70%, which shows that the overall debt level of private listed companies in China is not high. This may be because listed companies in China prefer equity financing. The reason for the preference is that when equity financing is adopted, enterprises do not need to pay interest or repay principal as they do to debt financing, and they do not need to be restricted by the use of funds by creditors. Therefore, the more flexible equity financing is more favored by enterprises, which may also result in the low level of debt financing.

Table 2. Analysis of debt maturity structure of private listed companies

Proportion of current liabilities	mean value	N	standard deviation
2017	0.867	306	0.156
2018	0.840	306	0.169
2019	0.832	306	0.167
Total	0.846	918	0.164

From the analysis of debt repayment period, debt can be divided into short-term debt and long-term debt. Through the research on the cross relationship between the balance sheets of several private listed companies, the average asset liability ratio of private listed companies is 43.3%, which is not much different from that of foreign listed companies. However, its liability structure is extremely unreasonable, with current liabilities accounting for 83% and long-term liabilities only 17%. Current liabilities account for most of the total liabilities, while non current liabilities account for a relatively low proportion of the total liabilities. The average of the total liabilities in three years is over 80%, which shows that private listed companies in China have unbalanced debt structure, long-term liabilities have not been fully applied, and there is a large short-term debt repayment pressure. Long term debt should be one of the important financing means for enterprises, and the long-term debt of private listed companies is not as good as a fraction of that of foreign listed companies. The long-term debt ratio is low, the company needs to improve the management cost of current liabilities, and is faced with greater debt repayment pressure, the play of financial leverage will also be affected, there are financial risks in the capital structure.

2.2. Debt Maturity Analysis of Private Listed Companies in China.

There is a positive correlation between short-term liabilities and company value. The short-term debt will increase the market value of the company. The reasons for the high short-term debt of private listed companies are explained here.

The relationship between long-term debt and enterprise value is not significant. The increase of long-term debt has no great influence on the market value of the company. Combining with the factors of financing cost, it explains the reason why the long-term debt of private listed companies is relatively low.

2.3. Debt Channels of Private Listed Companies in China

The main sources of funds for private enterprises in China are as follows: (1) analysis of financing channels for additional issuance and share allotment; (2) analysis of financing channels for bank loans; (3) analysis of internal financing channels

(1) Analysis on financing channels of additional issuance and share allotment

It is an effective way for listed companies to raise funds to issue additional shares. Among them, the issuance of additional shares is the issuance of new shares by listed companies to the general public, and the allotment of new shares is the allotment of new shares by listed

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companies to the shareholders of the company, both of which are a way of direct financing. In addition to increasing the owner's equity of the company, the additional issuance will reduce the proportion of the shareholders' equity, which will cause the decrease of the shareholders' control right of the company, dilute the shares of the company and avoid the concentration of rights. It is good for the shareholders of the listed company to introduce funds through additional issuance and share allotment. At present, there is a problem in the financing channel of issuing additional shares to enlarge the circulation plate, which has caused great harm to the development of China's capital market. Therefore, the relevant departments formulate a series of strict audit measures for the issuance and allotment of shares, and make strict requirements for the net income, financing scale and financing period of listed companies, so as to avoid some problems hindering the development of the capital market.

(2) Analysis of financing channels of bank loans

Bank loan financing is a very common financing channel, especially for companies that continue to fund, it is the best choice. Bank loan financing is that listed companies and banks reach an agreement in terms of repayment period, loan interest rate, etc. under the premise of repayment of principal and interest, they obtain the funds lent by banks. Bank loan is a kind of financing channel that many listed companies tend to use, but in practice, there are not many listed companies that use this channel for financing, which forms a contradiction between them. From the perspective of listed companies, bank borrowing will improve the company's debt ratio and play a double-edged sword role in the company's development; from the perspective of banks, there is a certain risk in lending a large amount of funds, so banks need to control and reduce the risk in other aspects such as the amount of funds. Therefore, only by forming information transparency between listed companies and banks can we improve the utilization rate of bank loan financing channels.

(3) Analysis of internal financing channels

Endogenous financing mainly refers to a way for listed companies to finance through their own accumulated funds. The source of internal capital is mainly depreciation of goods, retained earnings and enterprise principal. Internal financing should be the priority of financing channels for listed companies, which has two advantages: first, the source of internal financing is the listed company itself, which has the advantages of low cost, strong autonomy and strong anti risk ability; second, internal financing is the optimal use of the listed company's own resources, which can strengthen the company's financial management and capital utilization Conducive to the development of the company.

3. Factors Affecting the Debt Structure of Private Listed Companies

3.1. Development of Private Listed Companies in China

Private listed companies play an important role in China's economic development. Mainly reflected in: private listed companies have become an important economic growth point and an important force to promote the development of China's national economy. The latest data shows that there are more than 4.8 million private listed companies registered by industry and Commerce in China, and the total number of private listed companies in China has exceeded 42 million, accounting for more than 99% of the total number of enterprises in China. The value of the final products and services created by the private listed companies accounts for 59% of GDP, the goods produced accounts for 60% of the social sales, the taxes paid account for 51% of the national total, and the jobs provided account for more than 75% of the total jobs. Moreover, the private listed companies have become the leaders in technology and innovation. 66% of China's patents are invented by private listed companies, more than 75% of technological innovation is completed by private listed companies, and the R & D of new products accounts for about 82% of China's total. In 2017, according to the statistics of China Banking Regulatory Commission, in

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the first quarter of that year, the loan amount of major commercial banks exceeded 220 billion yuan, and private listed companies only received 300 billion yuan of loans, accounting for 14% of all commercial loans.

Private listed companies are also constantly improving their level of opening up. According to the latest customs statistics in 2018, the export proportion of private listed companies in light industrial products such as textiles, clothing, toys and household products is relatively large; in high-tech fields such as biotechnology and electronic communication equipment products, the export proportion of private listed companies is also gradually increasing.

3.2. Basic Factors Affecting Debt Structure

3.2.1 asset structure

Asset structure has an important impact on liability structure. Generally speaking, enterprises with large proportion of long-term assets should make less use of short-term liabilities and more use of long-term liabilities or issuing stocks to raise funds; conversely, enterprises with large proportion of short-term assets can make more use of current liabilities to raise funds.

3.2.2 industry characteristics

The existing data shows that the overall debt financing structure shows obvious differences between industries, reflecting that the debt financing tendency of enterprises has a certain connection with the industry characteristics of enterprises. Generally speaking, commercial enterprises are easily affected by seasonal factors, and demand for current assets is relatively high, so they generally maintain high current liabilities, which makes enterprises have considerable financial flexibility. On the contrary, public utility enterprises generally have large scale of one-time investment, long return period of investment, certain monopoly and stable long-term income, so they generally choose long-term loans, which makes long-term liabilities generally high.

3.2.3 enterprise scale

Business scale has an important impact on the debt structure of enterprises. In countries with more developed financial markets, large enterprises have less current liabilities and small enterprises have more current liabilities. Because of their large scale and good reputation, large enterprises can issue bonds to raise long-term funds at a lower cost in the financial market, so they use less current liabilities, while small enterprises use the opposite.

3.2.4 interest rate status

When the difference between the interest rate of long-term liabilities and that of short-term liabilities is small, enterprises generally make more use of long-term liabilities and less of current liabilities; on the contrary, when the interest rate of long-term liabilities is far higher than that of short-term liabilities, enterprises should make more use of current liabilities in order to reduce the cost of capital.

In a word, the debt situation of an enterprise is affected by many factors, including asset structure, industry characteristics, enterprise scale, interest rate, etc.

4. The Influence of Debt Structure of Private Listed Companies on Their Development

4.1. Research Design

4.1.1 proposal of research hypothesis

(1) The influence of debt level on the growth of enterprises

MM theory believes that the introduction of debt will bring tax shield effect, and the value of the company is positively related to the level of debt. According to agency cost theory, although the introduction of debt can reduce the cost of equity agency to a certain extent, it will also

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increase the cost of debt agency. According to the trade-off theory, debt can not only play its tax shield effect, promote the development of enterprises, but also bring the cost of financial distress to enterprises and threaten the growth of enterprises. When the debt of enterprises is too high, the cost of financial distress can offset the benefits of tax shield effect. Enterprises will suffer from greater bankruptcy pressure due to the high debt risk, threatening the growth of enterprises.

However, in the development of private listed companies in China, private listed companies are more likely to obtain and rely on short-term liabilities. The reason may be that creditors with long-term liabilities will demand higher return on investment, and the high proportion of long-term liabilities will cause creditors to join more restrictions, restrict the use of capital by enterprises, and cause enterprises to bear more capital costs And affect the development of enterprises. However, the use of non current debt funds is long, and the repayment period is also long, so the risk is relatively low from the perspective of enterprise financing. Therefore, there may be an optimal balance point for the debt level of an enterprise. When the debt level of an enterprise is below the optimal balance point, the higher the debt level is, the more favorable it is for the growth of the enterprise. When the debt level of an enterprise is above the optimal balance point, the improvement of the debt level will reduce the growth of the enterprise.

Therefore, based on the above analysis, this paper puts forward the following research hypothesis: the effect of debt level of private listed companies on their growth is inverted U-shaped structure. With the increase of asset liability ratio, the growth of enterprises will rise first and then decline after reaching the best balance point.

4.1.2 sample data selection and data source

Select the private listed companies in the SME Board of Shenzhen stock market from 2017 to 2019 as the sample, but excluding some special abnormal enterprises, such as (1) enterprises with asset liability ratio greater than 1 (2) enterprises with loss in consecutive years (3) enterprises with insufficient financial information disclosure and abnormal data, etc

4.2. Variable Design

4.2.1 design of interpreted variables

The explained variable in this paper is the growth of enterprises. Growth represents the valuable future investment opportunities of the company and reflects the company's ability to grasp the investment opportunities. Based on the research at home and abroad, this paper establishes the evaluation criteria for the future development of enterprises from three aspects of profitability, operation ability and development ability.

4.2.2 design of explanatory variables

Asset liability ratio, also known as liability ratio, is the percentage of total liabilities and total assets of an enterprise. It reflects how much of the company's total assets are obtained through debt, is an indicator to measure the company's ability to use the creditor's funds for business activities, and also reflects the company's financial situation, solvency and the security of the creditor's loan.

This paper studies the relationship between debt structure and growth of private listed companies in China from the perspective of debt maturity. Among them, the debt maturity structure of an enterprise is to measure the proportion of short-term liabilities with the proportion of current liabilities.

4.3. Model Design

4.3.1 descriptive statistical analysis

The average value of assets and liabilities of private listed companies in China is 43.3%, the maximum value is 94.8%, the minimum value is only 3%, and the debt level gap is significant.

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In terms of debt maturity structure, the proportion of short-term liabilities in total liabilities of private listed companies in China is as high as 85.6%. It can be found that private listed companies in China are highly dependent on short-term liabilities, but the long-term liabilities are very low, not fully utilized, and the source structure is unreasonable. However, such irrationality may lead to a great debt pressure on the enterprise, which will have a negative impact on the expansion of the company's scale and long-term investment activities. Whether the degree of the adverse impact exceeds the degree of its favorable impact remains to be further studied. However, it should be noted that from the analysis, it can be found that the average ratio of current liabilities has been showing a slow downward trend in the past three years, indicating that the impact of excessive short-term liabilities on the company may have been paid attention by the management, the proportion of long-term liabilities is gradually rising, and the debt structure will move towards the more and more reasonable goal.

4.3.2 multiple linear regression model

Univariate linear regression is a main influencing factor as independent variable to explain the change of dependent variable. In the research of practical problems, the change of dependent variable is often affected by several important factors. At this time, two or more influencing factors are needed to explain the change of dependent variable, which is also called multiple regression. When multiple independent variables and dependent variables are linear, the regression analysis is multivariate regression. Let y be the dependent variables $X_1, X_2 \cdots X_K$ is an independent variable and the relationship between independent variable and dependent variable is linear, the multiple linear regression model is:

$$Y_a = \beta_0 + \beta_1 X_{1a} + \cdots + \beta_k X_{ka} + \varepsilon_a$$

$\beta_0 \cdots \beta_k$ are undetermined parameters, and ε_a is undetermined parameters

In this paper, we use the following two models to make multiple regression from the debt maturity structure, that is, the short-term debt structure and the long-term debt structure.

Two hypotheses were analyzed by multiple linear regression

(1) The short-term debt structure makes multiple regression on the relationship of enterprise growth

The influence of debt maturity structure on the development of enterprises, in which DW is greater than 2, the multicollinearity of the model can be ignored; F's statistic is 350, and P's significance level is less than 1%. The research shows that the correlation coefficient between short-term debt ratio and corporate growth index is positive at the level of 1%. The regression equation has passed the test of significance, showing a significant positive correlation between the two. Therefore, the shorter the debt maturity, the more conducive to the development of enterprises. The correlation coefficient between the size of the control variable and the growth of the enterprise is positive, showing a significant positive correlation. Through linear regression analysis, the impact of debt maturity structure on the growth of enterprises is the same as the assumption in this paper. However, the main reason for this situation may be that the short-term debt can better play the governance effect, or it may be that the research sample of this paper is from private listed companies. In order to better use the growth opportunities, these companies tend to choose short-term debt with fewer restrictions and lower financing costs.

(2) Multiple regression of long-term debt structure to the relationship of enterprise growth

It can be seen from the analysis that the proportion of non current liabilities to total liabilities is positively correlated with the return on net assets in and year, while it is negatively correlated in the past three years. But the significance test between them still failed. The relationship between control variables and return on net assets has not changed, but the significance has improved. From the square value of, we can see that the fitting degree of the

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model is better than that of studying the relationship between the proportion of non current liabilities to total liabilities and the return on net assets. The correlation between the proportion of non current liabilities to total liabilities and the operating profit rate is different from that between the proportion of current liabilities to total liabilities and the operating profit rate except for the data related to constant items. The two indicators, the proportion of non current liabilities to total liabilities and the proportion of current liabilities to total liabilities, draw the conclusion that they are just the opposite, while the data related to control variables and The fit values of the models are the same.

5. Research Conclusion

5.1. Research Conclusion

According to the descriptive statistical analysis, the short-term debt of private listed companies in China has a negative correlation with their growth. If the proportion of short-term debt to total debt is too large, due to the short repayment period of short-term debt, it will bring great repayment pressure to the enterprise's capital, and have a certain negative impact on the company's recent investment development and capital investment. According to multiple linear regression, the higher the proportion of short-term debt, the higher the growth. First of all, from the previous analysis, short-term debt can bring information transfer benefits. Second, short-term debt repayment period is short, less flexibility, can reduce the cash flow of enterprises, and restrict the adverse behavior of management. The short-term debt plays an effective role in restricting the excessive consumption of the management, which is conducive to the growth and development of the enterprise; and the increase of the long-term debt ratio will increase the investment expenditure of the enterprise, which has not played a positive role in restricting the excessive investment of the management. Moreover, when the long-term debt ratio is too high, the creditors will take various methods to interfere with the operation of the enterprise, which is not conducive to the enterprise to better grasp the development opportunities according to its own situation, thus affecting the enterprise value promotion.

5.2. Research Suggestions

In order to ensure the healthy growth of private listed companies in China's manufacturing industry, based on the above analysis, this paper puts forward the following suggestions:

Through the study of this paper, according to descriptive statistics and regression analysis, we can see that the debt financing structure of Listed Companies in China has a high proportion of short-term financing, which leads to a negative impact on the company's operating performance. In addition, if the debt burden of the enterprise is too large, the enterprise may face greater financial risks; short-term debt can not replace the stability of long-term debt, and the assets of listed companies mainly rely on short-term financing, which will make the company carry out short-term financing frequently, and lead to the high cost of refinancing, increase the financial cost of the company, and have greater financial pressure to repay the principal and interest And has an unstable impact on the company's capital. Moreover, the high proportion of short-term financing also means that the long-term funds needed by the company's operation can only be raised through equity financing, which will lead to the company's frequent share expansion and refinancing, which will damage the original shareholders' equity, dilute the earnings per share, and affect the company's image. Therefore, in order to prevent the company from facing too high financial risks, the enterprise may have to give up some favorable development opportunities that need stable financial support. In the long run, it will inevitably cause adverse effects on the growth of the enterprise. In order to consider in the long run, we should use long-term capital to support the corresponding long-term investment projects.

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It can be seen that enterprises should appropriately reduce the proportion of short-term debt financing, reduce the financial pressure of the company, increase the proportion of long-term debt financing, appropriately choose to issue corporate bonds, stabilize the company's capital source, enhance the company's reputation, and promote the improvement of the company's operating performance. We should match the term of assets with the term of liabilities, reduce the financial risk of the company, and make the industry of the company reasonably balanced.

References

[1] Kong Xuejiao. Research on the influence of debt structure of private listed companies on their growth [D]. Hebei University of economics and trade, 2015.

[2] Liu Caixia. Research on the impact of debt financing on corporate performance of private listed companies in China [D]. Lanzhou University, 2014.

[3] Ge Bangliang, Bei Zhengxin. Analysis on the influencing factors of debt refinancing of Listed Companies in China [J]. Journal of Finance and accounting, 2014, 22 (22).

[4] Qiu pengbing. Empirical analysis on the impact of debt financing structure of listed real estate enterprises on corporate performance [D]. Jinan University, 2014.

[5] Li Aiqin. Empirical Study on the relationship between debt structure and performance of Listed Companies in steel industry [D]. Wuhan University of technology, 2012.

[6] Liu Yaozhong. Empirical Study on debt refinancing of Listed Companies in China [D]. Southwest University of Finance and economics, 2012.

[7] Hu Xiaoyan. Empirical Study on the relationship between debt financing and corporate performance of Listed Companies [D]. Northeast University of Finance and economics, 2012.