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AN EMPIRICAL STUDY ON THE INFLUENCE OF CAPITAL STRUCTURE ON ENTERPRISE PERFORMANCE OF MANUFACTURING LISTED COMPANIES ON GROWTH ENTERPRISE MARKET

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Abstract: *As an emerging capital market, the growth enterprise market, different from the main board market, plays an important role in China's security market. The growth enterprise market is designed to provide financing channels and growth space for small- and medium-sized enterprises, and high-tech enterprises that cannot be listed on the Main board Market. Therefore, the paper selects manufacturing listed companies in the growth enterprise market to study the relationship between capital structure and enterprise performance, hoping to find the most suitable financing strategies, promote their healthy development and provide suggestions on the development of growth enterprise market in China. 247 manufacturers listed in the growth enterprise market before December 31 are collected and their data of 2019 are taken as the sample to conduct an empirical study on the relationship between their capital structure and enterprise performance. Based on the comprehensive factor analysis and multiple linear regression analysis, it is revealed that the shareholding ratio of the top shareholder is positively correlated with enterprise growth and enterprise performance; the debt-asset ratio and enterprise performance show a significant negative correlation; the short-term debt ratio, the long-term debt ratio, the shareholding ratio of the first 10 shareholders and enterprise scale are not related to enterprise performance. Accordingly, the suggestions are made that companies should attach importance to the optimization of the capital structure and avoid the adverse impact of short-term debt by moderately increasing the ratio of long-term debt. As an effective supplement to the main board market, the growth enterprise market helps to increase the liquidity and efficiency of capital and solve the financing difficulties of small- and medium-sized enterprises.*

Keywords: *capital structure; enterprise performance; manufacturing listed companies; growth enterprise market*

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INTRODUCTION

The growth enterprise market (GEM), an emerging capital market, is more

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proactive than the main board. As a market to assist small and medium-sized enterprises and high-tech enterprises in financing and capital operation, the growth enterprise market with the low threshold to enter concentrates on the potential of enterprise growth and pays more attention to the development of innovative enterprises. As the most active part of the market, small and medium-sized enterprises (SMEs) are characterized by rapid growth and high operational risks. As one of the most representative industries, manufacturing industry plays a vital role in the process of China's economic construction. The operation of GEM reveals that China's capital market need to be improved and most enterprises do not have the reasonable capital structure (Zhu & Zhang, 2018). The data of 2015 shows that 30% is the average debt-asset ratio of manufacturing listed companies in GEM and the average short-debt ratio was 86%, which tells that the low debt-asset ratio of the manufacturing industry and the large proportion of short-debt in the total liabilities. There is an optimal capital structure in one company. With the increase of the debt-asset ratio, enterprise performance level will be higher (Masulis, 1983). The higher financial leverage ratio means it has better enterprise performance and the greater scale effect (Anthony, 2007; Almansour, Alrawashdeh & Almansour, 2019). However, the unbalanced debt structure of the manufacturing industry will seriously affect the profitability of enterprises (Yang, Li, Xiang & Wu, 2019), thus leading to the increase of the credit and bankruptcy risk (Tan, Lau & Gozgor, 2020). It discourages the development of enterprises and the growth enterprise market in China. Whether a company has the reasonable capital structure has become one of the core issues affecting the growth and development of enterprises (Zhu, Wei & Wang, 2014).

Compared with western countries, the researches on capital structure and enterprise performance are conducted relatively late in China. Although their researches can serve as the reference, China's growth enterprise market has been established for a short time and the situation for growth enterprise market varies greatly. Therefore, the researches on GEM in western countries may not be suitable to solve the relevant problems in China. Additionally, few researches take GEM as the object and study the relationship between capital structure and performance. The difference in industries will also have an impact on the results of the study. The capital structure of enterprises in the same industry is similar, but the capital structure of enterprises in different industries will have obvious differences. For example, there is no significant difference in the characteristics of capital structure among manufacturing enterprises (Zhao & Huang, 2005). On the other hand, enterprises in different industries will also have an impact on the results of the study. Then, what is the relationship between capital structure and enterprise performance? Is the relationship between the two in growth enterprise market the same as the results of the relationship between the same two on the main board market? Therefore, the paper selects manufacturing listed companies in the growth enterprise market to study the relationship between capital structure

and enterprise performance, hoping to find the most suitable financing strategies, promote their healthy development, and provide suggestions on the development of growth enterprise market in China.

LITERATURE REVIEW

In the narrow sense, capital structure refers to the composition and proportion of long-term capital of an enterprise, that is, the proportion of debt and equity in the total assets of one company. The capital structure, essentially determined by the company's financing strategy, can give full play to the regulatory role of financial leverage and maximize the profit of the enterprise only when it is in line with the actual development of the enterprise. In the broad sense, capital structure refers to the source and proportion of all funds of a company, including the proportional relationship among total liabilities, assets and equity, and the proportional relationship among all debts. Since the narrow sense of capital structure cannot fully reflect the capital structure, the broad sense of capital structure is studied to fully consider the impact of short-term debts, long-term debts and equity structure on the performance of listed companies. Enterprise performance is a general term of operator performance and operation performance during a certain period. The performance of operators is mainly reflected on the contributions and achievements in the process of their management, operation and development. Moreover, operation performance is mainly shown in the profitability, debt-paying, operation, follow-up development abilities of an enterprise.

Some researchers choose long-term debt ratio and short-term debt ratio to measure capital structure (Flannery, 1986; Salim & Yadav, 2012). As enterprises are affected by enterprise size and their growth, the short-term debt ratios vary from company to company. The higher ratio of the short-term debt suggests the worse the profitability of enterprises (Hall, Hutchinson & Michaelas, 2000). Some researchers found there is a positive correlation between the two when using the debt-asset ratio to measure the capital structure (Niu, Cao & Zou, 2009). The higher the debt to assetratio is, the higher the return on equity and earning per share will be (Zhang, Du & Li, 2003). However, some scholars discovered that debt structure is negatively correlated with enterprise performance when enterprise performance is measured by two indictors of return on asset and return on equity (Daniel & Vatavu, 2015). In China, the degree of equity concentration is frequently used as a measure of equity structure. Some studies showed that the ratio of the top shareholder has a negative impact on enterprise performance (Chen & Zeng, 2014), while others indicated that the ratio of the top 10 shareholders is positively correlated with enterprise performance (Bai & Zhang, 2016). However, When Wang & Yu (2014) investigated the influence of equity concentration on enterprise performance and found that their relation curve is inverted "U" type and the optimal inflection point of capital structure is 51.95%.

In existing researches, there is no consensus on the relationship between

capital structure and enterprise performance. Modigliani & Miller (1958) thought that there is no correlation between capital structure and enterprise performance and the debt-asset ratio would not affect enterprise performance when it is out of the range of 23% to 45% (Masulis, 1983). Some scholars claimed that they influence mutually and have the non-linear relationship (Berger & Di Patti, 2006), such as the type of inverted "U" (Lv, Jin & Han, 2007; Margaritis & Psillaki, 2010); other scholars also pointed that capital structure is positively correlated with enterprise performance (Anthony, 2007; Frank & Goyal 2003; Fosu, 2013); Other scholars claimed that they have the negative correlation(Booth, Aivazian, Demirguc & Maksimovic, 2001).The high share of capital borrowed will lead to a decrease in negative profitability and the best share of capital borrowed that maximizes the return of assets should be within the range of 0 to 21% (Spitsin, Vukovic, Anokhin, & Spitsina, 2020). As for the results on the influence of capital structure on enterprise performance, the conclusions made by different researchers vary greatly, which may result from the differences in the indicators and samples selected for measurement. Because different countries, sectors and industries may influence the results of the study, it is better to select samples from the same sector and industry for the study. Furthermore, in China, the researches on the impact of capital structure on enterprise performance is conducted mainly based on listed companies in the main board market. There are limited researches on the growth enterprise market for it has been established for a short time and relatively few studies can reach an agreement on the conclusions. Therefore, based on the previous studies we concentrate on manufacturing listed companies in the growth enterprise market to explore the relationship between capital structure and enterprise performance.

RESEARCH DESIGN

Data Source

The data used in this study are collected from the official websites of Juchao Information Network and Growth Enterprise Market of the Shenzhen Stock Exchange. As of May 31, 2019, 508 companies were listed on the growth enterprise market in China. In order to ensure the completeness of data and the accuracy of analysis, we selected the companies that had been listed for three years as samples. Therefore, we selected manufacturing companies listed on the growth enterprise market of the Shenzhen Stock Exchange before December 31, 2016 and took their data of 2019 as the sample. After excluding incomplete, abnormal data and the data of companies with special treatment (ST) stock and particular transfer (PT) stock, the data of 247 companies are chosen for further study.

Measurement of the Variables

Enterprise Performance

Enterprise performance represents the performance and efficiency of business operations, including the indicators of market value and finance. Researchers measure enterprise performance from different perspectives. Foreign scholars use Tobin's Q value, while domestic scholars use return on assets (Sorana, 2015; Long and Zhang, 2006), return on equity (Sorana, 2015; Bai and Zhang, 2016), or earnings per share as a measurement index (Xie and Zheng, 2009; Li, 2012). In view of the comprehensiveness of its indicators, this study establishes a composite index system. The variables of each indicator are explained as follows:

(1) Tobin Q (TQ) refers to the ratio of the company's market value to its replacement cost. When the value of TQ exceeds 1, it indicates that the enterprise has created the value at this time. When its value is less than 1, it indicates that the enterprise has not created the value. Because it is difficult to obtain the replacement value of assets, the book value of corporate assets is generally used to replace the replacement value of assets in China. The formula is shown as follows:

Tobin Q = market value of the enterprise/book value of assets

= (year-end market value per share x total equity + total debt - debt of cash and cash equivalents) /book value of assets

(2) Return on Assets (ROA) is the ratio of a company's net income to its average total assets, which embodies the relationship between asset utilization efficiency and capital utilization effect. When the total assets of company are definite, the ROA index can be used to analyze the stability and durability of its earnings and determine the risks faced. This index can reflect the operation level of corporate capital. The formula is shown as follows:

Return on total assets = net profit/total assets

(3) Return on equity (ROE) is the core index in the Dupont financial analysis model and an internationally used comprehensive index reflecting the company's capital earning ability. It is widely used and highly representative. Return on equity is a comprehensive index that can reflect the business performance and financial performance. It is mainly used to measure the profitability achieved by using the capital invested by shareholders. As a financial index to evaluate the profitability of enterprise performance, this index reflects the relationship between the net assets and its structure, and the net profit and the level of operation and management. The formula is shown as follows:

Return on equity = net income/average net assets

(4) Earnings per share (EPS) is the ratio of after-tax net income to total equity. The larger the ratio is, the more abundant the source of dividend distribution will

be. In that case, the appreciation ability of corporate assets will become stronger and it will earn better profits. The formula is shown as follows:

Earnings per share = net profit/total shares of equity

Capital Structure

Based on the broad sense of capital structure, this study explores its relationship with enterprise performance in the growth enterprise market. The analysis of the influence of capital structure on enterprise performance is made by evaluating the indices from the perspective of liability and stock right structure.

(1) Liability Structure

This study selects the debt-to-asset ratio (DAR) as a variable to measure the liability structure of small- and medium-sized enterprise. The debt-to-asset ratio is a major indicator to measure the capital structure for it can be used to evaluate the debt level of the listed company. It can fully reflect the debt in proportion of the assets in one company. Furthermore, it has become one of the frequently used indicators to evaluate the capital structure of one company.

(2) Equity Structure

Equity concentration is a quantitative index reflecting ownership concentration or dispersion. It mainly refers to the state of equity dispersion caused by the different shareholding proportion of all the shareholders in a company. It is an important indicator to measure the stability of a company. In this study, the shareholding ratio of the top shareholder (Chen & Zeng, 2014) and the shareholding ratio of the top ten shareholders (Bai & Zhang, 2016) were selected to show its equity concentration.

Controlled Variables

There are many factors that affect enterprise performance. In order to control the impact of other factors on enterprise performance, this study refers to relevant researches by scholars and finally determine as controlled variables enterprise size (Yang, 2015; Shi and Li, 2016) and growth (Fu, 2014) in consideration of the difficulty of data collection. The controlled variables are described as follows:

(1) Enterprise Size (Size)

The size of a company has the influence on its performance. Based on previous studies, this study selects the natural logarithm of the company's total assets to measure the size of the company.

(2) Growth

Enterprise growth is expressed by the growth rate of net profit for it is the

final result of a company's performance. The continuous growth of net profit is the basic feature of company growth. If it increases fast, it shows that the company has outstanding business performance and strong market competitiveness. The description of variables is shown in Table 1.

Table 1 Description of Variables

Type	Variable	Indicator	Symbol	Variable's Explanation
Predicted Variable	Enterprise Performance	Comprehensive Enterprise Performance	F	Composite Index System
Explanatory Variable	Capital Structure	Debt-Asset Ratio	DAR	Debts/Assets
		Proportion of Top Shareholder	TOP1	Number of Top Shareholder's Share/Total Number of Share
		Proportion of Top 10 Shareholders	TOP10	Number of Top 10 Shareholder's Share/Total Number of Share
Controlled Variables	Enterprise Size	Total assets	SIZE	Ln (Average Total Assets)
	Growth	Net Profit	GROW	Net Profit of Current Year - Net Profit of Previous Year)/Net Profit of Previous Year

RESULT ANALYSIS

Descriptive Analysis

Before factor analysis and multiple regression analysis, the preliminary statistical analysis is made on the variables of manufacturing listed companies on the growth enterprise market. As can be seen from Table 2, the minimum Tobin Q value of 1.4, the maximum value of 17.58, the median value of 4.68, the mean value of 5.31 and the standard deviation of 2.68 indicates that there is little difference on the market value among enterprises. The minimum value of return on asset is -46.84%, the maximum value is 18.95%, the median value is 4.28, the mean value is 4.24%, and the standard deviation is 5.92%. The minimum value of return on equity is -168.19%, the maximum value is 29.38%, the median value is 5.89, the mean value is 4.99%, and the standard deviation is 13.34%. The minimum value of earnings per share is -2.12, the maximum value is 1.19, the median value is 0.20, the mean value is 0.22, and the standard deviation is 0.32.

All shown above suggest that the profitability of companies is relatively weak, and the companies with negative outcome have very poor profitability. As to the ratio of debt to asset, the minimum value is 3.27%, the maximum value is 77.01%, the median value is 28.61, the mean value is 33.25%, the standard deviation is 16.14%. It is generally acknowledged that a company of the debt-asset ratio within the range

of 40% to 60% has the optimal capital structure. However, the debt-asset ratio of manufacturing listed companies is obviously on the low side, indicating that companies generally prefer equity financing and the proportion of debt financing is relatively small. They do not make full use of financial leverage to earn economic benefits.

Moreover, the minimum value, maximum value, median value, mean value and standard deviation of the shareholding ratio of the top shareholder are 4.38%, 62.50%, 29.23, 30.88% and 12.14% respectively. The minimum value, the maximum value, the median value, the mean value and the standard deviation of the shareholding ratio of the top ten shareholders are 15.95%, 85.77%, 58.57, 58.02% and 11.60% respectively. The standard deviation of the shareholding ratio of the top shareholder is larger than that of the following nine major shareholders, reflecting the checks and balances of the following nine major shareholders on the top shareholder are relatively balanced in manufacturing listed companies.

Furthermore, the minimum value of enterprise size is 19.40, the minimum value is 23.20, the median value is 21.31, the mean value is 21.35, and the standard deviation is 0.67. It shows that there is no big difference on the enterprise size. The minimum value of the net profit growth rate is -7289.06%, the maximum value is 2113.68%, the median value is 18.62, the mean value is -3.75% and the standard deviation is 536.71%. The growth rate of net profit reflects the development ability of enterprises. The negative mean value indicates some companies without good business performance grow slowly and have weak market competitiveness.

Table 2 Results of Descriptive Analysis

Variable	Max.	Min.	Median	Mean	Standard Deviation
TQ	1.40	17.58	4.68	5.31	2.68
ROA(%)	-46.84	18.95	4.28	4.24	5.92
ROE(%)	-168.19	29.38	5.89	4.99	13.34
EPS	-2.12	1.19	0.20	0.22	0.32
DAR(%)	3.27	77.01	28.61	30.25	16.14
TOP1(%)	4.38	62.50	29.23	30.88	12.14
TOP10(%)	15.95	85.77	58.57	58.02	11.60
SIZE	19.40	23.20	21.31	21.35	0.67
GROW(%)	-7289.06	2113.68	18.62	-3.75	536.71

Factor Analysis

This paper uses the method of factor analysis to construct the enterprise

performance evaluation system of manufacturing listed companies in the growth enterprise market, and calculates factor scores to quantify enterprise performance. Firstly, we used factor analysis to preliminarily extract 4 variables representing enterprise performance. Then, the maximum variation rotation method was used for factor analysis of all variables with high commonality and factor load greater than 0.6. Finally, the scores of all observed values in each factor are calculated to evaluate the performance level of each company. The result showed the KMO value of 0.637(> 0.5)), and the X2 value of 662.910 in Bartlett spherical test, which was suitable for factor analysis.

The results of factor analysis in Table 3 showed that the eigenvalues of two factors were greater than 1 and the total variance explained was 90.136% (>85%), indicating that the factors of F1 and F2 can represent the information contained in four variables.

Table 3 Matrix of Factor Load and Results of Factor Analysis after Rotation

Variable		Factor Load		Intercommunity	Factor
Return on assets (ROA)		0.967*	0.091	0.943	F_1
Return on equity (ROE)		0.930*	0.007	0.865	
Earnings per share (EPS)		0.893*	-0.043	0.799	
Tobin Q (TQ)		0.017	0.999*	0.999	F_2
	Symbol	Eigenvalue	Variance contribution rate	Cumulative variance contribution rate	
Factor 1	F_1	2.597	64.923%	64.923%	
Factor 2	F_2	1.009	25.214%	90.136%	
Note: * is the constituent variable of the factor whose absolute value of the factor load is greater than 0.5.					

The factor 1 has a large load in return on assets, return on equity and earnings per share, and its variance contribution rate is 64.923% while the factor 2 has a large load on Tobin Q and its variance contribution rate is 25.214%. Therefore, the formula for comprehensive factor scoring of enterprise performance is obtained as follows:

$$F_i = \frac{0.64923F_1 + 0.25214\,F_2}{0.90136}$$

Correlation Analysis

As can be seen from Table 4, the factors of enterprise performance have the significant positive correlation with the shareholding ratio of the top shareholder, the shareholding ratio of the first ten shareholders and the enterprise growth, while it has the significant negative correlation with the ratio of debt to assets. The results show that there is no high correlation among explanatory variables,

and it is preliminarily determined that there is no collinearity among explanatory variables.

Table 4 Correlation Analysis

	F	DAR	SAR	LAR	TOP1	TOP10	SIZE	GROW
F	1							
DAR	-0.240**	1						
TOP1	0.164**	-0.027	0.129*	-0.146*	1			
TOP10	0.204**	-0.073	0.058	-0.106	0.553**	1		
SIZE	0. 037	0.415**	-0.138*	0.353**	-0.136*	-0.109	1	
GROW	0.672**	-0.061	-0.057	0.063	0.051	0.122	0.193**	1

Note: ** is significantly correlated at 0.01 level (bilateral); * was significantly correlated at the level of 0.05 (bilateral), the same as below.

The influence of the debt-asset ratio on enterprise performance

In order to find the accurate relationship between capital structure and enterprise performance, this study employs the method of multiple regression analysis to investigate the relationship among variables. The results of regression analysis (Table 5) showed that the R2 of the model was 0.491 and the value of R2 was 0.485 after being adjusted, indicating that 48.5% of the changes in the explained variables could be explained by explanatory variables. The value of F at the significant level indicates that the regression model has gone through the significance test while the coefficient of the debt-asset ratio with -0.009 suggests that the T-test has gone through the significance test. The debt-asset ratio and enterprise performance show a significant negative correlation at the 1% level. There is no correlation between enterprise size and enterprise performance, but there is a significant positive correlation between enterprise growth and enterprise performance.

Table 5 Results for Model Regression Analysis

	Coefficient	Standard Deviation	*T*	*VIF*
(Constant)	-0.522	1.248	0.418	
DAR	-0.009	0.002	-3.844**	1.238
SIZE	-0.011	0.060	-0.183	1.282
GROW	0.001	0.000	14.000**	1.065
R^2	0.491	F-statistic	78.081	
Adjusted R^2	0.485	Prob(F-statistic)	0.000	
Kolmogorov-Smirnov	1.016	Breush-Pagan	8.942	

The influence of the shareholding ratio of the top shareholder on enterprise performance

The analysis results of the shareholding ratio of the top shareholder on enterprise performance are shown in Table 6. The R2 of the model was 0.474 and its value was 0.467 after being adjusted, indicating that 46.7% of the changes in the explained variables could be explained by the explanatory variables. The value of F reaches the significance level, indicating that the regression model has passed the significance test. The coefficient of the shareholding ratio of the top shareholder is 0.008, indicating that the shareholding ratio of the top shareholder is significantly positively correlated with enterprise performance at the level of 5%. There is no correlation between enterprise size and enterprise performance, but there is a significant positive correlation between enterprise growth and enterprise performance.

Table 6 Results for Model Regression Analysis

	Coefficient	Standard Deviation	*T*	*VIF*
(Constant)	1.701	1.201	1.416	
TOP1	0.008	0.003	2.512*	1.025
SIZE	-0.090	0.055	-1.631	1.062
GROW	0.001	0.000	14.301**	1.045

R^2	0.474	F-statistic	72.859
Adjusted R^2	0.467	Prob（F-statistic）	0.000
Kolmogorov-Smirnov	1.169	Breush-Pagan	12.142

The influence of the shareholding ratio of the first ten shareholders on enterprise performance

It can be seen from Table 7 that the R2 value of the model is 0.472, and its value is 0.466 after being adjusted, indicating that 46.6% of the changes in the explained variables can be explained by the explanatory variables. The value of F at the significance level indicates the regression model has passed the significance test. The coefficient of the shareholding ratio of the first ten shareholders is 0.008, and the shareholding ratio of the top ten shareholders is significantly positively correlated with enterprise performance at the level of 5%. The enterprise size is not correlated with the enterprise performance while there is significant positive correlation between enterprise growth and enterprise performance.

Table 7 Results for Model Regression Analysis

	Coefficient	Standard Deviation	T	VIF
(Constant)	1.554	1.222	1.272	
TOP10	0.008	0.003	2.390*	1.034
SIZE	-0.093	0.055	-1.682	1.058
GROW	0.001	0.000	14.023**	1.061

R^2	0.472	F-statistic	72.487
Adjusted R^2	0.466	Prob（F-statistic）	0.000
Kolmogorov-Smirnov	1.141	Breush-Pagan	16.352

CONCLUSIONS

The current liabilities in manufacturing listed companies on the growth enterprise market are relatively high, which may be related to the fact that companies prefer equity financing in business operation. While banks provide credit and loan to companies, they are less active in lending to small- and medium-sized enterprises. For the purpose of risk avoidance, the banks raise the threshold of loans, and prefer to lend to large enterprises within small operating risks, good financial performance and long-term solvency. As a result, SMEs have difficulty in obtaining long-term financing, leading to the unbalanced liability structure and the low asset to liability ratio.

It is found that the debt-asset ratio of manufacturing listed companies has a significant negative correlation with enterprise performance, and the increase of debt-asset ratio will reduce the performance of enterprises. This may be because in China the growth enterprise market implements the system of centralized audit and issuance, leading to the high rate of over raise, the large number of idle funds and the low debt ratio. Moreover, most of the companies have not reached the mature stage. The small scale, low governance level and insufficient creditability cause them to be trapped in financing difficulties. In order to control the risk of capital sources, short-term financing with the advantages of fast raising and less restriction enables them to be more inclined to choose equity financing instead of debt financing. Under the premise of short-term financing, the proportion of long-term liabilities is relatively low, resulting in the imbalance of liability structure, the ineffective use of financial leverage and tax shield. In addition, short-term liabilities impose much pressure on companies for a large debt repayment pressure on the maturity date, which leads to an increase in the total cost and a decrease in its performance.

On the other hand, it is found that the shareholding ratio of the top shareholder and the first ten shareholders of manufacturing listed companies on the GEM in China are significantly positively correlated with the enterprise performance. According to the descriptive analysis, the mean value of the average shareholding

ratio of the top shareholder with 31%, and that of the shareholding ratio of the first ten shareholders with 58%, indicates that the equity concentration can motivate major shareholders to participate in management and decision-making, strengthen the supervision of enterprise management and improve the business performance. However, there is no correlation between enterprise size and enterprise performance. The scale of manufacturing listed companies in the growth enterprise market is small, and the scale effect has not been formed. But there is a significant positive correlation between enterprise growth and enterprise performance, indicating that the good development of the company will have a positive impact on the improvement of enterprise performance.

IMPLICATIONS AND SUGGESTIONS

The research shows that the debt-asset ratio of manufacturing listed companies in China's growth enterprise market is generally low. Debt financing can be used to optimize the capital structure and leverage the debt financing. The short-term debt ratio of manufacturing listed companies is high, which may aggravate the risk of the stock price crash in the future due to the opacity of information (Cheng, Chao, Fang, Wang & Yao, 2020). With the development of one company, the improvement of its profitability and the expansion of its scale, the capital structure of the enterprise should be adjusted in time. Enterprises should determine the long-term capital structure based on their industry characteristics and other factors (Zhu & Zhang, 2018). Therefore, it suggests that listed companies should pay attention to long-term liabilities when financing, and avoid the pressure of repayment of the principal and its interest caused by excessive short-term financing, and appropriately leverage debt financing to reduce the cost of capital of the company. At the same time, the information disclosure system should be improved to enhance the information transparency of the growth enterprise market.

On the other hand, regulators should strengthen the supervision of information disclosure and require listed companies to timely and accurately disclose information to investors in accordance with relevant regulations to ensure the healthy development of the growth enterprise market. And companies should strengthen the management of internal information, improve its own credit system, enhance the management level so that they can get more opportunity for credit financing from the bank. The enhancement of corporate competitiveness, credit and financing ability is conducive to the improvement of the level of the debt-asset ratio. The positive effect of financial leverage should be given full play to on enterprise performance of the improvement of the overall quality of listed companies, so that the company can continue to develop in the growth enterprise market.

Companies can moderately increase the proportion of the legal person's shareholding and improve its equity structure. Compared with ordinary

shareholders, corporate shareholders have the clearer understanding of the long-term development goals of the company. They have the strong shareholding stability than ordinary investors, which can effectively reduce the fluctuation range of stock price caused by stock trading. In addition, corporate shareholders have more professional management experience and can provide more constructive suggestions for the company, thus improving enterprise performance. The moderate concentration of equity is favorable to playing a positive role of major shareholders. They can participate in the company's operation and management and have the motivation to implement effective supervision to the managers. To some extent, it can alleviate the problems caused by listed companies entrusting professional brokers to manage the company.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The empirical study was conducted on the relationship between capital structure and enterprise performance of manufacturing listed companies in the growth enterprise market. However, the growth enterprise market has been established for a short time, and one-year data of listed companies were collected for the study. As a result, the short-period data and the small size of samples probably affect the adaptability of the results. Additionally, 4 indicators are selected for evaluation, but there are different indicators that can be used to measure capital structure and have different influences on enterprise performance. In this study, the factor analysis method is used to calculate the comprehensive score of enterprise performance, and linear regression model is constructed for analysis. In addition, nonlinear regression model can also be used for further regression analysis. Whether there is a more scientific approach is worth further discussion. With the gradual increase of listed companies in the growth enterprise market, future research should extend the research period and increase the number of samples to improve the study and make the results more reliable.

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