A study of the impact of corporate financialization on the performance of listed manufacturing companies

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Abstract: With the rapid development of China's financial industry, the connection between the real industry and the financial industry is deepening, and a large number of real enterprises are involved in the financial industry. Among them, the manufacturing industry is an important pillar of a country's productivity, and the trend of financialization is also increasing. This paper selects listed manufacturing companies as a sample, and uses statistical software to study the impact of corporate financialization on the performance of listed manufacturing companies. After theoretical analysis and empirical research, it is concluded that there is an inverted U-shaped relationship between corporate financialization and corporate performance, that is, too high or too low financialization is detrimental to manufacturing performance. Finally, suggestions are put forward: enterprises should return to their main business, improve their innovation capabilities and maintain a moderate level of financialization, government departments should strengthen supervision and improve financial markets, and financial institutions should reasonably construct financialization risk indicators.

Keywords: corporate financialization, manufacturing, company achievements

1. Introduction

As China's economy shifts from a high-speed growth stage to a high-quality development stage, the phenomenon of financialization of real enterprises is becoming more and more serious. [1] After the 2008 financial crisis, my country's real enterprises have become more and more keen on financial investment and asset allocation, and the degree of corporate financialization has been continuously improved. [2]

The term corporate financialization has been widely used since the beginning of the 21st century, which means that companies use their limited own funds for financial investment rather than their main business, and their profits come more from the increase in financial capital value rather than operating profit.^[3] With the increasingly saturated market demand, the operating profit rate of real enterprises is far lower than that of the financial industry. Its main business, the operating profits of physical enterprises increasingly come from financial channels rather than the manufacturing field, and gradually the phenomenon of "financialization of physical enterprises" is formed.^[4]

Since 2015, the party and the country have begun to observe that the trend of economic "decoupling from the real to the virtual" has come quietly. This is an important requirement and the realistic background of the research.^[5]

The main reason why the manufacturing industry favors corporate financialization is the pursuit of profit, that is, the pursuit of high profits.

Corporate financialization may have both promoting and inhibiting effects on corporate performance. [6] Corporate financialization is not the result of only positive or negative effects, but a combination of the two.

This paper puts forward the research hypothesis: the degree of corporate financialization is too high or too low is not conducive to corporate performance, the degree of corporate financialization and the performance of listed manufacturing companies is an inverted U-shaped relationship.

2. Research Design

2.1. Variable Selection

2.1.1. Explained Variable

The explained variable: company performance level.

This paper chooses return on equity (ROE) as a measure of company performance, that is, an explanatory variable, and selects return on total assets (ROA) in the robustness test of company performance indicators.

2.1.2. Explanatory Variable

The explanatory variable: the level of corporate financialization.

This paper measures the degree of corporate financialization from the perspective of asset composition, with FAR as the explained variable.

2.1.3. Control Variable

In order to avoid the possible influence of other factors, five control variables including Lev, Lnsize, Growth, annual dummy variables, and industry dummy variables are selected.

2.2. Model building

According to theoretical analysis and SPSS curve simulation, the linear regression model does not match the original data, and the quadratic function regression model matches the original data in the nonlinear model. A quadratic function regression model is established to approximately describe the nonlinear relationship in order to test whether the relationship between corporate financialization and the performance of listed manufacturing companies is an inverted U-shaped relationship. If the estimated square term coefficient is negative and significant, the linear term coefficient is positive and Significant, then we can think that the two are indeed an inverted U-shaped relationship.

$$ROE_{i,t} = \alpha + \beta_0 FAR_{i,t} + \beta_1 FAR_{i,t}^2 + \beta_3 Lev_{i,t} + \beta_4 Lnsize_{i,t} + \beta_5 Growth_{i,t} + \epsilon_{i,t}$$
 (1)

3. Empirical Research

3.1. Sample Selection and Data Sources

This paper selects the listed manufacturing companies from the Guotai'an database as a sample, and uses the listed companies in the manufacturing industry in the 2012 edition of the China Securities Regulatory Commission's industry classification. The original samples were processed as follows as needed: first, companies with ST and *ST were removed; second, companies with 0 total assets were removed; third, samples with missing observations of other variables were removed. In order to avoid the possible influence of outliers on the robustness of the regression results, all continuous variables were processed by Winsorize by 1% up and down with the state statistical software. After final processing, there are a total of 13037 company-year observations.

3.2. Descriptive Statistical Analysis

21.8188

0.2172

Variable

ROE

FAR

Lev

Lnsize

Growth

Mean value Median Maximum value Minimum value Standard deviation -0.6102 0.0689 0.068 0.3476 0.0884 0.2005 $0.02\overline{95}$ 0.234 0.7121 0.1391 0.4044 0.399 0.8845 0.0479 0.1913

19.6394

-0.6199

1.0791

0.4891

Table 1: Descriptive statistics of variables such as ROE.

From the descriptive statistics of the explanatory variables of enterprise financialization in Table 1, it can be seen that the proportion of financial assets held by listed manufacturing companies in my country is generally high, and financialization occupies a large proportion in the balance sheet of enterprises. The preference of financial investment among industrial companies is inconsistent, so there

25.5269

4.0215

21.6968

0.1133

is a large gap in the proportion of financial assets held by companies.

3.3. Relevance analysis

Table 2: Pearson correlation coefficient matrix.

	FAR	ROE	Lev	Lnsize	Growth
FAR	1	0.144***	-0.375***	0.157***	0.028***
ROE		1	-0.156***	0.087***	0.006***
Lev			1	0.482***	0.013***
Lnsize				1	0.025***
Growth					1

Note: *** means significant at the 1% level.

The correlation analysis of SPSS software shows that the correlation between the main variables is more significant.

3.4. Regression Analysis

Table 3: ROE sample regression results.

Variable	Models		
FAR	0.1791***		
	(9.03)		
FAR ²	-0.1966***		
	(-6.28)		
Lev	-0.1027***		
	(-21.69)		
Lnsize	0.0170***		
	(21.60)		
Growth	0.1616***		
	(13.30)		
Years	Yes		
Industries	Yes		
AdjR ²	0.0989		
F	192.77***		
N	13037		

From the established regression results, it can be seen that ROE is significantly positively correlated with FAR and the regression coefficient is 0.1791; ROE is significantly negatively correlated with the square term of FAR, and the regression coefficient is -0.1966.

Satisfying the quadratic function regression model, in the rising stage of the quadratic function curve, the financialization of enterprises has a "reservoir" effect on the performance of manufacturing companies. Improve the financial situation of the enterprise, improve the profitability of the enterprise, and improve the performance of the enterprise. In the descending stage of the quadratic function curve, the financialization of enterprises has an "investment substitution" effect on the performance of listed manufacturing companies.

3.5. Robustness Check

In order to test the robustness of the empirical analysis, this paper selects ROA, the return on total assets, as the company performance indicator for testing.

Table 4: Descriptive statistics of variables such as ROA.

<u>Variable</u>	Mean value	Median	Maximum value	Minimum value	Standard deviation
ROA	0.0511	0.0483	0.5347	-0.2679	0.0614
FAR	0.234	0.2005	0.7121	0.0295	0.1391
Lev	0.4044	0.399	0.8845	0.0479	0.1913
Lnsize	21.8188	21.6968	25.5269	19.6394	1.0791
Growth	0.2172	0.1133	4.0215	-0.6199	0.4891

Variable	Models
FAR	0.1091***
	(6.23)
FAR ²	-0.1664***
	(-2.07)
Lev	-0.1576***
	(-20.57)
Lnsize	0.0187***
	(21.59)
Growth	0.1724***
	(12.73)
Years	Yes
Industries	Yes
AdjR ²	0.0647
F	96.26***
NT	12027

Table 5: ROA sample regression results.

Note: The numbers in parentheses are t values, **, and *** indicate significant at the 5% and 1% levels. It can be seen from the established regression results that the FAR financial asset holding ratio FAR and ROA return on total assets ROA are significantly positively correlated at the level of 1%; the FAR financial asset holding ratio and the square term of ROA are at the level of 5%. There is a significant negative correlation with ROA. It can be shown that there is an inverted U-shaped relationship between FAR and ROA. Therefore, the estimated results of the robustness test are basically consistent with the above conclusions.

The authors declared that there is no conflict of interest.

4. Conclusion and Discussion

4.1. Analysis Conclusion

Finally, this paper can draw the conclusion that the degree of corporate financialization is too high or too low is not conducive to the company's performance, there is an inverted U-shaped relationship between the degree of corporate financialization and the performance of listed manufacturing companies.

4.2. Policy Suggestion

First, manufacturing enterprises should curb excessive financialization, improve corporate governance, promote technological innovation, and rationally invest in financial assets. ^[7] Second, government departments should increase penalties for violations of laws and regulations, use administrative means when necessary to urge companies to return to business, avoid falling into the trap of capital seeking profits, effectively prevent and control financial risks, speed up the improvement of the financial market, and promote the supply-side reform of the financial industry. ^[8] Third, financial institutions should reasonably construct financialization risk indicators, and financial regulatory authorities should also establish a financial risk prevention mechanism, and formulate effective economic policies and rules and regulations for specific financial activities that occur in accordance with relevant market mechanisms. ^[9]

4.3. Research Limitations and Prospects

4.3.1. Research Limitations

Moderation is a vague concept, and what is moderation is what this paper does not study. This paper does not subdivide the manufacturing industry, such as into state-owned and non-state-owned enterprises.

4.3.2. Research Outlook

The specific value of "degree" of moderate financialization level is deeply studied, and the manufacturing industry is divided into state-owned enterprises and non-state-owned enterprises for detailed research.

Acknowledgement

Fund: CITIC Reform and Development Research Foundation (H21319), Mixed Ownership and Enterprise Innovation: From the Perspective of Business Environment

References

- [1] Liu Dongdong. The impact of the financialization of real enterprises on the high-quality development of enterprises [J]. Statistics and Decision-Making, 2022, (11):159-163.
- [2] Xu Yunsong, Feng Yi. Research on the Influence of Chinese Enterprises' Financialization on Industrial Investment [J]. Journal of Guizhou Normal University (Social Science Edition), 2022, (03):107-118.
- [3] Lian Yonghui, Chu Dongxiao. Research on financing sources and governance methods of corporate financialization [J]. Shanghai Finance, 2020, (12): 19-28.
- [4] Ban Xin, Cai Wenxia. Financial supply-side structural reform Research on the Financialization of Non-financial Enterprises and Enterprise Operation Risk in the Background Based on the Empirical Evidence of Chinese Listed Companies [J]. Regional Finance Research, 2020, (06): 58-64.
- [5] Fu Wenjun. Xi Jinping's important discussion on the development of the real economy Research [J]. Shanghai Economic Research, 2020, (04): 13-23.
- [6] Hu Haifeng, Dou Bin, Wang Aiping. Corporate Financialization and Production Efficiency [J]. World Economy, 2020, 43(01): 70-96.
- [7] Xie Jiazhi, Wang Wentao, Jiang Yuan. Manufacturing Financialization, Government Control and Technological Innovation [J]. Economics Dynamics, 2014, (11): 78-88.
- [8] Liu Gang, Liang Hongbo. Research on the dilemma and governance of listed manufacturing companies from "departing from real to virtual" [J]. Finance and Finance, 2021(03):58-65.
- [9] Song Xiaoyan. On the Construction of an Effective Financial Regulatory System [J]. East Law, 2020, (02): 103-120.