

# Does corporate financialization affect the growth of main business? An empirical study of Chinese A-share non-financial listed companies

Jundong Chen<sup>1</sup>, Biao Zhong<sup>2\*</sup>

1.School of Management, Beijing Normal University, Zhuhai 519087, Guangdong, China.  
E-mail: 605971722@qq.com

2.Institute of Advanced Studies in Humanities and Social Sciences, Zhuhai 519087, Guangdong, China

---

**Abstract:** Financialization of non-financial companies, referring to investing more on financial assets instead of main business, is a noticeable trend among Chinese listed companies, especially in recent years. Based on the annual panel data of Chinese A-share non-financial listed companies on the Shanghai Stock Exchange and the Shenzhen Stock Exchange from 2014 to 2019, this article analyzes the relationship between financialization and the growth of main business. Results suggest that financialization of non-financial companies has a “crowding-out effect” on industrial reinvestment, and state-owned enterprises, compared with private listed companies, are less likely to be affected by the increase of financial assets.

**Keywords:** financialization; non-financial listed companies; main business; growth; crowding-out effect

---

## 1. Introduction

Financialization stipulates that listed companies are allowed to selectively purchase financial products and estate property with higher safety and liquidity to make full use of their idle funds, including fixed-income national debt and financial products of commercial banks. The new issued policies have been welcomed by most non-financial listed companies. According to the national statistics, the average share of financial assets held by non-financial listed companies in China shows a rapid upward trend. On the one hand, the previous policies suppressed the enthusiasm of companies for financial products; on the other hand, it is a practical need that some companies have difficulty in obtaining a higher loan amount and investing more in financial products can be a way for them to revitalize the cash flow.

## 2. Literature review

Due to the sequence of research time and financialization, the definition of financialization of non-financial companies varies at home and abroad. Krippner pointed out that financialization is an accumulation mode<sup>[1]</sup>; Orhangazi defined financialization as the continuous expansion of financial markets and the increasing importance of financial institutions<sup>[2]</sup>. Domestic scholars Cai and Ren explained financialization from two aspects, namely actions and results<sup>[3]</sup>. Chinese and foreign scholars also have conducted a lot of relevant research on the impact of financialization on non-

financial companies. Their conclusions can be divided into two categories: “crowding-out effect” and “reservoir effect”. The former refers to the fact that companies will squeeze the funds originally used for production and operation activities after focusing on investment in resource allocation. Research of Li, et al. showed that financialization has a significant negative impact on the environmental responsibilities of industrial enterprises, private enterprises and small enterprises<sup>[4]</sup>; at the same time, Xiao’s research found that corporate financialization has an inhibitory effect on the sustainable innovation of non-financial listed companies<sup>[5]</sup>. However, the negative impact of financialization on non-financial companies will eventually spread to the whole macro-economy. Research of Tomaskovic-Devey, et al. showed that the investment of non-financial companies is transferred to financial instruments instead of production, reducing the gross value added of non-financial economy<sup>[6]</sup>.

Although there are more scholars who support the “crowding-out effect” in academic communities, some scholars still believe that financialization can bring better development to companies. For example, Guo’s research showed that financialization does not just have a “crowding-out effect” on companies, but operating performance and financing constraints will affect the effect of financialization<sup>[7]</sup>. The research of Zhang and Luo also indicated that private companies are more subject to financing constraints and it is difficult for them to expand production under the premise of financing difficulties; however, after the financialization of private companies, the lowering of financing threshold and the improvement of financing efficiency have greatly accelerated the process of large-scale production and improved the production efficiency of companies<sup>[8]</sup>.

Zhu’s research found that the growth rate of main business is the factor for evaluating financial performance of listed companies<sup>[9]</sup>, suggesting that the main business plays an important role in the operation and management of companies. The research results of Lei made it clear that financialization will cause crowding and erosion to the special assets (such as fixed assets and intangible assets) of companies<sup>[10]</sup>, while Xu’s research indicated that there is an intermediary effect between corporate financialization and income of main business<sup>[11]</sup>.

### **3. The theoretical basis and hypotheses**

#### **3.1 Financialization and the growth of main business**

According to the existing theories, the impact of financialization on non-financial listed companies is mainly divided into two types: one is “crowding-out effect” and the other is “reservoir effect”. Combining theory with practice, this article holds that financialization has the following effects on the growth of main business. In recent years, due to the emerging of financial products and an increasing number of species, combined with own shortcomings of real assets, companies will transfer investment from real assets to financial assets, resulting in a decrease of investment in main business, such as innovation expenditure. Based on this, the first hypothesis can be proposed that financialization has a negative impact on the growth of non-financial listed companies’ main businesses.

#### **3.2 State-owned companies, financialization and growth of the main business**

Since the Third Plenary Session of the 18th CPC Central Committee proposed to develop a mixed ownership economy, state-owned enterprises have continued to transform and actively introduced social capital and foreign capital. They are more likely to obtain long-term low-interest loans from banks. Therefore, state-owned companies do not have sufficient motivation to financialize, and financialization cannot have a great negative impact on the development of their main business. Thus, this article puts forward the second hypothesis: state-owned enterprises are less affected by financialization than non-state-owned enterprise in the growth of their main business.

### **4. Research design**

#### **4.1 Sample selection and data sources**

This article intends to select the annual data of A-share listed companies on the Shanghai Stock Exchange and the Shenzhen Stock exchange from 2014 to 2019 (the data selected from the CSMAR database), excluding samples of financial, insurance and real estate enterprises (the real estate is a highly leveraged industry) and those lacking relevant data. In order to avoid the influence of extreme values, a 1% and 99% winsorization will be carried out. In this article, Stata15 is used to analyze the data.

## 4.2 Variable definitions

(1) Level of financialization. In this article, the level of financialization is measured by the proportion of financial assets to total assets. Financial assets include transactional financial assets, derivative financial assets, net loans and advances, net available-for-sale financial assets, net held-to-maturity investments and net investment real estate.

(2) Growth of main business is measured by the growth rate, which can be expressed as:

(3) Control variables. This article also adds control variables at the financial and corporate governance levels.

(4) Adjustment variables. The nature of property right (Soe) is defined as the adjustment variable, which belongs to category variable. That is, if the listed company is a state-owned enterprise, it will be assigned a value of 1, otherwise 0.

The variables and definitions involved in this article are shown in Table 1.

**Table 1. Variable definitions**

Type	Name	Code	Definition and description
Explained variable	Growth rate of main business	Growth	Growth rate of main business = (income of main business in current period/income of main business in the same period last year - 1) * 100%
	Growth rate of total assets	Growth1	Growth rate of total assets = (amount of total assets in current period/amount of total assets in the same Period Last Year - 1) * 100%
Explanatory variable	Level of financialization	Fin	Financial assets/total assets
Adjustment variable	Nature of property right	Soe	1 for state-owned enterprises, and 0 for other enterprises

## 4.3 Constructing models

In order to verify the first hypothesis proposed in this article, the following model based on regression equation is constructed:

Here Control represents a collection of control variables. If the coefficient is negative and significant in p or t test, the first hypothesis is tenable, otherwise it is not.

## 5. Empirical analysis

### 5.1 Descriptive statistics

The descriptive statistical results of this article are shown in Table 2.

**Table 2. Descriptive statistics**

Variable name	Sample size	Average	Standard deviation	Minimum value	Maximum value
Growth	13,128	0.139	0.323	-0.513	1.726
Fin	13,128	0.0374	0.0669	0	0.378
Lev	13,128	0.421	0.195	0.0591	0.861
Roa	13,128	0.0344	0.0594	-0.261	0.188

Size	13,128	22.36	1.246	19.96	26.17
Indep	13,128	0.374	0.0530	0.333	0.571
Boardsize	13,128	2.133	0.197	1.609	2.708
Instown	13,128	0.412	0.230	0.00153	0.888
Soe = 1 (State-owned)	5334				
Soe = 0 (Non-state-owned)	7794				

It can be seen from Table 2 that the sample size of this study is 13,128 (2,188 listed companies in total), indicating that the data volume is sufficient and lays a foundation for verifying the hypotheses of this article. Secondly, the standard deviation of the growth index (the growth rate of main business income) is relatively large, with obvious gap between the maximum value and the minimum value, and the minimum value is even a “negative growth” of 50%, showing that there are great differences in the development of Chinese listed companies.

## 5.2 Correlation analysis and multicollinearity test

The correlation analysis and multicollinearity test in this article are shown in Tables 3 and 4.

**Table 3. Correlation analysis**

	Growth	Fin	Lev	Roa	Size	Indep	Boardsize	Instown
Growth	1							
Fin	-0.042***	1						
Lev	-0.016*	-0.101***	1					
Roa	0.218***	0.017**	-0.299***	1				
Size	0.0120	-0.047***	0.496***	0.042***	1			
Indep	-0.00100	0.015*	-0.00400	-0.032***	-0.00700	1		
Boardsize	-0.033***	-0.055***	0.148***	0.034***	0.273***	-0.548***	1	
Instown	-0.045***	0.00100	0.190***	0.116***	0.443***	-0.050***	0.211***	1

Note: \*\*\*, \*\* and \* in the table are statistically significant at 1%, 5% and 10% respectively.

**Table 4. Multicollinearity test**

Variable name	VIF value
Fin	1.11
Lev	1.69
Roa	1.20
Size	1.88

Table 3 shows that most of the variables selected in this article are statistically significant, and it can be preliminarily determined that the model constructed above is available. As can be seen from Table 4, the VIF values of all the explained variables and control variables are lower than the general standard value of 10 in academia, and there is no multicollinearity with the explanatory variables. Moreover, in Table 3, the growth of main business is highly negatively correlated with the level of financialization (significant in the statistical sense of 1%), preliminarily verifying the first hypothesis, which needs further confirmation.

## 5.3 Regression analysis

Table 5 presents the regression analysis results of this article.

**Table 5. Regression analysis**

	(1)	(2)
Variable name	Growth	Growth
Fin	-0.202*** (-4.80)	-0.275*** (-6.52)
Lev		0.146*** (8.19)
Roa		1.353*** (27.45)
Size		0.003 (0.90)
Indep		-0.174*** (-2.82)
Boardsize		-0.084*** (-4.85)

In Table 5, column (1) lists univariate regression results, and column (2) lists multivariate regression results. It can be seen that the coefficients of the explanatory variable Fin are -0.202 and -0.275, respectively. The industry fixed effect and the year fixed effect are controlled. As far as the current situation of listed companies is concerned, the main reason why managers choose financial assets is that the real investment is not ideal, and the “crowding-out effect” still dominates.

#### 5.4 The moderating effect, and difference test between groups

To verify whether the nature of property right (Soe) has a moderating effect on the negative relationship between financialization and the growth of main business, this article verifies it by grouping regression.

The regression coefficient of independent variables of non-state-owned enterprises is obviously smaller than that of state-owned enterprises. However, as mentioned above, the two groups of coefficients after grouping regression cannot be directly compared, and the difference test of coefficients between the two groups needs to be carried out. The method used in this article is the seemingly unrelated equation model, and the results are shown in Table 6 (only presenting the results of independent variables to save space).

**Table 6. Test of the seemingly unrelated regression**

Variable name	Coefficient difference	p-value
Fin	-0.197	0.050

**Table 6 shows that the difference between the regression coefficients formed by the two sets of data is -0.197, and the p value is 0.05. It can be inferred that there are significant differences between the two groups of data distinguished by the nature of property right, and their regression coefficients can also be directly compared.**

**Therefore, it can be proved that the second hypothesis is correct.**

#### 5.5 Robustness test

In order to make the results found in this article more robust, the robustness of regression analysis is also tested. The results are shown in Table 7, among which column (1) lists the regression results of single variables and column (2) lists the regression results of multiple variables. The regression coefficients of independent variable Fin are negative whether under univariate regression or multivariate regression, which is -0.311 and -0.348 respectively, and are significant at the level of 1%. These values prove that the growth rate of total assets is also negatively correlated with the level of financialization.

**Table 7. Robustness test**

	(1)	(2)
Variable name	Growth1	Growth1
Fin	-0.311*** (-8.11)	-0.348*** (-9.20)
Lev		0.054*** (3.38)
Roa		1.231*** (27.81)
Size		0.022***

According to the idea of “analyzing the upper layer” of Chen[12], this article finally chooses the industry price-earnings ratio as the instrumental variable.

## 6. Conclusion

Due to the relaxation of policies and the unsatisfactory rate of return on real investment, more and more listed companies tend to invest in financial assets, which is the change brought about by financialization to the asset allocation of companies. Regarding this, this article studies the relationship between the level of financialization and the growth of main businesses by selecting 2188 Chinese non-financial listed companies from. It has been found that corporate financialization has a “crowding-out effect” on non-financial companies, and the nature of poverty right can obviously reduce the impact of financialization on the growth of main business.

## References

- [1] Krippner GR. The financialization of the American economy (I). Ding W, Chang S, Li C, et al. (translators). *Foreign Theoretical Trends* 2008; (6): 7-15.
- [2] Orhangazi O. Financialisation and capital accumulation in the nonfinancial corporate sector: A theoretical and empirical investigation on the U.S. economy: 1973-2003. *Cambridge Journal of Economics* 2008; 32: 863-886.
- [3] Cai M, Ren S. Corporate financialization: A literature review. *Finance & Economics* 2014; (7): 41-51.
- [4] Li Z, Wang Y, Tan Y, et al. Does corporate financialization affect corporate environmental responsibility? An empirical study of China. *Sustainability* 2020; 12: 1-2.
- [5] Xiao Z, Lin L. Financialization, life cycle and persistent innovation: An empirical research based on the industrial difference. *Journal of Finance and Economics* 2019; 45(8): 43-57.
- [6] Tomaskovic-Devey D, Lin KH, Meyers N. Did financialization reduce economic growth? *Socio-Economic Review* 2015; 1-24.
- [7] Guo L. The impact of financialization of manufacturing industry on innovation investment: “Crowding-out effect” or “reservoir effect”? (in Chinese). *Modern Economic Research* 2017; (12): 49-59.
- [8] Zhang M, Luo L. Empirical study on the impact of financialization of private companies on productivity—Based on empirical analysis of Chinese A-share private listed companies (in Chinese). *Reform of Economic System* 2017; (5): 155-161.
- [9] Zhu J, Jiang W, Qin H, et al. Evaluation methods of financial performance of listed companies (in Chinese). *Statistics & Decision* 2004; (6): 26-27.
- [10] Lei X, Zhu R, Huang Y. Research on the financial degree of enterprises, its precipitating factors and economic consequences. *East China Economic Management* 2020; 34(1): 76-85.
- [11] Xu S, Pan X. Firm financialization and institutional investor behaviors. *Finance Research* 2019; (6): 59-72.
- [12] Chen Y. Logic, imagination and interpretation: The application of instrumental variables for causal inference in the social sciences. *Sociological Studies* 2012; 27(6): 192-216, 245-246.