

Original Paper

Study on the Influence of Government Key Customers on the Enterprise “from Real to Virtual”

Jiawei Xu¹

¹ College of Management, Shandong University of Technology, Zibo, China

Received: January 27, 2024

Accepted: March 12, 2024

Online Published: March 27, 2024

doi:10.22158/ibes.v6n2p66

URL: <http://dx.doi.org/10.22158/ibes.v6n2p66>

Abstract

Taking China's Shanghai and Shenzhen A-share listed companies from 2007 to 2020 as samples, this paper studies the influence of government background key customers on the financialization of real enterprises. The research finds that the government background big customers reduce the degree of financialization of real enterprises; The heterogeneity test found that, compared with state-owned enterprises, the inhibition effect of big customers with government background on the financialization of real enterprises was more significant in non-state-owned enterprises and industries with fierce competition; The mechanism test found that the government background large customers suppressed the financialization of real enterprises by easing the financing constraints and improving the net profit level. Research shows that the government, as a major customer of enterprises, is an important means to give play to the visible hand of the government, which can effectively reduce the level of financialization of real enterprises and promote high-quality economic development, and can be an important starting point for the country to prevent systemic financial risks.

Keywords

Major Government-background Customers, Financialization of real enterprises, Financing constraints, Net profit level

I. Introduction

The report of the 19th National Congress pointed out: “To build a modern economic system, we must focus on the real economy”. However, in recent years, due to the decline in the profit rate of the real industry, many real enterprises have gradually abandoned the traditional production and operation business, have been involved in the financial and real estate industry, through a large number of allocation of financial assets to obtain excess profits, making the phenomenon of “financialization” of real enterprises, but also lead to the Chinese economy showing a trend of “real to virtual” (Zhang &

Zhao, 2022). According to the statistics of the Wind database, from 2010 to 2019, the ratio of financial assets held by China's non-financial listed companies to fixed assets and the ratio of profit from financial channels to net profit showed an accelerated rise (Gu et al., 2020). Excessive financialization of real enterprises will not only squeeze the funds invested in the real assets of enterprises, but also affect the technological innovation of enterprises, which is detrimental to the long-term development of enterprises (Li & Yang, 2021). Therefore, in order to prevent excessive financialization of real enterprises, revealing the influencing factors of financialization of real enterprises has become a hot issue in academic research. Previous studies mainly focus on internal governance characteristics (Song & Lu, 2015), management characteristics (Du et al., 2019) and other micro aspects, as well as economic policies (Peng et al., 2018), monetary policies (Zheng et al., 2013), industrial policies (Xiang et al., 2013). 2020), financial regulation (Ma & Peng, 2019) and other external macro environment perspectives have been discussed, but few literatures have explored its impact on the financialization of entity enterprises from the perspective of supply chain, especially from the perspective of customers. Therefore, focusing on large clients with government background, represented by the government and state-owned enterprises, helps us to understand the impact of government intervention on the capital market and enterprise operation from a new perspective (Dou et al., 2020). Then, as a special presence in the customer group, big customers with government background represented by the government and state-owned enterprises will have an impact on the financialization of the entity enterprises and through what channels will they affect the financialization degree of the entity enterprises?

The government and state-owned enterprises are high-quality large customers with strong purchasing power, stable demand, high credit and low risk of bad debts, which can effectively reduce the default risk of enterprises, bring stable cash flow to enterprises, and help enterprises gain recognition in the capital market, thus easing the financing constraints they face (Dou et al., 2020). The easing of financing constraints can reduce the financial investment behavior under the precautionary motivation (Yang & Zhang, 2022), thus reducing the level of financialization of enterprises. Customer structure is directly related to the core sales link in the business process of enterprises (Dou et al., 2020). The stable existence of large customers with government background can expand the sales scale of enterprises, reduce the sales expenses and other expenses of enterprises, so as to improve the net profit level of entities, and thus reduce the motivation of enterprises to "chase" profits through financial channels. We will reduce the level of financialization of real enterprises.

The findings of this paper are as follows: big customers with government background effectively inhibit the financialization of real enterprises; Compared with state-owned enterprises, the inhibition effect of government-backed big customers on financialization of real enterprises is more significant in private enterprises. The degree of industry competition positively moderates the relationship between government-backed big customers and financialization of real enterprises, that is, the higher the degree of industry competition, the more government-backed big customers can inhibit the degree of financialization of real enterprises. The impact path test shows that big clients with government

background can reduce the “precautionary” motivation of enterprises by easing the financing constraints of enterprises, thus inhibiting the financialization of entity enterprises. At the same time, big customers with government background can also reduce the motivation of “profit chasing” by improving the level of net profit of enterprises, thus restraining the degree of financialization of enterprises.

The contributions of this paper are as follows: First, this paper explores its impact on corporate behavior from the perspective of supply chain, especially from the perspective of large customers with government background, and deepens the academic circle’s understanding of how government plays a role in the market economy as a customer of enterprises; Second, it enriches the relevant research on the factors affecting the financialization of entity enterprises, extends the research perspective to the enterprise supply chain level, and provides new ideas for the follow-up research. Third, it reveals the mechanism by which big customers with government background affect the financialization of real enterprises, that is, big customers with government background reduce the degree of financialization of real enterprises by easing financing constraints and improving the level of corporate profits, which provides new ideas for alleviating the “real economy from real to virtual” and promoting the high-quality development of real economy.

2. Literature Review

2.1 Large Customers with Government Background

Government customers are a special type of customer and differ in many ways from enterprise customers. The economic behaviors of large customers with government background represent the policy orientation of the country to a large extent, and while meeting the policy needs, they are inevitably affected by policy factors. Therefore, the procurement of large customers with government background is in essence a special intervention means between the market transaction behavior and the government support behavior, with both the functions of policy support and demand satisfaction, rather than a simple political connection or customer relationship (Dou Chao et al., 2020) ^[11]. Big government customers have an important impact on businesses. On the one hand, government-backed big customers have a positive impact on enterprises. Large customers with government background inhibit the transmission of supply chain default risk, thus easing the financing constraints of real enterprises (Dou et al., 2020). Mitigate risks and uncertainties faced by enterprises and reduce audit costs of enterprises (Dou et al., 2020); Significantly promote the growth of future profitability of enterprises and enhance the market’s cognition of enterprises; Improve enterprise innovation input and resource allocation, and promote the increase of total factor production rate (Zhang & Shen, 2021).

On the other hand, some scholars believe that large clients with government background also have certain negative effects. Government procurement has become an important incentive for the decline in the capacity utilization rate of enterprises (Zhang et al., 2018). Local government procurement has a significant negative correlation with enterprise innovation, which hinders the development of

enterprises (Wu & Liu, 2020).

2.2 Financialization of Real Enterprises

The financialization of real enterprises refers to the change in the relationship between non-financial enterprises and the financial market (Orhangazio, 2006). Real enterprises are investing more and more funds in the financial industry instead of the real industry, which is reflected in the increasing types and quantities of financial assets of real enterprises (Lin & Wu, 2020). At present, the academic circles believe that there may be two kinds of motives for the financialization of entity enterprises: one is the precautionary savings motive, under which the financialization of entity enterprises shows the “reservoir effect”; The other is the profit-chasing motive, under which the financialization of entity enterprises is manifested as “crowding out effect” (Wang et al., 2017). Excessive financialization of real enterprises makes the real economy lack of development vitality, which will bring adverse effects on the long-term development of enterprises and increase the probability of systemic risks (Liu, 2021). Therefore, the academic community should pay more attention to the factors affecting the financialization of entity enterprises, and provide policy ideas for preventing excessive financialization. As for the factors affecting the financialization of entity enterprises, the existing literature generally includes two aspects. On the one hand, there is the impact of macro environment. For example, economic policy uncertainty significantly inhibits the financialization trend of real enterprises (Peng et al., 2018). On the whole, the implementation of margin financing mechanism will significantly promote the financialization of real enterprises (Du & Deng, 2020). ESG performance inhibits corporate financialization through financing constraints (Pan et al., 2022). On the other hand, there are micro-level influences. For example, the shareholding of institutional investors intensifies the short-sighted behavior of management and drives the financialization of entity enterprises (Liu & Cao, 2018). Corporate social responsibility inhibits the tendency of financialization of entity enterprises (Liu et al., 2019). Equity incentive inhibits the financialization of real enterprises by reducing agency costs and easing financing constraints (Liu & Zheng, 2022), but few literatures have studied its impact on the financialization of real enterprises from the perspective of supply chain.

3. Theoretical Analysis and Research Hypothesis

3.1 Financialization of Government-backed Big Customers and Entity Enterprises

In general, large customers with government background can reduce the financialization level of entity enterprises by easing the financing constraints faced by enterprises and improving corporate profits.

First, large clients with government background can reduce the level of financialization of real enterprises by easing the financing constraints faced by enterprises. Relying on the national credit and financial power, big customers with government background have large and stable product demand and low risk advantages (Cohen & Li, 2020). Big customers with government background can bring stable government procurement revenue to enterprises, provide cash flow to maintain the normal operation of enterprises, and alleviate the financing constraints faced by enterprises. At the same time, such

customer relationship can also effectively “endorse” corporate credit, improve the capital market’s cognition of enterprises, help enterprises expand diversified financing channels, and then help enterprises obtain more financing and improve the financing constraints they face (Dou et al., 2020). Finally, the financial asset investment behavior implemented by enterprises due to “preventive” motivation will be reduced, and the financialization of real enterprises will be suppressed.

Second, large government-backed clients can reduce the level of financialization of real enterprises by increasing their net profits. Large customers with government background provide direct order support to enterprises and deliver real profits for enterprises (Li, 2015). First of all, due to the large scale of government procurement, the quotation provided by enterprises is often lower than the normal market price. However, the concentration of enterprise customers and the large procurement scale of a single customer can reduce the cost of market development and reduce various expenses, especially sales expenses, thus improving the net profit level of enterprises. Secondly, the scale of government procurement is usually large, and enterprises can make full use of their production capacity. Although the net profit per unit product is relatively low, enterprises will realize economies of scale and the overall profit level will be improved, thus easing the financialization behavior implemented by enterprises due to the pursuit of short-term profit motive. Third, backed by large customers with government background, real enterprises can be less threatened by competition and less influenced by the profit maximization motive (Wang & Zhu, 2022), which enables enterprises to focus on long-term interests rather than pursuing short-term profits, thus planning the future development of real economy and weakening the need for real enterprises to make profits through corporate financialization.

Based on the above analysis, this paper proposes hypothesis 1:

H1: Large clients with government background can effectively inhibit the level of financialization of entity enterprises.

3.2 Major Clients with Government Background, the Nature of Property Rights and Financialization of Entity Enterprises

Based on the above theoretical analysis, big customers with government background can reduce the “reservoir” motivation of enterprises by easing the financing constraints faced by enterprises, thus reducing the degree of financialization of entity enterprises. If the above theoretical logic is correct, then in enterprises with a higher degree of financing constraints, the effect of big customers with government background on reducing the financialization of real enterprises will be more effective. In this paper, the nature of property rights is used as the standard to classify the degree of corporate financing constraint. In China, it is much more difficult for private enterprises to obtain financing than state-owned enterprises (Luo & Zhen, 2008). On the one hand, compared with private enterprises, state-owned enterprises have the implicit guarantee of the government and are more likely to be favored by financial institutions (Qiang et al., 2021). On the other hand, state-owned enterprises have innate advantages in the institutional environment and receive more government support (Song et al., 2014), such as financial subsidies. Therefore, compared with state-owned enterprises, private

enterprises are troubled by problems such as difficult and expensive financing in the process of growth, and the degree of financing constraints they face is much higher than that of state-owned enterprises. Based on the above analysis, hypothesis 2 is proposed in this paper:

H2: Other things being equal, large customers with government background in private enterprises are more likely to inhibit the financialization of real enterprises than state-owned enterprises.

3.3 Big Customers with Government Background, Industry Competition and Financialization of Real Enterprises

Based on the above theoretical logic, big customers with government background can also reduce the motivation of “profit pursuit” of real enterprises by improving the net profit level of real enterprises, thus reducing the level of financialization of real enterprises. Therefore, large customers with government background can restrain their financialization level more effectively in enterprises with lower net profit level. This paper takes industry competition as the proxy variable of enterprise profit level. First of all, in a strong industry competition environment, product homogeneity is high and market development is difficult, which will affect its sales scale. At the same time, in order to develop the market, enterprises have high management, sales and other expenses, which makes it less likely for enterprises to obtain super profits (Yang et al., 2019), resulting in a decrease in the net profit level of enterprises. Secondly, high competition restricts the sales scale of enterprises, underutilization of production capacity, high fixed cost per unit product, declining gross profit of products and declining profits, which drives managers to no longer participate in the main business investment, but to rely more on financial asset allocation (Sun & Teng, 2022). Based on the above analysis, hypothesis 3 is proposed in this paper:

H3: Other things being equal, the inhibitory effect of government-backed large clients on the financialization of real enterprises is more obvious in highly competitive industries.

4. Research Design

4.1 Sample Selection and Data Sources

In this paper, the A-share listed companies in Shanghai and Shenzhen from 2007 to 2020 are selected as the research objects, and the initial samples are screened as follows: (1) ST and *ST companies are excluded; (2) Excluding listed companies in the financial and real estate industries; (3) Enterprises with missing financial data in the calculation process are excluded. After the above screening, the annual observed values of 20,228 enterprises were finally obtained. In order to overcome the influence of outliers, we winsorize all continuous variables at the 1% and 99% levels. All the data in this paper are from Guotai’an database.

4.2 Variable Definition and Measurement

4.2.1 Explained Variables

The explained variable of this paper is the financialization of the entity firm. Referring to the studies of Du and Wang (2022) and Du et al. (2019), this paper adopts the scale of financial assets (Fin) and the

interest rate earned through financial channels (Finratio) for measurement. This paper includes transactional financial assets, derivative financial assets, net loans and advances, net available-for-sale financial assets, net hold-to-maturity investment and net investment real estate into the category of financial assets. Therefore, financial Assets size (Fin) = (trading financial assets + derivative financial assets + net loans and advances + net available-for-sale financial assets + net hold-to-maturity investments + net investment real estate)/total assets. Since the two items of “held-to-maturity investment” and “available-for-sale financial assets” are no longer used in the new accounting standards in 2018, this paper will use “debt investment” to replace “held-to-maturity investment” and the sum of “other debt investment” and “investment in other equity instruments” to replace “available-for-sale financial assets” in the sample data for 2019 and 2020. $Finratio = (\text{Financial channel profit} - \text{operating profit}) / \text{operating profit}$, financial channel profit includes investment income, fair value change income and other comprehensive income loss.

4.2.2 Explanatory Variables

The explanatory variable of this paper is the government background of large customers. The data of major customers with government background used in this paper comes from the information of the top five customers disclosed in the company’s annual report. If there are state-owned enterprises and government agencies among the top five customers of the listed company, the value is 1, indicating that the listed company has major customers with government background. In addition, in order to ensure that large customers with government background can fully exert their influence, the data must meet the conditions of concentration of the top five customers greater than 1%.

4.2.3 Adjust Variables

(1) Nature of property rights (soe). For state-owned enterprises, the value is 1. For a non-state-owned enterprise, the value is 0.

(2) Industry competition (CR). CR value represents the proportion of the main business income of the top 4 companies in the industry to the main business income of the whole industry. Enterprises with CR value higher than the median are defined as high industry competition group, and enterprises with CR value lower than the median are defined as low industry competition group. If it is a high industry competition group, the value is 1. Otherwise, the value is 0.

4.2.4 Control Variables

Based on the study of Wang (2022) et al., this paper selects the following control variables: company Size; Asset-liability ratio (LEV); Return on total assets (ROA); The ability to Grow; Cash flow from operating activities (CF); Board size; Rate of operating profit change (Esurp); In addition, in order to control the influence of Year and Industry, the year and industry dummy variables are set respectively. Among them, the manufacturing industry is classified according to the second-level code, and the non-manufacturing industry is classified according to the first-level code. The main variable definitions are shown in Table 1.

Table 1. Variable Definition Table

Variable type	Variable name	symbol	Variable definition
Explained variable	Financialization of real enterprises	Fin	(Trading financial assets + derivative financial assets + net loans and advances + net available-for-sale financial assets + net hold-to-maturity investments + net investment real estate)/total assets
		Finratio	(Profit from financial channels - Operating profit)/Operating profit
			(Financial channel profit = investment income + fair value change income + other comprehensive income loss)
Explanatory variable	Big client with government background	Gov	Gov: dummy variable, which is 1 if the company's top five customers have government background (including party, government, military departments, government institutions and state-owned enterprises at all levels), and 0 if not
		Size	The natural log of total assets at the end of the period
		LEV	Total ending liabilities/Total ending assets
		ROA	Average balance of ending net profit/total assets
Control variable	Cash flow from operating activities	Grow	Annual change in operating income/previous year's operating income
		CF	Net cash flows from operating activities/total assets
		Board	The natural logarithm of the number of board members
		Esurp	(Current Year operating profit - last year operating profit)/ Last year operating profit
		Soe	If the listed company is state-owned, Soe=1, otherwise Soe=0

Industry competition	CR	Calculate the proportion of the main business income of the top 4 largest companies in the industry to the main business income of the whole industry, greater than the median CR=1, otherwise CR=0
Asset turnover rate	Turnover	Sales revenue/Average total assets
Proportion of independent directors	Indep	Number of independent directors on the Board/total number of board members
profession	Industry	Industry dummy variable
year	Year	Annual dummy variable

4.3 Model Construction

4.3.1 Influencing Factor Model of Financialization of Entity Enterprises

In order to empirically study the impact of large customers with government background on the financialization of entity enterprises, this paper constructs a model to test hypothesis H1:

$$Fin / Finratio = \alpha_0 + \alpha_1 * Gov + \beta * Control + \varepsilon_{it} \quad (1)$$

4.3.2 Model of Property Right Nature's Regulating Effect

In order to empirically study the moderating role of property rights nature in the relationship between the financialization of big customers with government background and entity enterprises, this paper builds a model to test hypothesis H2:

$$Fin / Finratio = \alpha_0 + \alpha_1 * Gov + \alpha_2 * Soe + \beta * Control + \varepsilon_{it} \quad (2)$$

4.3.3 Industry Competition Regulation Effect Model

In order to study the moderating effect of industry competition on the financialization relationship between big customers with government background and entity enterprises, a model is constructed to test hypothesis H3:

$$Fin / Finratio = \alpha_0 + \alpha_1 * Gov + \alpha_2 * CR + \beta * Control + \varepsilon_{it} \quad (3)$$

5. Empirical Analysis

5.1 Descriptive Statistics

Table 2 shows the descriptive statistics of the main variables. As can be seen from Table 2, the mean value of entity financialization (Fin) is 0.040, the standard deviation is 0.070, the maximum and minimum values are 0.410 and 0 respectively, the mean value of Finratio is -0.20, the standard deviation is 0.990, the maximum and minimum values are 5.580 and -1.720 respectively. It shows that the financialization degree of different entities is quite different. The descriptive statistical results of

other variables are basically consistent with other studies.

Table 2. Descriptive Statistical Results of Variables

variable	Sample	Mean	Median	Max	Min	SD
Fin	20,228	0.040	0.010	0.410	0	0.070
Finratio	20,228	-0.200	0	5.580	-1.720	0.990
Gov	20,228	0.100	0	1	0	0.300
Board	20,228	2.160	2.200	2.710	1.610	0.200
CF	20,228	0.050	0.050	0.250	-0.150	0.070
Esurp	20,228	0.070	0.120	17.660	-21.640	3.800
Grow	20,228	0.180	0.110	3.070	-0.520	0.440
Indep	20,228	0.370	0.330	0.570	0.310	0.050
LEV	20,228	0.460	0.450	0.950	0.060	0.200
ROA	20,228	0.040	0.040	0.230	-0.200	0.060
Size	20,228	22.230	22.070	26.110	19.700	1.280
Turnover	20,228	0.730	0.610	2.880	0.080	0.500
Soe	20,228	0.480	0	1	0	0.500
CR	20,228	0.690	1	1	0	0.460

5.2 Correlation Coefficient Analysis

In this paper, Pearson and Spearman coefficients were used to test the correlation of variables, and the test results were shown in Table 3. As can be seen from Table 3, the Spearman coefficients of government-backed big customer (Gov) and entity financialization (Fin/Finratio) are -0.061 and -0.09, respectively, which are significant at the 1% level. The Pearson coefficients of Gov and Fin/Finratio are -0.049 and -0.0084, respectively, which are significant with Fin at the level of 1%, indicating a significant negative correlation between gov and financialization of real enterprises, preliminarily confirming hypothesis H1. In addition, the absolute values of the correlation coefficients between most variables are less than 0.5, which basically excludes the adverse effects of multicollinearity on the regression results in this paper.

Table 3. Phase Relation Table

	Fin	Finratio	Gov	Board	CF	Esurp	Grow	Indep	LEV	ROA	Size	Turnover	Soe	CR
Fin	1	0.026***	-0.061**	-0.090**	0.0064	0.014*	-0.095**	0.053***	-0.12***	0.023***	0.028***	-0.058**	-0.069**	-0.034**

			*	*			*				*	*	*	
Finratio	0.078***	1	-0.030**	-0.038**	-0.18***	-0.17***	-0.14***	0.0015	0.058*	-0.28***	-0.069**	-0.16***	0.033***	-0.013
Gov	-0.049**	-0.0084	1	0.086***	-0.0065	-0.0049	0.014	-0.053**	0.082*	-0.026**	0.039***	-0.058**	0.098***	0.063***
Board	-0.11***	-0.020**	0.089***	1	0.053***	-0.026**	0.015*	-0.47***	0.13***	0.0068	0.22***	0.031***	0.25***	0.062***
CF	0.0041	-0.16***	-0.012	0.052***	1	0.032***	0.069***	-0.019*	-0.15***	0.41***	0.066***	0.14***	0.0015	-0.053**
Esurp	0.015*	-0.17***	0.0042	-0.0034	0.043***	1	-0.016*	0.013	0.039*	-0.16***	-0.027**	-0.0097	-0.030**	0.0069
Growth	-0.046**	-0.087**	0.0084	-0.0062	0.027***	0.016*	1	-0.0077	0.017*	0.33***	0.066***	0.20***	-0.060**	-0.030**
Independ	0.032***	0.012	-0.054**	-0.47***	-0.017*	0.0032	-0.0045	1	-0.0089	-0.033**	0.023**	-0.026**	-0.054**	-0.016*
LEV	-0.15***	0.096***	0.083***	0.14***	-0.16***	-0.0048	0.044***	-0.0020	1	-0.41***	0.38***	0.14***	0.25***	0.12***
ROA	0.038***	-0.24***	-0.018**	0.018*	0.39***	-0.029**	0.22***	-0.025**	-0.37***	1	-0.011	0.22***	-0.15***	-0.062**
Size	-0.087**	-0.067**	0.041***	0.24***	0.067***	-0.018**	0.050***	0.050***	0.37***	0.024***	1	0.033***	0.26***	0.064***
Turnover	-0.084**	-0.089**	-0.049**	0.021**	0.082***	0.011	0.11***	-0.026**	0.15***	0.16***	0.047***	1	0.025***	0.050**
Soe	-0.075**	0.041***	0.098***	0.26***	-0.0002	-0.018*	-0.039**	-0.047**	0.24***	-0.11***	0.28***	0.051***	1	0.066***

	-0.0	0.01	0.06	0.06	-0.0	0.00	-0.0	-0.0	0.1	-0.0	0.07	0.05	0.06	
CR	17*	1	3***	2***	48** *	68	18*	14*	2***	47** *	3***	9***	6***	1

***, **, * respectively represent 1%, 5%, 10% of the significance level, the same below.

5.3 Regression Analysis

5.3.1 Main Regression Analysis

Model (1) is used to analyze the relationship between government key customers and financialization of real enterprises. Table 4 shows the results of model (1) after multiple regression. As can be seen from Table 4, in the first column, the regression coefficient of government-backed big customers (Gov) and entity financialization (Fin) is -0.008, with a significant negative correlation at the level of 1%. In the second column, the regression coefficient of government-backed big customer (Gov) and entity enterprise financialization (Finratio) is -0.060, which is significantly negatively correlated at 5% level. From an economic point of view, on average, the proportion of financial assets of enterprises with large customers with government background decreases by about 0.8% and the income from financial assets decreases by about 6.0% compared with enterprises without large customers with government background, which shows that the economic implications are relatively significant. All the above results show that government big customers are negatively correlated with financialization of real enterprises, that is, government big customers inhibit financialization of real enterprises, which supports hypothesis H1.

Table 4. Regression Results of Financialization between Big Government Customers and Real Enterprises

variable	(1) Fin	(2) Finratio
Gov	-0.008*** (-5.42)	-0.060** (-2.49)
Board	-0.032*** (-10.40)	-0.016 (-0.36)
CF	-0.012 (-1.41)	-0.930*** (-8.24)
Esurp	0.000** (2.48)	-0.044*** (-29.85)
Grow	-0.006*** (-4.62)	-0.076*** (-5.11)
Indep	-0.017	0.160

	(-1.60)	(0.98)
LEV	-0.042***	0.262***
	(-12.06)	(5.95)
ROA	0.023*	-2.961***
	(1.92)	(-18.68)
Size	-0.001*	-0.066***
	(-1.75)	(-10.68)
Turnover	-0.010***	-0.112***
	(-9.22)	(-7.54)
Soe	-0.002**	0.067***
	(-1.96)	(4.54)
CR	0.001	0.005
	(1.28)	(0.34)
cons	0.161***	1.355***
	(14.25)	(7.99)
Year	YES	YES
Industry	YES	YES
N	20,228	20,228
Adj R ²	0.038	0.103

5.3.2 The Regulating Effect of Property Right Nature

Model (2) was used to analyze the moderating effect of property rights on the relationship between government-backed big customers and financialization of entity enterprises. The results are shown in Table 5. In column (1), the regression results of non-state-owned sub-samples show that the regression coefficient of government-backed big customers and financialization of entity enterprises (Fin) is -0.01, which is significant at the 1% level. The regression coefficient of Finratio between big customers with government background and real enterprises is -0.065, which is significant at 5%. However, this significant negative correlation is not reflected in state-owned samples. The regression results of state-owned samples show that the regression coefficients of big customers with government background and financialization of real enterprises (Fin/Finratio) are -0.004 and -0.036, respectively, which is not significant. Therefore, compared with state-owned enterprises, the negative correlation between big customers with government background and financialization of real enterprises in private enterprises is more significant. The above results show that enterprises with high degree of financing constraints imposed by large customers with government background can more effectively restrain the degree of financialization, which verifies the correctness of the theoretical logic of this paper and reveals the causal mechanism of large customers with government background in restraining the financialization of real enterprises.

Table 5. Regression Results of Government Major Clients, Property Rights Nature and Financialization of Real Enterprises

variable	(1)		(2)	
	Non-state sample		National sample	
	Fin	Finratio	Fin	Finratio
Gov	-0.010*** (-6.12)	-0.065** (-2.24)	-0.004 (-1.21)	-0.036 (-0.85)
Board	-0.038*** (-10.45)	0.018 (0.32)	-0.019*** (-3.60)	-0.009 (-0.14)
CF	-0.078*** (-6.57)	-1.324*** (-7.34)	0.050*** (4.12)	-0.539*** (-3.79)
Esurp	0.000** (2.08)	-0.045*** (-20.37)	0.000 (1.22)	-0.043*** (-22.21)
Grow	-0.005*** (-3.45)	-0.103*** (-4.80)	-0.007*** (-3.23)	-0.056*** (-2.70)
Indep	-0.024* (-1.94)	-0.177 (-0.82)	0.011 (0.61)	0.527** (2.05)
LEV	-0.046*** (-10.33)	0.114* (1.77)	-0.040*** (-7.57)	0.372*** (6.29)
ROA	0.023 (1.43)	-3.675*** (-13.98)	0.020 (1.20)	-2.516*** (-12.86)
Size	-0.001*** (-2.58)	-0.060*** (-7.44)	0.001 (1.09)	-0.062*** (-6.49)
Turnover	-0.005*** (-3.93)	-0.085*** (-4.29)	-0.017*** (-9.77)	-0.154*** (-6.69)
cons	0.188*** (14.86)	1.445*** (6.66)	0.089*** (3.93)	1.069*** (3.74)
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
N	10,650	10,650	9,714	9,714
Adj R ²	0.030	0.100	0.050	0.109

5.3.3 The Regulating Effect of Industry Competition

Model (3) was used to analyze the moderating effect of industry competition on the relationship between big customers with government background and financialization of entity enterprises. The results are shown in Table 6. For the group with low level of industry competition in column (1),

Fin/Finratio and Gov coefficients are not significant. As can be seen from the group with high level of industry competition in column (2), the coefficients of Fin/Finratio and Gov are both significantly negative, indicating that the higher the level of industry competition, the more obvious the inhibitory effect of big customers with government background on the financialization of entity enterprises; In highly competitive industries with low revenue and meager profits, the existence of large government-backed customers can increase the profit margin of enterprises and effectively inhibit the financialization of real enterprises. The above results show that big customers with government background can more effectively restrain the financialization level of enterprises with lower profit level, which verifies the correctness of the theoretical logic of this paper and reveals the causal mechanism of big customers with government background in inhibiting the financialization of real enterprises.

Table 6. Regression Results of Government Major Customers, Industry Competition Degree and Financialization of Entity Enterprises

variable	(1)		(2)	
	Low industry competition		High industry competition	
	Fin	Finratio	Fin	Finratio
Gov	0.000 (0.00)	-0.053 (-1.11)	-0.011*** (-6.77)	-0.063*** (-2.25)
Board	-0.013** (-2.56)	-0.002 (-0.03)	-0.040*** (-10.69)	-0.019 (-0.35)
CF	-0.009 (-0.58)	-1.047*** (-5.00)	-0.013 (-1.32)	-0.848*** (-6.34)
Esurp	0.000 (0.51)	-0.036*** (-14.04)	0.000*** (2.62)	-0.048*** (-26.71)
Grow	-0.009*** (-4.50)	-0.048* (-1.75)	-0.005*** (-2.82)	-0.085*** (-4.80)
Indep	0.004 (0.20)	0.102 (0.37)	-0.025** (-2.02)	0.207 (1.03)
LEV	-0.043*** (-7.11)	0.327*** (4.61)	-0.042*** (-9.77)	0.228*** (4.10)
ROA	0.012 (0.59)	-2.120*** (-8.67)	0.028* (1.91)	-3.438*** (-16.70)
Size	-0.001* (-1.69)	-0.057*** (-5.15)	-0.000 (-0.85)	-0.069*** (-9.37)
Turnover	-0.010*** (-5.18)	-0.163*** (-6.14)	-0.010*** (-7.86)	-0.094*** (-5.26)

cons	-0.002 (-1.20)	0.048** (1.99)	-0.002 (-1.46)	0.079*** (4.24)
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
N	6,364	6,364	13,864	13,864
Adj R ²	0.029	0.095	0.044	0.109

5.4 Robustness Test

5.4.1 Replace Explanatory Variables

Referring to Du et al. (2019)¹, this paper introduced the dumb variable of whether enterprises purchase financial assets (finratio1) as a substitute variable to measure the financialization of real enterprises, and conducted a regression again, and the regression result remained unchanged.

Table 7. Regressions Tested by Alternative Variables

variable	(1) Finratio1
Gov	-0.035*** (-3.64)
Board	-0.042*** (-2.61)
CF	-0.094** (-2.11)
Esurp	0.003*** (4.07)
Grow	-0.022*** (-3.68)
Indep	0.044 (0.78)
LEV	-0.143*** (-8.39)
ROA	-0.176*** (-3.08)
Size	0.066*** (28.36)
Turnover	0.023*** (4.47)

Soe	-0.020*** (-3.46)
CR	-0.011* (-1.89)
Cons	-0.477*** (-8.09)
Year	Yes
Industry	Yes
N	20,228
Adj R ²	0.041

5.4.2 Full Sample Regression

In the previous data, samples with concentration of less than 1% among the top five customers were excluded. In order to ensure the reliability of the results, the whole sample was used for regression. The regression results are consistent with the above.

Table 8. Full Sample Regression

variable	(1) Fin	(2) Finratio
Gov_all	-0.006*** (-3.65)	-0.042* (-1.65)
Board	-0.027*** (-7.03)	-0.110** (-1.97)
CF	0.006 (0.63)	-1.028*** (-7.33)
Esurp	0.000** (2.31)	-0.047*** (-25.67)
Grow	-0.004** (-2.45)	-0.096*** (-5.62)
Indep	-0.000 (-0.02)	0.087 (0.42)
LEV	-0.046*** (-10.60)	0.265*** (4.66)
ROA	-0.004 (-0.29)	-2.993*** (-15.45)
Size	0.001	-0.047***

	(0.93)	(-5.55)
Turnover	-0.010***	-0.119***
	(-8.01)	(-6.02)
Soe	-0.003*	0.075***
	(-1.91)	(3.80)
CR	0.001*	0.005*
	(1.28)	(0.34)
cons	0.116***	1.172***
	(7.86)	(4.95)
Year	Yes	Yes
Industry	Yes	Yes
N	20,228	20,228
Adj R ²	0.038	0.103

5.4.3 Heckman Two-stage Method

Since samples collected manually in this paper may have sample selection bias in identifying the nature of enterprises, this paper uses the Heckman model to test the possible sample selection bias.

In the first stage, Gov is used as the dependent variable to build the probit model of large customers with government background:

$$Gov = \alpha_0 + \alpha_1 * LEV + \alpha_2 * Grow + \alpha_3 * Age + \alpha_4 * Size + \alpha_5 * ROA + \varepsilon_{it} \quad (4)$$

lambda is obtained after regression with Probit model:

In the second stage, lambda was added to the original regression equation as a control variable for regression.

The results are shown in Table 9. The Lambda coefficient is significant, indicating the existence of endogeneity problems. After Lambda was added to the model regression, the Gov coefficient was still significant, indicating that the results were still significant after controlling the problem of identifying corporate nature bias, supporting hypothesis H1.

Table 9. Regression of Heckman Two-stage Method

variable	(1)	(2)
	Fin	Finratio
Gov	-0.005***	-0.043*
	(-3.52)	(-1.80)
Board	-0.025***	0.023
	(-8.21)	(0.54)
CF	-0.016*	-0.874***

	(-1.80)	(-7.82)
Esurp	0.000**	-0.046***
	(2.09)	(-29.91)
Grow	-0.006***	-0.070***
	(-4.76)	(-4.78)
Indep	-0.006	0.178
	(-0.54)	(1.13)
LEV	0.034***	0.617***
	(7.13)	(9.52)
ROA	0.056***	-3.097***
	(4.07)	(-18.22)
Size	0.001	-0.054***
	(1.35)	(-8.85)
Turnover	-0.008***	-0.094***
	(-7.73)	(-6.40)
Soe	-0.003***	0.062***
	(-2.83)	(4.28)
CR	0.002*	0.003*
	(1.86)	(2.31)
Lambda1	0.130***	0.729***
	(24.19)	(10.84)
Cons	-0.156***	-0.462**
	(-9.49)	(-2.03)
Year	Yes	Yes
Industry	Yes	Yes
N	19,791	19,791
Adj R ²	0.064	0.106

6. Further Analysis: Action Path Test

6.1 Financing Restraint Mechanism

Based on the above theoretical analysis, financing constraints play an intermediary role in the relationship between government key customers and the financialization of entity enterprises. In order to test the correctness of the above theoretical analysis, this paper empirically tests whether financing constraints play an intermediary effect. According to the study of Gu Leilei et al. (2020) [2], the calculation process of financing constraint variable FC is as follows: (1) The three variables of enterprise scale, age and cash dividend payout rate are standardized according to the year, and the virtual variable QUFC of financing constraint is determined according to the mean value of the

standardized variables. Enterprises whose average value is higher than one-third of the quantile have a lighter degree of financing constraint, and the corresponding QUFC is set at 0. Enterprises whose average value is lower than one-third of the quantile have a heavier degree of financing constraint. The corresponding QUFC is 1; (2) The Logit model is used to fit the annual probability of financing constraints of the enterprise, and it is defined as the financing constraints index FC (the value is between 0 and 1). The larger the FC is, the more serious the financing constraints of the enterprise.

$$P(QUFC = 1/Z_{i,t}) = e^{Z_{i,t}} / (1 + e^{Z_{i,t}}) \quad (5)$$

$$Z_{i,t} = \alpha_0 + \alpha_1 size_{i,t} + \alpha_2 lev_{i,t} + \alpha_3 (CASHDIV / ta)_{i,t} + \alpha_4 MB_{i,t} + \alpha_5 (NWC / ta)_{i,t} + \alpha_6 (EBIT / ta)_{i,t} \quad (6)$$

In Model (6), CASHDIV represents cash dividends declared for the year, ta represents total assets, NWC represents net working capital, and EBIT represents EBIT.

According to Wen et al., the following mediation effect model is established in this paper, and models (1), (7) and (8) are used for testing:

$$FC = \alpha_0 + \alpha_1 * Gov + \beta * Control + \varepsilon_{it} \quad (7)$$

$$Fin / Finratio = \alpha_0 + \alpha_1 * Gov + \alpha_2 * FC + \beta * Control + \varepsilon_{it} \quad (8)$$

The regression results are shown in Table 10. As can be seen from Table 10, in column (2), the coefficient of financing constraint is significantly negative, indicating that the existence of large customers with government background is conducive to alleviating financing constraint. In column (3), the coefficient of financialization of real enterprises is significantly negative and the coefficient of financing constraints is still significantly negative, indicating that financing constraints play a part of the intermediary effect in the process of large clients with government background inhibiting the financialization of real enterprises. It shows that the existence of large customers with government background can help alleviate the financing constraints of enterprises, thus reducing the “reservoir” motivation of enterprises, and thus inhibiting the financialization of entity enterprises. Different from the results obtained by the ordinary mediation three-step method, the coefficients of explanatory variables in column III are not reduced compared with those in column (1). However, according to the study of Jiang (2022), the regression of column (3) may be affected by the endogeneity of intermediary variables, so in the mediation effect, As long as financing constraints are used as the dependent variable to carry out regression with large customers with government background (column (2)), the coefficient of financing constraints is significant, which can prove that there is an intermediary effect of financing constraints.

Table 10. Regression Results of Mediating Effect Test of Financing Constraints

variable	(1)		(2)	(3)	
	Fin	Finratio	FC	Fin	Finratio
FC				-0.027*** (-6.49)	-0.426*** (-8.71)
Gov	-0.008*** (-5.45)	-0.061** (-2.52)	-0.031*** (-8.36)	-0.008*** (-5.22)	-0.069*** (-2.94)
Board	-0.031*** (-10.30)	-0.015 (-0.35)		-0.033*** (-10.63)	-0.022 (-0.52)
CF	-0.012 (-1.41)	-0.926*** (-8.25)		-0.014 (-1.57)	-0.904*** (-8.02)
Esurp	0.000** (2.25)	-0.044*** (-30.00)		0.000** (2.13)	-0.045*** (-29.72)
Grow	-0.006*** (-4.72)	-0.079*** (-5.28)	-0.022*** (-7.26)	-0.007*** (-5.37)	-0.072*** (-4.80)
Indep	-0.017 (-1.63)	0.155 (0.96)		-0.018* (-1.75)	0.100 (0.64)
LEV	-0.043*** (-12.28)	0.263*** (6.05)		-0.058*** (-14.72)	-0.009 (-0.18)
ROA	0.021* (1.77)	-2.945*** (-18.75)	0.061** (2.37)	0.006 (0.43)	-3.439*** (-20.39)
Size	-0.001 (-1.62)	-0.065*** (-10.62)	-0.169*** (-177.72)	-0.004*** (-5.30)	-0.118*** (-11.86)
Turnover	-0.009*** (-9.24)	-0.113*** (-7.62)		-0.009*** (-8.26)	-0.104*** (-7.04)
Soe	-0.002** (-2.18)	0.067*** (4.54)		-0.003** (-2.43)	0.059*** (4.05)
TOPT			0.000*** (5.30)		
MSTOCK			0.000*** (11.33)		
cons	0.160*** (14.23)	1.343*** (7.96)	4.168*** (195.83)	0.252*** (12.90)	2.878*** (10.83)
Year	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes
N	20,228	20,228	19,484	19,484	19,484

Adj R ²	0.038	0.103	0.673	0.042	0.104
--------------------	-------	-------	-------	-------	-------

On this basis, in order to enhance the credibility of the mediation effect, the sobel test was also conducted in this paper, and the statistical results showed that the Z-value was also significantly greater than the critical value of 0.97 (Gov/Fin: 3.618; Gov/Finratio: 3.826), which indicates that financing constraints are indeed an important intermediary affecting the relationship between large clients with government background and the financialization of real enterprises.

6.2 Influence Mechanism of Profit-Chasing Motivation

This paper uses “Net profit/operating income” to measure the net profit level (OPR) of enterprises. According to Wen et al., the following mediation effect model is established in this paper, and models (1), (9) and (10) are used for testing:

$$OPR = \alpha_0 + \alpha_1 * Gov + \beta * Control + \varepsilon_{it} \quad (9)$$

$$Fin / Finratio = \alpha_0 + \alpha_1 * Gov + \alpha_2 * OPR + \beta * Control + \varepsilon_{it} \quad (10)$$

The regression results are shown in Table 11. In column (2), the coefficient of net profit level is significantly positive, indicating that the existence of large customers with government background is conducive to improving the net profit level of enterprises. In column (3), the coefficient of financialization of real enterprises is still significantly negative, indicating that the level of net profit plays a part of the mediating effect in the process of large customers with government background inhibiting the financialization of real enterprises. The existence of large customers with government background helps to improve the net profit level of real enterprises, thus reducing the motivation of enterprises to “chase” short-term financial profits, and thus inhibiting the financialization of real enterprises.

Table 11. Regression Results of Intermediate Effect Test of net Profit Level

variable	(1)		(2)		(3)	
	Fin	Finratio	OPR	Fin	Finratio	
OPR				0.026***	-0.419***	
				(4.49)	(-8.76)	
Gov	-0.008***	-0.061**	0.009**	-0.009***	-0.057**	
	(-5.45)	(-2.52)	(2.56)	(-5.59)	(-2.38)	
Board	-0.031***	-0.015	0.025***	-0.032***	-0.013	
	(-10.30)	(-0.35)	(4.77)	(-10.38)	(-0.30)	
CF	-0.012	-0.926***		-0.017**	-0.844***	
	(-1.41)	(-8.25)		(-2.02)	(-7.50)	
Esurp	0.000**	-0.044***		-0.000	-0.038***	
	(2.25)	(-30.00)		(-0.82)	(-22.29)	

Grow	-0.006*** (-4.72)	-0.079*** (-5.28)		-0.007*** (-4.82)	-0.075*** (-5.07)
Indep	-0.017 (-1.63)	0.155 (0.96)		-0.016 (-1.54)	0.123 (0.76)
LEV	-0.043*** (-12.28)	0.263*** (6.05)	0.009** (2.56)	-0.040*** (-11.41)	0.220*** (5.01)
ROA	0.021* (1.77)	-2.945*** (-18.75)	0.025*** (4.77)	-0.001 (-0.07)	-2.584*** (-15.31)
Size	-0.001 (-1.62)	-0.065*** (-10.62)		-0.001** (-2.08)	-0.061*** (-9.96)
Turnover	-0.009*** (-9.24)	-0.113*** (-7.62)	-0.043*** (-21.47)	-0.008*** (-8.02)	-0.131*** (-8.62)
Soe	-0.002** (-2.18)	0.067*** (4.54)		-0.003** (-2.38)	0.071*** (4.80)
TOPT			0.001*** (15.30)		
cons	0.160*** (14.23)	1.343*** (7.96)	-0.020 (-1.64)	0.163*** (14.44)	1.301*** (7.72)
Year	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes
N	20,228	20,228	20,224	20,224	20,224
Adj R ²	0.038	0.103	0.193	0.040	0.106

7. Research Conclusions and Suggestions

Based on the sample of Shanghai and Shenzhen A-share non-financial listed companies from 2008 to 2022, this paper studies the influence of large clients with government background on the financialization of real enterprises from the perspective of the nature of clients of listed companies. It is found that there is a significant negative correlation between government background big customers and financialization of real enterprises, that is, the existence of government background big customers inhibits the development of financialization of real enterprises; Compared with non-state-owned enterprises, the inhibition effect of big customers with government background on the financialization of entity enterprises is more significant in state-owned enterprises. Moreover, among enterprises with high degree of industry competition, large customers with government background can restrain the trend of financialization of entity enterprises. Further research shows that large customers with government background inhibit the financialization of entity enterprises by easing financing constraints and improving net profit level.

Based on the conclusions of this study, the following two policy suggestions are put forward: From the perspective of the government, it is necessary to pay attention to the positive effect of the government as the enterprise customer on reducing the financialization of the entity enterprise, and give full play to the function and role of the government customer; The government can further use procurement as a means to regulate the economy. Especially for enterprises with a high degree of financialization but high development prospects, the government can improve relevant policies through government procurement to restrain the level of financialization, so that enterprises can focus on their main business and gain benefits from the real economy, thus restraining the economy from “turning from real to virtual”. From the perspective of enterprises, enterprises can actively explore the market, strive for government orders, give play to the positive role of major customers with government background, improve the level of corporate profits and financing constraints, focus on the development of the main business, and achieve high-quality development of enterprises.

Reference

- Cohen, D. A., & Li, B. (2020). Customer-base concentration, investment, and profitability: The U.S. government as a major customer. *The Accounting Review*, 95(1), 101-131. <https://doi.org/10.2308/accr-52490>
- Does political connection Exacerbate corporate financialization? Empirical evidence from Chinese private enterprises. (2022). *Journal of Hunan University (Social Sciences Edition)*, 36(02), 35-42. (in Chinese)
- Dou, C., Bai, X. J., & Chen, X. (2020). Can government-backed big clients improve the “quality” and “quantity” of private enterprise innovation? *Journal of Central University of Finance and Economics*, 2020(11), 14. (in Chinese)
- Dou, C., Wang, Q. W., & Chen, X. (2019). Can government-backed customer relationships ease the financing constraints of Private enterprises? *Journal of Finance and Economics*, 46(11), 16. (in Chinese)
- Dou, C., Yuan, M., & Chen, X. (2020). Government background and audit fees: Based on supply chain risk transmission perspective. *Accounting Research*, 2020(3), 15. (in Chinese)
- Du, Y., & Deng, X. (2019). Chinese style margin financing and corporate Financialization: A quasi-natural experiment based on batch expansion. *Finance and Trade Economics*, 41(2), 15. (in Chinese)
- Du, Y., & Wang, T. (2022). Non-ceo executive independence and financialization of real enterprises. *Journal of Shanghai University of Finance and Economics*, 24(03), 45-60+122. (in Chinese)
- Du, Y., Xie, J., & Chen, J. Y. (2019). CEO financial background and financialization of real enterprises. *China Industrial Economy*, 2019(5), 19. (in Chinese)
- Gu, L. L., Guo, J. L., & Wang, H. Y. (2020). Corporate Social Responsibility, Financing constraints and corporate financialization. *Financial Research*, 2020(2), 19. (in Chinese)

- Jiang, J. (2022). Mediating Effect and moderating Effect in Empirical study of causal Inference. *China Industrial Economy*, 2022(05), 100-120.
- Li, F. W. (2015). Play the supporting role of government procurement on the development of strategic emerging industries. *Fiscal Research*, 2015(12), 7. (in Chinese)
- Li, Z. J., & Yang, Q. P. (2021). Digital finance and corporate financialization. *Journal of Yunnan University of Finance and Economics*, 37(12), 52-70. (in Chinese)
- Lin, S. Y., & Wu, A. (2019). Internal control, corporate financialization and earnings quality: Empirical evidence from listed non-financial companies in China. *Science and Economics*, 33(01), 101-105. (in Chinese)
- Liu, H. L., & Zheng, X. B. (2022). Equity incentive, contract heterogeneity and entity financialization. *Journal of Nanjing Audit University*, 19(03), 82-92. (in Chinese)
- Liu, J. H. (2021). Research on the impact of social capital on the financialization of real enterprises. *Financial Economics*, 2021(09), 29-38. (in Chinese)
- Liu, S. W., Liu, J. Q., Yang, Y. et al. (2019). Corporate Social Responsibility and Corporate Financialization: Financial Tools or Management Tools? *Accounting Research*, 2019(9), 8. (in Chinese)
- Liu, W., & Cao, Y. Q. (2018). Do institutional investors drive the real economy “from real to virtual”. *Finance and Trade Economics*, 39(12), 15. (in Chinese)
- Luo, D., & Zhen, L. M. (2008). Private control, political relations and corporate financing constraints: Based on empirical evidence of Private listed companies in China. *Financial Research*, 2008(12), 164-178. (in Chinese)
- Ma, S. C., & Peng, Y. C. (2019). Can strengthening financial supervision promote enterprises to “move from virtual to real”—Evidence from listed companies from 2006 to 2015. *Journal of Central University of Finance and Economics*, 2019(11), 28-39. (in Chinese)
- Orhangazi, O. (2006). Financialization of the US Economy and its Effects on Capital Accumulation: A theoretical and Empirical Investigation. *University of Massachusetts Amherst*, 2006, 4-11.
- Pan, H. Y., & Zhu, Y. D. (2021). New husband. ESG performance and firm financialization: The moderating effect of both internal and external supervision. *Journal of Nanjing Audit University*, 19(02), 60-69. (in Chinese)
- Peng, Y. C., Han, X., & Li, J. J. (2018). *Economic policy uncertainty and corporate financialization*. *China Industrial Economics*, 2018(1), 19. (in Chinese)
- Qiang, H. F., Yan, H., Zhang, W. C., & Xiao, K. K. (2019). State-owned venture Capital and Corporate Financing Constraints: Is repayment counterproductive? *Journal of Finance and Economics*, 47(11), 154-169. (in Chinese)
- Song, J., & Lu, Y. (2015). U-shaped relationship between non-monetary financial assets and operating returns: Evidence from financialization of listed non-financial companies in China. *Financial Research*, 2015(6), 17. (in Chinese)

- Song, Z. J., Feng, L. M., & Tan, X. M. (2014). State-owned equity, Private entrepreneurs' political participation and corporate financing convenience: Empirical evidence from China's privately held listed companies. *Financial Research*, 2014(12), 15. (in Chinese)
- Sun, Y., & Teng, Y. K. (2022). Analysis on the relationship between green credit policy and financialization of polluting enterprises. *Journal of Southwest Petroleum University (Social Science Edition)*, 24(02), 26-34. (in Chinese)
- Wang, H. J., Cao, Y. Q., Yang, Q., & Yang, Z. (2017). Financialization of real enterprises promotes or inhibits enterprise innovation: Based on the empirical study of listed manufacturing companies in China. *Nankai Management Review*, 20(01), 155-166. (in Chinese)
- Wang, Y. P., & Zhu, X. M. (2022). Study on the governance effect of government procurement on enterprises' "transformation from real to virtual". *Fiscal Research*, 2022(01), 94-109. (in Chinese)
- Wen, Z. L., Zhang, L., Hou, J. T. et al. (2004). Mediating effect test program and its application. *Acta Psychologica Sinica*, 36(5), 614-620. (in Chinese)
- Wu, W., & Liu, Y. T. (2019). Government procurement and Enterprise innovation: Protection effect and spillover effect. *Journal of Finance and Economics*, 46(5), 20. (in Chinese)
- Xiang, H. L., Guo, D. Q., & Wu, F. (2020). Can local industrial policy control enterprises from real to virtual—China's experience from the perspective of government behavior. *International Finance Research*, 2020(08), 3-12. (in Chinese)
- Yang, X. D., Shen, Y. J., & Peng, C. C. (2019). Industry competition, executive incentive and corporate actual tax burden. *Tax Research*, 2019(01), 99-106. (in Chinese)
- Yang, X. Q., & Zhang, J. Y. (2022). Chain shareholders and corporate financialization: Inhibition or promotion. *Journal of Zhongnan University of Economics and Law*, 2022(2), 14. (in Chinese)
- Zhang, D. L., & Zhao, S. Z. (2022). Management behavior, internal and external supervision and corporate financialization. *Research on Financial and Economic Issues*, 2022(04), 121-128. (in Chinese)
- Zhang, G. S., Kuang, H. S., & Liu, Z. (2018). How does government procurement affect capacity utilization?—Empirical findings from Chinese manufacturing enterprises. *Economic Management*, 40(9), 18. (in Chinese) <https://doi.org/10.26480/icemi.02.2018.18.20>
- Zhang, Q. L., & Shen, H. T. (2021). Can big government customers improve total factor productivity? *2021(2020-11)*, 34-48. (in Chinese)
- ZHENG, G. J., Lin, D. J., & Zhang, F. D. (2013). Financial distress, hollowing out of major shareholders and the effectiveness of corporate governance: Evidence from financial data of major shareholders. *Management World*, 2013(5), 12. (in Chinese)