



# How to Balance Enterprise Financialization and Earnings Management?——From the Perspective of External Governance of Institutional Investors

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**Abstract.** The excessive financialization of real enterprises has a negative impact on enterprise innovation, unbalanced economic development and financial stability. This paper studies the tradeoff logic between corporate financialization and earnings management from the perspective of external governance of institutional investors. It is found that strategic institutional investors may reduce accrued earnings management and real activity earnings management of listed companies by allocating financial assets. In addition, strategic institutional investors are for the dual purposes of obtaining short-term earnings and restraining earnings management of listed companies, while financial institutional investors may be mainly for the purpose of obtaining short-term earnings. Further research shows that when strategic institutional investors participate in corporate governance, they can reduce the earnings management of their real activities by supervising the abnormal production activities of listed companies. The conclusion of this paper shows that the external effects of institutional investors are reflected in corporate finance and earnings management. By paying attention to institutional investors, we can give better play to their external governance effects and improve the quality of listed companies.

**Keywords:** Corporate Financialization · Earnings Management · Institutional Investors · External Governance

## 1 Introduction

Since the 1980s, the international economy has gradually shown a trend of financialization. Especially after the US subprime mortgage crisis in 2008, the excessive development of virtual economy caused by financialization was attributed to one of the important reasons of the crisis, which triggered extensive discussion and promoted the significant increase of financialization research. As an important embodiment of the micro level of economic financialization, the financialization of real enterprises is becoming more and more serious. China is in a period of economic transition, and the traditional industries are facing the problems of low level of technology, single profit and overcapacity,

which makes it difficult for the development of practical enterprises, especially traditional enterprises. On the one hand, companies use earnings management to show the appearance of stable profits and eliminate earnings fluctuations; on the other hand, many entity enterprises have entered the financial market to obtain higher returns and improve profitability by arranging financial assets. On the one hand, companies use earnings management to show the appearance of stable profits and eliminate earnings fluctuations; on the other hand, many entity enterprises have entered the financial market to obtain higher returns and improve profitability by arranging financial assets. Therefore, the real enterprises have gradually deviated from their main business, and the corporate funds have been transferred from the real economy to the virtual economy, which has given rise to the problem of economic transfer, that is, “from the entity to the virtual”.

By exploring the relationship between corporate financialization and earnings management activities of listed companies, this paper analyzes whether the behavior of enterprise allocation of financial assets will also have an impact on earnings management activities. In addition, this paper also adds the regulatory variable of institutional investors to the model in order to further identify the external governance role of institutional investors in the relationship between corporate financialization and earnings management.

## 2 Data Sources and Methods

### 2.1 Data Sources

Select all A-share listed companies in Shanghai and Shenzhen stock markets from 2014 to 2019 as primary samples, according to the following rules: (1) eliminate the sample data of listing and delisting during this period; (2) eliminate the sample data of ST, \*ST, negative assets and financial industry; (3) eliminate the sample data with missing values. All the above data are collated from CSMAR database.

### 2.2 Variable Definition

#### 2.2.1 Real Activity Earnings Management Level

This paper first calculates the abnormal production cost (AbPROD) and discretionary expenses (AbDISX) according to the disclosed financial information, and then estimates the real activity earnings management level of the enterprise by the sum of the two [1]. It is necessary to estimate the normal cost through the product cost model, expense model and real earnings management model, and then calculate the abnormal cost.

The specific models for estimating normal production costs are as follows:

$$\frac{PROD_t}{A_{t-1}} = \alpha_0 \frac{1}{A_{t-1}} + \beta_1 \frac{S_t}{A_{t-1}} + \beta_2 \frac{\Delta S_t}{A_{t-1}} + \beta_3 \frac{\Delta S_{t-1}}{A_{t-1}} + \varepsilon_t \quad (1)$$

The model regards the normal production cost as a linear function of this year's main business income and the increase of this year's main business income over the previous year, and carries on the regression by year and industry. The higher the residual estimated

by the model, the more likely the enterprise is to carry out real earnings management by expanding production.

The specific model of the estimated normal cost is as follows:

$$\frac{DISX_t}{A_{t-1}} = \alpha_0 \frac{1}{A_{t-1}} + \beta \frac{S_t}{A_{t-1}} + \varepsilon_t \quad (2)$$

The purpose of the above model is to estimate the normal expenses, which includes the sum of sales expenses, management expenses and financial expenses, and regards the normal expenses as a linear function of the main business income of the previous year. Return by year and industry.

Real earnings management model:

$$REM_t = AbPROD_t + (-1)AbDISX_t \quad (3)$$

By adding up the abnormal product costs and abnormal expenses measured by the product cost model, the real earnings management level can be obtained.

### 2.2.2 Financial Level of Enterprises

The ratio of financial assets to total assets is used to measure the financial level of enterprises [3] (Ozgur 2007, Yong 2017).

### 2.2.3 Institutional Investors

Previously, scholars have studied that institutional ownership has a significant positive impact on earnings management of listed companies [4, 6]. Compared with transactional institutional investors, stable institutional investors have intensified the negative correlation between accounting conservatism and over investment [5]. China's Securities Law stipulates that when an investor holds 5% of the issued shares of a listed company, he shall, within 3 days from the date of occurrence of this fact, make a written report to the securities regulatory authority under the State Council and the stock exchange, notify the listed company and make a public announcement, and perform the obligations stipulated by the relevant laws. Therefore, this paper classifies the sample companies whose shareholding ratio of institutional investors is greater than or equal to 5% as strategic institutional investors, otherwise they are financial investors.

### 2.2.4 Other Control Variables

The characteristic variables and governance level of the sample company are controlled [2]. Select company size (Size), asset-liability ratio (Lev), profitability (ROA), company growth (Growth), listing life (Age), board size (Directors), whether the two positions are separated (Dual), board independence (Independent), whether it is audited by the big four accounting firms (Big4), and the nature of property rights (SOE). In addition, it also controls the industry of the sample company and the year in which the data is selected.

### 2.2.5 Other Control Variables

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### 2.2.6 Model Building

Build a model (4) to examine the relationship between corporate financialization and real activity earnings management:

$$ERM_{i,t} = \beta_0 + \beta_1 FINRATIO_{i,t-1} + \sum Controls_{i,t-1} + \varepsilon_{i,t} \quad (4)$$

## 3 Test Results and Discussions

### 3.1 Descriptive Statistics

Tables 1 show the descriptive statistical results of the main variables in this paper. It can be seen that the maximum of corporate financialization (Finratio) is more than 0.8. The minimum is 0, and the average value is less than 0.05. it shows that as far as non-financial listed companies are concerned, their financialization level is still at a low level. The maximum real activity earnings management (ERM) is 3.171 and the minimum is -10.335, indicating that there are great differences in real activity earnings management among the sample companies. In addition, with regard to the control variables, the maximum Lev of the sample company is more than 8 and the minimum is less than 0.01. on the whole, the financial leverage of the sample company varies greatly; the standard deviation of the size and listing years (Size, Age) of the sample company is more than 1, and the standard deviation of the Growth of the sample company is more than 5, and the growth of the company varies greatly. The average audit performance (Big4) of the sample company is about 0.055, and the proportion of the four audit samples in the sample is at a low level, and the standard deviations of the integration of the two positions, the size of the board of directors and independent directors (Dual, Directors, Independent) of the sample company are all less than 0.5, indicating that the differences among all the sample companies are small. The extreme value of earnings (ROA) of the sample company varies greatly, but the standard deviation is very small, indicating that the extreme value of the sample company is very different, but the overall income difference is not big.

### 3.2 Return to the Benchmark of Real Activity Earnings Management

Table 2 reports the regression results of corporate financialization (Finratio) to real activity earnings management (ERM). In (1) in the full sample regression results, the coefficient of enterprise financialization is -0.0707, but it is not statistically significant; in (2) the regression results of strategic investors, the enterprise financialization coefficient is -0.2212, which is significant at the statistical level of 5%. In the regression results

**Table 1.** Descriptive statistics of earnings management of real activities

Variables	Obs	Mean	Std. Dev.	Min	Max
ERM	10024	0.000	0.247	−10.335	3.171
Finratio	3240	0.041	0.081	0.000	0.839
Lev	10024	0.431	0.227	0.008	8.009
Size	10024	22.408	1.297	18.491	28.636
Growth	10024	0.355	4.991	−1.309	429.036
Big4	10024	0.055	0.229	0.000	1.000
Dual	10024	0.273	0.445	0.000	1.000
Directors	10023	2.117	0.199	1.099	2.996
Independent	10023	0.377	0.057	0.200	0.800
ROA	10024	0.031	0.104	−3.911	0.526
SOE	10024	0.351	0.477	0.000	1.000
Age	10024	13.396	7.470	1.781	29.481

**Table 2.** Descriptive statistics of earnings management of real activities

	(1) Full sample	(2) Strategic Investors	(3) Financial investors
Finratio	−0.0707 (−1.19)	−0.2212** (−2.01)	0.0222 (0.32)
Size	0.0071* (1.69)	0.0321*** (4.94)	0.0022 (0.32)
Lev	−0.0085 (−0.21)	−0.1357*** (−2.66)	0.0624 (1.38)
ROA	−0.4262*** (−4.72)	−0.9865*** (−5.49)	−0.2188*** (−2.87)
Growth	−0.0355* (−1.81)	−0.0193 (−1.43)	−0.0484 (−1.62)
Age	0.0012 (1.53)	−0.0009 (−0.96)	0.0021** (1.98)
Directors	−0.0577 (−1.43)	−0.0496 (−1.54)	−0.0446 (−0.74)
Dual	−0.0134 (−1.23)	−0.0072 (−0.46)	−0.0188 (−1.24)
Independent	0.0245 (0.25)	−0.0722 (−.70)	0.0906 (0.53)

(continued)

**Table 2.** (continued)

	(1)	(2)	(3)
	Full sample	Strategic Investors	Financial investors
Big4	-0.1082*** (-3.26)	-0.0702*** (-3.91)	-0.1605*** (-2.74)
SOE	0.0342*** (3.19)	0.0124 (0.90)	0.0499*** (2.87)
Constant	-0.0264 (-0.20)	-0.4602*** (-3.04)	-0.0091 (-0.05)
Industry & Year	Yes	Yes	Yes
Adj. R <sup>2</sup>	0.2051	0.1793	0.2717
F-test	3.1467	4.3365	2.8592

of (3) financial investors, the enterprise financialization coefficient is 0.0222, which is not statistically significant. This shows that only strategic institutional investors whose shareholding ratio is greater than or equal to 5% can reduce the real activity earnings management of listed companies by allocating financial assets. It may mean that when strategic institutional investors participate in corporate governance, on the one hand, in order to obtain income, they may tend to urge listed companies to allocate financial assets, and on the other hand, they will supervise the operating activities of listed companies. Restrain it from conducting earnings management through high-cost real activities.

## 4 Further Inspection

Table 3 reports the regression results of corporate financialization (Finratio) to abnormal costs (AbPROD). In (1) in the full sample regression results, the coefficient of enterprise financialization is -0.0591, but it is not statistically significant; in (2) the regression results of strategic investors, the enterprise financialization coefficient is -0.1425, which is significant at the statistical level of 5%. In the regression results of financial investors, the enterprise financialization coefficient is -0.0005, which is not statistically significant. This shows that only when the proportion of institutional investors is greater than or equal to 5% can strategic institutional investors reduce their real activity earnings management by supervising the abnormal production activities of listed companies when they participate in corporate governance. One of the possible methods is to allocate financial assets.

**Table 3.** Descriptive statistics of earnings management of real activities

	(1)	(2)	(3)
	Full sample	Strategic Investors	Financial investors
Finratio	−0.0591 (−1.57)	−0.1425** (−2.13)	0.0005 (0.01)
Size	0.0095*** (3.25)	0.0259*** (5.44)	0.0055 (1.29)
Lev	0.0196 (0.73)	−0.0473 (−1.30)	0.0505* (1.72)
ROA	−0.3821*** (−5.09)	−0.8481*** (−5.96)	−0.2193*** (−3.70)
Growth	−0.0002 (−0.03)	−0.0020 (−0.48)	0.0015 (0.11)
Age	0.0005 (1.12)	−0.0008 (−1.30)	0.0014** (2.27)
Directors	−0.0435** (−2.01)	−0.0435** (−2.03)	−0.0343 (−0.97)
Dual	−0.0091 (−1.27)	−0.0130 (−1.19)	−0.0100 (−1.05)
Independent	−0.0476 (−0.72)	−0.1164 (−1.63)	0.0163 (0.14)
Big4	−0.0613*** (−4.56)	−0.0543*** (−4.67)	−0.0820*** (−3.14)
SOE	0.0243*** (3.34)	0.0056 (0.59)	0.0297*** (3.20)
Constant	−0.0950 (−1.16)	−0.3703*** (−3.46)	−0.0636 (−0.55)
Industry & Year	Yes	Yes	Yes
Adj. R <sup>2</sup>	0.0681	0.1425	0.0660
F-test	4.9536	6.0902	3.5690

## 5 Conclusion

After analyzing the statistical data and empirical facts by constructing the above model, it is found that:

- (1) Only strategic institutional investors can reduce the real activity earnings management of listed companies by allocating financial assets.
- (2) When strategic institutional investors participate in corporate governance, they can reduce the earnings management of their real activities by supervising the abnormal

production activities of listed companies, and one of the possible ways is to allocate financial assets.

The conclusion of this paper provides new evidence for listed corporate governance, and its policy implication is that in the action to improve the quality of listed companies in China, the tradeoff between corporate financialization and earnings management can take the external governance effects of institutional investors into consideration, which is conducive to balancing the interests of all parties, promoting listed companies to improve corporate governance and improving corporate quality.

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