

The Impact of Retail Investor Attention on Earnings Management: Evidence from China

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Abstract. The paper investigates the impact of change in retail investor attention on earnings management in this article. The result indicates that retail investor attention is positively correlated with earnings management. The relation with the two variables is tenable to multiple panel regressions containing alternative measurements and grouped regression models. The further analysis illustrates the positive impact of the increase in retail investor attention on earnings management is more salient in firms who are not state-owned, with small capitalization and audited by non-Big4. Moreover, it indicates that an increase in retail investor attention leads to more active earnings management in firms with less supervision and exposure. Finally, it leads to conclusion that retail investor attention appears to motivate earnings management.

Keywords: Retail investor attention; earnings management; corporate governance; China.

1. Introduction

The impact of retail investor attention is an important topic in the financial sector and is receiving growing attention nowadays. For retail investor attention, Kahneman, in 1973, first stated that attention is a scarce cognitive resource for investors [1]. When a large amount of information is involved, investors need to process the information before making decisions. Yet, they cannot fully grasp all related information due to the incompleteness of information [2]. A large amount of other literature has studied the role of retail investor attention on various aspects, such as stock liquidity [3], stock price crash risk [4], index returns [5], and IPO valuation [6]. Unlike these prior studies, we will study the impact of retail investor attention on a firm's earnings management.

Speak of earnings management, a generally accepted definition of earnings management, uses different accounting policies to control the contents disclosed in the company's financial report to maximize management's self-interest or the company's stock price without violating GAAP [7]. Earnings management can affect investors' understanding and expectation of accounting earnings and subsequent investment decisions, and then changes the distribution pattern of relevant interests and the efficiency of capital market resource allocation [8]. Therefore, the study of earnings management is of paramount importance. Prior studies have explored the determinants affecting earnings management, including CEO incentives [9], audit quality [10], import relief investigations [11], analyst coverage [12], and corporate R&D activities [13]. While for the relationship between earnings management and investor attention, prior studies were basically about the impact of institutional investor attention on earnings management since institutional investors have more resources and ways to influence the management decisions of target companies [14]. But recently, researchers have found that retail investors can also significantly impact a firm's earnings management. The strengthening of retail investor attention and increased cognition of earnings information can form a "governance effect" on earnings management behavior [15]. On the other

hand, listed companies may cater to retail investors to meet their expectations [16, 17]. Therefore, in this paper, we will examine the impact of retail investor attention on earnings management.

Indications show that the China A-Shares market is gradually becoming one of the most attractive stock markets that always catch capital's attention worldwide. China has been the world's second-largest economy since 2010 and, at that time, had a total GDP of 4.98 trillion US dollars, and the economy was still developing at an increasing rate [18]. China is playing a crucial role in the world economy and globally attracts more attention from investors. Furthermore, we selected China's stock market as the object of study because the China A-Shares market has a unique feature compared with other mature capital markets. Since over 80% of the trading volume was contributed by retail investors, retail investors' dominance has a profound impact on market movement [19]. Therefore, to seek how retail investor attention will affect earnings management, the China A-Shares market is the most suitable candidate in our list.

We explore this field by researching the effect of the increase in retail investor attention on earnings management by using the data from CSMAR in China, focused on listing companies in A-Share. We find retail investor attention is positively correlated with earnings management. The relation with the two variables is tenable to multiple panel regressions containing alternative measurements and grouped regression models. The further analysis illustrates the positive impact of the increase in retail investor attention on earnings management is more salient in firms who are not state-owned, with small capitalization and audited by non-Big4. Moreover, it indicates that an increase in retail investor attention leads to more active earnings management in firms with less supervision and exposure.

The study contributes to contemporary literature in four ways. First, the study examines how retail investor attention impacts earnings management. Our findings support that an increase in retail investor attention will positively affect earnings management, which is the difference from existing findings that investor distraction will motivate earnings management [20]. It brings a new possibility that under certain circumstances, where firms confront less oversight, concentrated investor attention will also motivate earnings management. In this aspect, we believe our research provides a meaningful piece to investor attention and corporate accrual management.

Second, the research also extends current literature, revealing new factors and determinants that affect earnings management. For example, in the group regression process, we find firms' capitalization, belongings, and auditing conditions all deflect earnings management given the same retail investor attention. Generally, the more supervision the firm received, the more exposure to the public, less flexibility could be in their accruals.

Third, our study contributes to the adaptiveness of retail investor attention impacting earnings management. The extant literature exclusively focused on investor attention and earnings management interactions in developed countries where financial business prevails. Our research collects the data from CSMAR in China, explores the relationship between listing firms' corporate management and retail investor market in such emerging economies, which broadens the scope in financial markets in developing countries.

Finally, the study offers some insight for both financial regulators and retail investors. An increase in retail investor attention will motivate earnings management, especially in non-stated owned firms with small-cap, and firms not audited by Big-4. It indicates that regulators should be wary about the change in financial statements from some specific firms and be more judgmental to firms' accounting department. Moreover, retail investors should also be precautious on those firms with increasing retail investor attention. It is plausible for them to doubt the authenticity and fidelity of the financial report post by firms.

The remainder of the paper is organized as below. We set our hypotheses in Section II. Section III is for data and methodology, including sample, data source, and research design. Section IV describes empirical results, which cover descriptive statistics, correlation analysis, baseline results, additional analysis, and robustness checks. Section V concludes the paper and references, and the appendix is listed in the end.

2. Hypotheses development

There are two different views on the effect of retail investor attention on earnings management. One view is that high retail investor attention may reduce earnings management. Scholars like Hirshleifer & Teoh stated that investor attention could reduce the information asymmetry between investors and management [21], which reduced the room for management to manipulate earnings and attracted more attention from external supervisory forces, thus reducing the motive of earnings management [15]. Therefore, we propose the first hypothesis for the effect of retail investor attention on earnings management:

H1a: Retail investor attention reduces a firm's earnings management, other things being equal.

On the other hand, some scholars have found that when firms make dividend policies, they may cater to the demands expressed by investors on network platforms [16]. When firms have financing needs or internal transaction needs, they may adopt earnings management to meet investors' attention and concern on firms' performance [17]. Therefore, the increased retail investor attention due largely to the increase in information channels nowadays [16] may facilitate firms' decision of catering to this kind of attention by implementing earnings management to adjust the firm's short-term performance. Based on the above analysis, the second hypothesis of this paper is as follows:

H1b: Retail investor attention increases a firm's earnings management, other things being equal.

3. Research design

3.1 Construction of sample

All the data in this article come from China Stock Market Accounting Research (CSMAR) from 2011 to 2019, and the research objects are A-share listed companies in China. We collect 19,776 samples, and these industries are different, such as pharmaceutical manufacturing, real estate, retailing, etc. And we get rid of financial enterprises and ST companies since the financial reports of financial companies are different from other enterprises.

3.2 Models

The hypotheses to be tested are that earnings management (EM_MJones) is a function of retail investor attention ($SVI1$) and other control variables. The basic empirical model employed is:

$$EM_MJones_{t+1} = \beta_0 + \beta_1 SVI1 + \sum_{q=2}^m \beta_q (qth\ ControlVariable_t) + \varepsilon_t \quad (1)$$

where β_i represents regression coefficients; ε_t is an error term; Control Variable contains *size*, *age*, *BM*, *Roa*, *Ret*, *Lev*, *Growth*.

3.3 Variables

(1) Dependent variable: earnings management

Following prior studies of Dechow et al. [21], this paper employs the Modified Jones model to measure the level of earnings management of listed companies in each year during the observation period. Details are as follows:

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_0 \frac{1}{A_{i,t-1}} + \beta_1 \frac{\Delta REV_{i,t}}{A_{i,t-1}} + \beta_2 \left(\frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \quad (2)$$

$$NDA_{i,t} = \hat{\beta}_0 \frac{1}{A_{i,t-1}} + \hat{\beta}_1 \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} + \hat{\beta}_2 \left(\frac{PPE_{i,t}}{A_{i,t-1}} \right) \quad (3)$$

$$DA_{i,t} = \frac{TA_{i,t}}{A_{i,t-1}} - NDA_{i,t} \quad (4)$$

Where the subscript i refers to data of the i^{th} sample firm and subscript t refers to data collected in year t , total accrued profit $TA_{i,t}$ is the difference between operating profit and net cash flow from operating activities, $NDA_{i,t}$ is non-discretionary accruals, $DA_{i,t}$ is discretionary accruals, $\Delta REV_{i,t}$ is revenues in year t less revenues in year $t-1$ scaled by total assets at $t-1$, $\Delta REC_{i,t}$ is net receivables in year t less net receivables in year $t-1$ scaled by total assets at $t-1$, $PPE_{i,t}$ is gross property plant and equipment in year t scaled by total assets at $t-1$, $A_{i,t-1}$ is total assets for the i^{th} sample firm in year $t-1$.

First, we use Equation (2), which is an industry-year dual fixed effect panel model, to generate the regression coefficient $\beta_0, \beta_1, \beta_2$ into Equation (3) to calculate the corresponding $NDA_{i,t}$, then we put it into Equation (4) and get the discretionary accruals $DA_{i,t}$, and here we take the absolute value of $DA_{i,t}$ to measure the company's earnings management EM_MJones , the larger the EM_MJones is, the higher the company's earnings management level will be.

For the robustness test, following prior studies of Dechow and Dichev [22], we use the working capital accruals to make linear regression for the cash flows from operating activities of the lagging period, current period, and future period.

$$\frac{WCA_{i,t}}{A_{i,t}} = \beta_0 + \beta_1 \frac{CFO_{i,t-1}}{A_{i,t}} + \beta_2 \frac{CFO_{i,t}}{A_{i,t}} + \beta_3 \frac{CFO_{i,t+1}}{A_{i,t}} + \varepsilon_{i,t} \quad (5)$$

Where the subscript i refers to data of the i^{th} sample firm and subscript t refers to data collected in year t , working capital accruals $WCA_{i,t}$ is calculated by a change in accounts receivable plus the change in inventory minus change in accounts payable minus change in tax payable plus the change in other current assets between year $t-1$ and t , CFO is net cash flow from operations, $A_{i,t-1}$ is total assets for the i^{th} sample firm in year $t-1$, $\varepsilon_{i,t}$ is residuals, and here we take the absolute value of residuals to get EM_DD , the greater the absolute value of residuals EM_DD , the greater the space of earnings management, and the lower the quality of accounting information.

(2) Test variable: retail investor attention

For the measure of retail investor attention, scholars usually describe retail investor attention through the information available to investors or investors' online searching behavior. For example, some studies use media report frequency [23], interaction data of listed companies' official microblogs [24], the search index of search engines [25, 26], and the data of financial forum posts and comments [16].

In this paper, we use Baidu Index to measure retail investor attention. If the netizen searches information of a certain stock in Baidu, it shows that he/she pays close attention to that listed company. Therefore, we use a crawler to get the data from the website of the Baidu Index [27]. Then we construct SVI_code to be the search values when using the stock code as the keyword, we take the logarithm of SVI_code to get $SVI1$. We construct SVI_all to be the sum of search values when using stock code, company abbreviation, full company name, etc. as keywords, we take the logarithm of SVI_all to get $SVI2$ for robustness test.

3.4 Control variables

There are a few control variables, which can affect retail investor attention. $SVI1$ is a variable that means retail investor attention. Investor attention is related to these control variables. *Size* means the natural logarithm of the book value of total assets in year t . *Age* means the year established by companies. *BM* is measured as the book value of equity divided by the market value of equity in year t . *Roa* is defined as net profit divided by the book value of total assets in year t . Hutton et al. [28] show that financial leverage and operating performance are negatively related to crash risk. As Hutton et al. find a positive association between earnings management and future crash risk, we control abnormal accruals, a proxy for earnings management [28]. *Ret* calculated as the arithmetic average

of firm-specific weekly returns in year t . We control for financial leverage Lev calculated by the book value of total debt divided by the book value of total assets in year t . $Growth$ means the increased percentage of sales growth in year t .

Table 1. Control variables

Control variables	Definition
<i>Size</i>	The natural logarithm of the book value of total assets in year t
<i>Age</i>	Years of company
<i>BM</i>	Book-to-market ratio, calculated by the book value of equity divided by the market value of equity in year t
<i>Roa</i>	Return on assets, calculated by net profit divided by the book value of total assets in year t
<i>Ret</i>	The mean of firm-specific weekly returns over the fiscal year t
<i>Lev</i>	Firm financial leverage, calculated by the book value of total debt divided by the book value of total assets in year t
<i>Growth</i>	The increased percentage of sales growth in year t

4. Empirical analyses

Table 2. Descriptive statistics

VarName	Obs	Mean	SD	P25	Median	P75
<i>EM_MJones</i>	19684	0.070	0.073	0.021	0.048	0.091
<i>SVI1</i>	19773	5.948	0.574	5.524	5.879	6.317
<i>Size</i>	19776	22.172	1.296	21.234	22.000	22.922
<i>Age</i>	19772	2.843	0.352	2.639	2.890	3.091
<i>BM</i>	19276	0.629	0.249	0.435	0.632	0.820
<i>Roa</i>	19776	0.036	0.056	0.013	0.034	0.062
<i>Ret</i>	16430	-0.087	0.432	-0.376	-0.087	0.199
<i>Lev</i>	19776	0.432	0.206	0.268	0.427	0.589
<i>Growth</i>	19773	0.177	0.426	-0.021	0.105	0.262

This table reports descriptive statistics on retail investor attention, earning management, and other control variables for the sample. It mainly shows the relationship among mean, median, and standard deviation for the earning management. All variables are defined in the Appendix.

Table II gives out the descriptive statistics of the variables utilized in this analysis. The most important data we need to notice is the standard deviation of the earning management, which is 0.073. This number is relatively low, so that we can analyze that the numbers in our sample are close to the average number, which means the centrifugal value wouldn't seriously impact our test. Furthermore, in the sample distribution, the average value is greater than the median and is farther away from the minimum value. This circumstance is because there are a small number of companies that have perfect earning management performance, whereas the rest of the small-cap firms cannot do well.

In Table III, after calculating the Pearson and Spearman correlation coefficient between variables, the result indicates that earning management is significantly and positively correlated with the retail investor attention. The correlation between the size and the book-to-market ratio is higher than other correlations between any two independent variables. We compute the variance inflation factor, and the number is 1.49, which we can conclude that multicollinearity cannot be a serious problem to our study.

Table 3. Correlation analysis

	<i>EM_MJones</i>	<i>SVI1</i>	<i>Size</i>	<i>Age</i>	<i>BM</i>	<i>Roa</i>	<i>Ret</i>	<i>Lev</i>	<i>Growth</i>
<i>EM_MJones</i>	1	0.056***	-0.079***	-0.010	-0.086***	0.029***	-0.017**	0.029***	0.051***
<i>SVI1</i>	0.051***	1	0.255***	-0.087***	-0.101***	-0.112***	0.194***	0.196***	-0.051***
<i>Size</i>	-0.079***	0.309***	1	0.157***	0.587***	-0.052***	0.017**	0.493***	0.018**
<i>Age</i>	0.002	-0.055***	0.130***	1	0.073***	-0.081***	0.074***	0.131***	-0.072***
<i>BM</i>	-0.083***	-0.090***	0.594***	0.047***	1	-0.232***	-0.221***	0.409***	-0.019**
<i>Roa</i>	-0.041***	-0.079***	-0.017**	-0.077***	-0.176***	1	0.016**	-0.410***	0.282***
<i>Ret</i>	-0.021***	0.188***	0.021***	0.096***	-0.235***	0.025***	1	0.044***	-0.039***
<i>Lev</i>	0.052***	0.198***	0.487***	0.152***	0.399***	-0.357***	0.052***	1	0.028***
<i>Growth</i>	0.141***	-0.010	0.008	-0.020**	0.001	0.176***	0.005	0.049***	1

This table reports the correlation analysis between each variable, including retail investor attention and earning management, and shows if the correlation is significant or not. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 4. Univariate analysis

Variables	<i>Low Attention (1)</i>	<i>High Attention (2)</i>	<i>Difference (1)-(2)</i>	<i>t-Value (1)-(2)</i>
<i>EM_MJones</i>	0.0660	0.0730	-0.00700	-6.618***
<i>Size</i>	21.85	22.50	-0.648	-36.334***
<i>Age</i>	2.844	2.843	0.00200	0.323
<i>BM</i>	0.648	0.610	0.0380	10.747***
<i>Roa</i>	0.0390	0.0340	0.00500	6.819***
<i>Ret</i>	-0.170	-0.0180	-0.152	-22.757***
<i>Lev</i>	0.391	0.474	-0.0830	-29.112***
<i>Growth</i>	0.178	0.177	0.00100	0.117

This table mainly reports the difference in the degree of retail investor attention for earning management. T-value is given in the parenthesis. Whether there is a significant difference between high attention and low attention for earning management or not can be evaluated by the difference of t-Value.

Table IV shows the univariate test on the variables that we use in this analysis. We aim to see a significant difference between the two degrees of attention for earning management by abstracting the low attention t-value by the high attention t-Value as we are first simply calculating the difference between the two numbers. The difference between earning management and between low attention and high attention is negative, as well as the t-Value, which leads to a clear respective that there is a significant difference occurring in terms of earning management and the firm's size.

Table 5. Panel Regression

Panel regression	<i>EM_MJones</i>
<i>SVI1</i>	0.004** (2.430)
<i>Size</i>	-0.005*** (-6.053)
<i>Age</i>	0.000 (0.127)
<i>BM</i>	-0.018*** (-4.599)
<i>Roa</i>	-0.068*** (-3.483)
<i>Ret</i>	-0.004** (-2.124)
<i>Lev</i>	0.019*** (4.597)
<i>Growth</i>	0.023*** (9.928)
_cons	0.169*** (11.552)
Year	Yes
Industry	Yes
N	15958
r2_a	0.080

Table V shows the result from the panel regression of the impact of the stock searching index on earnings management. The dependent variable is *EM_MJones*, and the test variable is *SVI1*. Column 1 contains the results for the regression with the full sample adjusted in years and various industries. Reported in brackets are t-values. T-statistics are given in the parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

The result in Table V shows *SVI1* and *EM_MJones* are positively correlated. The coefficient is significant in the 95% confidence interval, and the t value is 2.430. We speculate that with more attention from retail investors, the firm is prone to show its good performance to attract more possible investments. Therefore, it will manipulate financial statements more often to manifest a great financial condition by modified work.

Table 6. Grouped Regression

Group regression	Grouped characteristic					
	<i>small-cap</i>	<i>large-cap</i>	<i>Non-SOE</i>	<i>SOE</i>	<i>Non-Big4</i>	<i>Big4</i>
<i>SVI1</i>	0.009*** (3.252)	-0.001 (-0.286)	0.004* (1.714)	0.003 (1.433)	0.004** (2.185)	0.005 (1.112)
<i>Size</i>	-0.009*** (-3.570)	-0.004*** (-3.323)	-0.005*** (-3.539)	-0.005*** (-4.338)	-0.005*** (-4.896)	-0.009*** (-3.625)
<i>Age</i>	-0.003 (-1.225)	0.001 (0.592)	-0.003 (-1.157)	0.008*** (2.728)	-0.001 (-0.583)	0.008 (1.467)
<i>BM</i>	-0.002 (-0.275)	-0.024*** (-5.023)	-0.021*** (-3.901)	-0.012** (-2.324)	-0.019*** (-4.790)	0.021* (1.754)
<i>Roa</i>	-0.064** (-2.455)	-0.085*** (-2.863)	-0.114*** (-4.413)	0.011 (0.379)	-0.081*** (-4.014)	0.178*** (2.683)
<i>Ret</i>	0.002 (0.705)	-0.008*** (-3.241)	-0.002 (-0.730)	-0.004 (-1.261)	-0.003 (-1.518)	-0.014** (-2.267)
<i>Lev</i>	0.024*** (3.964)	0.012** (1.983)	0.021*** (3.397)	0.022*** (4.051)	0.019*** (4.375)	0.024 (1.504)
<i>Growth</i>	0.026*** (7.137)	0.020*** (6.772)	0.024*** (7.976)	0.020*** (5.411)	0.023*** (9.778)	0.016* (1.668)
<i>_cons</i>	0.211*** (4.654)	0.168*** (8.111)	0.179*** (7.808)	0.135*** (6.493)	0.167*** (10.046)	0.190*** (3.904)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
N	6873	9085	8324	7634	14766	1192
r2_a	0.081	0.086	0.093	0.071	0.080	0.097

Table VI shows the result from the panel regression of the impact of the stock searching index on earnings management in companies with different capitalization, whether it is a state-owned enterprise and those audited by Big4 or not. The dependent variable is *EM_MJones*, and the test variable is *SVI1*. Column 1, 2 contains the results for the regression with the samples from small and large capitalization firms; column 3, 4 have samples from firms who are state-owned enterprise and those who are not; column 5, 6 sampled classified by audited by Big4 or not. Reported in brackets are t-values. T-statistics are given in the parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

The result differs in different groups. For relatively small-cap firms, the coefficient between *SVI1* and *EM_MJones* is positive and significant (t = 3.252) in a 1% confidence interval compared with that in large-cap firms (t = -0.286). This is plausible because large-cap firms are exposed to the public significantly, which means a tiny change in annual statements might bring large attention and concerns. For groups with state-owned enterprise and Non-SOE, the coefficient for non-SOE is positive and

significant (with $t = 1.714$). It is presumed that state-owned firms receive more censor and governance from the government or other authorities while non-SOE is more flexible to adjust their earnings management. The result is similar in groups for Big4 and Non-Big4. A firm audited by Non-Big4 has a positive correlation between *SVI1* and *EM_MJones*. Such a result is tenable because audited by Big4 automatically brings more stringent supervision, which means investor attention will have a larger positive effect for earnings management in firms with Non-Big4.

Table 7. Robustness Test

Robustness test	Alternative measurements			
	<i>EM_MJones</i>	<i>EM_DD</i>	<i>EM_MJones</i>	<i>EM_DD</i>
<i>SVI1</i>	0.005* (1.857)	0.010*** (3.036)		
<i>SVI2</i>			0.004* (1.950)	0.007** (2.453)
<i>Size</i>	-0.010*** (-3.929)	-0.014*** (-7.262)	-0.010*** (-5.734)	-0.014*** (-6.784)
<i>Age</i>	-0.010 (-0.931)	-0.000 (-0.042)	-0.009 (-0.943)	0.001 (0.349)
<i>BM</i>	-0.011* (-1.799)	0.009 (1.052)	-0.011** (-2.121)	0.008 (0.941)
<i>Roa</i>	-0.071*** (-2.705)	-0.074** (-2.541)	-0.072*** (-4.712)	-0.086*** (-3.008)
<i>Ret</i>	-0.002 (-1.091)	0.006 (1.482)	-0.002 (-1.183)	0.006 (1.485)
<i>Lev</i>	0.024*** (2.742)	-0.003 (-0.316)	0.024*** (3.554)	-0.003 (-0.359)
<i>Growth</i>	0.021*** (8.596)	0.061*** (9.860)	0.021*** (14.346)	0.062*** (9.917)
_cons	0.297*** (5.380)	0.342*** (10.754)	0.295*** (6.928)	0.349*** (10.770)
Year FE	Yes	Yes	Yes	Yes
Industry FE	No	Yes	No	Yes
Firm FE	Yes	No	Yes	No
Observations	15958	12898	15958	12898
Adjusted R ²	0.045	0.206	-0.102	0.205

Table VII shows the result from the ordinary least squares regression of the impact of the stock searching index on earnings management. The dependent variable is *EM_MJones*, *EM_DD*, and the test variable is *SVI1*, *SVI2*. Column 1 contains the results for the regression of the impact of *SVI1* on *EM_MJones*; column 2 contains the results for the regression of the impact of *SVI1* on *EM_DD*; column 3 contains the result for the regression of the impact of *SVI2* on *EM_MJones*, and the last column contains the result for the regression of the impact of *SVI2* on *EM_DD*. Reported in brackets are t-values. T-statistics are given in the parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

The results are relatively the same in directions. We changed the model from ‘Year FE and Industry FE’ to ‘Firm FE and Observations’ in the robustness test. Further, we altered measurement for investor attention from *SVI1* to *SVI2*. Finally, we used the alternative index *EM_DD* to replace *EM_MJones*. Coefficients between *SVI1* and *EM_DD*, *EM_MJones* are significant and positive with t values 3.036, and 1.857. Similar conclusions in *SVI2* and *EM_DD*, *EM_MJones*, coefficients are 0.007 and 0.004 with t values 2.453 and 1.950. This implies that alternative measurements of investors’ attention and

substitution of earnings management measures have a positive correlation. Therefore, the conclusion is robust and tenable.

5. Conclusion

Based on a sample of unique data from the China stock market research by A-share listed companies in China, this paper examines the impact of retail investor attention on earning management. The empirical results show that the retail investor attention is significantly and positively correlated with the earning management after showing the table analyzing the correlation between each independent variable and doing the univariate analysis. Moreover, the impact of retail investor attention on earning management is more pronounced in firms with smaller market capitalization, non-state-owned, and non-Big 4 auditors. In addition, we find alternative measurements for both retail investor attention and earning management to test the robustness between these two variables. As a result, we can conclude that retail investor attention has a positive correlation with earning management. From the regression table, we can analyze that retail investor attention is more likely to improve the earning management of firms.

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