

# The Effect of Stock Refinancing on Company Performance of Listed Companies-Evidence from China

Jiunan Ji

Department of Management, Xi'an Jiaotong University City College, Xi'an, China

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**Abstract:** The management in the process of the company's financial management activities is a classic proposition of the company's financial management. The main sources of capital raising for listed companies are internal capital raising and external capital raising, including internal retained earnings and external equity and debt financing. Equity refinancing, as a major financing method, has been widely concerned by companies and scholars. On the basis of the existing research, this paper uses the data of listed companies in China's a-share market from 2013 to 2017, using the independent sample t-test empirical research method, this paper discusses and studies the Equity Refinancing of listed companies, the results show that the performance of the listed companies in one year, two years and three years after the issuance of seasoned equity offerings, rights issues and convertible bonds shows a downward trend.

## 1. Introduction

In February 2017, the CSRC promulgated the Regulations on guiding and regulating the financing behavior of listed companies. In this regulation, the size, timing and pricing of equity refinancing are regulated. Many scholars have done research on the related topic of Equity Refinancing, and foreign scholars Kang, Kimred <sup>[1]</sup> and others have done empirical research on the changes of corporate performance after equity refinancing. Chinese scholars have also used empirical research methods to study this related issue. Liu e ping and Liu Chun conducted an empirical study on the expected impact of convertible debt financing in equity refinancing, the research shows that earnings management before the issue will make the performance of the company decline after the issue, and investors may use equity refinancing behavior for profit manipulation and adjustment <sup>[2]</sup>. Some domestic scholars' research shows that after the equity refinancing, the company's performance shows positive influence or little influence. The research results show that the policy influence of the national macro-economic level is the most important factor. Most scholars show that the performance of SEO companies immediately shows a downward trend after the release of the performance of the phenomenon in the first two years.

Based on the actual situation of China's a-share market, this paper selects the data of listed companies in China's capital market from 2013 to 2017 and uses the independent sample t test to discuss and study the equity refinancing of listed companies, in order to provide some suggestions for the financing of corporate financial management.

## 2. Theoretical Analysis and Research Hypotheses

Since the 1980s, a large number of empirical studies have shown that there are many deviations from the hypothesis of market efficiency in capital markets. Based on the principal-agent theory, this paper holds that there are agency conflicts between shareholders and creditors, controlling shareholders and minority shareholders, managers and shareholders due to the separation of management right and ownership. When the company has more free cash flow, the company's managers will misappropriate the company's assets due to agency problems, and equity refinancing will increase the company's free cash flow, so the agency problem of the listed company will be more serious, which will lead to the decline of the company performance. On the other hand, because of the special ownership structure of listed companies in China, China's capital market is

dominated by state-owned shareholders who may use their controlling position to infringe upon the interests of small shareholders, through the use of funds and other means for the transfer of benefits.

Hypothesis: In order to meet the standard condition of equity refinancing, earnings management will lead to the decline of corporate performance after equity refinancing.

### 3. Sample and Data

This paper selects the listed companies that have implemented equity refinancing in Shanghai and Shenzhen Stock Exchanges in the past five years (from 2013 to 2017) as a sample. In order to analyze the results of empirical analysis, according to the following steps for data filtering, excluding abnormal data for analysis.

The target sample includes 1,847 companies. Among them, the companies are classified according to the “guidance on industry classification of listed companies”, and the industries are classified by level 1, which is divided into 13 industries. The 13 industries are: A agriculture, forestry, animal husbandry, fishery, B extractive industries, C social services, D Production and supply of electricity, gas and water, E construction, F transportation, warehousing, G information technology, H wholesale and retail trade, J real estate, K Social Services, communication and cultural industries, M integrated category. According to the information disclosed on the Wind database, the CSRC website and the Oriental Fortune website, the general situation of the sample is illustrated in Table 1:

Table 1 2013~2017 Number of Listed Companies

Year	2013	2014	2015	2016	2017	Total
issue additional stocks	221	311	447	447	320	1746
right offerings	10	14	3	8	7	42
convertible bond	6	11	3	10	29	59
Total amounts	237	336	453	465	356	1847

From table 1, we can conclude that the main way of equity refinancing of listed companies is to issue additional stocks, which accounts for 95.19% of the total amount. The Second one was convertible bond, which raised 2.69% of the money in convertible bond, ahead of the 2.11% raised by right offerings, and the number of listed companies that adopt this method for equity refinancing is the fewest, which shows that listed companies tend to raise funds by issuing additional stocks when they conduct equity refinancing, followed by raising funds by convertible bond. Finally, the right offerings is carried out to raise equity refinancing funds. The proportion of financing is shown in Figure 1:

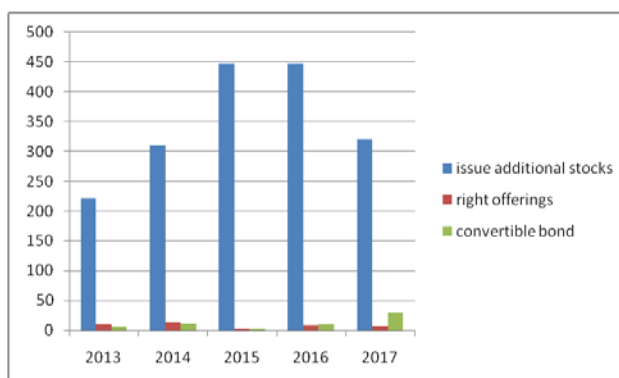


Fig.1 Trend Chart Unit: A Thousand Million

From the figure 1 above, we can conclude that the total amount of refinancing of listed companies in China is in a fluctuating trend, which has been increasing from 2013 to 2016, reaching the highest, with a larger growth rate. In 2017, in order to standardize and guide the rational financing of listed companies, and reasonably determine the scale of financing, improve the efficiency of the use of funds, and prevent unreasonable “financing” behavior, the CSRC has imposed restrictions on the specific financing conditions of listed companies. The policy requires

listed companies to make strict regulations on the total number of issues, the time interval between issues, and the use of funds. The overall volume of equity refinancing declined in 2017, with the largest share raised through right offerings.

#### 4. Empirical Results

In order to compare the performance of listed companies before and after equity refinancing, this paper makes a statistical analysis on the sample of issuing additional stocks, right offerings and convertible bonds. This paper selects the index of Yield value and total assets rate of return to analyze the corporate performance index of listed companies one year before the implementation of equity refinancing, one year after issuing additional stocks, one year after the issuance of additional financing and two years after issuance of additional financing, the two-year data of the sample period were selected as the observation sample, and the sample data were shrunk using SPSS.

##### 4.1 Descriptive Statistical Analysis about the Company Performance of Issuing Additional Stocks

The results of independent sample t test of issuing additional stocks are shown in table 2:

Table 2 Independent Sample T Test

	Year	N	Mean value	Standard deviation	F	t	df	Sig.2-tailed
R O E	One year before	520	.0708	.1296	5.249	0.468	1038	0.640
	Reporting period	520	.0676	.0896				
	Reporting period	520	.0676	.0896	1.233	1.968	1038	0.049
	One year after	520	.0558	.1029				
	Reporting period	520	.0676	.0896	0.448	2.528	1038	0.012
	two years after	520	.0525	.1017				
	One year after	520	.0558	.1029	0.166	0.512	1038	.6087
	two years after	520	.0525	.1017				
	Reporting period	520	.0676	.0896	0.105	2.047	1038	.0409
	three years after	520	.0557	.0977				

From the table 2 above, we can conclude that the ROE level of 6.76% in the year of the SEO is lower than that of 7.08% in the year before the SEO, both of which are not statistically significant. The value of Roe of 5.58% is lower than that of 6.76% , and both of them are significant at the level of 5% The level of Roe of 5.25% in the two years after raising capital is significantly lower than the level of 6.76% in the year after raising capital. The level of Roe of the three years after raising capital is significantly lower than the level of Roe of the year after raising capital. Therefore, the level of Roe of the three years after raising capital is significantly lower than that of the year after raising capital, based on the empirical data of additional issue financing, the results of independent sample t-test show that the performance of listed companies drops significantly after additional issue financing.

##### 4.2 Descriptive Statistical Analysis about the Company Performance of Right Offerings

The results of independent sample t test of right offerings are shown in Table 3:

Table 3 Independent Sample T Test

	Year	N	Mean value	Standard deviation	F	t	df	Sig.2-tailed
R O E	One year before	25	.0630	.0396	.704	-2.006	48	0.050
	Reporting period	25	.0898	.0538				
	Reporting period	25	.0898	.0538	.086	2.381	48	0.021
	One year after	25	.0518	.0588				
	Reporting period	25	.0898	.0538	.679	1.890	48	0.065
	two years after	25	.0448	.1062				
	One year after	25	.0518	.0588	.421	0.290	48	0.773
	two years after	25	.0448	.1062				
	Reporting period	25	.0898	.0538	.394	1.833	48	0.073
	three years after	25	.0570	.0713				

From the table 3 above, we can conclude that the sample data of the rights issue shows that the ROE level of the year before the rights issue is 6.3%, which is significantly lower than the ROE level of 8.98% in the year of the rights issue. The level of ROE one year after the rights issue is significantly lower than the level of ROE two years after the rights issue is lower than the level of ROE two years after the rights issue, but they are not significant. The level of ROE in the three years after the rights issue financing is significantly lower than that in the year after the rights issue financing. Therefore, the result of independent sample t test analysis shows that after the rights issue financing, the long-term performance of the company shows a downward trend, which is consistent with the hypothesis of this paper.<sup>[3]</sup>

### 4.3 Descriptive Statistical Analysis about the Company Performance of Issuing Convertible Bonds

The results of independent sample t test of issuing convertible bonds are shown in Table 4:

Table 4 Independent Sample T Test

	Year	N	Mean value	Standard deviation	F	t	df	Sig.2-tailed
R O E	One year before	17	.1093	.0470	.272	-1.116	32	0.273
	Reporting period	17	.1289	.0553				
	Reporting period	17	.1289	.0553	.009	2.994	32	0.005
	One year after	17	.0759	.0476				
	Reporting period	17	.1289	.0553	.039	3.026	32	0.005
	two years after	17	.0683	.0614				
	One year after	17	.0759	.0476	.097	0.406	32	0.688
	two years after	17	.0683	.0614				
	Reporting period	17	.1289	.0553	.924	3.272	32	0.003
Three years after	17	.0750	.0394					

From the table 4 above, we can conclude that the performance of listed companies before and after convertible bond financing, the level of ROE 10.93% in the year before convertible bond financing is lower than that of ROE 12.89% in the year before convertible bond financing. At the level of 1%, the level of ROE in one year before is significantly lower than that in reporting period. At the level of 1%, the level of ROE in two years after is significantly lower than that in One year before. The level of ROE in three years after financing is significantly lower than the level of ROE in reporting period of convertible financing. Therefore, the results from the above analysis can be seen that listed companies in convertible bond financing after the performance of the company showed a significant downward trend.

## 5. Conclusions

The results of the above empirical analysis show that the market timing behavior of equity refinancing is analyzed by independent sample t test. The results show that the sample data information of issuing additional stocks, right offerings, convertible bond, etc. In order to meet the standard conditions for refinancing, the performance of the listed companies in the first year, the second two years and the third year after the issuance of equity refinancing shows a downward trend.<sup>[4]</sup> Earnings management is often applied to the performance of the company before refinancing, which makes the performance of the company after refinancing tend to decline. We will strengthen the management of various regulatory bodies and promote the healthy and orderly development of the capital market. Due to the limited knowledge level of the author, the article still needs further study in some aspects. About the selection of variables and data in the study, the paper has certain limitations, and the conclusion of the study needs further test.

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