

The Effect of the Semi-mandatory Dividends Policy on the Listing Companies Cash Dividend Policy

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Abstract

In May 2012, the Securities Regulatory Commission promulgated the notice of related matters about the further implementation of the listing companies' cash dividends. Based on China's A-share listed companies from 2010 to 2014 data, we analyzed the effect of the semi-mandatory dividends policy on the listing companies' cash dividend policy through empirical research. The results of research show that the policy facilitates the cash dividends of the companies which have higher rates of assets and liabilities, non state-owned holding and low profitability, but inhibits the cash dividends of the companies which have lower rates of assets and liabilities, state-owned holding and higher profitability. Overall, after the promulgation of the policy, the company which has the future financing pressure will be forced to raise the level of cash dividends, to meet the demand for refinancing, and the company which does not exist strong refinancing pressure will reduce the level of cash dividends.

Key words: *listed company; semi-mandatory dividends; dividend policy; equity refinancing; government regulation*

1 Introduction

1.1 Research background

China Securities Regulatory Commission (CSRC) defined "semi-mandatory dividend policy" as a policy that refinancing qualification is related to the dividend levels, and promulgated "the notice on further implementation about the relevant matters of listed companies' cash dividends" in May 2012. However, the capital market of China started late, there were two characteristics in the domestic market: first, the common preference of listed companies in China was "more financing and less distribution"; second, the relationship between dividends and equity refinancing had significant periodic and policy.

From March 2001 to October 2008, CSRC issued the views and discipline to constraint and improved the semi-mandatory dividend policy for four times. Then in 2012, CSRC promulgated the "the notice on further implementation about the relevant matters of listed companies' cash dividends" to further strengthen supervision. According to the relevant policies issued by CSRC, the companies' cash dividend is related to the refinancing qualification. The purpose of this paper is to discuss about that the "Notice" has greatly strengthened the supervision of the semi-mandatory dividend policy. However, how to influence the cash dividend policy of listed companies in our country?

1.2 Literature review

On the issue of financing allocation, foreign research has a long history. There is a theory that the cash dividend has nothing to do with the financing decision (proposed by *M. H. Miller, F. Modigliani*.¹), the famous MM theory. However, the real capital market is not perfect, the

companies' cash dividends not only have a significant impact on the companies' stock price, but also closely related to the companies' financing decisions. In today's world, many emerging market countries have made special provisions on the dividend policy of the listed companies, the dividend level of the countries with mandatory dividend policy is higher than those without mandatory dividend policy (e.g. *La Porta*,² *Kinkki*.³).

The companies with financing pressure future will be forced to raise the level of cash dividends to meet refinancing conditions after the promulgation of the policy(verified by *Li Hui*⁴). The continuous strengthening of the supervision of the dividend will only affect the willingness of the subject to be controlled, and does not affect the level of dividend(e.g. *Zheng Rong, Gan Shengdao*⁵ and *Zhu Nan*⁶). The semi-mandatory dividend policy is very limited in improving shareholder cash dividend returns and protect the interests of investors(drawn from *Chen Yunling*⁷). In order to make our country's financing distribution order operate well, it is necessary to strengthen the supervision of semi-mandatory dividend(summed up by *Zheng Rong, Gan Shengdao, Duan Huayou*⁸).

2 Experimental

2.1 Theoretical analysis and research hypothesis

Semi-mandatory dividend policy is mainly targeted at the company with the needs of the equity refinancing. Accordingly, we can speculate that if the policy is really play a role, those companies who choose to refinance must be the companies that have the ability and willingness to do cash dividends in accordance with the requirements; and those who cannot reach the divided requirements, they will not have the refinancing qualification and is likely to choose not to refinance. Therefore, the following assumptions are presented in this paper.

Hypothesis 1: the promulgation of the "Notice" will promote the increase in cash dividends of high growth firms.

Hypothesis 2: the promulgation of the "Notice" will lead the companies with strong profitability to reduce its cash dividends, and the companies with weak profitability to increase the cash dividend due to the demand for refinancing.

Hypothesis 3: after the promulgation of the "Notice", the company with high leverage ratio in order to deal with the future financing pressure will be forced to increase the cash dividend.

Hypothesis 4: after the promulgation of the "Notice", the state-owned holding company will maintain the original dividend policy, while the non-state-owned holding companies will increase the cash dividend.

2.2 Research method

2.2.1 Sample selection and data sources

The sample selection scope of this paper is all A listed companies before December 31, 2010. We collect annual data on those companies including dividend and other financial data from 2010 to 2014. In addition, we exclude the companies in financial sector; ST, PT companies; the companies whose ROA is greater than 1 and the dividend payment rate is more than 100%, also exclude observations with missing values to ensure the accuracy of the data in the sample. Then 5826 data were obtained in 2010-2014. The related financial data of this research are the annual report data, the data comes from the RESSET database.

2.2.2 Variable selection

Table 1 –The meaning of the main variable and its calculation method

	Variable name	Meaning	Calculation method
Dependent variable	Div	Dividend payout ratio.	Dividend per share over the book value of assets per share in a year.
Explanatory variables	tq	Tobin’s Q.	The sum of the market value of equity and book value of debt, scaled by the book value of assets.
	ROA	Return on assets.	Net profit over total assets.
	lev	Leverage.	Total liabilities over total assets.
	owner	State ownership.	A dummy variable that equals one if the company is state-owned, and zero otherwise.
Control variables	ls	Proportion of large shareholders.	Proportion of the first large shareholders.
	size	Size of listed companies.	Natural logarithm of total assets.
	pl	Dividend policy dummy variable.	Before the promulgation of the policy that 2010, 2011 take 0, after the year to take 1.
	year	Year dummy.	
Robustness variables	ROE	Return on net assets.	Net profit over net assets.
	NCF	Net cash flows from operating activities per share.	

2.2.3 Empirical model

$$Div = \alpha_0 + \sum_{i=1}^4 \alpha_i Explain_i + \sum_{j=5}^8 \alpha_j Control_j + \varepsilon \tag{1}$$

$$Div = \alpha_0 + \sum_{i=1}^4 \alpha_i Explain_i + \sum_{j=5}^8 \alpha_j Control_j + \alpha_k Crossterm_k + \varepsilon \quad k = 9,10,11,12 \tag{2)-(5)}$$

In Eq.(2)-(5), we separately add cross terms of pl*tq, pl*ROA, pl*lev and pl*owner. So that we can study the influence level on the dividend policy of different types of companies after the promulgation of the "Notice".

$$Div = \alpha_0 + \sum_{i=1}^4 \alpha_i Explain_i + \sum_{j=5}^8 \alpha_j Control_j + \sum_{k=9}^{12} \alpha_k Crossterm_k + \varepsilon \tag{6}$$

3 Results and Discussion

3.1 Regression results and analysis

First, Tobin Q (tq) in the model (1)-(6) is negatively related with the rate of dividend payment(Div),which shows that higher growth companies have lower level of cash dividends instead. In the model (2) and (6), the coefficient of cross term of Tobin Q and dividend policy dummy is also positive, while Tobin Q’s coefficient becomes positive, shows that after excluding the influence of other variables, the promulgation of the policy has a positive impact on the dividend distribution strategy of the high growth firms. That is, the promulgation of the policy can promote high growth firms to increase the cash dividend,

which to some extent confirms the hypothesis 1, but the variables did not pass the significance test, shows that the influence of the "Notice" issued on the high growth firms to improve the cash dividend is not strong.

Table 2 –Multiple regression results

	(1)	(2)	(3)	(4)	(5)	(6)
α	-0.824 (-3.94)	-0.821 (-3.92)	-0.835 (-3.90)	-0.827 (-3.95)	-0.825 (-3.93)	-0.882 (-4.08)
tq	-0.001 (-0.15)	0.003 (0.30)	-0.001 (-0.10)	-0.002 (-0.18)	-0.001 (-0.14)	0.008 (0.62)
roa	0.433* (1.71)	0.465* (1.82)	0.426* (1.67)	0.613* (1.79)	0.432* (1.69)	0.576 (1.61)
lev	-0.297*** (-4.99)	-0.296*** (-4.98)	-0.286*** (-3.80)	-0.298*** (-5.00)	-0.297*** (-4.99)	-0.237*** (-2.81)
owner	-0.042** (-2.06)	-0.042** (-2.06)	-0.042** (-2.07)	-0.042** (-2.07)	-0.039 (-1.38)	-0.039 (-1.32)
ls	0.080 (1.26)	0.078 (1.24)	0.080 (1.27)	0.079 (1.26)	0.080 (1.27)	0.079 (1.26)
size	0.043*** (4.38)	0.042*** (4.31)	0.043*** (4.39)	0.042*** (4.35)	0.043*** (4.38)	0.043*** (4.37)
pl	-0.014 (-0.59)	0.008 (0.25)	-0.004 (-0.09)	0.004 (0.11)	-0.012 (-0.42)	0.089 (1.13)
pltq		-0.014** (-1.96)				-0.021** (-2.12)
plroa				-0.327* (-1.78)		-0.243 (-1.498)
pllev			0.022 (1.245)			0.115** (2.02)
plowner					-0.003** (-2.09)	-0.006** (-2.17)
year	YES	YES	YES	YES	YES	YES
N	5826	5826	5826	5826	5826	5826
R ²		0.0109	0.0107	0.0108	0.0107	0.0106
D.W		1.897	1.896	1.897	1.896	1.897
F		8.13	8.03	8.09	8.03	6.21

Second, in the model (1)-(6), the rate of return on total assets (ROA) is positively related to the dividend payout ratio(Div), that in the absence of the promulgation of the policy as the premise, the higher the company's profitability is, the higher the level of cash dividends. But in the model (4) and (6), the cross-term's(pl*ROA) is negative, suggests that policy will suppress the cash dividend level of the company with strong profitability, that is to say, the company with strong profitability after the "Notice" issued, will reduce the cash dividend, and the company with weak profitability due to the presence of refinancing pressure would improve the level of cash dividends. The results support the hypothesis 2 proposed above. Third, in model (1)-(6) , the companies' asset liability ratio (lev) is negatively related to the dividend payout ratio(Div) and shows a significant correlation, indicating the company with high leverage, the cash dividend ratio is low, but the coefficients of cross-term(pl*lev) was

positive, shows that company with higher leverage ratio will increase the cash dividend after the "Notice" issued. To a certain extent, this supports the hypothesis 3, the company with high leverage due to facing greater pressure on financing in the future, has to increase the cash dividend to meet the premise of refinancing.

Last, the companies' equity nature variables (owner) and dividend payout ratio(Div) in the model (1)-(4) showed a significant negative correlation, which shows that the state-owned holding company have less cash dividends. In the model (5) and (6), the coefficient of equity nature and policy variables cross term(pl*owner) is negative, that is to say, after the promulgation of the policy, the state-owned holding company will reduce the cash dividend in some degree, while the non-state-owned holding companies will increase the cash dividend, which to some extent supports the hypothesis 4. However, the state-owned holding companies in order to retain a certain amount of cash to ensure that in the future they are able to successfully carry out the cash dividend distribution, the policy will be reduced a a certain amount of cash dividends.

3.2 Robustness

Table 3 –Robustness results

	(1)	(2)	(3)	(4)	(5)	(6)
α	-0.777 (-4.21)	-0.771 (-4.18)	-0.783 (-4.19)	-0.759 (-4.11)	-0.779 (-4.21)	-0.759 (-4.06)
ncf	-0.001 (-0.09)	0.012 (0.82)	-0.001 (-0.09)	-0.001 (-0.12)	-0.001 (-0.08)	0.009 (0.64)
roe	0.003*** (3.30)	0.003*** (3.29)	0.003*** (3.29)	0.001 (0.80)	0.003*** (3.30)	0.001 (0.89)
lev	-0.319*** (-6.04)	-0.317*** (-6.02)	-0.309*** (-4.52)	-0.315*** (-5.96)	-0.319*** (-6.04)	-0.311*** (-4.42)
owner	-0.04** (-1.96)	-0.039* (-1.94)	-0.0400** (-1.97)	-0.040** (-1.98)	-0.037 (-1.28)	-0.036 (-1.23)
ls	0.076 (1.21)	0.078 (1.22)	0.077 (1.21)	0.077 (1.23)	0.076 (1.21)	0.079 (1.25)
size	0.041*** 4.51	0.041*** (4.48)	0.041*** (4.52)	0.041*** (4.49)	0.041*** (4.51)	0.041*** (4.47)
pl	-0.012 (-0.51)	-0.015 (-0.67)	-0.003 (-0.07)	-0.039 (-1.47)	-0.009 (-0.31)	-0.034 (-0.71)
plncf		-0.029** (-2.37)				-0.024** (-2.11)
plroe				0.004** (2.18)		0.004** (2.02)
pllev			0.019** (2.22)			0.007** (2.07)
plowner					-0.006** (-2.15)	-0.006** (-2.16)
year	YES	YES	YES	YES	YES	YES
N	5826	5826	5826	5826	5826	5826
R ²	0.0122	0.0124	0.0121	0.0129	0.0121	0.0126
D.W	1.898	1.899	1.898	1.899	1.898	1.899
F	10.02	9.11	8.91	9.44	8.91	7.18

The regression results are basically uniform, which shows that the empirical model above has a certain robustness, is reliable, and the results of the study has a certain value.

4 Conclusion

In short, after the promulgation of the “Notice”, the companies with financing pressure in the future will be forced to increase the cash dividend, in order to meet the refinancing needs, while the companies without refinancing pressure or with a variety of financing channels, will reduce the cash dividend. After the promulgation of the "Notice", cash dividend level of our country's stock market overall does not necessarily improve, and even some companies will reduce the cash dividend, there is a certain regulatory paradox. Therefore, in order to protect investors, especially small investors, although the semi-mandatory dividend policy has been implemented, more powerful and effective market regulation should be reinforced in order to make it really play a role.

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