

# Ultimate Control Shareholder Cash Flow Rights, Refinancing Needs and Cash Dividend Policies

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**ABSTRACT.** *The cash dividend policy of the listed company is the financial decision of reasonable distribution of profit between cash dividend and internal retention. It is an important index to measure the business performance and its growth. This paper starts from the governance factor of ultimate ownership structure and introduces the regulating variable of refinancing demand. On the basis of trying to form a complete research framework, through literature review, theoretical model construction and empirical test, this paper systematically and deeply discusses the relationship between ultimate ownership structure and cash dividend payment willingness and payment level. Data from Shenzhen stock exchange and Shanghai stock exchange from 2007 to 2018 are used in this paper. This paper finds that the cash flow right of the ultimate controlling shareholder is positively correlated with the cash dividend policy. There is a significant negative correlation between refinancing demand and cash dividend policy, and refinancing demand can inhibit the positive correlation between ultimate controlling shareholders' cash flow right and cash dividend payment.*

**KEYWORDS:** *Ultimate controlling shareholder cash flow rights, Refinancing needs, Cash dividend policy*

## 1. Introduction

Under the influence of dividend supervision policy, this paper firstly analyzes the mechanism of ultimate controller's cash flow right on cash dividend policy, and describes the ultimate controller's cash flow right. Secondly, in terms of the selection of measurement indicators of cash dividend policy of the explained variable, this paper draws on the research results of other scholars and comprehensively measures the cash dividend policy of listed companies from the perspectives of cash dividend payment willingness and cash dividend payment level. Finally, in terms of the selection of regulatory variables, this paper chooses the refinancing demand as the regulatory variable, hoping to explore whether the ultimate controller's motivation to

use cash dividend policy to empty the listed company is still strong when the company is short of funds. At the same time, considering that regulatory policies attach great importance to equity refinancing, selecting it as the control variable can help us understand the influence of external regulatory policies on the ultimate controller's cash dividend behavior from the macro level.

La Porta [1] proposed the concept of ultimate controller, who constructed a complete theory of ultimate property right from the perspective of enterprise ownership structure and control mechanism. Through tracing the control chain of the company, we finally find the ultimate controller, namely the ultimate controlling shareholder of the listed company. We find the difference and particularity of cash flow right and control right of the ultimate controller, and thus successfully define the ultimate property right from both quantity and quality aspects. The definition of ultimate property right includes the ultimate controller's control right, cash flow right and separation degree of the two rights, and the definition of quality includes the ultimate controller's ownership attribute. According to this theoretical framework, scholars have conducted researches on the ultimate ownership status of different countries, such as Mara Faccio [4], Larry H. P. L. Ang on the western European market and Claessens [3] on the east Asian market, proving the existence of the ultimate controller and the separation of the two rights.

## **2. Theoretical analysis and research hypotheses**

### ***2.1 The ultimate controlling shareholder's cash flow right and cash dividend policy***

According to the theoretical framework of benefit seizure proposed by La Porta et al. [1], the ultimate controlling shareholders who gain control through multiple control chains have the fact that the cash flow right is separated from the control right. Under the circumstance that the ultimate controller can decide the policy of cash dividend of the listed company, the cash dividend, as a way for the ultimate controlling shareholder to obtain income, will inevitably be affected by the ultimate controlling shareholder's cash flow right, control right and separation degree of the two rights. According to the agency theory, in the case of relatively concentrated equity in China, the agency problem is mainly transferred to the conflict of interest between minority shareholders and major shareholders. The ultimate controller who holds the largest control right of the company can, according to his will, influence the company's cash dividend decision by exercising his voting right in the shareholders' meeting [10]. According to the theory of return on control, the cash flow right, which represents the ultimate controller's income sharing right, directly reflects the actual cash income that the ultimate controller can obtain when the cash dividend is distributed. The higher the cash flow right, the more cash dividend income will go into the hands of the ultimate controlling shareholder. Therefore, the cash flow right has a restraining effect on the ultimate controller's other ways of encroachment of interests, which has a positive incentive effect on cash dividend payment. According to the above analysis, hypothesis 1 is proposed:

**H1:** the ultimate controller's cash flow right has a positive influence on the willingness and level of cash distribution of listed companies.

### ***2.2 Ultimate controlling shareholder cash flow rights ,refinancing needs and cash dividend policy***

As the actual controller of the company, the ultimate controller has both positive and negative effects on the value of the company. When the ultimate controller's cash flow power is larger, the benefit synergy effect gradually plays a major role. As the largest owner of the company, the ultimate controller's personal interests have been integrated with the overall interests of the company. At this point, the formulation of the ultimate controller's cash dividend policy is more in line with the common interests of all shareholders and the needs of enterprise development, rather than blindly expanding the payment scale of cash dividend with the improvement of cash flow right. When the company is faced with good investment opportunities, the ultimate controller will participate in the equity refinancing of the enterprise. At this point, the higher the proportion of shares purchased by the ultimate controller through allotment or private placement, the greater the cash flow right and the greater the positive impact (benefit synergistic effect) on the company's development.

Especially after the promulgation of the new rules on refinancing in 2017, in order to prevent listed companies from transferring benefits to controlling shareholders or other stakeholders through private placement, the CSRC pays attention to the arrangement of funds of listed companies after refinancing and is vigilant against the transfer of benefits through various means during the financing period. Therefore, in the year of refinancing, the ultimate controller of the listed company is less likely to choose a large amount of cash dividend. According to the above analysis, hypothesis 7 is put forward:

**H2:** under the influence of refinancing demand, the positive correlation between the ultimate controller's cash flow right and the willingness to pay and the level of paying is weakened.

## **3. Data sources and research design**

### ***3.1 Sample selection and source***

This paper intends to select all companies listed on Shanghai and shenzhen a-shares as initial samples during the study period from 2007 to 2018 as samples, and conduct the following data screening on this basis: (1) excluding listed financial and insurance companies; (2) companies excluding ST and \*ST; (3) excluding companies that issue B or H shares at the same time; (4) excluding listed companies whose asset-liability ratio is greater than 1; (5) exclude the company whose ultimate controlling shareholder's control right is less than 10%; (6) excluding the listed companies with incomplete relevant information and data; (7) to eliminate the

influence of outliers, winsorize all continuous financial variable data by 1%. This article on the financial data of listed companies are used by source CSMAR database and WIND data in a database consolidated, Part of the data on controlling shareholder control that needs to be collected manually comes from the annual reports of listed companies. All data processing and statistical analysis is performed in Excel2010 and STATA14.0.

### 3.2 Model design and variable definition

#### (1) Explained variable

The purpose of this paper is to analyze the relationship between cash dividend policy and ultimate ownership structure in a comprehensive way. The willingness to pay cash (Dumdiv) is a dummy variable, which is 1 when the cash dividend is paid, or 0 otherwise. The purpose of setting up dummy variable is to study the influence of ultimate ownership on the willingness to pay cash dividends. The payout level (Payout) is the dividend payout ratio, which reflects the ratio of pretax dividend per share to net profit per share. This variable reflects the company's overall dividend policy towards income distribution. Cash dividend per share refers to the amount of cash dividend actually paid by the company in the current period.

#### (2) Explanatory variables

The explanatory variables in this paper include ultimate control shareholder cash flow rights (CFR) and refinancing needs (SEO). This paper multiplies the holding ratio of the actual controller and each layer of the equity relationship chain of the listed company or the sum of the holding ratio of the actual controller and each layer of the equity relationship chain of the listed company.

#### (3) Control variables

In order to better study the effects of these ultimate ownership structure characteristic variables and corporate governance characteristic variables on dividend policy. Referring to the control variables selected in the relevant research literature, this paper selects the corresponding variables from the aspects of company characteristics, company profitability, debt paying ability, cash flow and development ability to control

Table 1 Variable definition

Variable type	Variable name	Variable symbol	Variable specification	
Explained variable	Willingness to pay cash dividends	Dumdiv	The willingness to pay cash is a dummy variable, which is 1 when the cash dividend is paid, or 0 otherwise.	
	Capayout	the level of paying cash dividend	Payout	The payout level is the dividend payout rate, calculated by the formula: dividend payout rate = cash dividend per share/net profit per share
		pre-tax cash dividend per share	Dividend	The value of the pre-tax cash dividend per share published by a listed company

Explanatory variables	Cash flow rights	Cfr	The sum of the product of shareholding ratios in each control chain
	Refinancing needs	Seo	During the study period, the sample published the equity refinancing plan, Seo value is 1, otherwise the value is 0
	check-and-balance ownership structure	ER	The sum of the shareholding ratios of the second largest shareholders to the tenth largest shareholders of the company
	Ultimate controlling shareholder nature	State	The ultimate controller is 1 for artificial state ownership and 0 for non-state ownership
	Orecta	Occupy	Other receivables as a percentage of total assets in year t Size=Lsize
	scale of company	Size	
	Leverate	LEV	That's the asset-liability ratio, total liabilities over total assets
	growth	Growth	Tobin-q value at the end of the year
	return on total assets	Roa	Roa=Net profit/total assets at year end
	Cash holding level	Cash	Cash=Monetary capital/total assets at year end
	Annual dummy variable	Year	The sample time span is 12 years, and 11 annual dummy variables are set in total
Free cash flow	Fcf	Free cash flow = ebitda + depreciation and amortization - working capital increase - capital expenditure	
Industry variable	Ind	The industry logo of the sample company	

### 3.3 Model building

In this paper, model 1 and model 2 are mainly used to test the relationship between ultimate controlling human cash flow right and cash dividend policy, while model 3 and model 4 are mainly used to verify hypothesis 2. Model 5 and model 6 are mainly used to test the impact of refinancing demand on cash dividend policy (hypothesis 3). Model 7 and model 8 are mainly used to test the interaction between the ultimate controlling human cash flow right and refinancing demand on cash dividend policy. The second measure of dividend policy adopted in this paper is cash dividend payment level (Capayout). Dividend payment levels including Dividend payment rate (Payout) and cash Dividend per share (Dividend) two indicators. The model is as follows:

$$\log it(dumdiv) = \beta_0 + \beta_1 Cfr + \beta_2 Control + \varepsilon \quad \text{Model 1}$$

$$tobit(Capayout) = \beta_0 + \beta_1 Cfr + \beta_2 Control + \varepsilon \quad \text{Model 2}$$

$$\log it(dumdiv) = \beta_0 + \beta_1 CFR + \beta_2 SEO * CFR + \beta_3 Control + \varepsilon \quad \text{Model 3}$$

$$tobit(Capayout) = \beta_0 + \beta_1 CFR + \beta_2 SEO * CFR + \beta_3 Control + \varepsilon \quad \text{Model 4}$$

#### 4. Empirical analysis

##### 4.1 Descriptive statistics

In this paper, descriptive statistics were made on all sample data collected before variable regression, and descriptive statistics of variables were listed as observation value, mean value, variance, minimum value, median value and maximum value. It can be seen from table 2 that the observed values of all variables are 22441. Among them, the minimum value of Dumdiv is 0, the maximum value is 1, and the average value is 74%, indicating that the samples of cash dividends paid in all samples have reached above 74%. Generally speaking, the willingness to pay cash dividends is relatively high. The minimum value of Dividend is 0, the maximum value is 14.539, and the median value is 0.06, indicating that the variable dispersion of pretax cash Dividend per share is high. Dividend payment rate (Payout) average of 30%, A maximum of 179%, it is not hard to see before last year this year with no cash dividends of listed companies "miser" behavior, compared to listed companies in the A-share market in China in recent 10 years super high current for more high incidence.

Table 2 Descriptive statistics of variables

variable	observations	average	variance	minimum value	median	maximum
Dumdiv	22441	0.7386	0.4394	0	1	1
Dividend	22441	0.1270	0.2455	0	0.06	14.539
Payout	22441	0.3009	1.1009	0	0.2077	1.7914
Cfr	22441	0.3511	0.1707	0.0188	0.3378	0.7506
Seo	22441	0.1200	0.3250	0	0	1
State	22441	0.4437	0.4968	0	0	1
ER	22441	0.1211	0.0990	0	0.0954	0.6622
Eps	22441	0.4470	0.7071	-5.5727	0.3072	30.1144
Gro	22441	2.0459	2.0673	0.1528	1.5907	126.9515
ROA	22441	0.0532	0.1653	-0.646	0.042	20.7876
LEV	22441	0.4409	0.2106	0.0071	0.4378	0.9889
Occupy	22441	0.0170	0.0329	0	0.0076	0.9776
FCF	22441	0.0303	0.2191	-9.8325	0.0517	10.7061
Cash	22441	0.1886	0.1414	0	0.149	0.9359
Size	22441	22.0675	1.3631	17.3882	21.8792	30.8148

##### 4.2 Regression analysis

(1) Regression results of ultimate controlling shareholder's cash flow right and cash dividend policy

According to the result of table 3 Cash flow right and cash dividend policy regression results shows that the ultimate controller (Cfr) and Willingness to pay cash dividends(Dumdiv), cash Dividend per share (Dividend), Dividend payment rate (Payout) are significant at the 1% level, which is between cash flow right and send now intend to maximum correlation coefficient of 1.519. The above regression

results indicate that the greater the ultimate controller's cash flow right is, the stronger the incentive to pay cash dividends to obtain investment returns is, and the greater the possibility of obtaining excess returns by increasing the level of cash payout is. The increasing cash flow right stimulates the ultimate controller's intention to obtain public income by paying a high level of cash dividend. The test results verify hypothesis 1

(2) The influence of refinancing demand on the relationship between cash flow right and cash dividend policy

Table 3 Cash flow right and cash dividend policy regression results

variable	Dumdiv	Payout	Dividend
	M1	M2	M2
Cfr	1.519***	0.473***	0.137***
	-4.64	-8.19	-16.11
State	-0.113	-0.144***	-0.0316***
	(-0.58)	(-6.97)	(-10.12)
Er	0.839**	0.550***	0.0889***
	-2.45	-5.35	-5.93
Eps	1.440***	0.0629***	0.267***
	-11.71	-4.33	-163.59
Gro	-0.0950***	-0.0659***	-0.0105***
	(-3.83)	(-7.95)	(-9.05)
Roa	0.136	0.251***	-0.0780***
	-4.86	-0.7	(-26.81)
Lev	-4.143***	-1.092***	-0.251***
	(-16.29)	(-18.24)	(-27.74)
Occupy	-4.249***	-2.681***	-0.481***
	(-4.57)	(-7.64)	(-9.07)
Fcf	0.0815	0.07	0.0348***
	-0.64	-1.31	-5
Cash	1.636***	0.417***	0.194***
	-5.81	-5.64	-17.66
Size	0.860***	0.136***	0.0320***
	-18	-14.14	-22.53
Cons		-2.626***	-0.666***
		(-12.89)	(-22.11)
Ind	control	control	control
Year	control	control	control
N	13333	22441	22441
Pseudo R <sup>2</sup>	0.173	0.0185	0.956
Chi2	1835***	1192***	15862***

1. The value in square brackets under the coefficient value is the t-test value of the coefficient of each variable

2. \*P<0.1, \*\*P<0.05, \*\*\*P<0.01

Table 4 The test regression results of hypothesis 2

Variable	Dumdiv M3	Payout M4	Dividend M4
Cfr	1.574*** (4.80)	0.471*** (8.16)	0.137*** (16.14)
Seo	-0.218*** (-3.24)	0.0214 (0.74)	-0.0233*** (-5.44)
Cfr*Seo	-0.358 (-0.91)	-0.647*** (-3.86)	-0.0668*** (-2.66)
State	-0.116 (-0.60)	-0.142*** (-6.87)	-0.0325*** (-10.40)
Er	0.865** (2.52)	0.555*** (5.39)	0.0899*** (5.99)
Eps	1.452*** (11.80)	0.0621*** (4.28)	0.267*** (13.24)
Gro	-0.0850*** (-3.41)	-0.0665*** (-7.98)	-0.00992*** (-3.99)
Roa	2.036*** (4.87)	0.0282 (0.72)	-0.245*** (4.66)
Lev	-4.070*** (-15.96)	-1.091*** (-18.17)	-0.246*** (-34.86)
Occupy	-4.246*** (-4.57)	-2.670*** (-7.61)	-0.484*** (-8.20)
Fcf	0.0490 (0.38)	0.0796 (1.48)	0.0309*** (4.93)
Cash	1.590*** (5.64)	0.414*** (5.59)	0.191*** (12.09)
Size	0.855*** (17.90)	0.136*** (14.06)	0.0322*** (27.73)
Cons		-2.612*** (-12.82)	-0.408*** (-26.52)
Ind	control	control	control
Year	control	control	control
N	13333	22441	22441
Pseudo R <sup>2</sup>	0.174	0.0187	0.958
Chi2	1846***	1207***	15898***

1. The value in square brackets under the coefficient value is the t-test value of the coefficient of each variable

2. \*P<0.1, \*\*P<0.05, \*\*\*P<0.01

According to the result of table 4, ultimate controller of cash flow right and the cash dividend policy set (Dumdiv/Payout/Dividend) between the 1% level significantly positive correlation, It indicates that the higher the ultimate controller's cash flow right, the stronger the willingness to pay cash dividends and the higher the level of paying cash dividends, which results support the hypothesis 3. Under the influence of refinancing needs, refinancing needs and cash flow rights by item (seo \*



sep) and cash dividend payment intention relation coefficient is 0.358, but it's not significant; And the level of cash dividend payment (payout, dividend) at the 1% level significantly negative correlation between the correlation coefficient were 0.647 and 0.068. The conclusion shows that there are listed companies refinancing needs, ultimate control person, the higher the cash flow right, will and level of cash dividend would be reduced. It is proved that equity refinancing demand can effectively restrain the behavior of cash dividend payment of listed companies. However, it does not weaken the positive relationship between the ultimate controller's cash flow right and catering to cash dividends, which is affected by the semi-compulsory dividend policy as mentioned above. The results of the regression test prove hypothesis 2.

## **5. Conclusions and suggestions**

### ***5.1 Research conclusion***

The research results of this paper show that there is a stable positive correlation between the cash flow right of the ultimate controller and the willingness and level of cash payout, which reflects the incentive mechanism of ownership to cash dividend. The higher cash flow right makes the dividend income obtained by the ultimate controller in the pay-out period higher, while the cost of no or less pay-out is higher, which leads to the increase of the preference of the ultimate controller for cash dividend with the increase of the cash flow right. The refinancing of listed companies demand weakened the ultimate control of cash flow right people for the positive influence of cash dividend policy, the demand for refinancing of listed companies, with the increase of ultimate control person cash flow right, the will and the cash dividend of cash dividend payments were significantly reduced, suggesting that the equity financing for ultimate control people irrational ultra high current for the constraints of the role.

### ***5.2 Related suggestions***

Although in recent years, China has made a lot of efforts to improve and perfect the investor protection law, and has made relatively fruitful achievements. The level of investor legal protection has been constantly improved, but compared with the legal environment and legal system of developed capital markets, the level of investor legal protection in China is still low. Small and medium-sized shareholders through legal means to protect their own rights and interests due to difficulties in proof, high cost, low feasibility. Therefore, it is necessary to further improve the legal system to reduce the cost of proof for minority shareholders.

At present, the CSRC has issued a series of cash dividend supervision policies, but from the implementation results, these provisions did not play a guiding role in rational dividend distribution of listed companies, to protect small and medium investors. Some are even used by the ultimate controller to obtain the private

benefits of control. Therefore, it is necessary to review the existing laws and relevant provisions and adjust them. We can consider removing the link between the qualification of public equity refinancing and cash dividend policy.

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