

The impact of government grants on the level of corporate cash dividend payments Research

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Abstract. As a way to compensate for market failures, intervene in the market economy and support specific industries, government subsidies are important for improving the efficiency of fiscal expenditure, adjusting and optimising the economic structure and rationalising the distribution of national income. The level of cash dividend payment often reflects the operating conditions of enterprises, and the impact of government subsidies on the level of cash dividend payment of enterprises can reflect whether the allocation of government subsidies is reasonable. This project uses data from 4,610 non-financial listed enterprises in China A-shares from 2016 to 2020 to conduct an empirical study on the relationship between government subsidies and cash dividend payout levels, and to explore the impact of government subsidies separately by industry. The study found that: government subsidies have a general effect on the increase of cash dividend payment level of enterprises; the fundamental factor that government subsidies have different effects on the cash dividend payment level of different industries is the requirement of cash flow of enterprises; the new manufacturing industry, wholesale and retail industry, real estate industry and agriculture, forestry and fishery industry are significantly affected by government subsidies.

Keywords: government grants; level of cash dividend payments; cash flow.

1. Introduction

The level of cash dividend payments is an indicator of the operating conditions of listed companies, and dividend payouts are an effective way to promote positive interaction in the capital market and the sustainability of corporate financing. At present, the level of cash dividends paid out by listed companies in China is generally low, which requires government coordination to maintain a reasonable and healthy order of distribution and investment and financing, and to promote the growth of micro-entities. As an instrument of fiscal and industrial policy, government subsidies have a direct impact on the behaviour of micro-entities by tilting resources towards specific industries and enterprises. Therefore, the impact of government subsidies on the level of cash dividend payments is also an important area of research, but it is still relatively little explored in academic circles.

The effects of government subsidies can be broadly classified into incentives and disincentives. Huo [1] classifies government subsidies into revenue-based and asset-based government subsidies and conducts an empirical analysis on a sample of SMEs listed on the SMB from 2011 to 2017 under different financing constraints, further concluding that there are differences in the effects of the two types of government subsidies on firm growth. Among them, revenue-based government subsidies have a facilitating effect on the short-term growth of enterprises and no significant effect on their long-term growth; asset-based government subsidies have a facilitating effect on the long-term growth of enterprises and no significant effect on their short-term growth; Yang [2] further explores the intrinsic mechanism of the impact of government subsidies on enterprise innovation, and the regression results indicate that government subsidies have a significant booster effect on the strategic advancement of enterprises. On the contrary, some scholars argue that government subsidies have a negative impact on enterprises to a certain extent. Tian et al [3] empirically tested the inhibitory relationship between government subsidies and enterprise financialization by classifying government subsidies into: incentive subsidies, policy subsidies and endowment subsidies, using a sample of

manufacturing listed companies in China's Shanghai and Shenzhen A-shares from 2013 to 2018; Jiang et al [4] applied the 2014 to 2018 data of Chinese listed companies in strategic emerging industries in Shanghai and Shenzhen A-shares, from the perspective of enterprise innovation dynamics, the empirical study found that there is an inhibitory effect between government subsidies and enterprise total factor productivity, especially for strategic emerging industries.

Most of the existing literature explores the influencing factors of cash dividends from both macro and micro perspectives. Zou and Bai [5] consider the influencing factors of cash dividends at both macro and micro levels, and use non-linear regression methods to test the dynamic adjustment relationship between cash dividends and financing path and capital structure, and find that there is a contradictory relationship between corporate dividend distribution behavior and corporate financing behavior, which in turn affects the efficiency of capital adjustment. At the micro level, Tan et al [6] conducted an empirical study with a sample of Chinese A-share listed companies from 2006 to 2017 and found that cash dividends are influenced to a greater extent by stock liquidity, with a significant negative correlation between the two; Zheng et al [7] used principal-agent theory as the basis of their study, combined with the objective existence of small and medium-sized board listed companies in mainland China's A-share market in terms of industry, size and governance structure. The study finds that the bargaining power of both principal-agent parties has an important impact on the dividend distribution policy of small and medium-sized listed enterprises; at the macro level Zhu et al [8] incorporate the micro effects of monetary policy into the research framework based on a sample of Chinese A-share listed companies from 2009 to 2018, and construct a classification of the impact of monetary policy on corporate cash dividends into three mechanisms of action: investment environment, financing environment and stock price, concluding that the effect of monetary policy on corporate cash dividends has countercyclical characteristics.

This paper selects 4610 non-financial listed enterprises in China A-shares, and adopts a double fixed effects model for panel data to quantify the impact of government subsidies on cash dividend payments, while controlling for variables that influence the distribution of cash dividends in some enterprises' characteristics, and quantifying the impact of government subsidies on cash dividend payments by industry. At the same time, the impact of government subsidies on the level of cash dividend payout was investigated by industry, and the specific impact and mechanism of government subsidies on different industries was obtained. Finally, a robustness test was conducted to contribute to the rational use of government subsidies to enhance the level of cash dividend payout and promote the benign development of the capital market.

2. Study Object and Hypothesis Construction

2.1 Introduction to the study population

2.1.1 Government grants

Government subsidies are mainly manifested as the transfer of ownership of financial funds from government departments to enterprises through the exercise of their economic intervention functions, and are one of the important means of government support policies, the purpose of which is to make up for the defects of the market itself, promote the rational allocation of resources and solve a series of problems faced by enterprises in the process of development. The forms of government subsidies received by enterprises are mainly divided into monetary and non-monetary subsidies, of which monetary subsidies are mainly in the form of cash, financial allocations, financial subsidies, tax rebates, tax concessions and so on. For the country, government subsidies help maintain the economy at a reasonable level of fluctuation. The operation of government subsidies reflects the government's tendency of macro-control, when the economy is under pressure, the government appropriately increases government subsidies to promote the stable development of the economy; when the economy shows an upward trend, the government appropriately reduces government subsidies to prevent the economy from overheating. For enterprises, on the one hand, government subsidies have

a certain signalling effect. As there is information asymmetry in the market, enterprises receiving government subsidies are to a certain extent more likely to receive financial support and social recognition. On the other hand, government subsidies are an important source of funding for enterprises, helping to alleviate the problems of limited financing environment and high financing costs, thus providing financial support for the growth of enterprises, enhancing the efficiency of their capital operations and stimulating their vitality.

2.1.2 Cash dividends

Cash dividends, stock dividends, property dividends and liability dividends are the four forms of dividend distribution. Among them, cash dividends, refers to the distribution of undistributed profits of an enterprise to shareholders in the form of cash, and shareholders receive a return on their investment in the form of cash. Cash dividends reflect the life value of the enterprise and the protection of shareholders' rights and interests, and are an important way for enterprises to distribute dividends and a common way for investors to obtain income. For accounting purposes, cash dividends are classified as a current liability in the liabilities category. After an enterprise recognises a profit distribution, a cash dividend payable is accrued, resulting in an outflow of an equal amount from the enterprise's asset items as well as owner's equity and an increase in the dividend payable on the liability items. With sufficient internal funds and retained earnings, enterprises formulate a reasonable dividend distribution policy to ensure the stable operation of their capital. The distribution of cash dividends by an enterprise is influenced by various factors such as the size of the enterprise, corporate governance and the external environment of the enterprise. The level of cash dividend payment will have a direct effect on the market price of the enterprise's shares. The distribution of cash dividends by an enterprise to investors helps to convey favourable business information to investors, which in turn affects the fund-raising ability and market value of the enterprise.

2.2 Hypothesis and theoretical study

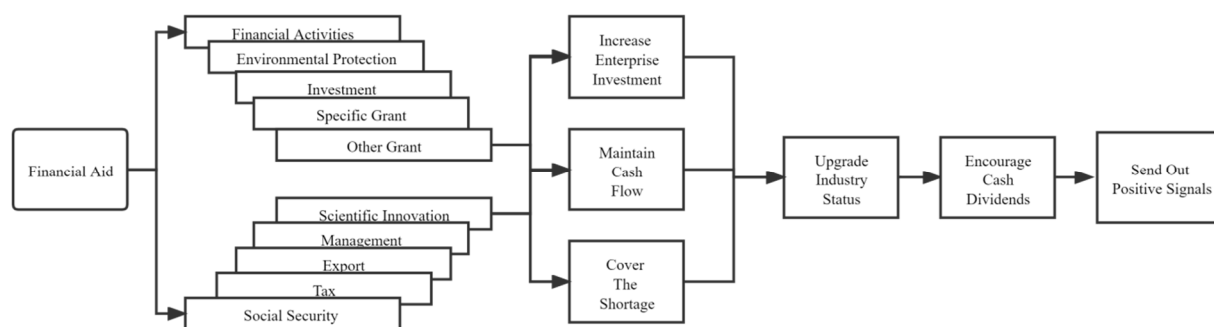


Figure 1. Map of the role of government grants

Hypothesis 1: The stronger the government subsidy, the higher the level of cash dividend payment by the firm

Government subsidies, as an important tool for the government to regulate the market economy, help to assist specific industries to weather economic cycles and maintain the normal operation of enterprises. Financial subsidies can be classified into 10 types, including technology and innovation subsidies and business-related subsidies (Figure 1). In summary, these 10 types of government subsidies are mainly aimed at encouraging enterprises to make special investments, maintaining their normal cash flow and making up for their shortcomings in development, thus enhancing the economic efficiency and competitiveness of the corresponding enterprises and increasing their profits. At the same time, by increasing the level of cash dividend payment to effectively control cash flow, the enterprise can minimise the proxy problem between directors and management due to cash flow inflation. Therefore, we will assume that the stronger the government subsidy, the higher the level of cash dividend payment of the enterprise.

Hypothesis 2: The sensitivity of the impact of government grants on the level of cash dividend payments varies by industry.

Government subsidies affect the size of an enterprise's cash receipts and payments, giving the enterprise more surplus resources to dispose of and transfer, reducing the risk of cash flow management and debt management, and increasing the enterprise's profitability and investment and financing capacity. According to the Chen and Zhao[9], as an act of government support to enterprises, government grants can actually be seen as a potential endorsement and guarantee. This can send a favourable message to the capital markets to attract more investment and promote improved corporate performance. The formation and enhancement of profits is the fundamental basis for determining the level of dividend payments, and the heterogeneity between industries makes it possible for government subsidies to have different effects in facilitating the process of corporate value creation. For example, traditional manufacturing industries have a long payback cycle and are less likely to generate cash flow to improve corporate profits in a short period of time. At the same time, traditional manufacturing industries are more cautious about the level of cash dividend payments and payouts than other industries due to the higher cash management requirements associated with long payback cycles. Therefore, the heterogeneity of industries allows this paper to make the following hypothesis: the sensitivity of government subsidies to the impact of cash dividend payout levels varies across industries.

3. Sample selection and model construction

3.1 Sample selection

This paper selects non-financial A-share listed companies in China from 2016 to 2020 as the sample, and treats the sample as follows: (1) exclude ST and *ST listed companies; (2) exclude companies that do not disclose government subsidies; and (3) exclude companies with missing data in the sample. After the above processing, this paper finally obtained a total of 9,378 research samples. The data in this paper were mainly obtained from the Wind database.

3.2 Variable setting

(1) Explanatory variable: Level of cash dividend payments (Div) Cash dividends are the most common form of dividend distribution. Compared to stock dividends, which do not result in an actual outflow of resources from the company, the level of cash dividend payments is chosen as the object of study to be closer to the economic substance. Factors such as company size and dividend decisions affect the total size of cash dividend payments, and using the total size of cash dividend payments as an explanatory variable makes it difficult to reflect the true causality of the study. Therefore, this paper includes cash dividends per share in the scope of examination. In addition, cash dividends are subject to tax in China, so this paper uses cash dividends per share after tax to represent the level of cash dividend payments.

(2) Explanatory variable: financial assistance (Sub). Broadly speaking, government grants take a variety of forms and include both non-reimbursable transfers of monetary assets and non-reimbursable transfers of non-monetary assets. Funds from non-monetary assets to the recipient is a form of government subsidy. Also, the company includes the amount of government grants in its operations in the accounting cycle to reflect the true financial position, which facilitates the collection and processing of data. However, due to the large difference in the quantitative scale, this paper uses the natural logarithm of the amount of government grants received by the company to represent the level of financial assistance.

(3) Control variables: The level of cash dividend payout is also influenced by the firm's own factors, including its size, gearing (Lev), cash holding ratio (Cash), growth, equity concentration (Sh1), board size (Bdsize), nature of ownership (Soe), dual role (Dual), and equity checks and balances (Cstr). and equity checks and balances (Cstr), the above variables were selected by referring to the variables related to controlling for changes in intra-firm factors in Shi and Zhang[10] 's study on the effect of

tax incentives on cash dividend payout levels. Also the level of cash dividend payout, as a variable that varies over time and by industry, can lead to fluctuations in the level of payout from year to year and by type of industry. Variable definitions are shown in Table 1.

Table 1. Definition of key variables

Variable type	Variable name	Variable Codes	Variable Description
Explained variables	Level of cash dividend payments	Div	Cash dividends after tax per share
Explanatory variables	Government grants	Sub	Use the natural logarithm of the amount of government grants received by the business
	Size of business	Size	Total business assets / operating income
	Gearing ratio	Lev	Total liabilities at end of period / Total assets at end of period
	Cash holding ratio	Cash	Net operating cash flow/total assets
Control variables	Growth	Growth	Operating income growth rate
	Concentration of shareholding	Sh1	Percentage of shareholding of the largest shareholder
	Board size	Bdsize	Ln (number of board members)
	Nature of ownership	Soe	Dummy variable, 1 for state-owned enterprises, 0 otherwise
	Double-hatted	Dual	Dummy variable, Chairman and Managing Director is 1 otherwise 0
	Shareholding checks and balances	Cstr	Sum of the shareholdings of the 2nd to 10th largest shareholders
	Year	Year	Annual dummy variables
	Industries	Ind	Industry dummy variables

3.3 Model construction

To test the effect of financial assistance on the level of cash dividend payments, the following model was developed:

$$Div_{it} = \beta_0 + \beta_1 \times Sub_{it} + \beta_2 \times Controls_{it} + \sum Ind_i + \sum Year_i + \varepsilon_{it} \quad (1)$$

The econometric model introduces several control variables based on the explanatory variable financial assistance (Sub) to reduce omitted variable bias, and controls for time fixed effects at the firm level. At the same time, industry fixed effects are introduced to better investigate the heterogeneity of financial assistance on cash dividend payout levels across industries. In addition, to test the robustness of the empirical results, we use total cash dividends/total shareholders' equity at year-end (Div1) and cash dividends/sales revenue (Div2) to replace the explanatory variables separately for robustness testing.

3.4 Empirical analysis

3.4.1 Descriptive statistics

Table 2 presents the results of the descriptive statistics of the main variables in the model. As can be seen from Table 2, the maximum value of the level of corporate cash dividend payments is 19.293, the minimum value is 0.001 and the standard deviation is 0.449, with a large difference between the maximum and minimum values, indicating that there is a large difference in the level of cash dividends paid by different listed companies' corporate cash dividends. The mean value of government subsidies was 17.523, indicating that the vast majority of listed companies received a high level of government subsidies. The mean value of shareholding concentration was 35.177, the maximum value was 88.240 and the minimum value was 4.080, indicating that the shareholding ratio of the largest shareholder of listed companies was 35.177% on average, and the maximum shareholding ratio reached 88.24%, and there were significant differences in the shareholding ratio of the largest shareholder of different listed companies. The mean value of the nature of ownership is 0.312, indicating that most of the listed companies in the sample are non-state-owned enterprises, with state-owned enterprises accounting for 31.2% of the total number of listed companies in the

sample. The mean value of enterprise growth was 0.560 and the minimum value was -3.027, indicating that the average growth rate of operating revenue of listed companies in the sample was 56.0% and some listed companies had negative growth in operating revenue.

Table 2. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Div	9378	0.203	0.449	0.001	19.293
Sub	9377	17.253	1.602	8.294	23.558
Sh1	9378	35.177	14.456	4.080	88.240
Soe	9378	0.312	0.463	0	1
Cstr	9378	25.904	12.627	1.060	66.760
Dual	9378	0.306	0.461	0	1
Cash	9378	0.061	0.067	-0.744	0.664
Growth	9378	0.560	6.904	-3.027	434.593
Lev	9378	0.396	0.186	0.014	0.925
Bdsize	9378	2.268	0.250	1.386	3.258
Size	9296	2.407	2.667	0.088	79.627

3.4.2 Correlation analysis

Table 3 presents the results of the correlation analysis of the main variables in the regression model of this paper. As can be seen from Table 3, the Pearson correlation coefficient between the variables is basically less than 0.5, indicating that there is no serious multicollinearity between the variables. The correlation coefficient between government subsidies and the level of cash dividend payment of enterprises was 0.075 and was significant at the 1% level of significance, indicating that there was a positive relationship between government subsidies and the level of cash dividend payment of enterprises, and the stronger the government subsidies, the higher the level of cash dividend payment of enterprises. This is consistent with the expectation of hypothesis 1 and can be a preliminary test of hypothesis 1.

Table 3. Correlation analysis of the main variables (heat map)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Div	1.000										
(2) Sub	0.075***	1.000									
(3) Sh1	0.109***	0.068***	1.000								
(4) Soe	0.011	0.160***	0.241***	1.000							
(5) Cstr	0.046***	-0.025**	-0.476***	-0.277***	1.000						
(6) Dual	0.007	-0.072***	-0.030***	-0.306***	0.090***	1.000					
(7) Cash	0.272***	0.083***	0.081***	-0.036***	0.047***	0.006	1.000				
(8) Growth	-0.010	0.005	0.007	0.024**	0.001	0.020*	-0.019*	1.000			
(9) Lev	-0.070***	0.281***	0.073***	0.257***	-0.110***	-0.108***	-0.193***	0.058***	1.000		
(10) Bdsize	-0.020**	0.103***	0.030***	0.307***	-0.054***	-0.159***	0.009	0.035***	0.126***	1.000	
(11) Size	-0.054***	-0.119***	0.015	0.075***	-0.013	-0.031***	-0.149***	0.013	-0.029***	0.036***	1.000

3.4.3 Key hypothesis testing

In order to test hypothesis 1, this paper conducted a regression analysis of government subsidies and the level of cash dividend payment of enterprises, and the regression results are shown in Table 4. As can be seen from Table 4, the regression coefficient of government subsidies is 0.021 and is significant at the 1% level of significance, indicating that the stronger the government subsidies are, the higher the level of cash dividend payment of enterprises. This may be due to the fact that government subsidies encourage enterprises to make up for their shortcomings in development by increasing special investments through a series of financial assistance initiatives. This helps to improve the economic efficiency and industry status of enterprises, increase their profits, provide financial support for their growth, stimulate their vitality and give them the incentive and ability to increase the level of cash dividend payout. Therefore, Hypothesis 1 is validated.

Table 4. Regression results of government grants and the level of cash dividend payments by firms

Variables	Div	T-value	P-value
Sub	0.021***	3.600	0.000
Sh1	0.004***	6.790	0.000
Soe	0.025	0.900	0.367
Cstr	0.003***	7.360	0.000
Dual	0.000	0.050	0.963
Cash	1.512***	5.690	0.000
Growth	0.000	0.250	0.806
Lev	-0.123***	-4.320	0.000
Bdsize	-0.058	-1.410	0.158
Size	-0.001	-0.630	0.526
_cons	-0.297*	-1.930	0.054
Ind	Yes	Yes	Yes
Year	Yes	Yes	Yes
Sample size	9,295	F-value	27.95
Adj R-squared	0.149	P-value	0.000

3.4.4 Endogeneity test

In this paper, a one-period lag of the main variables was adopted to mitigate the endogeneity problem. The variables other than the explanatory variables are lagged by one period and substituted into the above model for regression and the results are shown in Table 5. The effect of government subsidies on the level of cash dividend payments is still positive at the 10% significance level, with a regression coefficient of 0.018. This indicates that the effect of government subsidies on the level of cash dividend payments remains unchanged and significant after the endogeneity problem is mitigated by using a one-period lag.

Table 5. Test results for the endogeneity problem

Variables	Div	t-value	P-value
L.Sub	0.018*	1.850	0.064
L.Sh1	0.004***	5.100	0.000
L. Soe	0.037	1.050	0.292
L.Cstr	0.003***	5.930	0.000
L.Dual	0.006	0.510	0.610
L.Cash	1.367***	3.800	0.000
L.Growth	0.000	1.310	0.190
L.Lev	-0.078*	-1.820	0.070
L.Bdsize	-0.060	-1.220	0.223
L.Size	-0.000	-0.060	0.956
cons	-0.258	-1.190	0.235

3.4.5 Robustness tests

Table 6. Regression results for total cash dividends/total shareholders' equity at year-end

Variables	Div1	T-value	P-value
Sub	0.0012***	3.3300	0.0010
Sh1	0.0005***	11.0500	0.0000
Soe	-0.0070***	-5.0500	0.0000
Cstr	0.0004***	7.8300	0.0000
Dual	-0.0012	-1.1100	0.2660
Cash	0.1871***	15.1400	0.0000
Growth	-0.0000*	-1.7800	0.0750
Lev	-0.0138***	-3.8600	0.0000
Boardsize	-0.0004	-0.2000	0.8420
Size	-0.0007***	-2.6100	0.0090
_cons	-0.0167**	-2.2200	0.0260

(1) Replace the explanatory variable: total cash dividends/total shareholders' equity at the end of the year. In this paper, the measure of cash dividends was replaced with the ratio of total cash

dividends to total shareholders' equity at the end of the year. And the replaced sample was re-substituted into the model for regression, and the regression results are shown in Table 6 below. The regression coefficient for government subsidies was 0.0012 and was significant at the 1% level. This indicates that the higher the government subsidies, the higher the level of cash dividend payments, which also confirms hypothesis 1.

(2) Replace the explanatory variable: cash dividends/sales revenue. Referring to Shi and Zhang, this paper replaced the measure of cash dividends with the ratio of cash dividends to sales revenue and re-substituted the replaced sample into the model for regression, the regression results are shown in Table 7 below. The regression coefficient for government subsidies was 0.0015 and was significant at the 1% level. This indicates that the higher the government subsidy, the higher the level of cash dividend payment, which also confirms hypothesis 1.

Table 7. Regression results for cash dividends/sales revenue

Variables	Div2	T-value	P-value
Sub	0.0015***	2.6800	0.0070
Sh1	0.0006***	7.9400	0.0000
Soe	-0.0047**	-2.4200	0.0160
Cstr	0.0005***	6.5000	0.0000
Dual	-0.0000	-0.0200	0.9870
Cash	0.1931***	11.4000	0.0000
Growth	-0.0000	-0.1600	0.8750
Lev	-0.0900***	-17.2200	0.0000
Boardsize	0.0007	0.2700	0.7880
Size	0.0123***	3.2400	0.0010
cons	-0.0237	-1.2300	0.2200

3.4.6 Further analysis: based on the results of the industry estimates

Of the 13 industries selected, only five industries showed significant coefficients, namely agriculture, forestry and fishing, electricity, heat, gas and water production and supply, real estate, wholesale and retail and new manufacturing. According to Table 8, The coefficients for wholesale and retail and new manufacturing were both significant at the 1% level, with coefficients of 0.0268 and 0.0284 respectively, while the coefficients for agriculture, forestry and fishery and real estate were both significant at the 5% level, with coefficients of 0.0668 and 0.0368 respectively. The effect of government subsidies on the level of cash dividend payments is positive in all five industries, indicating that government subsidies increase the level of cash dividend payments in the corresponding five industries, most significantly in agriculture, forestry and fishery, similarly in real estate, wholesale and retail and new manufacturing, and least significantly in electricity, electricity, heat, gas and water production and supply. The remaining industries did not show significant results.

Table 8. Estimated results by sector300

Variables	Number of observations	Coefficient
Agriculture, forestry and fisheries	78	0.0668**
Electricity, heat, gas and water production and supply	306	0.0111*
Real Estate	277	0.0368**
Construction	264	0.0074
Transport, storage and postal services	306	-0.0086
Scientific research and technical services	111	-0.0028
Wholesale & Retail	399	0.0268***
Water, Environment and Public Facilities Management	151	0.0066
Culture, sport and entertainment	123	0.0111
Information transmission, software and information technology services	725	0.0069
Traditional manufacturing	1626	0.0137
New manufacturing	4698	0.0284***
Rental and business services	126	0.0020

The impact of financial assistance on the level of cash dividend payments is strongly heterogeneous across industries. The results show that government assistance is significantly and positively correlated with the level of cash dividend payments in the wholesale and retail and new manufacturing industries. The wholesale and retail industry has high capital turnover, high accounts receivable and accounts payable, and high demand for payment and collection capabilities. The new manufacturing industry has a higher proportion of investment in technology and research and development, with higher investment risks, and coupled with higher investment in fixed assets, its investment return cycle is longer. The real estate industry and the agriculture, forestry and fishery industry also exhibit similar characteristics to those of the new manufacturing industry. Due to the nature of the industries, both types of industries place high demands on cash flow management, which inhibits the willingness of companies to pay cash dividends and the level of payments. The intervention of financial assistance has eased the cash flow pressure on both types of companies and increased the willingness to distribute and pay dividends. The government, in order to improve the efficiency of financial fund distribution and promote the healthy development of the capital market, should mention moderately increasing the support of financial subsidies to the above two types of industries, so as to promote the real industries to become bigger and stronger for the benefit of small and medium shareholders. At the same time, it should actively support other industries to distribute cash dividends in due course to promote the formation of a good order of investment and financing.

4. Conclusion

This paper takes the non-financial A-share listed companies in China from 2016 to 2020 as a sample. The incentive effect of government subsidies on the increase of cash dividend payment level is studied, and whether there is any difference in the effect of government subsidies on the level of cash dividend payment in different industry situations. The results show that the higher the government subsidies, the higher the level of cash dividend payments. Based on the results of the industry study, it was found that for industries requiring sufficient cash flow, the effect of government subsidies on the level of cash dividend payments was more pronounced. As government subsidies can effectively alleviate the pressure of insufficient cash flow, industries with long investment return cycles and a high proportion of fixed assets can allocate capital more efficiently with the help of government subsidies; industries with a high proportion of investment in science and technology and high investment risks can use government subsidies to increase cash flow and thus effectively reduce the investment risks of enterprises; retail and wholesale industries can effectively rely on government subsidies to maintain stable cash flow and thus effectively maintain production and reduce the risk of investment. The retail and wholesale sector can effectively rely on government subsidies to maintain stable cash flow, thus effectively maintaining production and reducing the risk of bankruptcy due to large fluctuations in cash flow.

The significance of the findings of this paper is that it explores the impact of government subsidies on the level of cash dividends of micro enterprises and provides theoretical evidence that government subsidy policies affect the behaviour of micro enterprises. At the same time, this paper has the following implications: firstly, the government should use government subsidies to give enterprises policy support at the right time; secondly, the government should give different subsidies to different industries according to their cash flow level requirements, so as to reduce the waste of funds to a greater extent and improve the efficiency of capital allocation, so that funds can flow to the real industries that need subsidies more.

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