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A Research on Internal Control, Cash Dividends and Enterprise Performance Based on Economic Consequences

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Abstract. Whether internal control and cash dividend will have an interactive synergetic effect on enterprise performance or not is a study of both theoretical value and practical significance. Consequently, this article adopts a two-stage investment decision research process, explains the complex theoretical relationship among internal control, cash dividend and enterprise performance and, taking the Chinese A-share motherboard as an example, further explores their interactive synergetic effect. The research concludes that: (1) Internal control and cash dividend can contribute to the improvement of both short-term and long-term enterprise performance; (2) Internal control and cash dividend do have a significant synergetic effect, however there is a large disparity between the synergetic effect on short-term and long-term enterprise performance. In addition, the study finds that internal control and cash dividends are mutually regulative, thereby diminishing the positive impact on short-term enterprise performance and conversely enhancing the positive impact on long-term enterprise performance respectively.

1. Introduction

Traditional methods of enterprise performance measurement, such as solvency, profitability and cash dividend indicators are no longer satisfactory in fulfilling investors needs when rationalizing enterprise performance in the intense business world. Owing to this, considerable attention has been paid to internal managerial factors, for instance corporate jurisdiction and internal control. Existing studies have highlighted that the creation and implementation of internal control within companies are formed with the objective of maximizing the enterprise value [1] and thus provide a series of reasonable assurances to the efficiency of enterprise operationsthe reliability of financial statements and the observation of laws and regulations (COSO 2013), in order to continuously improve enterprise performance. Therefore, relating to the returns brought to investors by means of cash dividend, enterprises should place more importance on the signaling effect of disclosure of internal control and on the improvement of internal control quality to satisfy investors demands. An example of this would be to enhance consumer willingness to buy a product, to obtain loans from banks or other financial institutions, to gain access to policy support from the government, or to increase confidence of potential investors to make fiscal decisions. Internal control and cash dividend seem like two mutually independent decision-making processes without an apparent

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cross-over. However, a company's cash dividend policy is in fact a necessity for corporate governance, according to Yang [2], as cash dividends are a realistic way to meet the investors demand and to enhance enterprise performance. Enterprise performance will generate a positive market reaction at the point when investors believe that internal controls of enterprises are capable of improving their operational efficiency and reducing agency costs [3]. In this instance, if an enterprise further succeeds in offering a positive cash dividend policy, this positive performance reaction may be further amplified. Internal control and cash dividend may provoke a potential synergetic effect on enterprise performance, and therefore is of significant importance when considering the effect of cash dividends in a study of the impact of internal control on enterprise performance.

Current literature on the studies having being carried out on the theoretical analysis and empirical testing of the relationship between internal control and enterprise performance, and the relationship between cash dividend and enterprise performance, fail to reach an agreement on the empirical result and, it is observed that conclusions and explanations tend also to be contradictory [4]. According to Willis and Lightles [1] Internal Control Management Report, the disclosure of internal control information can bring a positive reaction on stock prices, which then contributes to the improvement of corporate value. This conclusion is in accordance with the empirical research of Rezaee and Jain [5] and Li et al. [6]. However, Zhang [7] warns that the implementation of excessive laws and regulations on internal control will produce a burden or side effect to enterprises, resulting in a negative reaction in the market and a decrease on corporate value. This finding is similarly supported by Engel et al. [8]. Baker and Wurgler [9, 10] consider that those enterprises which pay cash dividends have a higher corporate value than those who do not pay cash dividends. Johnson et al. [11] consider that high cash dividends may however have the negative effect of expropriating the interest of minority shareholders and creditors by the larger groups of shareholders. The researchers also suggest that high cash dividend levels will lead to a decline in corporate value. In short, current studies mainly focus on either the simple correlation between internal control and enterprise performance or between cash dividend and enterprise performance [12–14]. The interactive synergetic effect of internal control and cash dividend on enterprise performance still therefore remains to be examined.

For the reasons outlined above, this paper prepares to advance and deepen the understanding of the relationship between internal control, cash dividend and enterprise performance, mainly focusing on the interactive synergetic effect of internal control and cash dividend on an enterprises short-term and long-term performance. A two-stage investment decision model is applied, to analyze and construct a theoretical concept model of the relationship between the three factors. In this study, a panel data of 2004-2013 A-share motherboard listed companies is used and a suitable fixed effects model of multivariate regression method is applied in the empirical test. The results show that both internal control and cash dividend can enhance an enterprises short-term and long-term performance. A significant synergetic effect exists between the impact on enterprise performance, specifically, internal control and cash dividend can be mutually adapted, thus reducing the positive effect on short-term enterprise performance and enhancing positive impact on long-term enterprise performance.

This paper makes the following contributions. (1) Using the two-stage investment decision research process as reference, the article constructs a theoretical concept model of internal control, cash dividend and enterprise performance, and based on this concept model we can better explain the complex relationship among the three factors. (2) This paper uses panel regression analysis which incorporates internal control and cash dividend into the same empirical study model under the guidance of theoretical framework. The impact of both short-term and long-term enterprise performance is examined by means of analysis of their interactive synergetic effect. (3) The conclusion of this research not only enriches the available literature on internal control and cash dividend, but also provides guidance to listed companies, their investors and government regulation departments in the decision-making process.

1.1. Internal Control and Enterprise Performance

From the perspective of economic anthropology, modern companies are compact enterprises which are created based on a set of principal-agent relationships. It is therefore necessary to configure internal resources and consider organizational behavior in order to replace the price mechanism and thus reduce transaction costs. The expansion and contraction of the market efficiency frontier should elicit a saving

in transaction costs to and allow for maximum expansion. One of the roles of corporate government is to reduce transaction costs. Minimal transaction costs entail maximized organizational efficiency, and the subsequent increase in enterprise value. Under an incomplete contract, in order to achieve the lowest transaction costs and the maximum value of the enterprise, there should be an internal control mechanism within the enterprise to ameliorate any shortcomings in the enterprise contract and to facilitate normal operation and development of the enterprise. Internal control acts like a supervisory or control mechanism used by principal over its agent for the purpose of protecting the companys self-interests.

Internal control is essentially a controlling mechanism that, in the event of lower transaction cost, can rectify any deficiencies caused by an incomplete company contract and reduce agency cost, by performing a value creating activity, its final aim to help achieve the organizational goal of creating value for shareholders and other stakeholders. Internal control is achieved through value management. The functions of internal control are mainly to strengthen its infrastructure management, to prevent risk and to increase value. Among these functions, to increase value is the purpose, to prevent risk is the key point, and to strengthen internal control is the basis. The core function of internal control is the appreciation of enterprise value but not the control. According to this, we propose the following hypotheses:

H1: internal control and short-term enterprise performance has a positive correlation.

H2: internal control and long-term enterprise performance has a positive correlation.

1.2. Cash Dividend and Enterprise Performance

According to the opinions of principal-agent theory, there are still major flaws in the discussions over influence of cash dividends on enterprise value or performance. Principal-agent theory sees cash dividends as a kind of governance mechanism that can relieve arising conflict, and reduce agency costs from the perspective of testing interest conflicts between shareholders and management [15–17]. Cash dividends not only reduce the free cash flow of in-service consumption, or over investment of managers, and increase the possibilities of external financing, but also encourage managers to promote enterprise performance and value by all means possible [18]. The cash dividend occupation hypothesis proposes a benefits transformation concept in the case of ownership concentration. This hypothesis argues that cash dividends may be the one of the ways in which companies major shareholders occupy the interests of minority shareholders, and that high cash dividends may damage enterprise value [19–21]. Whilst some studies have focused on the governance effect or entrenchment effect of cash dividends based on principal-agent [22], most research concentrated on testing the influencing factors of cash dividend policy, and the effect of these cash dividends on companies principal-agent conflicts.

It can be observed that cash dividends can influence the agency cost of listed companies, the increase in agency costs can significantly damage the performance of enterprises, and based on this, we can deduce that cash dividends can influence enterprise performance by influencing agency cost, and this kind of impact may be influenced by the double-edged sword, a characteristic of cash dividends. Whether cash dividends are likely to ultimately promote or conversely damage enterprise performance by influencing agency cost, is determined by whether the governance effect is in the dominant position or if the entrenchment effect is in the dominant position. Suppose the governance effect brought about by the reduction of cash dividend to first generation agency cost is V1, in second generation agency conflicts, cash dividends become the tool for major shareholders to empty the listed companies, the entrenchment effect it elicits is V2, and the governance effect made by opportunistic behavior, by reducing free cash flow and major shareholders relative transactions, is V3. Apparently, when V1+V3-V2 >0, the governance effect of cash dividend is in the dominant position; When V1+V3-V2<0, the entrenchment effect of cash dividend is in the dominant position. When the governance effect of cash dividend is in the dominant position, it lowers the two of the equity of the agency costs as a whole, and consequently helps to promote enterprise performance; When the entrenchment effect of cash dividends is in the dominant position, the two of the equity of the agency costs will increase, and damage enterprise performance ensues. As a conclusion, we propose the following hypotheses:

H3a: Cash dividend has a positive correlation with enterprise short-term performance. Here, the governance effect of cash dividend is in the dominant position.

H3b: Cash dividend has a negative correlation with enterprise short-term performance. Here, the entrenchment effect of cash dividend is in the dominant position.

H4a: Cash dividend has a positive correlation with enterprise long-term performance. Here, the governance effect of cash dividend is in the dominant position.

H4b: Cash dividend has a negative correlation with enterprise long-term performance. Here, the entrenchment effect of cash dividend is in the dominant position.

1.3. Internal control, cash dividend and enterprise performance

In the first two parts of the analysis, internal control as a governance method can have a positive impact on enterprise performance owing to the cash dividends two-edged sword characteristic, although the impact on enterprise performance is still not clear. We believe that both internal control and cash dividend can interact together to affect enterprise performance. Primarily, although the quality of internal control helps to enhance enterprise performance, it is difficult to evaluate the true value of internal control information for external investors as a result of any defective information in the report, namely the input-output ratio of internal control. An over-investment in internal control will shake investors' expectations of the market value of the enterprise's future. On the other hand, cash dividends can be seen as a direct signal of future enterprise profitability, which indicates that the enterprise has adequate resources for the construction of internal control. Accordingly, cash dividend payouts will help investors to evaluate the true value of internal control. Secondly, because of information asymmetry between managers and investors, it is difficult for investors to make sound judgments on the motivation of cash dividend payout. Cash dividend payout will have a negative effect if investors consider that cash dividend payout is a questionable method used by large investors to encroach small and medium investors' interests, also referred to as tunneling behavior. The disclosure of enterprise governance information, especially of a high-quality transparent nature, indicates that the enterprise has a healthy governance mechanism and one which can ensure that the act of cash dividend payout is not just a means used by managers to sacrifice the interests of small and medium investors. These two explanations indicate that there is a regulative effect between internal control and cash dividend on enterprise performance.

In summary, internal control regulates the positive effect of cash dividend on enterprise performance and cash dividend also regulates the positive effect of internal control on enterprise performance. From the perspective of regression analysis, it can also be seen that there is a positive correlation between internal control and cash dividend. The analysis highlights a mutual regulatory effect on enterprise performance which makes internal control and cash dividend play a "1 + 1>2" synergetic effect on enterprise performance. In other words, internal control and cash dividend should be combined together in the overall enterprise strategy. Based on these factors, we propose the following hypotheses:

H5: Internal control and cash dividend have an interactive synergetic effect on short-term enterprise performance.

H6: Internal control and cash dividend have an interactive synergetic effect on long-term enterprise performance.

2. Methodology

2.1. Sample and Data

For this study, we select listed companies from Chinese A-share motherboard during the year 2004 to 2013. After a series of screening and sorting, samples are accrued relating to 11,507 observations.

Amongst the samples, the index of listed company's internal control is taken from Shenzhen Dibo's DIB internal control and risk management database; the data of cash dividend is derived from the WIND database; all other data are provided by the GTA (CSMAR) database. In order to prevent the confounding effect of extreme values on our findings, the paper processes all continuous variables by excluding extreme 1% values.

2.2. Variable definitions

Dependent variable: In order to be in accordance with existing literature, the article therefore opts to use ROA and TobinQ to measure enterprise performance over both the short-term and long-term.

Independent variable: Internal control and cash dividend. This paper uses Shenzhen Dibo's internal control index to measure the level of internal corporate controls, and uses DPS to measure the cash dividend payment level which is measured by the ratio of cash dividend asset to the number of A-share.

Control variables: The article uses firm size, solvency, growth, liquidity, cash flow and equity status as control variables. Each variable's definition is showed in Table 1.

Table 1: Variable definitions

Variables	Definitions
ROA	Net profit / corporate average assets
TobinQ	The market value of the replacement cost of long-term performance of the enterprise TOBINQ business / enterprise assets
ICI	Dibo company's internal control index (logarithmic)
DPS	Payment of dividends / number of ordinary shares
SIZE	The natural logarithm of firm size control variable SIZE period
LEV	Enterprise ending - total liabilities / total assets
GW	(Year operating income-operating income last year) / last year operating income
TAT	Ending revenue / total assets
FCF	(Cash and cash equivalents - Net cash flow from financing activities) / paid-up capital at period-end value
Liquid	Tradable A shares / total share capital
IND	In the industry take 1, and 0 otherwise

2.3. Model construction

According to the theoretical analysis and research hypothesis of this paper, we mainly use two steps to perform a test on the relationship between internal control, cash dividends and enterprise performance. First, we examine the influence of internal control and cash dividend on short-term enterprise performance. Model 1 and 2 test the influence of internal control and cash dividend on short-term enterprise performance respectively. Model 3 and 4 are expansions of model 1 and 2, as a comparative study. Model 4 also considers the impact of the interaction term of internal control and cash dividend on short-term enterprise performance.

Model 1: $ROA_{it} = \alpha_0 + \alpha_1 ICI_{it} + \alpha_2 Controls_{it} + \nu_{it}$

Model 2: $ROA_{it} = \alpha_0 + \alpha_1 DPS_{it} + \alpha_2 Controls_{it} + \nu_{it}$

Model 3: $ROA_{it} = \alpha_0 + \alpha_1 ICI_{it} + \alpha_2 DPS_{it} + \alpha_3 Controls_{it} + \nu_{it}$

Model 4: $ROA_{it} = \alpha_0 + \alpha_1 ICI_{it} + \alpha_2 DPS_{it} + \alpha_3 ICI * DPS_{it} + \alpha_4 Controls_{it} + \nu_{it}$

The second step is similar to the first step. The main goal is to test the influence of internal control and cash dividend on long-term enterprise performance. Model 5 and 6 examine the effect of internal control and cash dividend on long-term enterprise performance. Model 7 and 8 are expansions, mainly testing the influence of internal control and cash dividend on long-term enterprise performance.

Model 5: $TobinQ_{it} = \alpha_0 + \alpha_1 ICI_{it} + \alpha_2 Controls_{it} + \nu_{it}$

Model 6: $TobinQ_{it} = \alpha_0 + \alpha_1 DPS_{it} + \alpha_2 Controls_{it} + \nu_{it}$

Model 7: $TobinQ_{it} = \alpha_0 + \alpha_1 ICI_{it} + \alpha_2 DPS_{it} + \alpha_3 Controls_{it} + \nu_{it}$

Model 8: $TobinQ_{it} = \alpha_0 + \alpha_1 ICI_{it} + \alpha_2 DPS_{it} + \alpha_3 ICI * DPS_{it} + \alpha_4 Controls_{it} + \nu_{it}$

3. Results

3.1. Descriptive statistics

Table 2 shows the descriptive statistical characteristics of the main variables in the model. We find that the average short-term indicator of listed companies (ROA) is 0.032 with a minimum of -0.235 and a maximum of 0.195. The mean of long-term performance indicators (TobinQ) is 1.726, with a minimum value of 0.904 and a maximum of 6.859. All these results indicate that the current enterprise performance of listed companies overall is low, and identify a large disparity between the levels of performance of individual enterprises. Mean internal control index is 6.518, with a minimum of 5.945 and a maximum of 6.854. The dissimilarity here between the various companies is not significant. The average level of cash dividend payment is 0.075, with a minimum value of 0 and a maximum of 0.6. The level of cash dividends enterprise system is low.

Table 2: Descriptive Statistics

Variables	OBS	Mean	SD	Median	Min	Max
ROA	11507	0.032	0.059	0.030	-0.235	0.195
TobinQ	11507	1.726	1.018	1.351	0.904	6.859
ICI	11507	6.518	0.152	6.534	5.945	6.854
DPS	11507	0.075	0.117	0.02	0	0.6
SIZE	11507	21.875	1.265	21.737	19.244	25.699
LEV	11507	0.519	0.192	0.529	0.082	0.990
GW	11507	0.244	0.678	0.134	-0.634	5.171
TAT	11507	0.706	0.515	0.584	0.064	2.808
FCF	11507	-0.319	1.732	0.008	-7.877	3.772
Liquid	11507	0.653	0.276	0.629	0.090	1

3.2. Correlation analysis

Table 3 shows the correlation coefficients between the key variables. As can be seen, the correlation coefficients between the variables in the table do not exceed 0.5, which indicates that the regression model of this paper is not subject to serious multi-colinearity.

Table 3: Coefficient of main variables

	ROA	TobinQ	ICI	DPS	SIZE	LEV	GW	TAT	FCF	Liquid
ROA	1									
TobinQ	0.182***	1								
ICI	0.383***	0.078***	1							
DPS	0.392***	0.011***	0.325***	1						
SIZE	0.167***	-0.338***	0.481***	0.308***	1					
LEV	-0.337***	-0.207***	-0.096***	-0.144***	0.246***	1				
GW	0.175***	0.026***	0.099***	-0.017*	0.031***	0.058***	1			
TAT	0.134***	0.021**	0.183***	0.134***	0.045***	0.078***	0.047***	1		
FCF	0.092***	0.124***	-0.049***	0.016*	-0.207***	-0.173***	-0.051***	0.108***	1	
Liquid	0.008	0.307***	-0.028***	-0.045***	0.075***	0.022**	-0.118***	-0.005	0.013	1

* *P<0.1,** P<0.05,***P<0.05

As shown in Table 3, the correlation coefficient between the internal control index (ICI) and short-term enterprise performance indicators (ROA) is 0.383, and between ICI and the long-term enterprise

performance indicators (TobinQ) is 0.078. They are at the 1% level significantly correlated. Therefore, internal control and business performance over both the short and long term, has a significant positive correlation. In other words, H1 and H2 are likely to be verified. Cash dividend payment level (DPS) and short-term enterprise performance indicators (ROA) have a correlation coefficient of 0.392, and the correlation coefficient between DPS and long-term enterprise performance indicators (TobinQ) is 0.011. They are significantly correlated at the 1% level. Therefore, there is a significant positive correlation between the company's cash dividend payout and the level of short-term and long-term performance. In other words, H3a and H4a are likely to be verified.

Furthermore, the correlation coefficient between the internal control index (ICI) and cash dividend payout level (DPS) is 0.325, significant at the 1% level. This suggests that there is a strong correlation between the listed company's internal control and cash dividend. It also verifies the theoretical analysis proposed by H5 and H6. That is, internal control and cash dividend can regulate in conjunction with each other, thus creating a positive effect on enterprise performance. It is therefore necessary to examine the collaborative interaction of internal control and cash dividend on enterprise performance.

3.3. Regression Analysis

The effect of internal control and cash dividend on short-term enterprise performance

Table 4 lists the multiple regression results between the independent variables, controlled variables and short-term enterprise performance measure ROA. This article uses a sample from 2004-2013 A-share motherboard panel data, therefore we have to choose the most appropriate model in panel fixed effects, random effects, and mixed effects. By performing a Wald test (to test fixed effects and mixed effects), we find that F statistics of Model 1 to Model 4 are highly significant. We subsequently choose a fixed effect model, the Hausman test (which tests fixed effects and random effects). The Chi2 statistics of Model 1 to Model 4 are also highly significant, suggesting that the fixed effects model and random effects model make no significant difference in estimating the model coefficients. In this case, owing to a conservative estimate, we opt for a fixed effects model.

Model 1 measures the direct relationship between internal control and short-term enterprise performance. The regression results show that the model coefficients of the internal control index are significantly positive ($\alpha_1 = 0.215$, $p<0.01$), indicating that the correlation between internal control index (ICI) and ROA is positive. In other words, internal control and short-term enterprise performance have a significant positive correlation. The hypothesis H1 is verified. Model 2 measures the direct relationship between cash dividend and short-term enterprise performance. The regression results show that the coefficient of the cash dividend payout is significantly positive ($\alpha_1 = 0.579$, $p<0.01$), indicating that cash dividend payout (DPS) and ROA are positively related. Cash dividend and short-term enterprise performance therefore also show a significant positive correlation, so H3a is verified. This indicates that at present, in the Chinese capital market environment, the governance effect of cash dividend is in the dominant position, and that cash dividend in the first generation of agency cost V1 is significantly more than the entrenchment effect V2, caused by the second generation of agency cost. In addition, from the regression results, we find that companies with strong operational capabilities, assets and a high level of cash flow also exhibit higher short-term enterprise performance, whilst those with low solvency tend to achieve a lower short-term enterprise performance.

Models 3 and 4 are expansions of model 1, 2. Model 3 includes internal control and cash dividends into the empirical models. It controls one of the variables in order to examine the impact of other variables on short-term corporate performance. In the case of Model 3, we find that when controlling the cash dividend effect on short-term enterprise performance, the impact of internal control on short-term enterprise performance decreases ($\alpha_1 = 0.209$, $p<0.01$). This shows that cash dividend reduces the influence of internal control on short-term enterprise performance. When controlling the impact of internal control on short-term enterprise performance, the impact of cash dividend on short-term enterprise performance is significantly lower ($\alpha_2 = 0.067$, $p<0.01$). This shows that internal control regulation significantly reduces the effect of cash dividend on short-term enterprise performance. Model 4 is an extended model to include internal control and cash dividend interaction terms. The correlation between the interaction term and short-term enterprise performance is significantly negative ($\alpha_3 = -0.231$, $p<0.01$), and the coefficients of internal control ($\alpha_1 = 0.205$, $p<0.01$) and cash dividend ($\alpha_2 = 0.056$, $p<0.01$) are smaller compared with the model 1, 2,

3. This once again highlights that internal control and cash dividend can interact with each other, thus reducing their impact on short-term enterprise performance. We can therefore assume that cash dividend is able to reduce the impact of internal control on short-term enterprise performance, and internal control can similarly reduce the impact of cash dividend on short-term enterprise performance. This means that H5 has not been verified. This paper suggests that the reasons for this result may be that in the short-term, internal control has not played its role effectively, but conversely internal control needs enterprise to invest adequate resources at its inception, for example in the forms of manpower, material resources and other advantageous resources. At this juncture, it would be easier for potential investors to consider this as tunneling behavior of its major shareholders, and an invasion of minority shareholders interests if the enterprise announces high cash dividend payments. This would increase investors optimism in an enterprises prospects and investment opportunities when combined with the above two factors, and have the effect of reducing the enterprises short-term performance.

Table 4: The effect of internal control and cash dividend on short-term enterprise performance

Short-term performance: ROA				
	Model 1	Model 2	Model 3	Model 4
CON	-1.243***(-45.84)	-0.063***(-4.48)	-1.206***(-44.61)	-1.262***(-37.06)
SIZE	-0.002***(-2.93)	0.003***(3.19)	-0.004***(-4.81)	-0.004***(-4.92)
LEV	-0.085***(-25.68)	-0.119***(-31.72)	-0.080***(-24.18)	-0.078***(-23.64)
GW	0.010***(16.54)	0.014***(20.49)	0.010***(17.32)	0.010***(17.25)
TAT	0.014***(9.73)	0.022***(13.46)	0.012***(8.58)	0.012***(8.66)
FCF	0.002***(7.29)	0.001***(5.39)	0.002***(7.35)	0.002***(7.62)
Liquid	-0.017***(-6.57)	-0.022***(-7.32)	-0.017***(-6.68)	-0.016***(-6.47)
ICI	0.215***(59.07)		0.209***(59.00)	0.205***(58.84)
DPS		0.579***(13.48)	0.067***(13.23)	0.056***(8.79)
ICI*DPS				-0.231***(-8.48)
OBS	11507	11507	11507	11507
IND	√	√	√	√
Wald	F=3.75***	F=3.44***	F=3.16***	F=3.13***
Hausman	Chi2=70.30***	Chi2=281.54***	Chi2=125.27***	Chi2=127.64***
Model	Fixed effect	Fixed effect	Fixed effect	Fixed effect
R^2	0.416	0.228	0.426	0.430

* Note: Figures in parentheses are t-statistics; * P <0.1, ** P <0.05, *** P <0.05 (two-tailed); ultimately select a fixed effects model, so the parties are in the group R square.

The effect of internal control and cash dividend on long-term enterprise performance

Table 5 lists the multiple regression results between the different variables and long-term performance (TobinQ). As in the above analysis, we find that in models 5 to 8, the statistics (F statistics and Chi2 statistics) of the Wald test and Hausman test are highly significant at the 1% level, which infers that we should choose a fixed effects model for multiple regression analysis to evaluate the relationship among the three.

In model 5, the coefficient of internal index (ICI) control is positive and significant (α_1 = 0.349, p<0.01), highlighting the significant positive correlation between internal control and long-term enterprise performance. H2 is verified. In model 6, the coefficient of cash dividend payout level (DPS) is significantly positive (α_1 = 0.607, p<0.01), confirming the benefit of cash dividend payout on long-term enterprise performance (TobinQ). This supports hypothesis H4a. From this we can see, no matter whether over the long term or short term, the governance effect of cash dividend should be in dominant position, and means that the cash dividend in China at the current time has achieved a good corporate governance effect, and is worth noting and encouraging. At the same time, we find that in models 5 to 8, the company's short-term performance indicator (ROA) coefficients show a positive result, both significant at the 1% significance level.

This indicates that short-term enterprise performance positively correlates with the value of the business (similar to the positive long-term performance-related relationship). That is to say, if short-term enterprise performance is improved, investors may deem its future market value to be higher. Consequently this ensures long-term outstanding enterprise performance.

For further analysis of the impact of internal control and cash dividend on long-term enterprise performance, we first use model 5 as a reference model, as a comparison to models 5, 7, and 8. We find that after the addition of corporate cash dividend (DPS) (model7), the long-term impact of internal control on enterprise performance is significantly enhanced (α_1 = 0.441, p<0.01). If we then further add the internal control and cash dividend interaction terms in the research model (model 8), we find that not only is the interaction term coefficient significantly positive (α_3 = 2.690, p<0.01), but the internal control coefficient also increases (α_1 = 0.462, p<0.01). This indicates that the combination of internal control and cash dividend have a joint impact on the long-term performance of the enterprise, and that internal control has a higher impact on long-term performance if cash dividend is added. This conclusion is also part of the verification for H6. This means that cash dividends play a regulatory role on the positive correlation between internal control and long-term enterprise performance.

Secondly, using model 6 as a reference, we study models 6, 7, and 8. We have found that after adding the variables of internal control (ICI) on the basis of model 6 (model 7), the impact of cash dividend on long-term enterprise performance has increased (α_2 = 0.598, p<0.01). This implies that in the case of controlling the impact on internal control on long-term performance, enterprise cash dividend contributes incrementally to long-term performance. If we then further add the internal control and cash dividend interaction terms into the research model (model 8), we find that not only is the interaction term coefficient significantly positive (α_3 = 2.690, p<0.01), but also the cash dividend coefficient increases (α_2 = 0.683, p<0.01). This shows that cash dividend and internal control will jointly influence the long-term performance of an enterprise. Internal control factors play a regulatory role on the positive relationship between cash dividend and long-term enterprise performance. By carrying out a comprehensive analysis we find that H6 has been fully validated.

Table 5: The effect of internal control and cash dividend on long-term enterprise performance

Long-term enterprise performance: TobinQ				
	Model 5	Model 6	Model 7	Model 8
CON	8.898***(19.06)	9.011***(32.14)	9.050***(19.43)	9.876***(20.43)
SIZE	-0.373***(-30.06)	-0.388***(-31.36)	-0.389***(-31.00)	-0.387***(-30.95)
LEV	-0.097*(-1.82)	-0.062(-1.16)	-0.065(-1.17)	-0.078(-1.45)
GW	-0.003(-0.36)	0.002(0.20)	0.002(0.20)	0.002(0.21)
TAT	0.121***(5.37)	0.107***(4.75)	0.117***(4.79)	0.105***(4.68)
FCF	-0.004(-1.10)	-0.004(-1.03)	-0.004(-1.03)	-0.005(-1.25)
Liquid	1.037***(25.81)	1.033***(25.79)	1.033***(25.79)	1.027***(25.69)
ROA	2.347***(15.05)	2.175***(16.09)	2.235***(16.14)	2.266***(14.43)
ICI	0.349***(6.01)		0.441***(7.99)	0.462***(8.35)
DPS		0.538***(7.96)	0.598***(8.79)	0.683***(10.07)
ICI*DPS				2.690***(6.24)
OBS	11507	11507	11507	11507
IND	√	√	√	√
Wald	F=7.28***	F=7.20***	F=7.20***	F=6.87***
Hausman	Chi2=233.19***	Chi2=197.14***	Chi2=205.27***	Chi2=257.71***
Model	Fixed effect	Fixed effect	Fixed effect	Fixed effect
R^2	0.484	0.487	0.487	0.489

* Note: Figures in parentheses are t-statistics; * P <0.1, ** P <0.05, *** P <0.05 (two-tailed); ultimately select a fixed effects model, so the parties are in the group R square.

4. Discussion

Using the analysis process of two-stage investment decision as its reference, this article begins by theoretically analyzing the role of synergy which takes place during the influencing process, looking at such determinants as internal control and cash dividend and their effects on enterprise performance, and further empirically tests the existence of this synergy using the panel data. The conclusion of this article acts not only as a complement to existing literature, but notably broadens our knowledge of internal control and cash dividend economic consequences. The discussion and most prominent points of our conclusion are as followings:

First, in accordance with the previous studies of Willis and Lightle [1], [23] and [3], this article holds the view that internal control has a significantly optimizing effect on enterprise performance. This is apparent in the way that, at the current time, the strengthening of internal control in Chinese listed companies has achieved certain progress, and the governance effect of internal control is gradually advancing. The conclusion of this article also provides new experimental evidence of the enduring argument that cash dividend produces either a governance or entrenchment effect. Alongside the improvements in the Chinese market environment, major shareholders expropriation of minority shareholders is compressed, and recently investors awareness of their rights has become more apparent. All of these factors have brought about a gradual weakening in cash dividends entrenchment effect, whilst the governance effect of cash dividend has been further strengthened. This conclusion is collaborated in the studies of Amidu [14].

Secondly, the most discernible contribution of this article is that it clearly demonstrates the interaction synergetic effect of internal control and cash dividend on enterprise performance, both theoretically and empirically. The empirical result shows that internal control and cash dividend can affect each other to reduce any positive effect on enterprise performance in the short term. However, this conclusion is not in agreement with the articles initial theoretical analysis, one of the main reasons being that compared to developed countries in Europe and America, Chinese internal control is currently still in its infancy, and internal control still requires substantial investment, therefore the governance effect of internal control still fails to play an effective role. In the short term, minority shareholders may lack a thorough understanding of the target company, with the high cash dividend payment of enterprises often being interpreted as major shareholders expropriation and the shortage of internal control information increasing minority shareholders perception of risk. Whilst in the long term, all these deficiencies will inevitably be resolved, the advantage of internal control as a kind of governance mechanism will gradually become more salient, and will enhance investors confidence in decision-making. Furthermore, the payment of cash dividends further emphasizes the positive signal of a companys profitability to medium and small investors, and can facilitate the promotion of enterprise performance. In conclusion, over the long term, internal control and cash dividend can regulate one another, and thus enhance the positive influence of each on enterprise performance.

Finally, this articles samples and data focus on Chinas capital market at the current time. China however is on the verge of significant economic change, especially in respect of its specific policy adjustment relating to internal control. Albeit incomplete, statistics since 2002 indicate that the amendments to laws and regulations for internal control have increased tenfold. Furthermore, Chinas listed companies cash dividend policy is not merely a market behavior, but with the intervention of government, can achieve great administrative power. To conclude, when performing analysis of the specific impact of internal control and cash dividend on enterprise performance, this article only takes into consideration the current capital market environment in China. Caution should therefore be taken before extrapolating the findings to an international capital market.

5. Conclusion

There is considerable literature devoted to study enterprise performance [24, 25], but the literature from the perspective of interactive synergy between internal control and cash dividend is fairly sparse. Taking this paucity of information into account, theoretical and empirical analysis is carried out on panel data of 2004-2013 A-share listed companies by means of a panel fixed effect model. This research draws

the following conclusions. (1) Internal control positively affects both short-term and long-term enterprise performance. The implementation of an internal control system can directly optimize various resources, reduce operational and management costs, and thereby enhance operating profit and short-term performance. In the same way, enterprises which continuously improve the quality of their internal control will inevitably reduce risks and provide positive market news to investors, which will once again improve their enterprise performance in the long run. (2) Cash dividends play a positive role on short-term and long-term enterprise performance. Cash dividend payout can directly reduce the total amount of undistributed profit, resulting in a corresponding reduction in shareholder equity and an increase in short-term enterprise performance measurement ROA. Furthermore, cash dividend payout not only conveys effective operation signals to investors, but acts as an effective incentive to potential investors. It also elevates the stock price and ultimately improves enterprise market values. (3) The combination of internal control and cash dividend has a synergetic effect which reduces an enterprises short-term performance. In the short-term, the creation and implementation of internal control requires a substantial investment in terms of resources, of human, financial, material and other nature. Cash dividend payout can be regarded as a loss of enterprise resource and potential investment opportunity. When combining internal control and cash dividend, an enterprises short-term operating profit could be reduced, resulting in a temporary reduction in short-term performance. (4) Internal control and cash dividend can be regulated consecutively to enhance their role in promoting long-term enterprise performance. The negative effect of internal control and cash dividend will be eliminated in the long run. The implementation of internal control will optimize internal management and operation processes carried out by the enterprise, thus reducing agency costs and moreover enhance enterprise market performance. Cash dividend payout, especially one which is continuous and perceived as stable, will procure great confidence in investors, which is an effective way to enhance the performance of the enterprise market. A combination of internal control and cash dividend can enhance the market value of an enterprise in both internal and external ways, thereby leading to growth in long-term enterprise performance.

6. Recommendations

In brief, both internal control and cash dividend are crucial to enhance enterprise performance and are both therefore necessary factors to be considered in the overall success of a company. A company should initiate an overall development strategy based on the effect of internal control and cash dividend on enterprise performance so as to maintain its sustainable development. Therefore we have presented as a result of this study not only enrich the existing literature based around the topic of internal control and cash dividend, but also provide salient guidance and enlightenment to listed companies, investors and government regulators alike, when making decisions or policies.

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