

MARKET RESPONSE TO CASH DIVIDEND ANNOUNCEMENT IN KOREAN STOCK MARKET - FOCUSED ON HIGH-DIVIDEND PREFERENCE THEORY

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Abstract - The purpose of this study is to investigate the market response of stock price to cash dividend announcement from 2011 to 2016 in Korean stock market. The empirical results of this study are as follows. First, in general, because dividend policy increases firms' substantial capital and has a close relationship with the investment policy, the dividend policies have a significant impact on firm value. In the results of this paper, we found that there is an announcement effect on dividends increase, also a positive (+) excess return is confirmed in dividend decrease and maintenance announcement. Second, in terms of the announcement effect of dividends, there are a signal hypothesis, hypothesis for reducing agent cost, and 'bird in the hand' hypothesis in view of high dividend preference. This study analyzed which hypothesis is more appropriate for accounting for the announcement effect among the three hypotheses. We divided all our sample into four groups depending on growth in sales, block-holders' ownership, firm-size and dividend yield as a proxy for signaling, principal-agent, firm-size and bird-in-the-hand hypotheses and we examined whether the cumulative excess returns differed for each group or not. Our results contradict the signaling and principal-agent hypotheses, which argue that management has an incentive to distribute information about the company's future profit to the market through dividend policy and the increase (decrease) in dividends leads to an increase in additional external borrowing, which makes the firm a strict monitoring target of the capital market and therefore plays a role in reducing agency costs. Contrastively, our results support the firm-size and bird-in-the-hand hypotheses.

Keywords - Bird in the hand, Cash dividend, Event Study, Signaling Effect

I. INTRODUCTION

Dividend is the fact that a portion of the profits generated through business activities during a certain period of the business belong to the shareholders. Dividend policy is very important for investors and corporate or management in terms of returns on investment, and management policy such as stability of dividend, survival and growth of company. The effect of dividend policy on firm value can be divided into dividend irrelevance theory, high dividend preference theory, and low dividend preference theory.

First, dividend-irrelevance theory was first proposed by Miller and Modigliani (1961). Since the capital market is a perfect market and the investor is rational, only the cash flow change through sales activities affects the stock price. However, there are many market imperfect factors such as information asymmetry, tax, and transaction cost in the real capital market, and many studies that considering these imperfection factors explain the effect of dividend on stock price in terms of high dividend preference theory (signaling, reduction of agent problems, future uncertainties) and low dividend preference (difference in tax rates, reduction of capital financing costs, improvement of financial structure).

This study examines the stock price response according to cash dividend announcement using event study from the perspective of high dividend preference theory. The results of this study will

contribute to test of market efficiency and the effect of cash dividend announcement on stock prices. According to traditional financial theory, corporate value is defined as the sum of the present value of cash flows generated in the future. In the dividend discount model, future cash flows are regarded as dividends. Therefore, the increase in dividends leads to an increase in corporate value, and the assumption is that the stock response will be different depending on dividend increase and decrease announcement. A representative hypothesis in terms of high dividend preference is the dividend signaling hypothesis that firms or managers have an incentive to indirectly communicate information about future profits of a firm to market participants through dividend policy (Lintner; 1956, Miller and Rock; 1985, Li and Zhao; 2008, Park; 2003) Thus, the increase in dividends will serve as a positive signal to investors on the future profit of the company, which will lead to a rise in the share price. The second is that agency theory is used as a means to monitor the management performance of the manager, while high dividends lead to additional external borrowing of the firm, but strict monitoring of the corporation reduces the agency cost (Jensen; 1986, Lang and Litzenberger; 1989, Agrawal and Jayaraman; 1994, Jo; 1990, Kim and Lee; 2008, 2009, Jang and Yim; 2010). Finally, the bird in the hand hypothesis implies that the current profit is more valuable than the uncertain future profit. This is the theory that firms' dividend increases due to future uncertainties cause investors to lower the required returns to capitalize future dividends,

thereby raising share prices (Bhattacharya 1979). Although many studies have examined various factors that affect dividend policy on firm value based on various theories, domestic previous studies are mainly focused on samples before 2000 or between 2000 and 2010. Therefore, this study is the first step to retest the hypothesis of signaling, agency cost reduction, and bird in the hand in the recent cash dividend announcement from 2011 to 2016.

The purpose of this study is to classify the stock price responses according to the announcement of each dividend change as the dividend change is compared with the previous year due to the characteristics of dividend. In order to test the signaling hypothesis, agency cost reduction hypothesis and bird in the hand hypothesis, the sales growth rate, block-holders' ownership, firm-size and dividend yield are set as a proxies for each hypothesis. For the test, we classify the whole sample into four subgroups and examine the cumulative excess returns for each group for cash dividend announcement. Finally, in addition to the sample classification test method, this study additionally performed a cross-sectional regression analysis. The explanatory variables are the sales growth rate, total assets profit ratio (EBIT/TA), ROE as a proxies of the signaling hypothesis and testing the agency cost hypothesis are used as variables for large shareholder (BO), leverage ratio, foreign ownership (FO). Also, to test the small firm effect, we use Book-to-Market value (B/M), Size, and dividend yield (DY) used as a proxy for the bird in the hand hypothesis. This implies that the results of this study are not limited to the interpretation of the effect on the single variable. The results of this study are expected to provide policy implications to the managers who execute corporate dividend policy and contribute to the investment strategy and decision making for individual and institutional investors.

The composition of this study is as follows. In chapter 2, following the introduction of Chapter 1, we briefly review previous studies and present hypotheses of this study. Section 3 describes the research data used in the analysis and the research model used in the empirical analysis. Section 4 describes the empirical analysis results, and finally Section 5 presents the conclusion of this study.

II. THE HYPOTHESIS

In this study, we first test the announcement effect of dividends and test the appropriateness of the signaling hypothesis, the agency cost reduction hypothesis, and the bird in the hand hypothesis in the next step. In general, it is reported that the dividend policy increases the actual capital to the company and has a close relationship with the investment policy, which has a considerable effect on the corporate value. In addition, Lee and Jung (1986) and other previous studies have found that cash dividend announcement affects corporate value positively. In

this study, we expect cash dividend announcement to have a positive (+) effect on corporate value. we set [Hypothesis 1] and [Hypothesis 2] that If firm increases(decreases) cash dividend, corporate value will increase(decrease).

[H1] : Since the cash dividend announcement affects the firm value positively, the market response for the firm that announce the cash dividend are positive

[H2] : The firms with cash dividend increase announcement will have a positive (+) abnormal return, and the firm with dividend decrease announcement will have a negative (-) abnormal return.

The next step is to classify each of the dividend increases, decreases, and maintenance announcements into four groups based on the sales growth rate, block-holders' ownership, firm-size and dividend yield, and analyze the cumulative abnormal returns for each group for cash dividend announcement. To test the three hypotheses mentioned in introduction above, the following hypothesis 3, hypothesis 4, and hypothesis 5 were set.

[H3] : If the signaling hypothesis is appropriate, the abnormal returns of the groups with higher sales growth rates (Groups 3 and 4) will be higher than the abnormal returns of the groups with lower sales growth rates (Groups 1 and 2).

[H4] : If the agency cost reduction hypothesis is appropriate, the abnormal return of the group with a low block-holders' ownership ratio (Group 1, 2) will generally be higher than the abnormal return rate of the group with high block-holders' ownership ratio. (Group 3, 4).

[H5] : If the bird-in-the-hand hypothesis is appropriate, the abnormal return of the group with higher dividend yield (Group 3, 4) will generally be higher than the abnormal return of the group with lower dividend yield (Group 1, 2).

III. THE DATA AND METHODOLOGY

3.1. DATA

The purpose of this study is to examine the stock price response to cash dividend announcement in the Korean stock market. Although the announcement of cash dividends in Korea has been formally mandated since 2002, this study focuses on the lack of previous studies that reflect the recent changes in the perception of investors' dividends from the previous point of view. From 2011 to 2016 The sample size was 2,805, which satisfied the following conditions among the companies that announced cash dividends in the securities market.

► In the case of non-financial companies(excluding stock dividend announcement) among companies that made cash dividends both before and after the announcement of dividend announcement(t)

- ▶The companies that can obtain the listed companies and the financial statement data continuously from the fiscal year -2, to estimate the sales growth rate,
- ▶Excludes companies whose sales or profit or loss structure has changed by more than 30%, and which have increased or decreased by more than 10% of sales from the latest business year
- ▶Excludes companies that have an impact on the corporate value of mergers, acquisitions, lawsuits, etc. during the announcement period

the stock price is abnormal is 140 days from 151 days before announcement to -11 days(-151, -11).

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_t \quad (1)$$

In the equation (1), $R_{i,t}$ is the return of firm i of cash dividend announcement at the time t , $R_{m,t}$ is the composite stock price index of return at time t , $\hat{\alpha}_i$ and $\hat{\beta}_i$ are the coefficient of market model, and ε_t is the error term of i stock at the time t .

<Table 1> The Sample Number of the firm which Announced Cash Dividends

Year	Increase	Decrease	No change	Total
2011	158	185	135	478
2012	151	175	141	467
2013	151	140	169	460
2014	203	103	158	464
2015	205	107	149	461
2016	204	123	148	475
Total	1,072	833	900	2,805

$$AAR_{i,t} = R_{i,t} - (\hat{\alpha}_i + \hat{\beta}_i R_{m,t}) \quad (2)$$

$$AAR_t = \frac{1}{N} \sum_1^N AAR_t \quad (3)$$

After estimating the abnormal return of an individual firm by the market model, the average abnormal return (AAR) of the abnormal returns of the individual firms by the event period unit is obtained from equation (3). In addition, we can estimate the cumulative mean abnormal return by summing up the estimated average abnormal returns during the event period from Equation (4) and analyze the effect of the cash dividend announcement on the stock price through the cumulative average abnormal return.

<Table 1> shows the number of specimens that satisfy the above conditions by dividing the year from 2011 to 2016. The total number of announcements of dividends increase is 1,072, the dividend decrease announcement is 833, announcement can be divided into 900 pieces. The sample selection criterion and the parameters for testing each hypothesis, such as dividend yield, write-in size, sales growth rate, foreign ownership ratio, debt ratio, and market-book value ratio, were collected from Fn-guide and KISVALUE database systems.

$$CAAR_t(t_1, t_2) = \sum_{t=t_1}^{t_2} AAR_t \quad (4)$$

3.2. METHODOLOGYE

In this study, we used an event study to examine the effect of cash dividend announcement on stock price and conducted a regression analysis to increase the robustness of the test results. In the case study, before measuring the abnormal returns, the stock price change before and after the event date (cash dividend announcement date) should be separated into stock price changes by the market's overall pricing factors and stock price changes by cash dividend announcement. This study used a market model that is considered to be the strongest model because it can consider various market conditions in an abnormal return (Brown and Warner; 1985, Corrado; 2011). In the market model, the regression coefficient between the market returns and the return of individual companies is estimated using the least squares method (OLS). The period from the 10th day before the announcement date to the 10th day after the announcement date (-10, +10) and the estimation period to be used as a criterion to determine whether

We conducted a t-test on the null hypothesis that there is no excess return on dividend announcement date. The test statistic assumes cross-sectional dependency. In addition, the test statistic for daily average excess return (AAR) and cumulative average excess return (CAAR) is as follows. Based on the result of the cumulative average abnormal return, whether the cash dividend announcement event affects the abnormal return The test is conducted according to the statistical significance test procedure.

$$t_{AAR_t} = \frac{AAR_t}{S(AAR_t)}$$

$$\therefore AAR_t = \frac{1}{N} \sum_1^N AAR_{i,t}$$

$$\therefore \hat{S}(AAR_t) = \sqrt{\frac{1}{140-1} \sum_{t=-151}^{-11} (AAR_t - \overline{AAR_t})^2}$$

$$\therefore \overline{AAR_t} = \frac{1}{140} \sum_{t=-151}^{-11} AAR_t \quad (5)$$

$$t_{CAAR(t_1, t_2)} = \frac{CAAR(t_1, t_2)}{\hat{S}(CAAR_t)} = \frac{1}{\sqrt{T}} \frac{CAAR(t_1, t_2)}{\hat{S}(AAR_t)}$$

$$\therefore CAAR(t_1, t_2) = \sum_{t=t_1}^{t_2} AAR_t \quad \therefore t_1 \sim t_2$$

$$\therefore \hat{S}(CAAR_t) = \sqrt{\frac{1}{140-1} \sum_{t=-151}^{-11} (AAR_t - \overline{AAR_t})^2} \quad (6)$$

Next, in this study, we conducted a cross-sectional regression analysis according to each dividend change in order to test the suitability of signaling hypothesis, agency cost reduction hypothesis and bird in the hand hypothesis. In this regression analysis, the dependent variable is the cumulative excess return of each period before and after the announcement date. The explanatory variables are substitution variables of the signal transfer hypothesis: sales growth (growth), operating profit to total assets ratio (EBIT / TA) (ROE) and proxy cost hypothesis test are used as variables for large shareholder (BO), debt ratio (Leverage), foreign ownership (FO), size of market as a substitute variable for firm size hypothesis test, Ratio (B / M), and finally dividend yield (DY) for bird in the hand hypothesis testing.

$$CAAR_i = \alpha_0 + \beta_1 Size_i + \beta_2 Growth_i + \beta_3 BO_i + \beta_4 DY_i + \beta_5 EBIT/TA_i + \beta_6 FO_i + \beta_7 ROE_i + \beta_8 Leverage_i + \beta_9 B/M_i + industry + time + e_i \quad (7)$$

where, and Size are defined as the natural log value of the total market capitalization of each firm. Growth is the sales growth rate during the second fiscal year before announcement, BO is the shareholding ratio of the major shareholder, DY is the dividend yield rate of the previous year's announcement, FO is foreign ownership, financial liquidity is defined as the Ratio of non-fixed assets to fixed assets. This study also tried to control different industry and year characteristics by adding industry dummy and year dummy.

IV. THE RESULTS OF EMPIRICAL ANALYSIS

4.1. The Results of Cash dividend disclosure effect test for each year

In order to test whether cash dividend announcement have a significant effect on share prices, we conducted a sample of 2,805 firms that met the sample selection criterion among companies that announced cash dividends in the securities market from 2011 to 2016 We estimated the abnormal returns of the previous and the following period including the announcement date of the cash dividend and the announcement date. Since the cash dividend announcement event is divided into increase, decrease and maintenance announcement compared to the previous year, it is necessary to estimate the abnormal return by each situation, and considering the biased result of the specific year will affect the result of the whole sample, The results are presented in Table 3.

<Table 3> Panel A presents the results of the abnormal return estimation for the entire cash dividend announcement without dividend increase or

decrease. AAR, which is the mean abnormal return on the announcement of cash dividends (t), shows a positive average abnormal return on all yearly estimates except for 2016, but only 0.26% in 2011 and 2015, 0.57%, 5% and 1%, respectively, and the average excess returns for 2012, 2013, 2014 and 2016 are not significant. However, cumulative average abnormalities of cash dividend announcement days before and after 11 days (-5 to +5), 9 days (-4 to +4), 7 days (-3 to +3), and 3 days (-1 to +1) The returns are significant for most periods except for 2013 and 2016, and the cumulative average abnormal returns during periods t to + 1 and + 1 to +5 are also significant in 2014 and 2015 Reported.

In detail, in order to examine the result of dividend increase / decrease compared to the previous year, cumulative average abnormal return is estimated by dividing the total dividend announcement by increase, decrease and maintenance according to the change of dividend, and the estimation result is presented in panels B, C and D respectively . In Panel B, the market reaction to the announcement of dividend increases is that, in the case of abnormal average abnormal returns, no returns exceeding the average market returns for any year except for 2015, , The average cumulative average abnormal return was confirmed even before and after most announcements. In addition, the market reaction to the announcement of the dividend reduction of the year-on-year panel C is not significant in the other years except for the year 2015, as in the case of the dividend increase announcement. In 2016, (-) were confirmed, and different results were confirmed for each year. Finally, the market response to the announcement of the dividend maintenance announcement of Panel D is the same as the result of the total dividend announcement, with a significant positive (+) accumulation before and after most announcements except for 2011, 2013 and 2016 It is important to note that the average abnormal returns are reported, and in the case of dividend retained announcement, the year-to-year variation appears to be much the same as the response to dividend increases and decreases.

In conclusion, this study adopts Hypothesis 1 that cash dividend announcement will positively affect share price. However, Hypothesis 2 was rejected that positive abnormal returns on firms with cash dividends increased and negative abnormal returns on firms with lower dividends.

This is not consistent with the finding that dividend increases(decrease) announcement in previous foreign studies are good(bad) news for share prices. However, it is consistent with some of the contradictory domestic studies that positive abnormal returns are observed in both dividend increase and decrease firms(Kim; 1989).

<Table 2> Cumulative Excess Return per Period for Cash Dividend Announcement

Time Period	Panel A. Total Cash Dividend Announcements						Panel B. The Increased cash Dividend Announcement					
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
CAAR -5,+5	-0.0070* (-1.79)	0.0125*** (2.83)	0.0039 (1.08)	0.0117*** (3.80)	0.0252*** (6.60)	0.0023 (0.53)	-0.0032 (-0.48)	0.0106 (1.45)	-0.0022 (-0.36)	0.0074 (1.54)	0.0236*** (4.17)	0.0069 (1.04)
CAAR -4,+4	-0.0039 (-1.11)	0.0107*** (2.69)	0.0026 (0.78)	0.0088*** (3.17)	0.0221*** (6.40)	0.0016 (0.41)	-0.0039 (-0.64)	0.0105 (1.59)	-0.0037 (-0.65)	0.0063 (1.44)	0.0188*** (3.66)	0.0054 (0.89)
CAAR -3,+3	-0.0021 (-0.67)	0.0073* (2.06)	0.0028 (0.99)	0.0058*** (2.38)	0.0201*** (6.60)	-0.0003 (-0.07)	0.0017 (0.32)	0.0095 (1.62)	-0.0002 (-0.03)	0.0027 (0.71)	0.0171*** (3.78)	0.0022 (0.42)
CAAR -1,+1	0.0036* (1.76)	0.0049** (2.11)	0.0019 (1.00)	0.0028* (1.76)	0.0109*** (5.49)	-0.0010 (-0.44)	0.0060* (1.73)	0.0034 (0.90)	0.0035 (1.09)	0.0028 (1.11)	0.0075*** (2.55)	0.0024 (0.68)
CAAR -1,+1	0.0026** (2.19)	0.0019 (1.42)	0.0018 (1.62)	0.0010 (1.10)	0.0057*** (4.99)	-0.0012 (-0.96)	0.0027 (1.35)	0.0023 (0.63)	0.0014 (0.73)	0.0004 (0.76)	0.0053*** (3.11)	-0.0001 (-0.02)
CAAR 0,+1	0.0049*** (2.94)	0.0032* (1.71)	0.0021 (1.36)	0.0024* (1.86)	0.0078*** (4.78)	-0.0009 (-0.48)	0.0056** (1.99)	0.0015 (0.46)	0.0027 (1.02)	0.0019 (0.90)	0.0042*** (1.76)	0.0031 (1.10)
CAAR +1,+5	-0.0029 (-1.08)	0.0042 (1.41)	0.0021 (0.88)	0.0072*** (3.48)	0.0087*** (3.37)	-0.0007 (-0.23)	0.0004 (0.09)	0.0037 (0.76)	-0.0005 (-0.11)	0.0044 (1.37)	0.0058 (1.52)	0.0034 (0.77)

Time Period	Panel C. The Decreased cash Dividend Announcement						Panel D. No Change in cash Dividend Announcement					
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
CAAR -5,+5	-0.0034 (-0.52)	0.0111 (1.42)	0.0056 (0.78)	0.0211*** (2.90)	0.0336*** (3.79)	0.0113 (1.28)	-0.0157** (-2.19)	0.0160** (2.04)	0.0083 (1.47)	0.0123** (2.61)	0.0223*** (3.53)	-0.0108 (-1.57)
CAAR -4,+4	-0.0015 (-0.25)	0.0076 (1.08)	0.0036 (0.55)	0.0153** (2.32)	0.0319*** (3.98)	0.0082 (1.02)	-0.0068 (-1.05)	0.0143** (2.01)	0.0075 (1.47)	0.0087** (2.04)	0.0208*** (3.65)	-0.0086 (-1.38)
CAAR -3,+3	-0.0025 (-0.48)	0.0058 (0.92)	0.0046 (0.79)	0.0135** (2.31)	0.0295*** (4.18)	0.0027 (0.38)	-0.0061 (-1.06)	0.0065 (1.04)	0.0044 (0.97)	0.9 (1.56)	0.0186*** (3.69)	-0.0059 (-1.07)
CAAR -1,+1	-0.0004 (-0.10)	0.0021 (0.51)	0.0010 (0.27)	0.0022 (0.59)	0.0162*** (3.50)	-0.0014 (-0.30)	0.0053 (1.43)	0.0094** (2.29)	0.0010 (0.34)	0.0032 (1.29)	0.0125*** (3.80)	-0.0053 (-1.46)
AAR0	0.0024 (1.19)	0.0006 (0.27)	0.0016 (0.74)	0.0015 (0.67)	0.0083*** (3.11)	-0.0045* (-1.70)	0.0027 (1.25)	0.0028 (1.19)	0.0022 (1.31)	0.0015 (1.07)	0.0048** (2.52)	-0.0004 (-0.18)
CAAR 0,+1	0.0015 (0.54)	0.0023 (0.70)	0.0018 (0.58)	0.0034 (1.10)	0.0146*** (3.87)	-0.0029 (-0.77)	0.0079*** (2.60)	0.0061* (1.81)	0.0018 (0.72)	0.0027 (1.35)	0.0086*** (3.20)	-0.0048* (-1.65)
CAAR +1,+5	-0.0027 (-0.60)	0.0060 (1.13)	0.0012 (0.24)	0.0105** (2.14)	0.0172*** (2.87)	0.0067 (1.12)	-0.0070 (-1.46)	0.0028 (0.53)	0.0052 (1.36)	0.0090*** (2.84)	0.0076* (1.77)	-0.0118** (-2.54)

4.2. Signaling, agency costs, firm size, bird in the hand hypotheses

In this study, we find that there is an announcement effect of cash dividend in the same way as the results of other previous studies. The announcement effect of dividend can be interpreted as signaling hypothesis and agent cost reduction hypothesis. The size effect hypothesis and the bird-in-the-hand hypothesis were added.

The signaling theory of dividends means that firms or managers have incentives to increase dividends when they want to convey positive information to investors about future profits. If signaling theory is appropriate, there is a positive relationship between the abnormal return and the dividend change. In this study, we tried to test the signaling hypothesis by using the sample classification method. The sales growth rate is used as a proxy of profit and classified into four subgroups according to the sales growth rate and the cumulative average abnormal profit rate among the subgroups was measured.

<Table 4> shows the result of verifying the signaling effect. The cumulative average abnormal return of the firms with the lowest growth rate (Quintile 1) from -5 days prior to the announcement of cash dividends to +5 days after the announcement was 1.02%, which

was significant at the 5% significance level. However, no significant cumulative average abnormal returns were observed in estimates of -3 days to +3 days, +1 days of -1, +1 days of announcement, and +5 days of +1 day.

It should be noted that the cumulative excess returns before and after the announcement date of Quintile 3, which is a large group with a large sales growth rate, are statistically significant, except for +1 ~ +5 after the announcement date. However, the cumulative excess return before and after the announcement date of Quintile 4 group, which has the highest sales growth rate, did not show a significant cumulative excess return in any period. Therefore, this analysis can not accurately confirm that the cumulative excess returns of firms with the highest profitability will be stronger because the positive information on profit is transmitted to investors.

On the contrary, in the case of a company with a high growth rate, the decrease in dividend is considered to be an active investment, and even though it may serve as good news, the dividend decrease announcement shows a more significant result in the cumulative average abnormal return of the group. The result of this hypothesis is rejected.

<Table 3> The Cumulative Returns for testing Signaling Effects sorted by Sales Growth

Panel A. Increase		Analysis Period				
Sales Growth	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	266	0.0102** (2.1191)	0.0053 (1.3763)	0.0024 (0.9448)	0.0019 (0.9012)	0.0045 (1.3898)
Quintile2	266	0.0036 (0.7433)	0.0045 (1.1779)	0.0029 (1.1481)	0.0028 (1.3757)	0.0039 (1.2114)
Quintile3	266	0.0087* (1.7034)	0.0095** (2.3461)	0.0079*** (2.9600)	0.0041* (1.8656)	0.0014 (0.3937)
Quintile4	266	0.0077 (1.4131)	0.0029 (0.6552)	0.0029 (1.0292)	0.0035 (1.5052)	0.0015 (0.3983)
Panel B. Decrease		Analysis Period				
sales growth	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	174	0.0123** (2.1927)	0.0064 (1.4378)	0.0043 (1.4694)	0.0047** (1.9991)	0.0077** (2.0494)
Quintile2	174	0.0031 (0.4899)	0.0036 (0.7233)	-0.0002 (-0.0602)	0.0011 (0.3958)	0.0043 (1.0090)
Quintile3	174	0.0134** (2.0155)	0.0058 (1.0975)	0.0002 (0.0488)	0.0011 (0.3887)	0.0056 (1.2417)
Quintile4	174	0.0136** (2.0006)	0.0104* (1.9161)	0.0050 (1.4039)	0.0040 (1.3606)	0.0046 (0.7827)
Panel C. No change		Analysis Period				
sales growth	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	221	0.0090* (1.7864)	0.0088** (2.2059)	0.0048* (1.8294)	0.0041* (1.9332)	0.0057* (1.6723)
Quintile2	221	0.0085* (1.7893)	0.0048 (1.2588)	0.0052** (2.1205)	0.0035* (1.7322)	0.0028 (0.8697)
Quintile3	221	0.0027 (0.5133)	0.0018 (0.4402)	0.0028 (1.0375)	0.0020 (0.8761)	-0.0034 (-0.9698)
Quintile4	221	0.0031 (0.5325)	0.0006 (0.1265)	0.0039 (1.2791)	0.0045* (1.7856)	0.0003 (0.0656)

The second theory, which explains the information effect of dividends, argues that dividend policy can reduce agency costs between managers and shareholders. The increase (decrease) in dividends leads to an increase (decrease) in additional external borrowing, but this will result in firms being subject to rigorous monitoring of the capital market and thus reducing (increasing) agency costs. In this paper, we propose a model of dividend policy that can be used to explain the effect of dividend policy announcement. In this paper, we propose a model of dividend policy. The hypothesis that the shareholding ratio of the majority shareholder and the abnormal return rate will be negative (-) is tested.

In this study, to test the agency effect hypothesis, the cumulative excess returns for each group were estimated by dividing the total sample into four subgroups according to the large shareholder stake. Table 5 shows the results of estimating cumulative excess returns for each group of each dividend announcement. First, in the case of Quintile 1, which has the largest shareholding ratio of the majority shareholder, the dividend increase rate of Panel A increases from 3 days (-1, +1), 0 to +1, (-1, +1), the date of announcement, and the date of announcement, as well as in the next subgroup (Quintile 2) A significant cumulative average abnormal return on the next business day (0, +1) was confirmed.

However, in Quintile 3, which has a relatively large shareholding ratio, significant cumulative excess returns were found in some periods before and after the announcement date, but in the period after the announcement date and after the announcement date,

it was found to be similar. Quintile 4 No significant excess return was found in any period.

Panel B shows cumulative average abnormal returns for each group for dividend reduction announcement. The results of the dividend reduction announcement show that the cumulative average abnormal return for each period is similar to that of the dividend increase announcement. In the case of the dividend reduction event, the group with high shareholding ratio should have a high abnormal profit rate. This result shows that it is difficult to judge the difference clearly.

However, in the test results of dividend maintenance announcement, the abnormal return of the group with a large shareholding ratio is high, which shows that, unlike the countries where the dividend decrease announcement effect affects the share price negatively, As a result of the positive (+) effect of announcement, we believe that different results are seen. In summary, in dividend increase announcement, there is a negative correlation between large shareholder ownership and share price response. In the case of dividend hold announcement, the group with high shareholder ownership is higher than the group with low cumulative return This is consistent with the hypothesis that firms with a low shareholding ratio have a positive effect on share prices because they will minimize agency costs through increased dividends. In other words, it is confirmed that there is a negative relationship between shareholder's ownership and dividend announcement. This is the result of partially supporting the agency cost reduction hypothesis as well as the results of some previous studies.

-Table 4- The Cumulative Returns for testing Agency Cost Reduction Effects sorted by block-holders' ownership

Panel A. Increase		Analysis Period				
Block-holders' ownership	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	266	0.0075 (1.4476)	0.0042 (1.0127)	0.0047* (1.7496)	0.0052** (2.3607)	0.0087** (2.4979)
Quintile2	266	0.0084* (1.6662)	0.0093** (2.3214)	0.0064** (2.4542)	0.0040* (1.8887)	0.0010 (0.2896)
Quintile3	266	0.0158*** (3.1853)	0.0119*** (3.0025)	0.0043* (1.6573)	0.0033 (1.5425)	0.0016 (0.4737)
Quintile4	266	0.0001 (0.0274)	-0.0023 (-0.5650)	0.0018 (0.6727)	0.0003 (0.1268)	0.0013 (0.3944)
Panel B. Decrease		Analysis Period				
Block-holders' ownership	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	174	0.0161** (2.5921)	0.0093* (1.8646)	0.0005 (0.1681)	0.0014 (0.5137)	0.0104** (2.4709)
Quintile2	174	0.0193*** (3.1186)	0.0139*** (2.8067)	0.0051 (1.5715)	0.0062** (2.3396)	0.0071* (1.7036)
Quintile3	174	-0.0015 (-0.2236)	-0.0028 (-0.5189)	-0.0025 (-0.7098)	-0.0006 (-0.2034)	0.0032 (0.7056)
Quintile4	174	0.0096 (1.5238)	0.0079 (1.5585)	0.0072** (2.1693)	0.0045* (1.6692)	0.0006 (0.1412)
Panel C. No Change		Analysis Period				
Block-holders' ownership	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	221	-0.0044 (-0.7754)	-0.0008 (-0.1700)	0.0026 (0.8667)	0.0018 (0.7571)	-0.0072* (-1.8813)
Quintile2	221	0.0085 (1.6312)	0.0018 (0.4261)	0.0049* (1.8221)	0.0038* (1.7100)	0.0002 (0.0639)
Quintile3	221	0.0116** (2.4648)	0.0084** (2.2296)	0.0027 (1.0975)	0.0028 (1.3978)	0.0077** (2.4103)
Quintile4	221	0.0078 (1.4821)	0.0069* (1.6511)	0.0066** (2.4112)	0.0057** (2.5664)	0.0043 (1.2213)

The third hypothesis to be examined in this study is the small size effect hypothesis, which means that the stock returns of small firms are consistently higher than those of large firms. Banz (1981) It is also referred to as the 'small business effect'. This small business effect is mainly attributed to the errors that may occur when calculating the average return, the transaction cost, the problem of beta estimation, the lack of information on small companies, The study shows that the smaller the firm size, the greater the total return or risk adjusted return.

In other words, dividend announcement is a process in which information contained in the dividend policy is transmitted to external investors. Information stock imbalance is more severe because small scale firms have insufficient analysts to analyze and fewer opportunities for information transmission. Therefore, in this study, we tried to test the firm size effect based on the theory that even if the same dividend announcement is made, the amount of information delivered to investors will vary, In order to test the size effect, we classify each dividend change (rise, fall, maintenance) companies into four groups based on the market capitalization (SIZE) of companies and examine the cumulative excess returns by each group. If the firm size hypothesis is valid, the stock price response will be more significant for the companies with small size group in dividend announcement, and therefore, there is a negative relationship between the

size of firms and the excess returns.

Table 6 shows the results of cumulative excess returns for each group by dividing dividend announcement companies into four subgroups: dividend change (dividend increase, decrease, maintenance). First, Panel A reveals that dividend increase announcements show significant cumulative excess returns before and after almost all announcement days in a small group (Quintile 1, 2), but large firms (Quintile 3, 4), it is estimated that the excess returns (+) over the entire period before and after the announcement, and even the negative return (-) over the specific period.

This is supported by the hypothesis that the smaller the size of the firm, the greater the information asymmetry and the larger the dividend increase announcement. In addition, Panel B and C show the results of the analysis of cumulative excess returns for each group for dividend reduction and maintenance announcement cases. As with the results of the previous dividend increase announcement, the cumulative excess return on the group of small firms (Quintile 1, 2) generally decreased in dividend reduction and maintenance announcements compared to the large group (Quintile 3, 4) Respectively. Based on these results, it can be concluded that there is a strong effect of the stock price response and the effect of the firm size effect on the cash dividend announcement.

<Table 5> The Cumulative Returns for testing Size Effect, sorted by Firm-Size

Panel A. Increase		Analysis Period				
Size	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	265	0.0113** (2.2189)	0.0120** (2.8614)	0.0066** (2.4061)	0.0048** (2.1313)	0.0001 (0.0269)
Quintile2	265	0.0188*** (3.5370)	0.0126*** (2.9757)	0.0056** (2.0218)	0.0044* (1.9575)	0.0104*** (2.8898)
Quintile3	265	0.0035 (0.6880)	-0.0009 (-0.7717)	0.0024 (0.8078)	0.0016 (0.7407)	0.0025 (0.7184)
Quintile4	265	-0.0023 (-0.5182)	-0.0005 (-0.1467)	0.0026 (1.1022)	0.0019 (0.9852)	-0.0004 (-0.1239)
Panel B. Decrease		Analysis Period				
Size	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	174	0.0308*** (4.7595)	0.0237*** (4.5938)	0.0084** (2.4750)	0.0089*** (3.2392)	0.0175*** (4.0076)
Quintile2	174	0.0171** (2.4705)	0.0101* (1.8309)	0.0089** (2.4767)	0.0050* (1.6939)	0.0016 (0.3433)
Quintile3	174	0.0053 (0.8832)	0.0009 (0.1953)	0.0030 (0.9435)	0.0038 (1.4899)	0.0032 (0.7822)
Quintile4	174	-0.0089 (-1.4747)	-0.0060 (-1.2578)	-0.0096*** (-3.0565)	-0.0060** (-2.3316)	-0.0009 (-0.2107)
Panel C. No Change		Analysis Period				
Size	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	221	0.0107* (1.8330)	0.0075* (1.7058)	0.0095*** (3.2993)	0.0077*** (3.2599)	0.0055 (0.9470)
Quintile2	221	0.0120** (2.1976)	0.0066 (1.5062)	0.0075** (2.6331)	0.0044* (1.9041)	0.0059 (1.5936)
Quintile3	221	0.0053 (1.0735)	0.0058 (1.4845)	0.0019 (0.7430)	0.0018 (0.8604)	0.0009 (0.2733)
Quintile4	221	-0.0046 (-0.9281)	-0.0035 (-0.83-1)	-0.0019 (-0.7459)	0.0004 (0.1178)	-0.0052 (-1.5406)

Theories of signal transmission, agent theory, and firm size theory are the most representative explanatory theories that affect dividend policy. However, in recent studies, some new theories are presented in the hand, and in previous foreign studies, it is expressed as 'Bird in the hand'. This theory is a theory that, from the perspective of behavioral finance, investors prefer cash, that is, dividend income, rather than uncertain capital income, like the proverb "A bird in a hand is better than two birds in the forest". The reason for this is that even if a company holds a certain period of profits and records a high ROE, it is doubtful whether investors will be expected and can be realized. In this study, for the new hypothesis test of the hand, we classified the group into four subgroups based on the dividend yield, and the cumulative average abnormal return for each group was examined.

The results of the cumulative excess returns for each group for the announcement of dividend increase in Panel A of Table 7 are as follows. In the group with the lowest dividend yield of the previous year (Quintile 1, 2) (+) And (-), and the negative abnormal returns (-) in the specific period (-5 ~ +5, 0 ~ +1, +1 ~ +5) However, in the response of groups with high dividend yields (Quintile 3, 4), significant cumulative excess returns before and after the announcement of dividends were observed, especially in the group of companies with the largest dividend yields (Quintile 4) Term cumulative excess returns are statistically significant (+) and significance is highest.

Panel B, which presented the results of the dividend reduction announcement in the future, did not find any significant excess returns in any segment as in the case of the dividend increase announcement for

the group with the lowest dividend yield. However, in Groups 2 and 3, which had higher dividend yields in the previous year, significant excess returns were seen in some periods before and after the announcement, and Group 4, which had the highest dividend yield, have.

Panel B, which presented the results of the dividend reduction announcement, found no significant excess returns for any group with the lowest dividend yield as in the case of dividend increase announcement. However, in groups 2 and 3, which had the highest dividend yields in the previous year, significant excess returns were found in some of the days before and after the announcement. In Group 4, which has the highest dividend yield, it can be confirmed that the response is significant in most periods.

Finally, Panel C shows the excess returns by each group for dividend maintenance announcement. In the group with the lowest dividend yield, negative (-) excess returns are shown in all periods before and after the announcement, The high group showed significant positive (+) excess returns at the 1% level and a very strong significance was found at 1.13% and 0.88% immediately before and immediately after the announcement (-1 to +1, 0 to +1).

In sum, there is a positive relationship between the dividend yield and the excess return in dividend announcement, which means that investors prefer immediate cash generated from dividends rather than future capital gains, The same announcement would strongly respond to firms with high expected dividend yields. In particular, the stronger share price response in the maintenance announcement compared to the rise and fall in dividends is attributable to the preference of investors to maintain dividends rather

than increase or decrease, And worries about negative signals from the company. This suggests that the company would prefer to keep dividend changes the same as the previous year.

4.3. The Results of Multivariate Regression

In the previous analysis, the cumulative excess return on cash dividend announcement was measured through the case study method. In order to test the signal transfer hypothesis, the proxy hypothesis, the firm size hypothesis, and the bird in the hand hypothesis, the sales growth rate, Based on the size of the company and the dividend yield, we divide the results into four subgroups, and identify the difference in cumulative excess returns for each group. As a result of the analysis, it was revealed that the agency cost hypothesis, the corporate size hypothesis, and the new hypothesis of the hand were found to explain the effect of the dividend policy on the stock price and the signaling hypothesis was rejected.

For more accurate analysis, this section reaffirms the previous theory using multiple regression analysis. In this analysis, the dependent variable is the cumulative excess return of each period before and after the announcement, and the explanatory variables are the sales growth rate, EBIT / TA (t), financial liquidity (t), ROE (t) (T), foreign ownership (t), and the market-to-book value ratio (B / M) as substitution variables for firm size hypothesis testing), And the dividend yield (t-1) for the new hypothesis test of the hand. Finally, the regression analysis model is based on Eq. (7).

Table 7 shows the results of the regression analysis between the dividend policy and the cumulative excess returns of each dividend change announcement and many explanatory variables. In this analysis, both the analysis of dividend announcement and the analysis of each dividend change were conducted, and the industry and the year pile were added to the model. First, there are four different variables such as sales growth rate, EBIT / TA (t), financial liquidity (t), and ROE (t) as substitution variables to test signal distribution theory. As a result of analysis based on explanatory variables, sales growth rate showed a positive (+) value, but no significant explanatory power was shown.

In addition, the ratio of operating profit to total assets, financial liquidity, and ROE are negative in some periods before and after the announcement date, and there is a significant relationship only in the cumulative excess return of some periods. Since the results of the analysis can be different depending on the change of dividend (increase, decrease, maintenance), the results of the analysis are derived by using the dependent variable and the explanatory variable of dividend increase, decrease and retention. The results of the analysis show that the relationship between the cumulative excess returns before and

after each announcement and the sales growth rate, EBIT / TA (t), financial liquidity (t) and ROE (t) The relationship between the explanatory variables related to profit and the excess return is positive (+) because there is an incentive for the firm to transfer the internal information of profit to the outside through the dividend policy The results of the cumulative excess returns of this study suggest that the signaling theory hypothesis is consistent with the results of a number of previous studies that have been rejected (Eades; 1982, Glullon, Nichaely, Swaminathan ; 2002). Second, in this study, to test the agency cost hypothesis, we set the large shareholder stake, the debt ratio (t), and the foreign ownership ratio (t) as explanatory variables and examine the effect on the cumulative excess return before and after dividend saw. As a result of the analysis, the major shareholder 's stake is significant only in the periods before and after the announcement of holding and dividend announcement (-3, +3) and after the announcement of dividend (+1, +5) except dividend increase and decrease. And a positive (-) relationship was found unlike the previous cumulative excess return analysis. In addition, we can confirm that there is negative (-) relationship between the cumulative excess return of each period in the case of foreign ownership, but it is not statistically significant. In the case of debt ratio, And there is no significance in dividend increase, decrease, and total announcement. The results of this study are as follows. First, the results of this study are as follows. First, it is important to note that foreign investors are more likely to invest in dividends than foreign investors. The effect of positive (+) effect on dividend payout is similar to that of retained announcement.

Third, in order to test the firm size hypothesis, we analyzed the relationship between the market capitalization and the cumulative excess return using B / M. As a result, the market capitalization and B / M. And the firm size hypothesis was also rejected. Finally, we examine the impact of the previous year's dividend yield on cumulative excess returns to test the birds in the hand. In this analysis, it was found that the dividend yield in the total dividend announcement affects the cumulative excess returns before and after the announcement date, and especially affects the cumulative excess returns of the dividend maintenance announcement companies.

In summary, in this regression analysis, only the new hypothesis of the hand is supported among the signal hypothesis, agency cost hypothesis, firm size hypothesis, and bird in the hand hypothesis. Especially, May suggest that they do not prefer changes such as an increase or a decrease in dividends. The reason for this is that the increase in dividends is considered to be a slowing of growth for investors due to the reduction of in-house reserves of investment companies and the increase of income tax on dividend income. On the contrary, the decline in

dividends can be expected to stimulate growth of companies, but most of them are perceived as negative signals of companies.

<Table 4>-The Cumulative Returns for testing hand in the hand Effects sorted by Dividend yields

Dividend Increase		Analysis Period				
Dividend rate	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	266	-0.3000 (-0.1080)	0.0002 (0.0549)	0.0020 (0.1270)	-0.0016 (-0.1128)	-0.0004 (-0.1003)
Quintile2	266	0.0123 (0.1018)	0.0045 (1.0657)	0.0025 (0.5086)	0.0029 (1.7707)	0.0040 (1.1148)
Quintile3	266	0.0090 (1.8132)	0.0085** (2.1762)	0.0035** (2.1078)	0.0042** (1.9977)	0.0061 (0.9370)
Quintile4	2673	0.0115*** (2.4067)	0.0097*** (2.6746)	0.0072*** (2.0141)	0.0071*** (3.6737)	0.0087*** (2.0404)
Dividend Decrease		Analysis Period				
Dividend rate	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	174	0.0077 (1.1374)	0.0029 (0.5298)	-0.0016 (-0.4551)	0.0004 (0.1482)	0.0011 (0.2464)
Quintile2	174	0.0103*** (2.7053)	0.0114** (2.0552)	0.0012 (1.1412)	0.0002 (0.0552)	0.0030 (1.0587)
Quintile3	174	0.0052 (0.8182)	0.0036 (0.7110)	0.0025 (0.7387)	0.0029 (1.0857)	0.0093** (0.1845)
Quintile4	174	0.0118*** (2.2308)	0.0136*** (2.5171)	0.0074*** (2.6812)	0.0075*** (3.5118)	0.0058 (1.6230)
Dividend No Change		Analysis Period				
Dividend rate	N	CAAR(-5,+5)	CAAR(-3,+3)	CAAR(-1,+1)	CAAR(0,+1)	CAAR(+1,+5)
Quintile1	221	-0.3055 (-1.3008)	-0.0071 (-0.4701)	-0.0033 (-1.1313)	-0.0073 (-0.9380)	-0.0002** (-2.2063)
Quintile2	221	0.0068 (1.2404)	0.0025 (0.5794)	0.0025 (0.5700)	0.0022 (0.5552)	0.0013 (0.2988)
Quintile3	221	0.0069 (1.3227)	0.0040 (0.6528)	0.0062** (2.2742)	0.0051** (2.3130)	0.0047 (1.3303)
Quintile4	221	0.0171*** (3.7851)	0.0132*** (3.6470)	0.0112*** (4.6004)	0.0096*** (4.5218)	0.0080*** (2.8482)

<Table 5>-The Regression Results

variables	Total					Increase					Decrease					No Change				
	AAR 0	CAR -3,+3	CAR -1,+1	CAR 0,+1	CAR +1,-1	AAR 0	CAR -3,+3	CAR -1,+1	CAR 0,+1	CAR +1,-1	AAR 0	CAR -3,+3	CAR -1,+1	CAR 0,+1	CAR +1,+5	AAR 0	CAR -3,+3	CAR -1,+1	CAR 0,+1	CAR +1,+5
Intercept	-0.789 (1.17)	-0.890 (1.55)	-0.908 (1.85)	-0.974 (2.75)	-1.01 (3.69)	-1.00 (1.15)	-1.225 (1.80)	-1.18 (1.80)	-0.895 (1.05)	-1.08 (1.05)	-1.02 (1.80)	-1.19 (1.40)	-1.02 (1.51)	-1.02 (1.30)	-1.09 (1.30)	0.194 (1.96)	-0.22 (2.31)	-1.48 (3.21)	-0.03 (1.58)	0.360 (2.49)
DY(t-1)	0.02 (1.29)	0.02** (2.40)	0.02** (2.40)	0.01** (4.25)	0.02** (4.25)	-	0.027 (2.59)	0.015 (4.46)	0.016 (5.43)	0.019 (5.43)	0.016 (1.39)	0.016 (1.18)	0.012 (1.85)	0.012 (1.84)	0.012 (1.48)	0.025** (3.30)	0.027** (3.34)	0.017** (4.52)	0.019** (4.22)	0.016** (3.86)
logsize(t)	0.031 (1.15)	0.045 (1.64)	0.035 (1.77)	0.045 (1.60)	0.039 (1.41)	0.036 (1.70)	0.04 (2.71)	0.025 (3.21)	0.025 (3.21)	0.024 (4.08)	0.055 (1.24)	0.087** (2.00)	0.08 (1.64)	0.08 (2.04)	0.109 (2.11)	-0.022 (4.79)	-0.002 (0.41)	-0.018 (3.83)	-0.021 (4.42)	0.046 (1.34)
block-holders ownership(t)	0.013 (1.13)	0.038** (1.81)	0.030 (0.40)	0.033 (1.54)	0.045** (2.13)	0.021 (0.687)	0.033 (0.966)	0.012 (1.25)	0.013 (1.67)	0.019 (1.52)	0.016 (1.07)	0.018 (4.16)	0.049 (0.31)	0.056 (1.20)	0.014 (3.02)	-0.013 (3.48)	0.079** (2.13)	0.026 (5.18)	0.012 (1.13)	0.012** (2.73)
Growth (last two years)	0.014 (1.05)	0.027 (1.37)	0.021 (1.06)	0.025 (1.75)	0.07** (2.90)	0.00 (0.00)	-0.006 (1.55)	0.007 (1.22)	0.016 (5.18)	0.022 (6.83)	0.051 (1.33)	0.073** (1.95)	0.053 (1.30)	0.050 (1.24)	0.104** (2.05)	0.011 (3.70)	-0.006 (1.70)	0.041 (1.73)	0.033 (0.67)	0.029 (8.35)
EBIT/TA	1.10** (2.28)	0.040 (0.830)	-0.005 (1.13)	0.021 (4.30)	0.074 (1.53)	0.041 (5.07)	0.092 (1.15)	0.097 (1.21)	1.08** (0.03)	-0.024 (0.95)	1.223** (2.52)	-0.099 (1.11)	-1.42 (1.55)	-1.60 (1.75)	-0.019 (2.10)	-1.11 (1.16)	1.14 (1.20)	0.48 (5.07)	0.09 (7.16)	2.06** (2.30)
Foreign Ownership	-0.024 (0.880)	-0.115 (1.62)	-0.057 (1.40)	-0.037 (1.30)	-0.012 (4.54)	-0.055 (7.71)	-0.001 (0.11)	-0.052 (7.04)	-0.032 (1.57)	-0.077 (1.54)	-0.045 (0.86)	-0.074 (1.50)	-0.008 (1.17)	-0.008 (1.33)	-0.010 (3.77)	0.097 (8.18)	0.017 (3.74)	-0.004 (0.64)	0.12 (2.81)	0.08 (1.74)
ROE	0.077* (1.67)	-0.003 (1.47)	-0.011 (1.38)	0.055 (2.70)	0.033** (2.08)	0.007 (0.84)	-0.104 (1.33)	-0.101 (1.90)	0.10** (2.01)	-0.012 (1.51)	0.104 (1.33)	0.07 (0.64)	0.001 (7.64)	0.007 (3.29)	-0.059 (7.51)	0.098 (1.23)	-0.152 (1.40)	-0.023 (2.40)	-0.044 (4.63)	0.239** (2.71)
Leverage	-0.025 (-0.02)	0.029 (1.16)	0.016 (0.60)	0.021 (3.40)	0.029 (2.87)	-0.008 (1.08)	0.025 (2.42)	0.013 (3.11)	0.034 (8.23)	-0.004 (0.06)	-0.051 (0.85)	-0.030 (0.78)	0.004 (0.09)	-0.000 (1.23)	-0.005 (1.20)	0.001 (0.01)	1.13** (2.57)	0.087* (1.60)	0.090* (1.16)	0.094* (1.83)
B/M	0.015 (1.43)	0.016 (0.65)	0.005 (1.99)	0.028 (1.11)	0.015 (0.617)	-0.000 (1.54)	0.017 (4.83)	-0.015 (3.15)	0.016 (4.00)	0.030 (9.12)	0.053 (1.57)	0.041 (3.11)	0.070 (1.37)	0.000 (1.75)	-0.015 (3.64)	-0.022 (4.06)	-0.049 (1.11)	-0.001 (1.38)	-0.041 (0.50)	-0.051 (7.12)
Year Dummy	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry Dummy	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

CONCLUSIONS

This study examines the efficiency of the market for dividend announcement by re-examining the signal distribution hypothesis, the agency cost reduction

hypothesis and the new hypothesis of hand in the recent cash dividend announcement from 2011 to 2016, Of the stock price. The empirical results of this study are as follows.

First, in general, it is reported that dividend policy

has a substantial effect on firm value because it has a substantial relationship with the investment policy side, which increases the actual capital to the firm. Similarly, in the analysis results of this study, , And dividend reduction and retained earnings were also positive (+) excess returns. Second, in order to judge the appropriateness of each hypothesis explaining the announcement effect of dividends, the market reaction of the group with high sales growth rate, large shareholding ratio, and high dividend yield should be stronger. The results of the regression analysis of the industry and the yearly pile showed that only the dividend yield of the previous year was higher than that of the other period We find that it has a significant effect on the cumulative excess return. This fact suggests that policy management implies policy executives who pay dividends, investment profitability to investors in capital markets, and that the balance between growth and distribution through dividends is important, This study focuses on the effects of dividend signaling or agency cost reduction in a number of studies. However, in this study, the new hypothesis of hand is added and the results are verified to provide significant implications.

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