

# “THE IMPACT OF DIVIDEND INITIATIONS ON GREEK LISTED FIRMS’ WEALTH AND VOLATILITY ACROSS INFORMATION ENVIRONMENTS”

Apostolos Dasilas<sup>a</sup>, Katerina Lyroudi<sup>1b</sup> and Demetrios Ginoglou<sup>c</sup>

<sup>a</sup> University of Macedonia, Department of Accounting and Finance, 156 Egnatia Str., 54006 Thessaloniki, Greece, Tel:++30-2310-891674, email: [tdasilas@gmail.com](mailto:tdasilas@gmail.com)

<sup>b</sup> University of Macedonia, Department of Accounting and Finance, 156 Egnatia Str., 54006 Thessaloniki, Greece, Tel:++30-2310-891674, email: [lyroudi@uom.gr](mailto:lyroudi@uom.gr)

<sup>c</sup> University of Macedonia, Department of Accounting and Finance, 156 Egnatia Str., 54006 Thessaloniki, Greece, Tel:++30-2310-891688, email: [ginogl@uom.gr](mailto:ginogl@uom.gr)

## Abstract

**Purpose of the paper** – To investigate the impact of dividend initiations on shareholders’ wealth using a sample of 38 Greek listed firms.

**Design/methodology/approach** – We employ the event study methodology of Brown and Warner (1985) to examine the share price reaction to initial dividend announcements across different information environments.

**Findings** – Our results show that dividend initiations bring about significant positive abnormal returns in the announcement period. The price response to dividend initiations is inversely associated with the information environment. Finally, the volatility of stock returns is higher in the low information environment group of firms than in the high information environment group of firms.

**Research limitations/Implications** – The observations are not many, although we include the whole population, since there are no data available prior to 2000.

**Practical Implications** – These findings are useful to researchers, practitioners and investors that have an interest in firms listed on the Athens Stock Exchange for their proper strategic decision making.

**Originality/value** –For the first time the stock price behaviour of firms listed on the Athens Stock Exchange around dividend initiation announcement dates is examined.

**Keywords** – Dividend initiations, signaling effects, volatility, information environment;

**Paper type** – Research paper

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<sup>1</sup> Corresponding author: Katerina Lyroudi, University of Macedonia, Department of Accounting and Finance, 156 Egnatia Str., 54006 Thessaloniki, Greece, Tel: 0030-2310-891-674, Email: [lyroudi@uom.gr](mailto:lyroudi@uom.gr)

## **I. Introduction**

Miller and Modigliani (1961) suggested that, under conditions of perfect capital markets and zero taxes, dividends do not affect the value of the firms. However, they proposed that dividends may have information content if managers have better information than investors regarding the firm's future prospects and use that information to distribute dividends. Based on this premise, Miller and Modigliani (1961) proposed the information content of dividends hypothesis which states that managers use dividend announcements to convey their beliefs about the current and future financial position of the firm. Thus, an announcement of an increase in dividends reflects management's belief that the firm's future earnings will be kept sufficiently high to maintain the increased dividend. As a result, the announcement of a dividend increase conveys good news to the market something that is reflected in the positive reaction of share prices on the announcement day. On the other hand, an announcement of a decrease in dividends reflects management's pessimism about the firm's future earnings. The immediate result is a significant drop in stock prices on the announcement day. The information content of dividends hypothesis has been formalised by Bhattacharya (1979, 1980), John and Williams (1985), Miller and Rock (1985), Ambarish, John and Williams (1987), and Offer and Thakor (1987).

A number of empirical studies have investigated whether dividends contain information. For instance, Petit (1972) found that dividend announcements do convey valuable information. However, Watts (1973) came to the opposite conclusion claiming that unexpected dividend changes communicate no information beyond the one reflected in other contemporaneous announcements. Since then, numerous studies have examined the stock price reaction on and around dividend announcement days leading to mixed results.

However, little attention has been paid to the market reaction of dividend initiation announcements, which, according to Asquith and Mullins (1983), are less likely to be anticipated. A dividend initiation is defined as a dividend payment by a firm for the first time in

its entire corporate history or after a hiatus of more than three years. Asquith and Mullins (1983) examined the price response to dividend initiations, using daily stock price data of US companies to control for other contemporaneous information announcements and found significant abnormal returns at dividend initiation announcements. Other studies, including Dielman and Oppenheimer (1984), Healy and Palepu (1988), Michaely et al. (1995), Mitra and Owers (1995), Howe and Shen (1998) and Alangar and Bathala (1999) also documented significant positive returns at the announcement of dividend initiations. Mitra and Owers (1995) tested also the volatility and the magnitude of security returns for the days surrounding the dividend initiation announcements in the context of the firm's information environment. Similarly to Kalay and Lowenstein (1985) who documented substantial increases in the volatility of security returns for the days surrounding dividend announcements, Mitra and Owers (1995) found that the magnitude and volatility of security price reaction to dividend initiation announcements were associated with the firm's information environment. Specifically, the abnormal returns at the dividend initiation announcements appeared to be much stronger for the 'low' information environment firms than for the 'medium/high' group.

Following and extending the work of Mitra and Owers (1995), this study examines the information content of dividend initiation announcements in the context of the firm's information environment. In particular, first we analyse the price response to dividend initiation and we then relate that response to different information environments. Finally, we examine the magnitude of abnormal returns as well as the volatility of returns around the dividend initiation announcements. To give an unequivocal answer to the above three-fold question, we use data from Greece. Greece has an entirely different institutional environment regarding the distribution of corporate profits compared to the markets of the USA, Canada, the UK and other European countries where the majority of studies are focused. In particular, In Greece, there are no taxes

on dividends and capital gains. The distribution of corporate profits is mandatory as long as there are net earnings.

We contribute to the ongoing debate employing three different models to estimate the market response in the context of different information environments. We believe that our analysis is one further step in the direction of gaining a deeper understanding of the behaviour of stock prices to unanticipated news releases such as dividend initiation announcements. To the best of our knowledge, this is the first study that analyses market response and volatility in the context of different information environments using data from a European country.

The rest of the study is organised as follows: In Section 2 we present the institutional framework under which Greek listed firms operate. In Section 3 we describe the methodology used and sample selection criteria. In Section 4 we present and discuss the empirical results from our analysis. Finally, in Section 5 we present a brief summary and some concluding remarks regarding the directions for future research.

## **II. The Legal Framework of Dividend Policy in Greece**

Unlike the USA and the UK market where dividends are paid on a quarterly and semi-annually basis, respectively, dividends in Greece are paid on a yearly basis. A unique aspect of the Greek stock market is that the Greek corporate law 2190/1920 puts a specific quantifiable floor on the dividend distribution amount that a firm can pay in any given year to its shareholders. Specifically, a firm should distribute annual cash dividends equal either to 6% of its stock capital or to 35% of its net profits minus the amount kept for the formation of regular reserves<sup>2</sup>, whichever of the two amounts is larger. In case the dividend amount which corresponds to the 6% of the stock capital is smaller than the one that corresponds to the 35% of the net profits, the company can distribute the smaller amount only by the decision of its

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<sup>2</sup> At least 5% of the net profits are withheld for the formation of regular reserves. This obligation ceases to exist when the amount of the stock in formation reaches the 1/3 of the stock capital.

shareholders representing a majority of 80% of the stock capital. In this case the undistributed dividend up to a percentage of at least 35% of net profits is transferred to a special account called “reserves to be capitalised”. These reserves have to be capitalised within four years by the issuance of new shares to be delivered to the entitled shareholders. Dividends may not be distributed only when there is a decision of shareholders representing a majority of 95% of the stock capital. The rest of the profits are distributed in accordance to the aim of the corporate memorandum (i.e remuneration of the board of directors, additional wages for employees, distribution of additional dividends, formation of emergency stock, etc.).

From the above described legal environment, one may conclude that the distribution of a regular dividend is quite predictable in Greece. However, some firms opt not to distribute regular dividends for a series of years if they have investment plans that require internal financing. The board of directors proposes the investment plan at the shareholders’ annual general meeting (AGM) and a rejection or acceptance of the plan is decided. In any case, 80% of the shareholders’ vote is required for any decision to be valid. Standard corporate practice is the acceptance of the board of director’s proposal for the retaining of corporate profits and the omission of distributing regular dividends. Such corporate practice is usual among newly-listed firms that need cash equivalents to finance its investment plans at the beginning of their corporate life. Thus, the distribution of a regular dividend for the first time is a decision less likely anticipated than the setup of the distribution of a regular dividend distribution.

Moreover, unlike other markets including the USA, the UK, in Greece, there are no personal taxes on dividends. Corporate dividends are determined after corporate taxes have been deducted from profits before taxes (Law 2065/1992). Therefore, shareholders are not subject to any taxes on received dividends, that is, dividends are not double-taxed as in the USA. Similarly, no taxes are imposed on capital gains. The only tax that exists is a flat tax of 0.3% imposed on every stock sale proceeds.

This case of no personal taxes on dividends is unique in Europe and among all the developed economies. In addition, the distribution of a minimum amount from the corporate profits to shareholders deprives cash dividends of the element of surprise and, thus, it reduces significantly their information content. This feature could be the critical point of a different market reaction to the announcement of dividend initiations.

### **III. Sample Selection, Methodology and Testable Hypotheses**

#### *Sample selection*

Similar to Alangar and Bathala (1999), we define dividend initiation as a first-time regular cash dividend payment in the firm's history or the resumption of a dividend after a hiatus of at least three years<sup>3</sup>. To ensure that dividend initiations represent a stable dividend policy, we impose further restriction that, once initiated, regular dividend payments must continue for at least one more year. Dividend per share data, closing stock prices and announcement dates were extracted from the Dissemination Information Department of the Athens Stock Exchange. Dividend announcement dates were cross-checked with Greek daily and periodical press releases. The examined period is from January 2000 to December 2004.

Companies were only included in the sample of initial dividends if they met the following criteria: (a) price data were available for the period commencing 220 days prior to the dividend announcement to 20 days subsequent to the announcement; and (b) to 'isolate' the dividend information (Mitra and Owers, 1995) the firms should have had no other concurrently announced corporate events (such as announcements of equity increases, stock splits, mergers and acquisitions, share repurchases etc), within a twenty-day window surrounding the dividend announcement (-10, +10).

The initial sample consisted of 61 dividend initiations. Nineteen observations were excluded from the sample since dividend initiations were simultaneously announced with other

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<sup>3</sup> Aquith and Mullins (1983) and Healy and Palepu (1988) included in their samples firms that re-distribute regular dividends after a lapse of at least ten years.

corporate events. Four observations were deleted due to missing data during either the estimation period (days -220 to days -21) or the event period (days -20 to days +20). The resulting sample consisted of 38 dividend initiations realised by the Greek listed non-financial firms.

Table 1, Panel A presents the distribution of dividend initiations included in the final sample by year and by frequency. Descriptive statistics for the number of shares, the market capitalisation and the dividend per share is reported in Table 1, Panel B. As it can be seen, the majority of dividend initiations took place in 2001 (10 observations) followed by 2002 (9 observations). The average market capitalisation at the end of the month before the dividend initiation announcement is 352,504,183 Euros, the average dividend per share is 0.11 Euros and the average dividend yield is 2.05%.

[Insert Table 1 here]

### *Methodology*

To estimate the stock price response to dividend initiation announcements, we calculate log-returns. Logarithmic returns are preferred because they are theoretically better when linking together subperiod returns to form returns over longer periods (Strong, 1992). Hence, we have  $R_{i,t}$  for share  $i$  at date  $t$  as:

$$R_{i,t} = \ln(P_{i,t}) - \ln(P_{i,t-1}) \quad (1)$$

where  $P_{i,t}$  denotes the daily closing price of share  $i$  on day  $t$  and  $P_{i,t-1}$  is the daily closing price of the of share  $i$  on day  $t-1$ . Then, abnormal returns were calculated for each share according to the equation:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \quad (2)$$

where  $AR_{i,t}$  is the abnormal return on share  $i$  on day  $t$  and  $E(R_{i,t})$  is the expected return on share  $i$  on day  $t$ . The expected return is estimated employing: (i) the market model, (ii) the market-

adjusted return model and (iii) the raw-return model, which assumes that the expected return is equal to zero:  $E(R_{i,t}) = 0$ .

The market-adjusted return model is derived as:

$$E(R_{i,t}) = R_{m,t} \quad (3)$$

where  $R_{m,t}$  is the return on the market portfolio on day t proxied by the Athens stock exchange (ASE) composite index.

Market model parameters were estimated using 200 observations prior to the event window:

$$E(R_{i,t}) = a_i + b_i R_{m,t} + e_{i,t} \quad (4)$$

where  $R_{m,t}$  is the return on the market portfolio on day t proxied by the ASE composite index,  $e_{i,t}$  is the random error term and  $a_i$  and  $b_i$  are the market model parameters.

The daily abnormal returns are then averaged across the sample of firms according to the formula:

$$\overline{AR}_t = \left(\frac{1}{N}\right) AR_{i,t} \quad (5)$$

where N is the number of observations.

We define day 0 as the actual date that the dividend initiation announcement took place and day +1 the day that news appeared in the daily press. For each day from  $t = -20$  to  $t = +20$ , the t-value is also computed.

In addition, we examine the price reaction in the context of different information environments. Atiase (1985) has observed that the amount of non-accounting information production and dissemination is an increasing function of the capitalised value of the firm. Several studies since then, including Eddy and Seifert (1988), Bhushan (1989) and Haw and Kim (1991) have concluded that firm size, represented by the amount of market capitalisation, may be

proxying to its information environment. Similarly to Mitra and Owers<sup>4</sup> (1995), we use market capitalization as a proxy for firm size. It is defined as the market value of common equity at the end of the month immediately prior to the month of the dividend initiation announcement. Using the median<sup>5</sup> market capitalisation, we partition the sample into two information environments, that is, the ‘low’ and the ‘high’.

Finally, we analysed the volatility of security returns (denoted as  $\sigma^2$ ) for each firm  $i$  for each information environment portfolio as follows:

$$\sigma_i^2 = \left[ \sum_{t=1}^N (R_t - R)^2 \right] / N \quad (6)$$

where  $R_t$  = the returns over period  $t$ ,

$R$  = the average return over period  $t$  (given by  $\sum_{t=1}^N R_t / N$ ),

$N$  = the number of observations

Hence, for the estimation period, volatility is computed for each firm over the days -220 to -21, whereas the event period volatility was computed over days -4 to 0<sup>6</sup>. Thereafter, for each portfolio, individual firm estimation period and event period volatilities are totalled and average volatilities are computed by dividing the summations by the number of firms in the portfolio according to Mitra and Owers (1995).

Furthermore, we analyse the differences between average estimation period and event period variances by computing the volatility ratio  $\sigma_{eve}^2 / \sigma_{est}^2$ , where  $\sigma_{eve}^2$  is the average event period variance and  $\sigma_{est}^2$  is the average estimation period variance for each portfolio<sup>7</sup>.

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<sup>4</sup> Mitra and Owers (1995) have also used the number of institutions holding the firm’s equity, the percentage of institutional equity holding and the number of analysts following a firm as surrogate for firm size. However, we were unable to collect the above data for Greek firms.

<sup>5</sup> Dissimilar to Mitra and Owers (1995) who used the mean market capitalization to form the information environments, we used the median market capitalization because the former leads to bias selection resulting into extremely unequal portfolios. The use of median market capitalization overcomes that problem.

<sup>6</sup> We selected the days -4 to 0 as the event period because we found some evidence of leakage of information on day -4 for our sample of dividend initiation announcements.

<sup>7</sup> See Kalay and Lowenstein (1985) and Mitra and Owers (1995).

Finally, the Mann-Whitney U test is employed to test for significant differences in individual firm volatility ratios of ‘low’ portfolios versus ‘high’ portfolios, for each information environment proxy variable.

### *Hypotheses*

Our study investigates whether there exists an inverse relationship between the magnitude and volatility of security price response to dividend initiation announcements and the firm’s information environment. We expect that a dividend information announcement should provoke stronger price reaction to a ‘low information environment’ relatively to a ‘high information environment’. Similarly, the volatility increase during the event period should also be higher for ‘low information environment’ firms due to higher uncertainty compared to ‘high information environment’ firms. According to Mitra and Owers (1995), the premise behind the above hypotheses is that the information content per unit of a given dividend initiation should be more for a ‘low information environment’ firm relatively to a ‘high information environment’. In sum the hypotheses examined are the following:

**H<sub>1</sub>:** The higher (lower) the firm’s information environment, the lower (higher) the price reaction to dividend initiation announcements.

**H<sub>2</sub>:** The higher (lower) the firm’s information environment, the lower (higher) will be the decrease/increase in volatility for the period around a dividend initiation announcement.

## **IV. Empirical Results**

### *Price reaction*

Table 2 reports the abnormal returns (ARs) measured by the market model, the market-adjusted returns model and the raw returns model with the corresponding t-values for the event period (from day -20 to day +20). On the announcement day ( $t = 0$ ), the abnormal return measured by the aforementioned models is 1.514%, 1.410% and 1.329% respectively, statistically significant at the 0.01 level. On day 0, more than 70% (27 cases out of 38) of the

average ARs are positive. This result confirms the positive price reaction hypothesis to dividend initiation announcements. That is, the announcement of a distribution of a dividend for the first time in a firm's history or the resumption after a lapse of at least three years, conveys good news to the market bringing about a significant positive price reaction. Table 2 also shows that there are positive ARs from day -4 to day +6 without, however, being statistically significant. This finding implies that there are no significant information leakages before the announcement day.

Table 3 presents the cumulative abnormal returns (CAR) and the t-statistic for various event windows around the announcement day. For both the pre and post-announcement periods, the CAR is positive. However, for the event windows from day -1 to day +1, from day -1 to day 0 and from day 0 to day +1, the CAR computed by the market model is 2.303%, 2.137% and 1.681% respectively, statistically significant at the 0.01 and 0.04 level. These results are in line with those of Dielman and Oppenheimer (1984), Healy and Palepu (1988), Michaely et al. (1995), Mitra and Owers (1995), and Alangar and Bathala (1999) who found a CAR of at least 1% in the event period.

#### *Price reaction across information environments*

Next, we investigate whether the magnitude of security returns relatively to the dividend initiation announcements have an inverse association with the firm's information environment. Consistent with the studies of Kalay and Lowenstein (1985) and Mitra and Owers (1995), we proxy the information environment using the firm size measured by the market capitalisation. We form two information environments, the 'low' and the 'high' one.

Table 4 presents the CAR and the t-values for various pre-and post-event windows around the dividend initiation announcement for the 'high' information environment. In all pre and post-event windows, the CAR is statistically insignificant, even in the event window from day -1 to day +1 which has been defined as the event period. Specifically, for the event period the CAR measured by the market model, the market-adjusted returns model and the raw returns

model is 0.372%, 0.407% and 0.630%, respectively, all statistically insignificant. Moreover, in the post-event windows, the CAR is negative but not significant with the exception of the window from day +1 to day +5 where the CAR is nearly equal to zero.

Unlike the 'high' information environment, the CAR for the portfolio of firms included in the 'low' information environment appears to be positive both in the pre-and post-event periods. In addition, for the event period (days - 1 to days +1) the CAR measured by the market model, the market-adjusted returns model and the raw returns model is 4.235%, 3.230% and 2.451%, respectively, all statistically different from zero. Moreover, for the narrower event window from day -1 to day 0 and from day 0 to day +1, the CAR is positive and statistically significant.

The magnitude of the price reaction to dividend initiation announcements differs across information environments. For the pre-and post-event windows as well as for the event period (-1, 0, +1), the CAR is higher for the portfolio of firms in the 'low' information environment than in the 'high' one. Moreover, the abnormal return on day 0 ( $AR_0$ ) is higher for the 'low' group of firms than for the 'high' one (see Table 6). Specifically, the  $AR_0$  measured by the market model, the market-adjusted returns model and the raw returns model is 2.640%, 2.250% and 1.830%, respectively, for the 'low' group of firms, whereas the  $AR_0$  measured by the market model, the market-adjusted returns model and the raw returns model is 0.380%, 1.610% and 0.850%, respectively, for the 'high' group of firms. From Table 6, a difference of means test of the day 0 ARs measured by the market model of the two groups yields a t-value of -1.82, which is significant at the 0.05 level. Overall, the empirical results lend support to the hypothesis of the inverse association between abnormal returns to dividend initiation announcements and the firm's information environment (and market capitalisation). That is, the magnitude of the price reaction to dividend initiations is higher in the 'low' information environment than in the 'high' one. The above results are in absolute line with the findings of Kalay and Lowenstein (1985) and Mitra and Owers (1995).

### *Analysis of variance*

Table 7 compares the estimation period ( $t = -220, -21$ ) and the event period ( $t = -4, 0$ ) average daily return variances<sup>8</sup> for the two information environments. The ‘low’ information environment group of firms has ratio of average event period variance to average estimation period variance equal to 0.684, while the ‘high’ information environment group of firms has a variance ratio equal to 0.559. Furthermore, the Mann-Whitney U test reveals that the variance ratio for the ‘low’ group of firms is significantly different from that one in the ‘high’ group of firms at the 0.05 level. These results corroborate those of Kalay and Lowenstein (1985) and Mitra and Owers (1995), who found substantial increases in security returns volatility around dividend announcements. However, this increase in volatility appears to be higher for the ‘low’ information environment firms. According to Mitra and Owers (1995), while the increase in the event period volatilities for the ‘low’ category suggests heightened uncertainty around dividend initiation announcements, the results for the ‘high’ group suggest a lesser degree and an earlier resolution of uncertainty surrounding dividend initiations. Overall, our results confirm the inverse relationship between information environment and volatility of returns around the dividend initiation announcements.

### **V. Conclusions**

Our results demonstrate that dividend initiation announcements are trustworthy mechanisms to convey information about the firm’s future prospects. Once announced, dividend initiations are associated with rises in shareholders’ wealth through stock price increase. Specifically, the dividend initiation brings about a cumulative abnormal return of more than 2.3% in the event period. This return is comparable with the ones found in other studies including Dielman and Oppenheimer (1984), Healy and Palepu (1988), Michaely et al. (1995), Mitra and Owers (1995), Howe and Shen (1998) and Alangar and Bathala (1999). Moreover, the

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<sup>8</sup> Variances of returns for both the event and estimation periods are computed using the market model.

association between dividend initiations and abnormal returns appears to be much stronger for the 'low' information environment firms than for the 'high' group. Similarly to Mitra and Owers (1995), we proxied the information environment with the market capitalisation and we found that firms with smaller size demonstrate higher abnormal returns.

We also investigated whether the volatility of security returns varies across the two information environments. Employing the Mann-Witney U test we found that the variance ratio for the 'low' group of firms is significantly different from that one in the 'high' group of firms at the 0.05 level. Therefore, we conclude that the volatility analysis appears to have higher event period uncertainty for the 'low' information environment group of firms than for the 'high' group of firms. This result is in absolute line with those of Kalay and Lowenstein (1985) and Mitra and Owers (1995), although they analysed the US market. Our results are based on the Greek market, which is a developing one and has the unique feature of no taxation on dividends and capital gains and the distribution of a minimum amount from the corporate profits. Despite these differentiating factors, our results are in accordance to those regarding developed markets with double taxation systems.

Future research should be directed to the estimation of post-announcement stock price and profitability performance for dividend initiating firms across different information environments.

## References

- Aharony, J. and Swary, I. (1980), "Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis", *Journal of Finance*, Vol. 35, pp. 1-12
- Aharony, J., Falk H. and Swary, I. (1988), "Information content of dividend increases: The case of regulated utilities", *Journal of Business, Finance and Accounting*, Vol. 15, pp. 401-414
- Alangar, S. and Bathala, C.T. (1999), "The effect of institutional interest on the information content of dividend-change announcements", *Journal of Financial Research*, Vol. 22, pp. 429-448.
- Ambarish, R., John, K. and Williams, J. (1987), "Efficient signaling with dividends and Investments", *Journal of Finance*, June, pp. 321-343.
- Asquith, P. and Mullins, D. (1983), "The impact of initiating dividend payments on shareholders' wealth", *Journal of Business*, Vol. 56, pp. 77-96.
- Atiase, R. (1985), "Predisclosure information, firm capitalization, and security price behavior around earnings announcements", *Journal of Accounting Research*, Vol. 23, pp. 21-36.
- Bajaj, M. and Vijh, A. (1990), "Dividend clienteles and the information content of dividend Changes", *Journal of Financial Economics*, Vol. 26, pp. 193-219.
- Benartzi, S., Michaely R. and Thaler, R. (1997), "Do changes in dividends signal the future or the past?", *Journal of Finance*, July, pp. 1007-1034.
- Bernheim, B. D. and Wantz, A. 1995. A Tax-based Test of Dividend Signalling Hypothesis", *American Economic Review* June: 532-551.
- Bhattacharya, S. (1980), "Nondissipative signalling structures and dividend policy", *Quarterly Journal of Economics*, August, pp. 1-24.
- Bhattacharya, S. (1979), "Imperfect information, dividend policy and 'the bird in the hand' fallacy", *Bell Journal of Economics*, Vol. 10, pp. 259-270.
- Bhushan, R. (1989), "Firm characteristics and analyst following", *Journal of Accounting and Economics*, Vol. 4, pp. 255-274.
- Brickley, J. (1983), "Shareholder wealth, information signaling and the specially designated dividend", *Journal of Financial Economics*, Vol. 12, pp. 187-209.
- Brown, S. and Warner, J. 1985. Using Daily Stock Return: The Case of Event Studies. *Journal of Financial Economics* 14: 3-32.
- Brown, S. and Warner, J. (1980), "Measuring security price performance", *Journal of Financial Economics*, Vol. 8, pp. 205-258.
- Dielman, T. and Oppenheimer, H. (1984), "An examination of investor behaviour during periods of large dividend changes", *Journal of Financial and Quantitative Analysis*, Vol. 19, pp. 197-216.
- Divecha, A. and Morse, D. (1983), "Market responses to dividend increases and changes in payout ratios", *Journal of Financial and Quantitative Analysis*, Vol. 18, pp. 163-173.
- Eades, K., Hess, P. and Kim, H. (1994), "Time-series variation in dividend pricing", *Journal of Finance*, Vol. 49, pp. 1617-1638.
- Eades, K., Hess, P. and Kim, H. (1985), "Market rationality and dividend announcements", *Journal of Financial Economics*, Vol. 14, pp. 581-604.
- Eddy, A. and Seifert, B. (1988), "Firm size and dividend announcements", *Journal of Financial Research*, Vol. 11, pp. 295-302.
- Haw, I.M. and Kim, W.S. (1991), "Firm size and dividend announcement", *Journal of Accounting, Auditing and Finance*, Summer, pp. 325-344.
- Healy, P. and Palepu, K. (1988), "Earnings information conveyed by dividend initiations and omissions", *Journal of Financial Economics*, Vol. 21, pp. 149-175.
- Howe, S. J. and Shen, Y. (1998), "Information associated with dividend initiations: Firm specific or industry-wide?", *Financial Management*, Vol. 27, pp. 17-26.

- John, K. and Williams, J. (1985), "Dividends, dilution and taxes: A signaling equilibrium", *Journal of Finance*, Vol. 40, pp. 1053-1070.
- Kalay, A. and Loewenstein, U. (1985), "Predictable events and excess returns: The case of dividend announcements", *Journal of Financial Economics*, Vol. 14, pp. 423-449.
- Kalay, A. and Loewenstein, U. (1986), "The informational content of the timing of dividend announcements", *Journal of Financial Economics*, Vol. 16, pp. 373-388.
- Kwan, C. (1981), "Efficient market tests of the informational content of dividend announcements: Critique and extension", *Journal of Financial and Quantitative Analysis*, Vol. 16, pp. 193-205.
- Michaely, R., Thaler, R. and Womack, K. (1995), "Price reactions to dividend initiations and omissions: Overreaction or drift?", *Journal of Finance*, June, pp. 573-608.
- Miller, M.H. and Modigliani, F. (1961), "Dividend policy, growth, and the valuation of shares", *Journal of Business*, Vol. 34, pp. 411-433.
- Miller, M. H., and Rock, K. (1985), "Dividend policy under asymmetric information", *Journal of Finance*, Vol. 40, pp. 1031-1052.
- Mitra, D. and Owers, J. (1995), "Dividend initiation announcement effects and firm's information environment", *Journal of Business, Finance and Accounting*, Vol. 22, pp. 551-573.
- Offer, A. and Thakor, D. (1987), "A theory of stock price responses to alternative corporate cash disbursement methods: Stock repurchases and dividends", *Journal of Finance*, Vol. 42, pp. 365-394.
- Petit, R. (1972), "Dividend announcements, security performance and capital market efficiency", *Journal of Finance*, Vol. 27, pp. 993-1007.
- Petit, R. (1976), "The impact of dividend and earnings announcements: A reconciliation", *Journal of Business*, Vol. 49, pp. 86-96.
- Richardson, G., Sefcick, S. and Thompson, R. (1986), "A test of dividend irrelevance using volume reactions to a change in dividend policy", *Journal of Financial Economics*, Vol. 17, pp. 313-333.
- Strong, N. (1992), "Modelling abnormal returns: A review article", *Journal of Business, Finance and Accounting*, Vol. 19, pp. 533-553.
- Venkatesh, P. (1989), "The Impact of dividend initiation on the information content of earnings announcements and returns volatility", *Journal of Business*, April, pp. 175-197.
- Wansley, J., Sirmans, C. Shilling J. and Lee, Y. (1991), "Dividend change announcement effects and earnings volatility and timing", *Journal of Financial Research*, Vol. 14, pp. 37-49.
- Wnasley, L.W. and Lane, W.R. (1987), "A financial profile of the dividend initiating firms", *Journal of Business, Finance and Accounting*, Vol. 14, pp. 425-436.
- Watts, R. (1973), "The information content of dividends", *Journal of Business*, Vol. 46, pp. 191-211.
- Watts, R. (1976), "Comments on the impact of dividend and earnings announcements: A Reconciliation", *Journal of Business*, Vol. 46, pp. 97-106.
- Woolridge, J.R. (1982), "The information content of dividend changes", *Journal of Financial Research*, Vol. 5, pp. 237-247.

**TABLE 1**

Panel A: Year-wise Break-up of Dividend Initiation Announcements made by 38 Exchange-listed firms over the Period 2000-2004.

Year	Number of Firms	Frequency %
2000	8	21.05
2001	10	26.32
2002	9	23.68
2003	4	10.53
2004	7	18.42
TOTAL	38	100

Panel B: Descriptive Statistics for the Number of Shares, Market Capitalization and the Dividend per Share for the Whole Sample of Dividend Initiations

	Sample Size	Mean	Std. Dev.	Minimum	Maximum
Number of Shares	38	41,723,568	63,649,954	3,961,300	330,000,000
Market Capitalisation	38	352,504,183	735,277,580	6,975,422	3,238,720,000
Dividend per Share	38	0.11	0.15	0.01	0.88
Dividend Yield (%)	38	2.05	1.66	0.13	6.68

**TABLE 2**

Daily Average Abnormal Returns (AR) from 20 Days before to 20 Days after the Dividend Initiation Announcements by 38 Greek Listed Firms over the Period 2000-2004

N=38	MARKET MODEL		MARKET-ADJUSTED		RAW RETURNS	
DAYS	ARs %	t-Statistic	ARs %	t-Statistic	ARs %	t-Statistic
-20	0.807	1.45	0.484	1.17	0.645	1.24
-19	-0.261	-0.47	-0.250	-0.88	-0.128	-0.33
-18	0.415	0.75	0.421	1.08	0.338	0.70
-17	0.048	0.09	-0.307	-0.91	-0.927*	-1.83
-16	0.020	0.04	-0.091	-0.23	-0.413	-0.79
-15	0.525	0.95	0.007	0.02	0.193	0.36
-14	0.765	1.38	0.660	1.54	0.779	1.63
-13	1.182**	2.13	0.776*	1.88	0.698*	1.64
-12	0.445	0.80	0.314	0.78	0.433	0.83
-11	0.237	0.43	-0.209	-0.55	-0.467	-0.96
-10	0.290	0.52	0.044	0.08	-0.092	-0.17
-9	-0.171	-0.31	-0.169	-0.41	-0.150	-0.30
-8	0.687	1.24	0.466	1.03	0.382	0.74
-7	0.081	0.15	-0.086	-0.20	-0.117	-0.24
-6	-0.119	-0.21	-0.322	-0.77	-0.310	-0.62
-5	-0.138	-0.25	-0.508	-1.28	-0.497	-1.06
-4	0.340	0.61	0.537	1.16	0.377	0.67
-3	0.055	0.10	-0.015	-0.04	-0.218	-0.42
-2	0.326	0.59	0.133	0.27	0.155	0.26
-1	0.623	1.12	0.572	1.18	0.384	0.71
0	1.514***	2.73	1.410***	2.58	1.329**	2.17
1	0.166	0.30	-0.014	-0.03	0.006	0.01
2	0.257	0.46	-0.120	-0.29	-0.328	-0.60
3	0.035	0.06	-0.249	-0.76	-0.414	-1.01
4	0.292	0.53	0.267	0.53	0.583	0.96
5	0.282	0.51	0.219	0.45	0.324	0.55
6	0.314	0.57	0.344	0.68	0.475	0.81
7	-0.142	-0.26	-0.460	-1.36	-0.948**	-2.03
8	0.157	0.28	-0.075	-0.17	-0.394	-0.74
9	-0.053	-0.10	0.079	0.13	-0.049	-0.07
10	0.656	1.18	0.563	1.39	0.370	0.71
11	-0.176	-0.32	-0.273	-0.59	-0.471	-0.76
12	-0.184	-0.33	-0.043	-0.09	0.309	0.60
13	0.359	0.65	0.116	0.25	-0.216	-0.42
14	0.027	0.05	-0.387	-0.93	-0.983*	-1.90
15	0.369	0.66	0.038	0.10	-0.190	-0.44
16	-0.605	-1.09	-0.599*	-1.67	-0.947**	-1.98
17	0.033	0.06	0.158	0.39	0.032	0.07
18	0.194	0.35	0.133	0.26	-0.215	-0.36
19	-0.012	-0.02	0.179	0.37	0.141	0.27
20	0.643	1.16	0.810*	1.84	0.887*	1.70

Note: \*\*\* Statistically significant at the 0.01 level, \*\* statistically significant at the 0.05 level,  
\* statistically significant at the 0.1 level.

**TABLE 3**

Cumulative Abnormal Returns (CAR) from 20 Days before to 20 Days after the Dividend Initiation Announcements by 38 Greek Listed Firms over the Period 2000-2004

	MARKET MODEL		MARKET-ADJUSTED		RAW RETURNS	
	CAR %	t-Statistic	CAR %	t-Statistic	CAR %	t-Statistic
CAR (-20 -1)	6.156**	2.48	2.457	1.35	1.065	0.45
CAR (+1 +20)	2.614	1.05	0.686	0.38	-2.028	-0.86
CAR (-10 -1)	1.974	1.12	0.652	0.50	-0.085	-0.05
CAR (+1 +10)	1.964	1.12	0.554	0.43	-0.375	-0.23
CAR (-5 -1)	1.206	0.97	0.719	0.79	0.201	0.17
CAR (+1 +5)	1.032	0.83	0.103	0.11	0.171	0.15
CAR (-1 +1)	2.303**	2.40	1.968***	2.78	1.720*	1.89
CAR (-1 0)	2.137***	2.72	1.982***	3.43	1.713**	2.31
CAR (0 +1)	1.681**	2.14	1.396**	2.42	1.336*	1.80

Note: \*\*\* Statistically significant at the 0.01 level, \*\* statistically significant at the 0.05 level,  
\* statistically significant at the 0.1 level.

**TABLE 4**

Cumulative Abnormal Return (CAR) and t-statistic from 20 Days before to 20 Days after the Dividend Initiation Announcement for High Information Environment

	MARKET MODEL		MARKET-ADJUSTED		RAW RETURNS	
	CAR (%)	t-statistic	CAR (%)	t-statistic	CAR (%)	t-statistic
CAR (-20 -1)	0.064	0.02	0.504	0.25	-1.023	-0.38
CAR (+1 +20)	-1.303	-0.46	-0.785	-0.39	-5.510**	-2.06
CAR (-10 -1)	-0.994	-0.50	-1.292	-0.90	-3.079	-1.63
CAR (+1 +10)	-0.345	-0.17	-0.267	-0.19	-1.995	-1.06
CAR (-5 -1)	-0.845	-0.60	-1.029	-1.02	-2.070	-1.55
CAR (+1 +5)	0.004	0.00	0.073	0.07	0.432	0.32
CAR (-1 +1)	0.372	0.34	0.407	0.52	0.630	0.61
CAR (-1 0)	0.414	0.46	0.599	0.93	0.688	0.81
CAR (0 +1)	0.341	0.38	0.415	0.65	0.790	0.93

Note: \*\* statistically significant at the 0.05 level.

**TABLE 5**

Cumulative Abnormal Return (CAR) and t-statistic from 20 Days before to 20 Days after the Dividend Initiation Announcement for Low Information Environment

	MARKET MODEL		MARKET-ADJUSTED		RAW RETURNS	
	AR (%)	t-statistic	AR (%)	t-statistic	AR (%)	t-statistic
CAR (-20 -1)	12.248**	2.44	6.480**	2.10	5.827*	1.81
CAR (+1 +20)	6.530	1.30	0.886	0.29	-0.325	-0.10
CAR (-10 -1)	4.941	1.39	2.548	1.17	2.828	1.24
CAR (+1 +10)	4.274	1.21	1.362	0.62	0.918	0.40
CAR (-5 -1)	3.257	1.30	1.437	0.93	1.124	0.70
CAR (+1 +5)	2.061	0.82	0.632	0.41	0.326	0.20
CAR (-1 +1)	4.235**	2.18	3.230***	2.70	2.451**	1.96
CAR (-1 0)	3.860**	2.43	2.993***	3.07	2.373**	2.32
CAR (0 +1)	3.020*	1.91	2.495***	2.56	1.905*	1.87

Note: \*\*\* Statistically significant at the 0.01 level, \*\* statistically significant at the 0.05 level,  
\* statistically significant at the 0.1 level.

**TABLE 6**

## Average Abnormal Returns on Day 0 for High and Low Information Environment Firms

INFORMATION ENVIRONMENT	MARKET MODEL		MARKET-ADJUSTED		RAW RETURNS	
	AR (%)	t-statistic	AR (%)	t-statistic	AR (%)	t-statistic
HIGH	0.380	0.61	1.610	1.47	0.850*	1.81
LOW	2.640**	2.36	2.250**	2.03	1.830	1.43
DIF. OF MEANS		(1.82*)		(1.39)		(0.72)

Note: \*\* statistically significant at the 0.05 level, \* statistically significant at the 0.1 level. The t-values within parentheses pertain to differences of means tests between the 'low' and 'high' portfolios

**TABLE 7**Ratio of Event Period (t = -4, 0) and Estimation Period (t = -220, -21) Average Daily Return Variances ( $\sigma_{eve}^2 / \sigma_{est}^2$ ) in the Low and High Information Environment

INFORMATION ENVIRONMENT	VARIANCE RATIO( $\sigma_{eve}^2 / \sigma_{est}^2$ )
LOW	0.684
HIGH	0.559
MANN WHITNEY U TEST	1135 <sup>a</sup>

<sup>a</sup> Significantly different at the 0.05 level using the Mann-Whitney U test.