

Original Research Article

Does Dividend Signaling influence the Shareholder Value: An Empirical Investigation on Listed Firms in Sri Lanka?

K.G.A. Udaya Kumara

Senior Lecturer, Department of Accountancy & Finance, Faculty of Management Studies, Rajarata University of Sri Lanka, Mihintale Sri Lanka.

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ABSTRACT

This study attempts to examine whether there is significance influence of dividend news on shareholders' value of listed firms in Sri Lanka. Particularly this study investigated market response to dividend behaviors. The study included an overall sample of 287 events of 40 listed firms during the period from 2007 to 2015. Abnormal returns were calculated from daily share prices and all share price index using well-established market model commonly used by researchers under the Event Study Methodology. The results supported the prediction of dividend signaling hypothesis. The dividend increasing firms and dividend decreasing firms revealed significant abnormal returns to confirm that dividend signals influenced the shareholders' value.

KEYWORDS: Dividend Policy, Dividend Signaling, Abnormal Returns, Event Study Methodology

1. INTRODUCTION

The maximization of the market value of shares of a firm is the most important objective of a firm (Eugene & Louis, 1990). The broadly categorized finance functions of a firm namely; financing (from where, when and how to acquire funds), investment decision (allocation of funds in long term assets), and dividend decision (tradeoff earnings between retained earnings and paying out cash to the shareholders) should be consistent with this objective of a firm. It is assumed that investors would react quickly to such decisions, and accordingly the market price of the firm's shares would adjust quickly, to reflect the impact of each decision on the firm's value (Block & Hirt, 1994).

Out of three decisions, finally, by making dividend decision, firm should decide whether to distribute all earnings or to retain them or distribute a portion and to retain the balance (Pandey, 1995). The management of a firm when involving a dividend decision must maintain a proper balance between the dividend and retained earnings. When the firm increases the retained portion of the net earnings, dividend decreases and consequently the market price of a share of the firm may be adversely affected (Pandey, 1997). But the use of retained earnings to finance with a positive Net Present Value (NPV) will increase the future earnings. On the other hand, when dividends are increased, though they may be a favorable reaction in the stock market, the firm may have to sacrifice some investment opportunities, which will need funds, and consequently, the future earnings per share may decrease. So, the dividend decision of a firm is an important area that would affect both investment and financing decisions of a firm.

Thus, study finds that a high payout policy means less retained earnings, which will consequently result in slower growth and perhaps lower market price per share. A low payout policy will result to a higher growth, higher capital gains and perhaps higher market price per share. Capital gains are; however more uncertain than current dividends, but current dividends are taxed more than capital gain. Therefore, it is quite plausible that some investors would prefer high-payout firms where others may prefer low-payout firms. Thus, the relationship between dividend and the value of the share is not clear-cut. The financial manager must understand the various conflicting factors, which influence the dividend policy before deciding the allocation of firm's earnings into dividends and retained earnings. Therefore, it is interesting to study firm's dividend policy as a collaborative decision.

2. LITERATURE REVIEW

There are dozens of theories and controversial arguments among various academics and researchers for last six decades whether the dividend policy of a firm affects its share prices. Among them, dividend irrelevance argument pioneered by Miller and Modigliani (1961) argued that there is no relationship exists between the firm dividend policy and its shareholders wealth and this has been validated by the empirical findings of Fried & Puckett (1969) and Black & Scholars (1974). The Dividend relevance argument lead by Lintner (1956) argued with much criticism about irrelevance theory and evident that the level of dividend paid by a firm appeared to be of vital importance.

Dividend is taxed at a higher rate than capital gains and high dividend payout firms are penalized in the market while low dividend payout firms are rewarded. The dividend tax effect has been examined by Linzenberger & Ramaswamy (1979), Black & Scholars (1974), Miller and Scholars (1978) and among others. But, tax effect is not the subject of this study.

In a world of information asymmetry, the announcement of changes in dividend payments convey news about management's assessment of the future prospects of a firm to investors in the market. Their reaction to such news is reflected in share prices and hence dividend payment is an important determinant of the share prices of a firm. This argument has been investigated by Pettit (1976), Watts (1973), Asquith & Mullins (1983), Woolridge & Ghosh (1985) and Abeyrathne *et al.* (1991).

A dividend increase announcement may transmit two types of news; good news, i.e., the firm's systematic risk decreased, and bad news, i.e., limited growth opportunities. The former will lead to a positive market reaction and the latter to a negative reaction (Grullon *et al.* 2002).

2.1 Dividend as a Signal of future Prospects

Battacharya (1979) argued that when outside investors have imperfect information about future profitability of the firm and cash dividends are taxed at higher rate than capital gains, the payment of dividends can function as a signal, which conveys information to the market about future returns of current investments by developing the dividend signaling model in which dividends function as a signal of expected future prospects of a firm in an imperfect information setting. The managers as insiders choose dividend payment levels and increase, to signal private information to investors John & Williams (1985) and Miller & Rock (1985). The increased dividend payment serves as a credible signal

when other firms that do not mimic the dividend increase without unduly increasing the chance of later incurring a dividend cut. Thus the implication of the dividend-signaling hypothesis is that firms that increase (decrease) cash dividends should experience positive (negative) price reaction.

2.2 *Dividend as a Signal of the Method of Future Financing*

Keane (1985) forwarded another reason why management may convey its investment financing policy to the market through dividend policy. A high dividend payout is associated with new equity financing, while a low dividend payout is associated with financing investment through retained earnings, if the firm needs additional fund for its future growth. So investors may prefer the former package because under that package they will issue information about the proposed investment in the share-issuing prospectors. This creates less uncertainty than latter package when most of the information about the investment remains undisclosed.

Brickly (1983), who investigates share returns and dividend patterns surrounding extra dividend, compares them to those surrounding regular dividend increase and suggest that both extra dividend and regular dividend increase appear to convey positive information about the future prospects of firms.

2.3 *Dividend Cut as a Good Signal*

The reduction in dividends can be taken as a signal of good news (John & Kalay, 1985). Their argument was based on the existence of pecking order theory and they argued that growing firms can signal their true investment opportunities restricting dividend payout and financing projects through relatively low cost retentions.

Woolridge & Ghosh (1984), argues that dividend cut carries a positive signal to the market, if a firm has lots of profitable investment opportunities, with poor liquidity position, and cost of external financing is substantial, the price of a share might be increased by reducing current dividends and increasing investment through retained earnings.

The announcement of a new issue of equity shares reduces the market value of the firm. Under this circumstances a reduction of dividend, which communicates effective signals of future growth opportunities, could convey positive information to the market resulting in an increase in share price (Asquith & Mullins, 1986).

In conclusion, a large body of evidence mainly from western markets argues that in an information asymmetry, dividend announcements may convey news to the capital market. Generally, it is found as a weak evidence for the dividend information content hypothesis and, it is still controversy whether the

reaction of the market price is favorable or unfavorable.

In this context, this study attempt to examine whether there is any significance influence of dividend news on shareholder's value.

3. RESEARCH DESIGN

3.1 *Data*

To establish the reaction of dividend news on shareholder value, an overall sample of 40 firms listed in Colombo Stock exchange (CSE) were selected, through exercising reasonable care in order to select a large sample which represents the whole market to derive more valid findings. The sample period used in this study was from 01.01.2006 to 31.12.2015. The data were obtained from published annual reports of firms and the web site of the CSE.

3.2 *Sample*

To remain in the sample, a firm must satisfy the following selection criteria; (i) firm must pay dividends at least seven consecutive years throughout the study period, (ii) the dividends distribution is a regular year-end dividend, and (iii) sample must have only firms that have daily return data in the share price at least 180 days before and 180 days after the last dividend announcement date. These criteria drastically reduced the sample containing 287 events of 40 firms.

3.3 **METHODOLOGY**

As the first step of analysis, study divides the sample of dividend announcements into three sub samples according to the magnitude of dividend changes; as constant dividend, dividend increases, and dividend decreases. The empirical section of this study employs conventional Event-Study Methodology (ESM) in examining the market price reaction to the event of dividend announcement (Strong, 1992). This analysis focused on the behavior of share prices in order to test whether their stochastic behavior is affected by the dividend announcements.

According to the standard form of ESM, following stages has to be identified:

Announcement Date (Event Date): Date on which the effect of an event is presumes to take place. In here, used the date on which the first public announcement of dividend took place. The event date is assigned event date $t = 0$.

Test Period (TP): total period of time over which statistically significant effects of the event on the stock prices are presumed to take place. Therefore, the

study uses TP spacing 11 days; 5 days prior to the event date and 05 days after the event date.

Estimation Period (EP): Period which is used as the basis for estimating the parameters of the benchmark expected return. Here EP excluded the TP and it spans from $t = 5$ (5 days before the event date) to day -185 . That is TP contains 180 days before event date.

3.3.1 Calculation of the Daily Share Return and Daily Market Return

To calculate the daily return study, use logarithmic returns because it is empirically more likely to be normally distributed and so the assumption of standard statistics technique.

The daily returns of individual firms were estimated using following formulae.

$$R_{it} = \ln \left(\frac{P_{it} - P_{it-1}}{P_{it-1}} \right)$$

Where, R_{it} = Actual Return on Share i on day t , P_{it} = Price of Share i at the end of day t , P_{it-1} = Price of Share i at the day $t-1$ and \ln = Natural Logarithm.

The most popular market model was used in estimating market returns, and calculations were done using following formulae.

$$R_{mt} = \ln \left(\frac{ASPI_t - ASPI_{t-1}}{ASPI_{t-1}} \right)$$

Where, R_{mt} = Return on the Market Portfolio, $ASPI_t$ = ASPI for day t , and $ASPI_{t-1}$ = ASPI for day before day t

3.3.2 Estimating the Expected Return of Share - $E(R_{it})$

The expected return is derived using the following formulae.

$$E(R_{it}) = \alpha + \beta_i (R_{mt})$$

Where, $E(R_{it})$ = Expected return on share i in day t in the test period, α = Constant (estimated regression intercept of share i , and β_i = Estimated systematic risk of share i

Here α and β parameters were ascertained using data for the EP through Ordinary Least-Square (OLS) regression.

3.3.3 Computing Abnormal Return and Testing the Statistical Significance

In this study, well-known market model was used to calculate the Abnormal Returns (AR) of shares around the TP (11 days test period). Following formulae was used for this purpose.

$$AR_{it} = R_{it} - E(R_{it}) + e_{it}$$

The t - statistics were calculated to examine the statistical significance of the abnormal returns.

4. RESULTS AND DISCUSSION

4.1 Descriptive Sample Information

The Table 01 shows the distribution of the 287 total dividend announcements into three sub samples. It is revealed that 111 constant dividends, 118 dividend increase and 58 dividend decrease were taken, from 40 firms during the period from 2007 to 2015.

4.2 Effect of Constant Dividend on Market Return

The results of dividend have no-change (constant) firms that is no news is being signaled to the stock market, then, rationally investors might assume that no abnormal share price movements are expected. Surprisingly, results in the Table 02 show that AR during the dividend announcement period is positive and significantly different from zero on $t=0$. The possible reason for this unexpected reaction could be understanding of any uncertainty on that, no dividend change was announced.

4.3 Effect of Dividend Increases on Stock Market

Table 03 reports the stock market reaction to the dividend increase. The AR on day $t-1$, $t=0$ and $t+1$ were 1.89, 1.18 and 0.5 per cent respectively and corresponding t -values were 2.29, 1.09 and 1.37 respectively. The shareholders of these firms, on average earned a positive AR of 3.6 percent during the period between one day before the announcement and one day after the announcement. The reason for the negative AR for rest of the firms in the sample may be that the size of increase of dividend unsatisfied the investors in the market. This results confirm that the dividend increase convey as a good news to the stock market and consistent with the results of Pettit (1976), Watts (1973), Asquith & Mullins (1983), Woolridge & Ghosh (1985) and Abeyrathne *et al.* (1993).

4.4 Effect of Dividend Decreases on Stock Market

The results reported for the test period of the dividend decreasing sample in Table 04 below, reveals that AR on day $t-2$, $t-1$ and $t=0$ were -0.34, -0.74 and -1.84 percent respectively. Corresponding t -values for three days were -1.12, -1.14 and -2.38 respectively. That indicates dividend announcement day and two previous days AR were significantly negative and these results are consistent with dividend signaling hypothesis. These results are also compatible with the findings of Ross (1977), and Bhattacharya (1979, 1980). In response to the dividend cut as a bad signal, the stock market should react adversely, resulting in a fall in the firm's share price and reducing the returns to the shareholders of those firms.

5. CONCLUSION

The study has undertaken extensive empirical work to examine the dividend signaling phenomenon in the context of Sri Lankan capital market with the objective of investigating whether changes in dividend signaling, influence the shareholders value.

Abnormal returns of the dividend increasing sample and dividend decreasing sample support the dividend signaling hypothesis. In general, the AR over the announcement period for dividend announcements were in the order of magnitude, predicted by the dividend-signaling hypothesis.

The results of the dividend increasing firms showed high significant AR surrounding the announcement period and confirmed the increase

of shareholder value. The dividend decreasing firms performed quite poorly on dividend cut; the AR on announcement period was slightly negative. It is revealed that the magnitude of the negative AR for adverse news regarding dividend announcement is less than the magnitude of the positive AR carried out by their favorable news counterparts in the announcement period. The surprising results were reported by the constant dividend firms.

As a final conclusion on the basis of the evidence provided in this study, the validity of the dividend signaling is not likely to be rejected, but dividend signals is a much more complex process, than that considered by many studies in finance literature and need more comprehensive further studies.

Table 01: Descriptive Sample Information

Year	Constant Dividend	Dividend Increase	Dividend Decrease	Total
2007	09	15	08	32
2008	12	14	07	33
2009	13	12	07	32
2010	13	10	06	29
2011	15	11	06	32
2012	12	12	06	30
2013	18	11	05	34
2014	10	16	06	32
2015	09	17	07	33
Total	111	118	58	287

Table 02: Abnormal Returns of Constant Dividend Sample

DAY	AR	CAR	T-value	SD
t-05	-0.00461	-0.00461	-1.84163	0.020161
t-04	0.010134	0.005524	0.929916	0.087864
t-03	0.003915	0.009439	1.467588	0.021509
t-02	-0.01006	-0.000621	-1.47615	0.054946
t-01	0.000953	0.000332	0.358455	0.021436
t-0	0.004836	0.005168	1.713477	0.022753
t+01	0.00346	0.008628	1.00037	0.027884
t+02	-0.00044	0.008188	-0.13593	0.025873
t+03	-0.00135	0.006838	-0.35415	0.030681
t+04	0.010457	0.017295	2.194672	0.038416
t+05	0.002712	0.020007	0.858779	0.025462

*Significant at 95%

Table 03: Abnormal Returns of Dividend Increasing Sample

DAY	AR	CAR	T-value	SD
t-05	0.005041	0.005041	1.311134	0.012849
t-04	0.000351	0.005392	1.221112	0.010784
t-03	0.001254	0.006646	0.199322	0.023452
t-02	-0.000961	0.005685	-0.26242	0.012785
t-01	0.005274	0.010959	1.368177	0.012754
t-0	0.011809	0.022768	1.097316	0.035514
t+01	0.018954	0.041722	2.291591	0.031704
t+02	-0.000151	0.041571	-1.03584	0.020313
t+03	0.000235	0.041806	0.123121	0.011276
t+04	0.002751	0.044557	0.652622	0.014923
t+05	0.008945	0.053502	1.154851	0.024037

*Significant at 95%

Table 04: Abnormal Returns of Dividend Decreasing Sample

DAY	AR	CAR	T-value	SD
t-05	-0.003124	-0.003124	-2.152473	0.021452
t-04	0.002624	-0.0005	0.654254	0.023516
t-03	0.000251	-0.000249	0.123394	0.023514
t-02	-0.003458	-0.003707	-1.120186	0.028745
t-01	-0.007452	-0.011159	-1.147693	0.024524
t-0	-0.018453	-0.029612	-2.386752	0.033874
t+01	0.000425	-0.029187	0.104215	0.033785
t+02	-0.004524	-0.033711	-1.524581	0.026585
t+03	0.000648	-0.033063	0.235142	0.012458
t+04	0.001524	-0.031539	0.4652148	0.012452
t+05	-0.003211	-0.03475	-1.52484	0.021305

*Significant at 95%

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