

The Impact of Dividend Announcement on Share Prices of Listed Public Quoted Companies on ASPI in Sri Lanka

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Abstract

The impact of dividend announcements on share prices has become a contentious issue in the extant literature over the years since it has not been sufficiently investigated. Further, it is evident that different results have been found in different studies. Hence, the objective of this research is to investigate the impact of dividend announcement on share prices and the informational content of dividend announcement pertaining to the listed companies in Sri Lanka. A sample of 15 companies from ASPI was selected on purposive sampling method for the study. The daily closing stock prices and published first and final dividend announcements data for the period from 2014 to 2018 were used as the dependent variables and independent variables respectively. The standard event study method was employed as the methodology. The Ordinary Least Square Regression Model was used to ascertain alpha (α) and beta (β) of sample companies for event window for the years of 2014-2018. Subsequently, the Market Model was applied to compute the Excess Returns, Abnormal Returns, and t-values surrounding the testing period. The findings confirmed that t- values of Average Abnormal Returns on days for year of 2014-2017 were statistically significant at 5% except for the AARs on days in 2018. Finally, the dividend announcement also showed a substantial impact on share prices based on the descriptive analysis of overall years from 2014 to 2018. Thus, the conclusion of the study reveals that the dividend announcement leads to a positive market reaction by supporting the signaling theory. Furthermore, the results show that dividend announcement has informational content whereas dividend announcement is perceived as favorable news by the investors. This study may specially be useful to prospective investors to make decisions aligning with the dividend announcement pertaining to the listed corporate firms in Sri Lanka. Finally, this study recommends expanding event window or time period pertaining to further studies.

Keywords: *Abnormal returns, ASPI Companies, Dividend Announcement, Information Content, Share Prices*

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1. Introduction

Profits are paid among the shareholder in all commercial organization as dividends (Dedunu, 2018). Further, dividend is considered as a leading factor of corporate theory (Menike, 2014). Dividend policy is the policy that the management formulates pertaining to earnings for distribution as dividend among shareholders. The extant literature suggests that dividend policy of a firm is the most recognized controversial issue that provided considerable interest in the corporate finance. It is believed that, in establishing market price of the share of the company, dividend plays a crucial role (Khadka, 2012; Dhungel, 2013). Furthermore, the findings suggest that dividends serve an important informational role in the stock market across the globe. Subsequently, cash dividend announcement is used by company's managers as a signal of the future prospect about changes in their expectation of the company according to informational content of dividend announcement. As a result, some believe that the information contained in a dividend announcement is the cause for shareholders' reactions and their resulting impact on stock prices (Dharmarathne, 2013).

Lots of studies could be found on examining the association between dividend and share price of the firm or the value of the firm. Furthermore, it is clear that numerous theories on this subject have been generated and tested. However, it remains unclear if a firm's stock price or values affect the dividend and the association between dividend announcement and share price (Kadioglu et al., 2015). Harbi and Bujang (2016) claim that plenty of studies in developed and emerging markets have yet no consensus about the effect of dividend declaration on the price of shares due to the inconsistent nature of findings. The consensus of companies' dividend announcement on share price has not been reached and still being debated. (Mrzyglod & Nowak, 2017; Harbi & Bujang, 2016). Most importantly, dividend announcement is always a more interesting topic to scholars (Rosario & Chavali, 2016). Accordingly, examining the announcements of dividend and its impact on the share prices in Sri Lanka will be very interesting.

No other area of finance as stock prices behavior has been the topic of so much empirical research during the previous four decades (Mehndiratta & Gupta, 2010). Evidently, most of the studies have focused on the influence of dividend announcements on share prices in developed nations such as the U.S, UK, while a little effort has been taken to study on this theme in developing markets (Nishanthini & Nimalathasan, 2014). Dhungel (2013) further states that the association between date of dividend announcement and the price of shares is not yet clear and still it is

a controversial issue in underdeveloped countries like Nepal. Many studies have been conducted in different parts of the world and contrasting results on this have been presented (Rosario & Chavali, 2016). As per Joshi and Mayur (2017), the reason behind the impact of these two constructs doesn't seem conclusive. As far as the findings are concerned, Mehndiratta and Gupta (2010) reveal that, dividend announcement effects on share prices. However, Pradhan (2014) emphasizes that dividend announcement has no impact on share price. Meanwhile, some scholars have found out a positive relationship (Tahtamouni, 2020) while some studies propose negative relationships among them (Iqbal et al., 2014).

When considering Sri Lankan context, Menike (2014), asserts that only few studies can be found pertaining to the effect of dividend declaration and share price specially in the Sri Lankan context. The existing literature provides contradicting results for dividend announcements on market responses of Colombo Stock Exchange (CSE). Evidently, Dharmarathne (2013) finds that dividend announcement has an effect on the share price. Dedunu (2018) indicates that dividend announcements have little influence on stock prices. Nevertheless, there is a positive association between the dividend declaration and share price (Nishanthini & Nimalathasan, 2014). According to Pathirannahalage and Abeyrathne (2016), no association between the dividend declaration and the stock price could be seen. Consequently, the problem of the study could be presented as “whether there is an impact of dividend announcement on share prices in Sri Lankan context”.

After considering above factors, this survey attempts to investigate the impact of dividend announcement on share prices in Sri Lanka by using the All Share Price Index (ASPI) companies registered in the CSE. Further, it is expected to provide evidence regarding information content inherent in dividend announcements. Thus, the research problem is divided into measurable research questions as follows.

1. Is there an association between dividend announcement and share prices?
2. Is there an impact of dividend announcement on share prices?
3. Is there an informational content of dividend announcement?

At the end of this study, it is expected to achieve following objectives by considering aforementioned research questions.

1. To investigate the association between dividend announcement and share prices.
2. To examine the effect of the dividend announcement on share prices.
3. To assess the informational content of dividend announcement.

This study is significant in many ways. Exploring the contextual gap is significant since many studies were found in the developed markets where only few studies were found in Sri Lankan context (Menike, 2014). By exploring the performance gap, this study provides recent evidence on the aforesaid impact to the investors. This study will provide a general framework to various parties such as stakeholders, CSE, finance managers, both local and foreign investors, and for financial consultants as well. The results of this study will help current investors in making their investment decision aligning with the dividend announcement and for potential investors in predicting share returns on and around announcement period. Further, Financial consultants can offer services to develop optimal dividend policies while finance managers are in a position to formulate their future dividend policies by paying attention to the results of this study. On the other hand, this study will help to scholars, academicians and researchers who are expecting to do their further studies on this concern.

2. Literature Review

2.1 Dividend Announcement

Management of the company reveals its next dividends on the announcement date and it is called as declaration date. One of the major emphasis areas in the financial policy of the organization is dividend declaration (Gupta et al., 2012). Thus, the dividend announcement date is considered as event date that the actual date of companies announces dividends to the public. In general, the dividend is considered as a “good news” if it increases and a “bad news” if it decreases the share price. Previous studies have identified that company’s dividend sends out a positive message about its future prospects. Thus, the firm’s stock price significantly increases while a decrease in dividend indicates otherwise (Laabs & Bacon, 2013).

2.2 Share price

Generally, share price is considered as the market value of single stock of a firm. The stock prices changes are depending on company announcement, changes in director board, company acquisition or merging as well as financial disclosures of the company (Kaluarachi, 2019). Different authors argue using various theories to

come to a valid common agreement. Some authors view that the dividend announcement effects on share price while some bears totally different views and opposite findings. However, some scholars reveal that dividend payment will increase the stock price while others believe that it can hunt the stock price (Om & Goel , 2018).

2.3 Dividend Signaling Theory

According to Do and Hieu (2018), Dividend signaling theory was proposed by Spence (1973) and they further claim that aforementioned impact indicates information about the views of the manager pertaining to performance of the firm. The companies give signals to the financial market about what they have rewarded by increasing the dividends. The firm will be able to produce larger cash flows in the long run. Therefore, investors should reevaluate the firm's value according to a positive announcement of dividend, thereby increasing the stock price (Budagaga, 2017; Menike, 2014). Share prices moved upward after the dividend announcement significantly by confirming the impact of signaling theory (Suwanna, 2012).

2.4 Bird- In- Hand Theory

According to Ngoc and Cuong (2016), "Bird in the Hand theorem" is being initiated by Gordon (1960) and Lintner (1962). They argued that over a potential capital gain, investors prefer dividends. Therefore, investor will demand large total return from higher capital gain/dividend ratio of the firm. This implies the case of positive dividend announcement; investors increase the share price. On the contrary, negative announcement of dividend leads investors to cut the share price. It suggests that investors are selling their shares when stock has high dividend payments, and it commands a higher market price consequently (Budagaga, 2017; Ngoc and Cuong, 2016). In other words, this theory directly relates to the study since many of the similar studies in the past have also used signaling theory as the base theory.

2.5 The Informational Content of Dividend Announcement

Dividend conveys the various information to the market participants and this is called "Information content of dividend announcement" or "Signalling Hypothesis" (Vazakidis & Athianos, 2010; Ngoc & Cuong, 2016). Gupta et al. (2012) reveal that this concept was originally suggested by Lintner (1962) and further extended by Fama et al. (1969). As a result, dividend change announcements are regarded to represent management's views regarding current and future cash flows, and so provide significant information to the market. Subsequently, it is

evident that an expansion of dividends provides positive information whereas negative information is conveyed by decreased dividends and that will lead the firms' future prospects to the market subsequently. Thus, it could be argued that the increased dividend announcement leads to good news which will then motivate increasing the share prices whereas unfavorable prospects of decreased dividend announcement commands to a fall in market prices. It is noted that the informational content of dividend announcement has been tested in foreign and Sri Lankan contexts. Some of the scholars argue that a positive market reaction to dividend announcement exist while there is an informational content of dividend announcement in foreign context (Mehndiratta & Gupta, 2010; Scott & Keith, 1996; Dasilas & Leventis, 2011). When considering Sri Lankan context, the similar results have been confirmed (Dharmarathne, 2013; Dissabandara & Samarakoon, 2002; Menike, 2014).

2.6 Empirical evidence for Impact of dividend announcement on share prices

During the previous decade, there has been evidence of the influence of dividend announcements on share prices, according to existing studies. Scott and Keith (1996) found a significant impact of market phase on abnormal return around the announcement. In developing markets, Gurgul et al. (2003) investigated the effect of dividend announcement on Australian stock market and found that stock prices have significant positive reaction to increase dividends and, consequently, decreased dividend has caused to fall in market price of shares. They further revealed that information on dividends have affected to share prices very quickly. By supporting the dividend signalling hypothesis, Chen et al. (2009) discovered a favorable influence of cash dividend announcement on share prices pertaining to stock market in China.

According to Dhungel (2013), dividend announcements have little effect on share prices in developing countries like Nepal. According to the conclusions of his study, most of the banks have little effect on share pricing due to dividends. Predicting bank dividend policy is challenging and unclear in nations like Nepal, where the financial industry is still in its infancy and its gradual development (Dhungel , 2013).

However, in emerging markets, some scholars have found out a positive relationship in Jordanian stock market (Tahtamouni, 2020). Interestingly, one of the Jordanian commercial banks has increased dividend payments having the purpose of raising the shareholder wealth and, subsequently, the investors have purchased more shares which lead to increase the market price showing a positive relationship.

However, Iqbal et al. (2014) suggested that the agency cost, tax, and other factors may also affect the share prices of banking sector and it may not further cause to dividend announcement.

Kadioglu et al. (2015) revealed that market responds negatively to dividend announcement in Istanbul due to the non-leakage of information before the announcement is made. As a result of that, shareholders sell their shares to avoid more future taxes when announcing dividends which would then reduce the market price resulting the tax-client effect hypothesis. However, Gupta et al. (2012) clearly indicated that when a dividend signal is sent, the price fluctuations are higher than when the signal is sent with bad news.

Do and Hieu (2018) find increased dividend announcement does not affect on Vietnam's stock prices while supporting Black's tax-based dividend signalling hypothesis. As a result of that, dividend did not have worth information and it didn't convey the market participants. In the Bombay and Thailand stock exchanges, Joshi and Mayur (2017) and Suwanna (2012) confirmed that dividend announcements had a substantial influence on share prices and support for signaling theory.

When considering Sri Lankan context, dividend announcement has positive impact on share prices and thus, dividend announcement carries favorable information to the market (Dharmarathne, 2013; Dissabandara & Samarakoon, 2002; Menike, 2014). However, Dedunu (2018) clearly shows that dividend announcement doesn't have a significant impact on share prices. Meanwhile, Pathiranalage and Abeyrathne (2016) argue that no relationship between among them.

3. Methods

3.1 Sample and Sample selection

This study attempts to explore the changes of share prices in the stock market on the effect to the date of dividend announcement and informational content of dividend announcement in Sri Lankan context. Based on ASPI, 15 corporates were carefully chosen as the study's sample using purposive sampling method for the period of 2014 to 2018. It is evident that Mehndiratta and Gupta (2010) and Suwanna (2012) have also followed the same mechanism in selecting the samples in their studies. Further, in order to be eligible for selecting into the sample, following three selection criteria should be satisfied (Dissabandara & Samarakoon, 2002; Dedunu, 2018).

1. Throughout the research period, the firm should have been listed in the CSE.
2. The daily share prices should be available, and the companies' shares should actively be traded in the market.
3. The company should have paid dividend continuously by a way of final dividends throughout the sample period of 2014 to 2018 without any break.

It should be noted that only the public announcements related to first and final dividend payments of companies are considered where interim dividend announcements are not considered.

3.2 Data and Data Collection

Basically, two major methods are available for data collection as primary and secondary method. The latter is suitable for the present study due to the reliability and transparency of this data rather than primary data. Following three sets of data gathered from CSE are relevant and reliable as secondary data for the study (Dharmarathne, 2013).

1. The published final dividend announcement dates of each company for the period of 2014 - 2018.
2. Daily adjusted closing prices of each company's final dividend announcements around each announcement day during the test period.
3. Value of the ASPI for event window day from 2014 to 2018.

When collecting data, the researcher gives considerable attention to remove the impact of following capital-based data as per Dharmarathne (2013, p.103).

1. Announcement dates of bonus issue, date of ex-bonus
2. Announcement dates of right issue, rate, and right share price, price of ex-right and date of ex-right.
3. Announcement dates of new issue, issue price, number of new shares issued, immediately prior to new issued number of shares outstanding, quoted date and price before the quoted date.

3.3 Conceptual Framework

The dividend announcement is treated as an independent variable in the conceptual framework while the share prices of quoted companies are represented as the dependent variable. These variables are conceptualized based on model used in previous studies in the literature.

Dividend
Announcement

Share Prices



Figure 3. 1: Conceptual Framework

Source: Constructed by the authors based on the literature.

3.4 Method of Data Analysis

The standard event study method suggested by Menike (2014) is used as the methodology of the study. The Abnormal Returns are (ARs) estimated using the Market Model whereas there are several benchmarks used to calculate ARs (Menike, 2014). Om and Goel (2018) stated that market model is the most flexible and reliable model to calculate ARs. ARs are calculated separately for each day of event period for 2014-2018. It is evident that some scholars have used large event period while some have used short event period in the literature. The study uses short event window of 11 days as 5 days after (t+5) and 5 days prior (t-5) to dividend announcement date. It is evident that Menike (2014) and Do and Hieu (2018) have also followed the same mechanism in their studies. Hence, it is firmly believed that the event window used pertaining to this study is more appropriate to capture all the effects of dividend pronouncement on share prices and dividends conveyed to the market.

Based on share price movements, the conclusions could be derived on whether there is an impact or not. The data on daily returns of shares are not available in CSE. Therefore, daily share prices were used to compute daily share returns (Rit) and to calculate market returns (Rmt) using ASPI market indexes in event window for the testing period of 2014 to 2018. Firstly, the study used Ordinary Least Square Regression (OLS) to estimate alpha (α) and beta (β) of sample companies for event window for the period of 2014-2018. Rit and Rmt data for the purpose of running OLS regression were used as the dependent variable and independent variable respectively in this study. Expected Returns (ERs), ARs and Average Abnormal Returns (AARs) are calculated using regression results of alpha and beta for the estimation period. This study calculates AARs during the event window from 2014 to 2018 separately and whole to make generalizations and overall interpretation of the event more conclusively (Om & Goel, 2018). Further, t-statics of event window was calculated using market model while the overall number of years were calculated using 5% of one sample t- test. Finally, the conclusion is derived based

on corresponding t-values of AAR of the study (Dharmarathne, 2013; Menike, 2014).

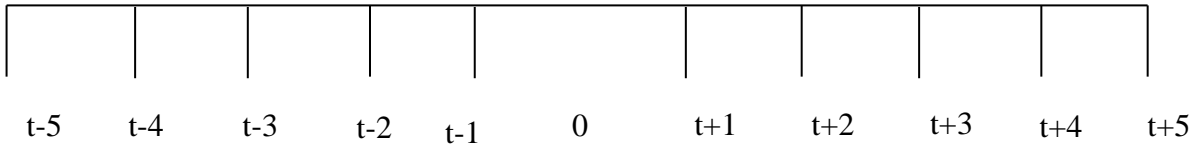


Figure 3. 2: Timeline of the Study

Figure 3.2 shows the interval of t-5 to t+5 representing the event window (test period) of the study. Time 0 represent the event date which considered as the announcement date. According to Gupta et al. (2012), an event day is treated as following trading days if event day is a non-trading day.

3.5 Hypothesis

To achieve the stated objectives, following hypothesis was developed in accordance with the literature.

H_1 = Dividend announcement affects on share prices.

H_0 = Dividend announcement does not affect on share prices.

3.6 Operationalization of the Study

Table 3. 1: Measurement of Key Variables

Variables	Definition	Measurement	Reference
Dividend announcement	Independent variable and event date for this analysis.	The study used 11 days of test period	Dharmarathne (2013), Dissabandara & Samarakoon (2002)
Share Prices	Dependent variable. share prices are defined as the daily closing stock prices published by the companies in CSE.	From event study, market model and OLS regression, assessed the stated impact by comparing the AARs and conclusion derived from the t-values.	

3.7 Calculations of the study

Table 3. 2: Calculations of the study

01.	Daily Share Return (Rit)	$R_{it} = \frac{(P_{it} - P_{it-1})}{P_{it-1}}$ <p>Pit - Closing share price on day t (Current Day) Pit-1-Closing share price on day t-1(Previous Trading Day)</p>
02.	Market Return (Rmt)	$R_{mt} = \frac{(ASPI_{it} - ASPI_{it-1})}{ASPI_{it-1}}$ <p>ASPIit- ASPI for day t (Current Day) ASPIit-1 - ASPI for day t-1 (Previous Trading Day)</p>
03.	Expected Return (ERit)	$E(R_{it}) = \alpha_i + \beta_i * R_{mt}$ <p>α_i - The estimated market model intercept (alpha) of stock i β_i - The estimated market model systematic risk (Beta) of stock i Rmt - The rate of return of the market on day t</p>
04.	Abnormal Return (ARit)	$AR_{it} = R_{it} - E(R_{it}) + e_{it}$ <p>Rit - Actual Return on share i on day t E(Rit) - Expected Return on share i on day t eit - The Regression error term of stock i on day t (Standard error term)</p>
05.	Average Abnormal Return (AARt)	$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$ <p>N - Number of events in the sample</p>

06.	Cumulative Average Abnormal Return (CAART)	$CAART = \sum_{t=1}^T AARt$ <p>T - Number of days AARt - Average abnormal return on day t</p>
07.	Significance of AARs for event window period is assessed using t-statistics at 5% significance level. H ₀ - Mean of AAR = 0 H ₁ - Mean of AAR ≠ 0	$T (AARt) = \frac{AARt}{SE (AARt)}$ $SE (AAR t) = \frac{1}{\sqrt{N}} \sigma (ARt)$ <p>SE (AARt) - Standard Deviation of AARt N - Number of Sample σ (ARt) - Standard Deviation of Art</p>

Source: Adopted based on literature

4. Findings of the Study

The amounts of daily average abnormal returns, daily cumulative average abnormal returns and daily abnormal returns at the time when dividends are announced in different intervals are some of the key parameters used to analyze the results in the literature. This study attempts to test the hypothesis based on the values of Average Abnormal Returns (AARs), Cumulative Average Abnormal Returns (CAARs) and t- values of AARs as stated by Dedunu (2018) and Rosario and Chavali (2016).

4.1 Results of Year 2014

Table 4. 1: AARs, T- values and CAARs for the Year 2014

Event Window	AAR	T (AAR)	CAAR
t-5	0.002979633	0.604605	0.00298
t-4	0.01329217	1.43996	0.016272
t-3	0.010997808	2.641626**	0.02727
t-2	0.003189672	0.606947	0.030459
t-1	0.004198383	0.658229	0.034658
t-0	0.015222012	4.031643**	0.04988
t+1	0.012630029	2.458685**	0.06251
t+2	0.003833303	0.557611	0.066343

t+3	-0.006022582	-1.02166	0.06032
t+4	0.028574279	2.443465**	0.088895
t+5	0.001037938	0.211928	0.089933

**Significant at .05 level

According to the results, the market has created a significant reaction on the t-3 day ($t= 2.641626$). The implication of this indication is that the information on dividend announcement has leaked to the public before it was made. In addition to that, it also suggests that the market has responded more strongly than the actual dividend announcement. This could probably be due to the leakages of insider information of the company to the public and prompt reaction of the investors to the so-called piece of information. The highest t-value of AARs was 4.031643 which was corresponding to event date (t-0). This t-value reflected significant at the level of 5%. This clearly indicates the announcement of dividend which has conveyed the information content and investor's reaction to the dividend announcement immediately.

There are positive and negative corresponding t-values for AARs during the event window. It is obvious that there is only one day recorded negative AAR (-0.006022582) which has been occurred three days following the dividend announcement. Further, it is found that all the CAARs are negative during the event window. The highest and the lowest CAAR were 0.089933 and 0.00298 respectively in t+5 and t-5. Day t+1 ($t=2.458685$) and t+4 ($t=2.443465$) are statistically significant during the post announcement period. This reflects that market has reacted few days after the dividend announcements made. Delayed reactions could be either due to the lack of investor's awareness of the company or might be due to some other factors (Dharmarathne, 2013; Menike, 2014). According to the results obtained, it is obvious that the AAR has been statistically significant on the event day and market has reacted before and after the event in 2014. According to the literature, the results also suggested that the dividend announcement provides information to market players.

4.1.2 Inferential Statistics for the Year 2014

Table 4. 2 Test of Significance for AARs for the Year 2014

One-Sample Test
Test Value = 0

t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	Lower	Upper
AAR	2.926	10	.015	.008176	.00195	.01440

The t-value of year of 2014 is 2.926. The amount of 2.926 is greater than significance level of 1.96 ($1.96 < 2.926$). It means that the null hypothesis is not supported while alternative hypothesis is supported. Hence, the dividend announcement has an impact on share prices of ASPI listed corporates in Sri Lanka for the year of 2014.

4.2 Result of Year 2015

Table 4. 3 AARs, T- values and CAARs for the Year 2015

Event Window	AAR	T (AAR)	CAAR
t-5	-0.001281179	-0.06959	-0.001281179
t-4	0.023213263	0.963606	0.021932084
t-3	0.039907954	1.600963	0.061840038
t-2	0.033351778	2.04561**	0.095191816
t-1	0.018488629	2.090585**	0.113680444
t-0	0.017384699	1.677784	0.131065144
t+1	-0.007725979	-0.22728	0.123339165
t+2	0.02345957	1.572878	0.146798735
t+3	0.012773737	1.166238	0.159572471
t+4	0.035054224	1.358389	0.194626695
t+5	-0.029164338	-0.71977	0.165462357

**Significant at .05 level

The t- values of AARs for the post announcement period are also not statistically significant since all the t-values are less than +/- 1.96 of significance level. It means the market was unresponsive to the dividend announcements. Nishanthini and Nimalathan (2015) describe this scenario as a situation in which the announcement of dividend does not surprise the investors. However, most of

AARs are near to significant level in the event window (t-3= 1.600963, t-0=1.677784, t+2=1.572878, t+4 = 1.358389) other than the year of 2018. As per literature, this implies that the investors are reacting immediately to the dividend announcements, but in less percentage .Only one negative CAAR can be seen.

The highest and lowest CAARs are 0.194626695 and -0.001281179 respectively in t+4 and t-5. There are several days that are also significant before the announcement period (t-1=2.04561, t-2=2.04561). This means that market responds before the announcement in 2015. Chavali and Nusratunnis (2013) stated that this could probably be due to the leakages of expectations or news of the market from the companies to the public. Subsequently, the t value of the day 0 is 1.677784 and it is statistically insignificant. Consequently, a negative AAR (-0.001281179) could be observed before the announcement period while two negative AARs (t+1 = -0.007725979 and t+5= -0.029164338) could be seen after the event. Accordingly, AAR has been statistically insignificant on the event day, but market reacts before the event in 2015. Further, the results reveal that dividend announcement carries information to the market participants as per the related literature.

4.2.1 Inferential Statistics for the Year 2015

Table 4. 4: Test of Significance for AAR for the Year 2015

One-Sample Test						
Test Value = 0						
t	Df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
				Lower	Upper	
AAR	2.419	10	.036	.015042	.00119	.02890

T- value for 2015 is 2.419 and it suggests that the declaration of a dividend has an impact on the share prices of ASPI-listed companies.

4.3 Result of Year 2016

Table 4. 5: AARs, T- values and CAARs for the Year 2016

Event Window	AAR	T (AAR)	CAAR
t-5	0.026934587	2.606379**	0.026934587
t-4	0.004937782	0.917644	0.031872369
t-3	-0.000747244	-0.10895	0.031125125
t-2	0.006506764	1.613172	0.037631889
t-1	0.005908329	1.469816	0.043540218
t-0	0.01372803	3.001833**	0.057268248
t+1	0.01342603	2.562409**	0.070694278
t+2	0.008243345	1.31316	0.078937623
t+3	0.002532976	0.389198	0.081470599
t+4	0.019350984	1.948597	0.100821584
t+5	0.009365838	1.4471	0.110187421

**Significant at .05 level

Out of five days prior to the dividend announcement, t-5 is significant ($t = 2.606379$) whereas no statistically significant event has been taken place on the other days during that period. However, day on +1 is statistically significant and other days are insignificant in the post announcement period, but near the significant level ($t+4=1.948597$, $t+5= 1.4471$, $t+2 = 1.31316$). Nishanthini and Nimalathan (2015) introduce this scenario as a state where the investors are reacting immediately to the dividend announcements, but in less percentage. As per literature, there is a market reaction before and after announcing the dividend. The findings show that the AAR of day -3 is negative (-0.000747244) during the pre-announcement period while the corresponding t- value has also become negative (-0.10895). However, there is no negative AAR during post announcement period. More specifically, the CAARs do not have negative value during the event window. The positive AARs starting from day -2 to +5 ($t-2 = 0.006506764$ and $t+5 = 0.009365838$) including announcement date over a window period could also be seen. Rosario and Chavali (2016) describe such kind of scenario as a situation in which the declaration of a dividend has a favorable effect on the stock price.

The highest t-value of AAR is 3.001833 and, it is corresponding to the event date while it is statistically significant. Results show that event date has quick response to dividend announcement with positive announcement effect and an important informational content has been conveyed by the dividend announcement to the market which has then reflected to the market price of shares immediately (Dharmarathne, 2013). Considering the above facts, AAR is statistically significant on the event day while market reactions could also be seen before and after the event

in 2016. Further, the results indicate that dividend announcement carries information to the market participants as well.

4.3.1 Inferential Statistics for the Year 2016

Table 4. 6: Test of Significance for AAR for the Year 2016

One-Sample Test						
Test Value = 0						
t	Df	Sig.	(2-	Mean	95% Confidence	Interval of
		tailed)		Difference	the Difference	
					Lower	Upper
AAR	4.188	10	.002	.010017	.00469	.01535

The t-value of the year 2014 is 4.188. Hence, the alternative hypothesis is supported implying that, for the year 2016, dividend announcements have an impact on the share prices of ASPI listed corporates in Sri Lanka.

4.4 Result of Year 2017

Table 4. 7 AARs, T- values and CAARs for the Year 2017

Event Window	AAR	T (AAR)	CAAR
t-5	0.021334865	2.62136**	0.021334865
t-4	0.022417952	3.657906**	0.043752817
t-3	0.006254842	1.2264	0.050007659
t-2	0.033508135	2.164229**	0.083515794
t-1	0.006508295	0.79325	0.090024089
t-0	0.021630833	2.275018**	0.111654922
t+1	0.03038685	1.881678	0.142041772
t+2	0.012052637	1.925766	0.154094409
t+3	-0.008472996	-1.21996	0.145621413
t+4	0.021506428	3.241381**	0.167127841
t+5	-0.0000821081	-0.01071	0.167045733

**Significant at .05 level

There are three statistically significant AARs before the announcement (t-5=2.62136, t-4= 3.657906 and t-2= 2.164229). According to Nishanthini and

Nimalathasan (2015), the reactions of AARs are seen to be faster before the announcement period than the post announcement period. All the significant t values of AARs are positive. According to the literature, this might be attributable to the market's good reaction to the dividend announcement if it meets market expectations. It implies that the dividend announcement has become favorable news for investors (Menike, 2014). Announcement date also has a significant t -value. According to Dharmarathne (2013), dividend announcements contain information content and it has further reflected market price of shares immediately. On the day -2 has shown the highest AARs (0.033508135) while the day +5 has the lowest AARs (0.0000821081) during the event window. Comparing the AARs on days with CAARs on days, CAARs for event window do not have negative value.

The highest CAAR (0.167127841) and the lowest CAAR (0.021334865) have been gained on days +4 and -5 respectively. According to the results as shown in Table 4.7, there are two negative AARs of $t+3$ and $t+5$ after the announcement and, they were -0.008472996 and -0.0000821081 respectively. However, approximately the same AARs have been shown on the days of -5, 0 and +4 ($t-5 = 0.021334865$, $t-0 = 0.021630833$, $t+4 = 0.021506428$). Day -5, -4 and -2 are statistically significant prior to the announcement. It might be due to the leak of information, probably due to the close association between company officials and market participants. The other possible reason might be a publication of rough report on the probability of potential dividend announcements. And also, day $t+4$ are significant at 5% level. This might be due to a delay in reaction. Lack of awareness of the investors and delay in dissemination of the information throughout the market may be the reason for a such kind of delayed behavior (Menike, 2014). Hence, it could be concluded that , AAR is statistically significant on the event day while the market has reacted before and after the event in 2017. Further, results reveal that dividend announcement carries information to the market participants by complying with extant literature.

4.4.2 Inferential Statistics for Year of 2017

Table 4. 8: Test of Significance for AAR for the Year 2017

One-Sample Test				
Test Value = 0				
t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference

					Lower	Upper
AAR	3.867	10	.003	.01518598	.0064367	.0239353

According to the results, t- value for 2017 is 3.867 and, it indicates that the declaration of a dividend has an impact on the share prices of ASPI-listed companies.

4.5 Result of Year 2018

Table 4. 9 AARs, T- values and CAARs for the Year 2018

Event Window	AAR	T (AAR)	CAAR
t-5	-0.002753694	-0.12226	-0.002753694
t-4	-0.041878943	-0.73382	-0.044632637
t-3	-0.15184491	-0.83348	-0.196477547
t-2	0.028467076	1.725584	-0.168010471
t-1	-0.002431047	-0.27407	-0.170441518
t-0	0.025013819	1.343821	-0.145427699
t+1	0.045148286	2.592846**	-0.100279413
t+2	0.025366654	2.802515**	-0.074912759
t+3	0.007123807	0.712004	-0.067788952
t+4	0.02406811	1.582638	-0.043720842
t+5	0.03465606	2.151146**	-0.009064782

**Significant at .05 level

According to the results, out of 5 trading days before the event, all the AARs are negative except for days of -2. However, these figures are not statistically significant. This dominates negative slope on stock return (Vazakidis & Athianos, 2010). It implies that the market has not reacted before the dividend announcements have been issued. The AAR on the dividend declaration day is 0.025013819 and corresponding t-value of that day is 1.34382 while the announcement date also has an insignificant t-value. The highest t-value of AAR is 2.802515 and it is corresponding to two days after the event date and that was statistically significant. It is further evident that, during the post announcement period, all the AARs and corresponding t-values are positive. Further, T- values of day +2 (2.802515), day t+1 (2.592846) and day t+5 (2.151146) are statistically significant and posits that the stock market will react shortly after the dividend is announced.

However, it is evident that lots of days are statistically insignificant during the event window. Dharmarathne (2013) argues that it could be due to the results of some other external factors affecting to the share price such as economic, social, political and agent's other actions other than dividend announcement. It is further noticed that all the CAARs are negative during the event window when comparing CAARs of other four years. Accordingly, AAR is statistically insignificant on the event day while market reactions could also be seen after the event in 2018.

4.5.2 Inferential Statistics for Year of 2018

Table 4. 10: Test of Significance for AAR for the Year 2018

One-Sample Test							
Test Value = 0							
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
AAR	-.049	10	.962	-.00082407	-.0380872	.0364391	

T value for 2018 is -.049 and it means that the alternative hypothesis is not supported.

4.6 Interpretation of the overall findings

Table 4. 11 AARs, T- values and CAARs for the Year 2014-2018

Event Window	AAR	T (AAR)	CAAR
t-5	0.009443	1.465486	0.009443
t-4	0.004396	0.348911	0.013839
t-3	-0.01909	-0.52045	-0.00525
t-2	0.021005	3.629185**	0.015758
t-1	0.006535	1.947902	0.022292
t-0	0.018596	3.95042**	0.040888
t+1	0.018773	2.221385**	0.059661
t+2	0.014591	3.513717**	0.074252
t+3	0.001587	0.425307	0.075839
t+4	0.000195	3.835188**	0.10155
t+5	0.003163	0.348608	0.104713

**Significant at .05 level

The analysis was done under the individual year basis so far. Hence, the entire effect of dividend pronouncements on share prices across all companies should be combined to get the whole picture. Within the event window, results for AARs for the whole sample are summarized in Table 4.11. AAR of day t-2 (3.629185) is statistically significant before the announcement period. It means that the announcement of dividend is statistically significant and, that affects positively on the stock returns. The implication of this indication is that the information on dividend announcement has leaked to the public before it was made. The *t* value on the declaration day is significant (3.95042) and it has the greatest t-score for the window's duration, indicating significance. This demonstrates that the dividend announcement provides market participants with useful information and, as a result of that, the share prices reflect immediately. This suggests that the share price has positively reacted in response to the dividend announcement. Further, the AARs as well as CAARs for all the companies are positive except for the AARs on days of -3 (-0.01909). Out of 5 trading days under the post announcement period, days of +1, +2 and +4 are statistically significant as 2.221385, 3.513717 and 3.835188, respectively. This might be due to the delay in reaction. Investors' inadequate knowledge and delays in dissemination of the information throughout the market may be the reason for a such kind of delayed behavior (Menike, 2014; Dharmarathne, 2013). Considering above facts, AAR is statistically significant on the event day and market has reacted before and after the event during the period of 2014 -2018. Hence, as per the literature, the results further reveal that the announcement of dividends is a means of getting information out to the market.

4.6.2 Inferential Statistics for Year 2014- 2018

Table 4. 12: Test of Significance for AAR for the Year 2014-2018

One-Sample Test						
Test Value = 0						
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AAR	2.086	10	.064	.007199674	-.00049007	.01488942

According to the results, overall t- value is 2.086. This shows that the stock returns have positively reacted towards the dividend announcement for the selected companies. According to the study’s findings, the declaration of a dividend has a favorable influence on the share prices of ASPI listed firms in Sri Lanka.

4.7 Patterns of AAR and CAAR of Year 2014-2018

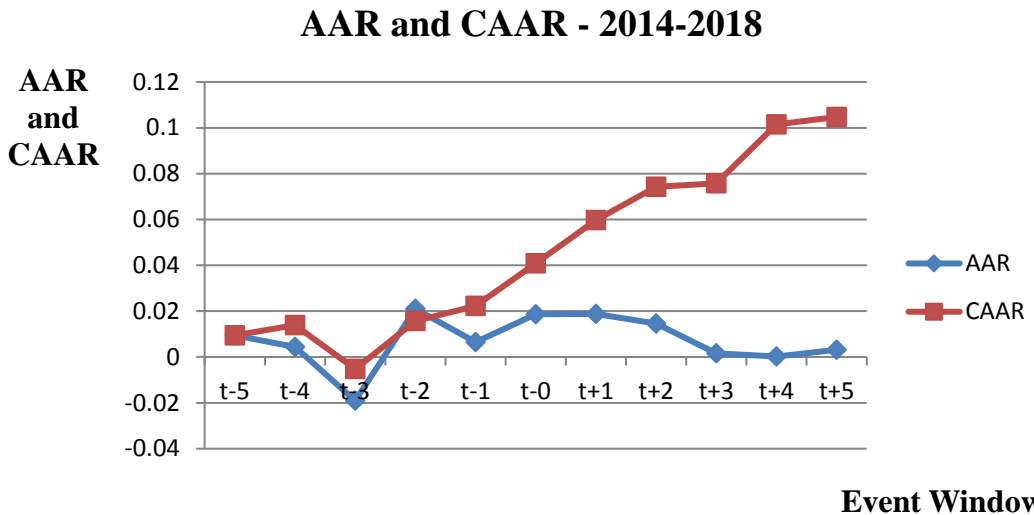


Figure 4.1 shows the behavior of AARs, t-values and CAARs during the event window from -5 to +5 pertaining to event date for all five years. It shows that except for the AARs on day of -3, AARs and CAARs are positive during the whole period. Hence, it could be concluded that the dividend announcement leads to a positive market reaction.

4.8 Summary of the Findings of Hypotheses

Table 4. 13 Summary of the Findings of Hypotheses for the Year 2014-2018

Year	Hypotheses	Results
2014	H ₁	Supported
2015	H ₁	Supported
2016	H ₁	Supported
2017	H ₁	Supported

2018 H₁ Not Supported

5. Discussion and Recommendations

5.1 Conclusion

This research explains the impact of dividend announcement on share prices of listed firms on ASPI in Sri Lanka and information content of dividend announcement. Thus, the t-statistics were used to test the hypothesis which was formulated to achieve the research objective. The analysis was done for five years separately and, then examined as a whole throughout the event window.

The results show that on the day of the event, the AAR is statistically significant, and the market responds both before and after the event. T-value for 2014 as a whole showed that the declaration of dividends has affected share prices. There are no significant t-values on the event date and after the dividend announcement date in 2015. However, AARs were statistically significant before the announcement period. Since the t-value for 2015 shows that dividend announcements affect share prices, the findings do not support the null hypothesis ($1.96 < t\text{-value} = 2.419$).

The findings of 2016 showed that AARs are statistically significant on day t-5, t+1 and t-0. As a result, the market has obviously responded on the previous day and the day following the dividend declaration. According to t-values, announcement of the dividend shows an impact on share prices and, thereby the alterative hypothesis is accepted for 2016.

As per the results of 2017, the market has reacted before and after the event too. Clearly, the announcement of the dividends has an impact on share prices, as seen by the t-value of 3.867. Nonetheless, in the year of 2018, the variations of AARs related to before and on the event are not significant at all. However, AARs of after announcement period are significant at the 5% level and it shows a delay in reaction. Hence, all of CAARs are negative during the event window when compared the results with other four years. Dharmarathne (2013) clarifies the reasons for such a strange result. He claims that it might be the consequence of any other information other than dividend releases. This implies that the share price is influenced by external variables such as political, social, economic, and other actions done by the business representatives and management (Dharmarathne, 2013).

The overall t-value indicates that the same results of dividend announcement do not affect on the share prices. Finally, based on the years separately, the alternative hypothesis was supported from 2014 to 2017. But t- value of year 2018 did not support the alternative hypothesis. This result can be further supported from t-value of overall findings during 2014-2018. Finally, it is clear that the dividend pronouncement has had a substantial influence on share prices. As a result, the study's conclusion is that the announcement of a dividend causes a favorable market reaction. Overall results confirm that dividend announcement has information content in stock market. Subsequently, Joshi and Mayur (2017) found that the dividend announcement is perceived by investors as favorable news and the dividend yields a favorable indication of the firm's future prospects. In addition, the study's overall findings corroborate the significance of signaling theory and the bird-in-hand theory as per Suwana (2012) being compliant with the existing literature.

5.2 Recommendations, Implications for Further Research

The study analyzed the impact of dividend announcement on share prices of listed companies on ASPI in Sri Lanka based on the limited number of variables, dividend announcement and share price. Hence, the results of this study could be used by the investors in making decisions pertaining to the dividend announcements. Thus, it is expected that the prospective investors may have positive implications on the results and conclusions obtained from this survey. Scholars can further examine the association and the impact on those independent and dependent variables based on the other related variables such as dividend cover, firm size and capital gearing or capital leverage using a same sample or different samples. Furthermore, scholars may investigate the effect of dividend announcement to interim profits, loss on share prices or trading volume using regression and independent sample t-test instead of the OLS. Finally, it is suggested to employ an expanded event widow or to use a much broader time period in further research.

5.3 Limitations of the Study

The dates of dividend announcement can be considered as the major limitation of this study. The reason is that some of the listed companies have not consistently made the final dividend announcements without any brakes. Selecting the sample consisting with 15 ASPI listed companies could be considered as another limitation of this study. Further, the data used was historical and this may not be a good representation of what may happen in the future due to the changing economic

factors. Finally, the study was limited to recent five years and, the event window was relatively shorter.

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