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A Study on Stock Split Announcements and its Impact on Stock Prices in Colombo Stock Exchange (CSE) of Sri Lanka

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I. Introduction

In any country, capital market is an important body in contributing to economic development. It has traditionally been viewed as an indicator or predictor of the economy. Colombo Stock Exchange (CSE) plays a major role in contributing much towards economic development in Sri Lanka. The CSE is the organization responsible for the operation of the stock market in Sri Lanka. CSE is an important emerging market of the region among the developing countries. It is recorded by the Fortune Magazine that "the CSE was named the second best emerging market in Asia". The CSE has 15 stock broking firms. Presently 287 companies are listed on the CSE; most companies' stocks do not frequently trade, representing twenty (20) business sectors with a market capitalization of 2167.6 billion rupees (over US$ 17.3 billion) as at 31st December 2012, which corresponds to approximately 29% of the Gross Domestic Product of the country.

Market capitalization of listed companies gradually increased from during the period of year 2009 to year 2012. It was Rs.1092 Bn in 2009 and moved up to Rs.2167.6 Bn in year 2012. Daily average turnover increased from Rs593.6 Mn in year 2009 to Rs. 884 Mn in year 2012. However, the CSE is concentrated, in those two main price indices such as All Share Price Index (ASPI) and Milanga Price Index (MPI). ASPI is used to measure the movement of share prices in all listed companies. MPI is used to measure the movement of share prices of 25 selected companies. These Companies have been selected on the basis of liquidity and market capitalization. With effect from 1 January 2013, the MPI was replaced by a newly introduced index, namely, S&P SL20 index. The S&P SL 20 index, which was introduced on 27 June 2012 to meet investors' demand for a transparent and a rule based benchmark.

CSE seems to be emerging trend in Sri Lanka. The peace process relatively stabilized political environment, foreign aid, low interest rate scenario, improved economic fundamentals and the increased profitability of listed companies had a positive impact on the performance of the CSE. Many believe (CSE Fact Book, 2005) that a decrease in stock prices signals a slowdown in the economy, whereas an increase in stock prices is evidence for economic growth. Stock split announcements have always been very common phenomena among firms and continue to be one of the least understood topics in finance. Stock split announcements were rare at CSE before the new Companies Act implemented in 2007 in Sri Lanka. The Study on the impact of stock splits announcement on stock returns has become more important as the number of listed companies announcing stock splits has increased. After implementing the new companies Act No.07 of 2007, stock split events were 69 during the period from 2008 to 2012.

The relationship between stock splits and stock return has been an interesting topic for researchers. It is evident from the theoretical perspectives that while

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stock split announcement increases the number of shares of a company, it decreases the price per share. A stock split usually takes place after an increase in the price of the stock, and it carries a positive stock price reaction (Carlos and Frank, 2009). However, stock splits usually increase stock prices with announcement (Gunnathilaka and Kongahawatte, 2011). Financial economists have sought to understand why markets react to stocks splits, since a stock split appears to be merely a cosmetic transaction that increases the number of shares outstanding. In a stock split, shareholders do not receive any tangible benefit; it is nothing more than an adjustment to the quantity of shares. Does it impact share return? Why do companies split shares if otherwise?

Researchers around the world have studied some of these impacts and these studies are known as 'event studies'. Event studies focus on the impact of various announcements like bonus issue, right issue, stock splits, earnings, dividends, mergers and acquisitions, stock repurchases, etc. Initially, event studies were undertaken to examine whether markets were efficient, in particular, how fast the information was incorporated in share price.

Therefore, the objective of this study is to analyze the extent to which a company's stock price would reflect the announcements of stock split according to the semi strong form efficiency which states that stock prices react so fast to all public information and that no investor can earn an abnormal return after the announcement is made. Information is key to the determination of the share prices and the key issue of the efficient capital market (Keane, 1986). An efficient market is one where the stock prices can quickly and fully reflect all available information about the assets. According to Fox and Opong (1999) an efficient market is one in which prices fully reflect available information. An implication of a semi – strong efficient market is that, no abnormal returns can be made from this information because adjustments had already been done in the stock price. The market has already been adjusted; therefore, the only way to outperform the market in this case would be using inside information.

II. Literature Review

Splits usually result in high market valuations, study done by Fama(1970) found that there is no evidence of abnormal return after the release of public information. They concluded that the market assimilates and takes into consideration public information very fast, within 5 to 15 minutes after the disclosure. This supports the idea that an investor acting on public information will not earn abnormal return. When this happens the market is said to be semi-strong form efficient. Grinblatt, Masulis and Titman (1984) indicated stock prices, on average, react positively to stock dividend and stock split announcements. Managers decide to split their stocks in order to lower the price of the stock and thereby attract more investors. As argued by Amihud and Mendelson [1986, as cited in Gunnathilaka et al. (2011)], the greater the liquidity of an asset, greater its value. Hence, firms may engage in liquidity-increasing policies to mitigate the cost and risk of liquidity. Stock split performs a signaling function of the firms' liquidity-improvement policy. Brennan and Copeland (1988) signaling model implies a positive relationship between stock splits and abnormal return.

Desai, Nimalendran and Venkataraman(1994) examined changes in trading activity around stock splits, and their effect on the volatility and the adverse information component of the bid ask spread. They found a significant increase in the volatility after the split. Abeyaratna, Bandara and Colombage (1999) examined the semi-strong form efficiency of the CSE using Granger causality test and a modified version of the market model on weekly indices of fourteen sectors for the period January 1993 to December 1997. Only three sectors (i.e., bank, finance and insurance; hotels and travels and manufacturing) are found to be semi-strong form efficient. A majority of the sectors lag the market indicating the possibility of predicting market movements of the EMH.

Wulff (2002) investigated the market reaction to stock splits, using a set of German firms. Similar to the findings in the U.S., he found significant positive abnormal returns around both the announcement and the execution day of German stock splits and observed an increase in return variance and in liquidity after the ex-day. Dhar, Goetzmann, Shepherd and Ning Zhu (2004) studied the trades of individual and professional investors around stock splits and found that splits bring about a significant shift in investor clientele. They found that a higher fraction of post-split trades are made by less sophisticated investors, as individual investors increase and professional investors reduce their aggregate buying activity following stock splits.

Huang, Liano and Pan(2005) using a sample of 2,335 stock splits over the 1963-1999 period, the split announcement year has the highest operating performance change and the operating performance change declines substantially over the subsequent four years. They also identified a negative relation between the stock split announcement effect and the operating performance during the four-year period following the announcement. Carlos et al (2009) found that the firms' public stock split announcements did not affect stock price on the announcement day. Results support the semi- strong form efficient market hypothesis since stock prices adjust so fast to public information that no investor can earn abnormal return by trading on the announcement day.

Devos, Elliott and Warr(2010) provided evidence that the decision to split a firm's stock is related to CEO incentives. CEOs that have option-based compensation are more likely to split their stock, and the degree of option convexity is a significant indicator of the magnitude of the split. To quantify CEO incentives, they use the delta and vega of the compensation package and find that higher delta and vega compensation is associated with a higher propensity to undertake a stock split. Gunnathilaka et al (2011) examined stock splits in Sri Lanka. Stock split announcements create significant positive market reaction and the sharp – adjustments in the stock prices on the day of announcement. It suggests that the market is informationally efficient. The stock's trading volume is improved significantly with the split announcement

Lei and Shrestha (-) Pointed out that three main theories are proposed to explain why firms split their stocks. They are liquidity, signaling, and optimal tick size theories. Liquidity theory is not supported except for the reverse split. The optimal tick size theory is also not supported for both the forward split and reverse split. Only the signaling theory is fully supported. Fernando, Krishnamurthy and Spindt (-) find that splitting funds experience significant increases (relative to non-splitting matched funds) in net assets and shareholders. Stock splits do appear to enhance marketability.

III. Data and Methodology

a) Sampling Design

For the purpose of measuring the stock split events on the share prices, an overall sample sixty four events (52 companies) listed in the CSE is selected which covers during the period of 2009 to 2012 which were selected by using judgmental sampling. This choice of the sample period is governed by the availability of data. Reasonable care has been exercised in order to select a large sample to derive more valid findings. The final selection criterion is the availability daily closing price and daily all share price index (ASPI) data in a manner that is necessary for the application of the 'event study method'. Daily closing price should be available for at least 150 days out of the total period of 161 days that include the 150 days estimation period (-11, -150) and the window period 21 days. Therefore, to be precise on testing the market efficiency, this study considers daily data which is important to measure the impact of the stock split announcements using the smallest feasible interval. Therefore, the table 1 reports the stock splits by split ratio for the sample period 2009-2012. One company offered seventy new shares for one (70:1) existing share, the highest split ratio in the sample. The second highest split factor was 35-for-1, and the lowest split ratios was 3:4.

Table 1 : Description of Sample According to Year of Announcement

	Number of Splits				
Split Ratio	2012	2011	2010	2009	Total Events
Ten-for-One	1	4	8	2	15
Two-for-One	1	11	7	1	20
Five-for-One	-	5	5	-	10
Three-for-Two	-	2	3	-	05
Others	2	5	7		14
Entire Sample	**4**	**27**	**30**	**3**	**64**

b) Data Source

In the present study, we used only secondary data which is the CSE's C-D. The study computes daily returns for individual securities on the basis of daily closing stock prices and its stock split announcement date. In cases where price for the non-traded on a given date, the following traded price is taken as the price for the non-trading date. The market return is calculated as the change in the *daily All Share Price Index'* (ASPI), which is the value-weighted price index of the entire share listed in the CSE.

c) Mode of Analyzes

This study uses the 'Standard Event Study Method' (Brown & Warner,1980,1985) to estimate the abnormal returns (AR), average abnormal returns (AARs) and cumulative average abnormal returns (CAARs) around stock split announcement (the event-day). In this study, researcher has taken 21 days around the event (stock split event date - day "0"), and study has designated -10,-9,-8 ……..,-1 as the 10 days prior to the event, 0 as the event day, and +1, +2, +3……., +10 days after the event and AARs and CAARs were computed for 21 days surrounding (lead and lag 10 days) the event-day.

From below the market model, present study computes the alpha and beta coefficient in respect of each event over the estimation period. In our case, we use an estimation period of size 150 days (-11, -161). This market model is estimated through regression analysis.

The following market model is used:

$$R_{it} = \alpha i + \beta_i R_{mt} + e_{it} \quad \ldots\ldots \quad (1)$$

Where,

R_{it}= the rate of return on stock 'i' on day't',

R_{mt} = the rate of return on the market on day't',

α_i = the intercept term (alpha coefficient) of security i,

βi = Slope of a straight line (beta coefficient) of stock i, and

ε_{it}= regression error term of security i on day t.

R_{it} is the time t return on security i, calculated as

$$= (P_{it} - P_{it-1}) / P_{it-1} \ldots \quad (1.1)$$

Where,

P_{it} is the market closing price per share i on day t.

P_{it-1} is the market closing price per share i on day $t-_1$

R_{mt} is the time t return on the CSE all-share price index calculated as

$$= (I_t - I_{t-1}) / I_{t-1} \ldots \quad (1.2)$$

Where,

I_{it} is the all-share price index on day t.

I_{t-1} is the all-share index on day $t-_1$.

Expected rate of return for each event is determined by using the estimates of alpha and beta in respect of each event as follows.

$$E(R_{it}) = \alpha_i + \beta_i R_{mt} \ldots \quad (2)$$

Where,

$E(R_{it})$ = expected return of stock i on day t in the window period,

α_i = estimate the market model intercept (alpha) of stock i, and

β_{it} = the estimated market model beta of stock i.

Compute the AR for each firm included in the sample for each of the days being studied. AR is the difference between the realize rate of return and the expected rate of return. The ARs are computed using the following model.

$$AR_{it} = R_{it} - E(R_{it}) \ldots\ldots . \quad (3)$$

Where,

AR_{it} = abnormal return of stock i on day t, and

R_{it} = the rate of actual return of stock i on day t in the window period.

After computation of abnormal return, we compute the average abnormal return (AARs) for each event date is calculated as simple average of abnormal returns for each day across the sample.

$$AAR_t = \frac{1}{N}\sum_{i=1}^{N} AR_{it} \quad \text{-------} \quad (4)$$

Where,

AAR_t = average abnormal return for day t in the window period, and

N = number of events in the sample.

The statistical significance of AAR_t is measured through the student t statistic as specified below.

$$T(AAR_t) = \frac{AAR_t}{\sigma(AAR_t)} \text{ -----} \quad (5)$$

Finally, we calculate the cumulative average abnormal returns (CAARi) which are the sum of the individual average abnormal returns over the period of time. The cumulative average abnormal returns ($CAAR_T$) for a given period is determined as follows,

$$CAAR_T = \sum_{i=1}^{T} AAR_t \text{ -----} \quad (6)$$

Where,

AR_{it} = abnormal return of stock i on day t, and

R_{it} = the rate of actual return of stock i on day t in the window period.

a) Hypotheses

This study is conducted with the following hypotheses.

H_1: Stock split announcements have significant impacts on the share prices of the stocks traded on CSE.

H_2: Colombo Stock Exchange (CSE) is consistent with the semi-strong form efficient market.

IV. Empirical Results

We present descriptive statistics for each of the sector stocks returns in our sample. The mean (Mean), standard deviation (StDev), minimum (Min), maximum (Max) and skewness (Skew) were calculated for each of the 52 companies' stocks over the 4-year period and are reported in table 2. The returns for 9 sectors stocks showed positive skewness, an indication that the return distributions of the stocks in our sample have a 67% (NSSA-43) of being positive. The positive skewed companies would be more attractive for investors to invest in future.

. *Table 2 :* Descriptive and Statistical Information for Sectors

Sector	Sample Companies	Mean(%)	St.Dev	Min (%)	Max (%)	Skew	NSSA
Banks, Finance and Insurance	14	-0.3552	0.7165	-1.4800	1.3002	0.8102	19
Hotels and Travels	07	-0.4202	1.4752	-4.3859	2.3966	-0.7752	09
Manufacturing	06	-0.5960	1.1650	-2.9976	2.4063	0.6266	07
Beverage, Food and	02	0.2049	3.7049	-5.3927	9.6629	0.8815	02

Tobacco							
Chemicals and Pharmaceuticals	01	-1.1810	3.4450	-7.2421	7.3963	0.6992	02
Trading	03	-0.7301	2.8135	-3.9823	4.8072	0.8513	03
Health Care	02	0.12831	2.13019	-4.0586	5.1095	0.27838	02
Land and Property	01	1.2516	4.0075	-4.4444	10.6219	1.1477	01
Information Technology	01	-1.7101	3.05314	-8.8273	3.5647	-0.7065	01
Services	01	-0.0080	1.4051	-3.1425	2.4162	-0.1880	02
Diversified Holdings	06	-0.8210	1.8126	-3.8646	3.4741	0.6364	06
Investment Trust	03	-1.0756	1.9893	-5.8545	3.2945	-0.0386	04
Power and Energy	01	0.4974	3.8569	-6.7198	8.8464	0.3476	01
Plantations	04	-0.4995	2.0089	-6.8652	3.2363	-1.3946	05

Note : 'Mean' is the AAR for each sector over the sample period; 'StDev' is the standard deviation of returns while 'Min' and 'Max' are the minimum and maximum AAR respectively; 'Skew' is the skewness for each of the sectors stock distributions; 'NSSA' refers to the number of stock split announcement events for each stock in the study; 'Sector' refers to the sector classification for each firm as classified on the CSE

Table 3, presents the daily percentage average abnormal returns (AARs %), daily percentage cumulative average abnormal returns (CAARs %) and T value of AARs % of the 21 days window period. T (AARs) indicates significance for the investigation period (t= -10 to +10). The number of events with positive and negative abnormal returns in each day is summarized under the column plus: minus sign.

Table 3 : Average Abnormal Returns (AARs) of Overall Sample

Event Date	AARs %	CAARs %	T(ARs)	Sig.	+ : - Sign
-10	0.05	0.05	0.072		31:33
-9	0.47	0.51	0.678		25:39
-8	-1.26	-0.80	-1.840	*	16:48
-7	-0.60	-1.86	-0.867		21:43
-6	-0.25	-0.84	-0.362		23:41
-5	-0.78	-1.03	-1.136		20:44
-4	-0.65	-1.43	-0.942		27:37
-3	-0.10	-0.75	-0.150		23:41
-2	0.32	0.22	0.470		33:31
-1	-0.32	0.01	-0.460		33:31
0	1.46	1.14	2.119	**	33:31
1	-1.63	-0.17	-2.370	**	20:44
2	0.17	-1.46	0.245		27:37
3	-0.53	-0.36	-0.771		24:40
4	-0.72	-1.25	-1.046		25:39
5	-1.10	-1.81	-1.594		20:44
6	-0.24	-1.33	-0.348		27:37
7	-0.74	-0.98	-1.076		23:41
8	-1.04	-1.78	-1.515		18:46
9	-1.06	-2.10	-1.539		19:45
10	-0.53	-1.59	-0.773		22:42
	** Significant at 5 % * Significant at 10%				

The values of AARs presented in table 3 shows that they are fluctuating returns both positive and negative returns around the event day. These are positive on 30 percent (3days) before and 10 percent (1 day) after the event day. It is negative on 70 percent (7 days) before and 90 percent (9 days) after the event day. During the 21 days selected for the study, the AARs are negative for more number of days than they are positive both pre and post the event day. Therefore, the trend indicates that it is possible to earn negative returns on most majorities of the days around the event day. The number of positive versus negative sign is 33:31 on the event day and 20:44 on day 1.

The level of significance is used 5% and 10%. In this study, the AARs is significantly lower during pre-split period except day "- 8" which is statistically significant at 10 % level. This significant AARs of -1.26% recorded in the period prior to the announcement date reflect

leakage of the information (Insider information - directors, senior officers or major shareholders). This may be information of stock split declaration leaks out to the market before the announcement made by the companies. We also find magnitude of the share price reaction of AARs on day 0 is positive of 1.46 %, this is statistically significant at 5% level. This implies that the market absorbs very quickly the favorable signal released by the announcement of the stock split made by the companies. Therefore, this evidence suggests that on the stock split announcement day 0 provide stronger signal to the market than other days. This is clearly shown that stock split announcements provide stronger significant positive information to the firms. Results here support the first hypothesis **H_1**: Stock split announcements have significant impacts on the share prices of the stock traded on CSE. Therefore, the H_1 is accepted. Surprisingly, the largest significant negative AARs of -1.63% is found on day +1, which refers to the first day after the announcement is made due to bad signal in the market. It is statistically significant at 5 % level. This means that the return is negative on average during the immediate day after the event day at 95% of the chance.

Evidence depicts the CAARs during the (-10, -1) period is -3.1% and the CAARs for the (0, +10) period is -6 %. Finally it is -2% over the window period of 21 days. These negative CAARs during the widow period disclosures recommend that stock split announcement do convey information which market uses in revising their stock prices. This speed response has the potential of generating negative AARs based on publicly available information, which runs counter to the semi- strong efficient market hypothesis. This quick responsiveness may be attributed to a fast in disseminating the stock split information to market participants. It may be a result of the efficiency of the information dissemination process. Under semi- strong efficient market, nobody would be able to earn abnormal returns using the available information. Semi-strong form tests are the test of the speed of the price adjustments to publicly available information. This similar evidence can be found in stock price reaction to stock split, Fama, Fisher, Jensen and Roll.(1969) found that there was considerable market reaction prior to the stock split announcement and the CAARs tapered off after the event day. They concluded that the market is efficient in the semi-strong form. The investors cannot earn abnormal returns by trading in the stocks after the stock split announcements. Results here confirm the second hypothesis H_2: Colombo Stock Exchange (CSE) is a semi-strong form efficient market for the sample companies within the study period. Therefore the H_2 is accepted.

Figure 1 : AARs and CAARs Values

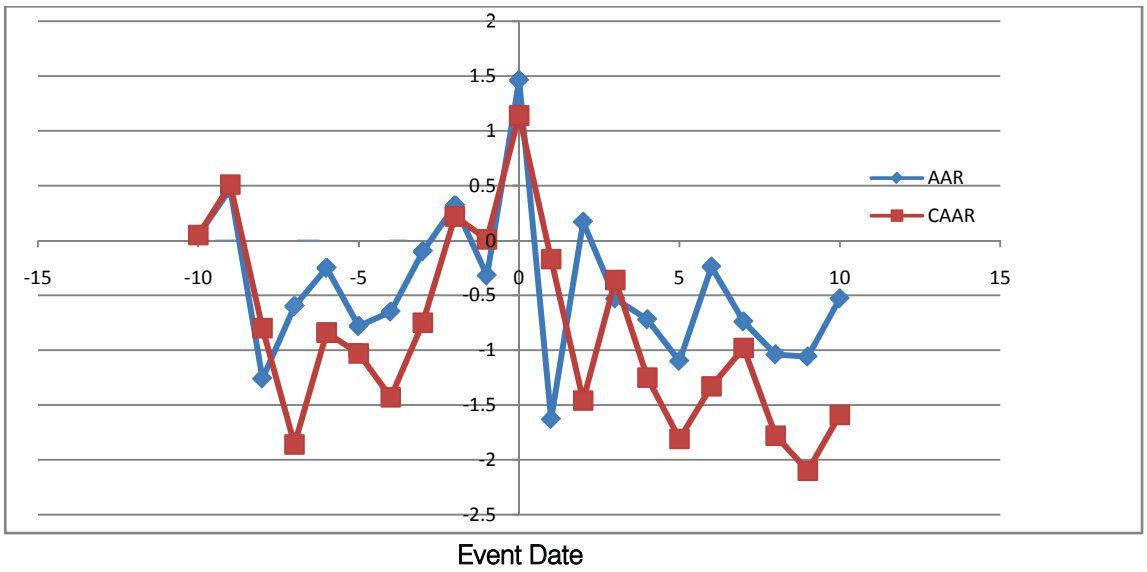

Figure 1 shows that the value of AARs and CAARs has minor fluctuating yield that is both positive and negative before and after the event day. This is clear that positive significant AARs and CAARs are earned on the day of the split announcement. It is confirmed that the market perceives stock split announcement as good information about the future of the firm. This also confirms our hypotheses.

Table 4 : Direction of Abnormal Returns (ARs) on Day 0

Direction	Number of Events	Percentage of Events
Positive	33	52%
Negative	31	48%
Total Events	64	100

In addition, table 4 indicates that ARs are evenly distributed over the window period for the 64 events. Results shown as 52 % of the days are positive abnormal returns and 48% of the days are negative abnormal returns. When we compute ARs into AARs (Day "0"=1.46%) which indicates more favorable positive signals than negative signals since some of the sample companies ARs are greater and compensate the negative or less ARs of other sample companies.

V. Discussion

To test the impact of stock split announcements on stock prices by examining the sample of 64 events from 52 companies in different sectors of emerging market of the Colombo Stock Exchange (CSE) during the period 2009 to 2012. The results of the study show that there is dominant pattern in negative average abnormal returns (AARs) around the window period. However, AARs of 1.46% are statistically significant (t = 2.119) at 5% level on the announcement date. Therefore, there is a positive quick market response to announcements on the event day. The empirical results of this study are consistent with many theoretical models suggest that announcement of stock split convey favourable information about future operating performance of the companies. The findings of the market reaction to stock split announcement support the informational content of the stock split which promulgates the manager's assessment of future potential growth of the firm.

The cumulative average abnormal returns for the (0, +10) period is -6%. This quick response to the split announcements of the sample companies is potentially due to the relatively higher liquidity of stocks. It indicates that there seem to be significant perfections in the process of generation and transmission of information in addition to the timing of the response being influenced by the liquidity of stock trading. Further, the result of the study shows evidence for an increase in the liquidity of the stock after the ex - split days. It confirms liquidity hypothesis. The quick and speed adjustment of price in the post split period to information implies that the market is informational efficient. This is support with informational dissemination process. The dissemination of information is fundamental to get better investment decisions by academicians, practitioners, policy makers and investors for making suitable policy formulations for their companies.

In Sri Lanka, there is less evidence documented than developed and other developing market related to stock split announcements and stock price behaviour in CSE. The sample size was very low, so that the results of the study were only indicative. The market response on stock split announcements is significant which shows split do signal good information to the market's future prospects and it confirms that in signaling hypothesis. This finding is consistent with work of Gunnathilaka and Kongahawatte, (2011) on stock price behaviour of CSE in Sri Lanka.

This study support the semi-strong form of efficient market hypothesis, it is inconsistent with work of Dissa Bandara,D.B.P.H.and Perera,K,D,I(2011). They studied the impact of dividend announcements of CSE in Sri Lanka. On the other hand, the study of P.Samarakoon (2005) in Colombo Stock Exchange of Sri Lanka reveals that results also confirmed that the Sri Lankan Stock market is indeed predictable and inefficient in the sense of weak - form market efficiency. The result found here contrast with the finding on semi-strong form of efficient market hypothesis. Furthermore, G.Abeyratna, W.M.Guneratne Bandara and S.R.N.Colombage (1999) in Colombo Stock Exchange of Sri Lanka tested the semi – strong version of efficient market hypothesis. The study indicates that the majority of the sectors (11 out of 14 sectors) are not a semi – strong form of efficient market which had not independent relationship with the market. This finding also contradicts semi- strong form of efficient market hypothesis.

VI. Conclusion

The study examined stock split announcements in Sri Lanka, in particular whether or not announcements of stock splits impact on stock price movement and then test semi strong form efficiency holds for the emerging market of Colombo Stock Exchange (CSE) in Sri Lanka. This study addresses how and when does the Sri Lankan stock market respond to announcement of stock splits? This issue is investigated using the standard event study methodology.

The study finds significant market reactions on the split announcement day. The information of the split is absorbed by the market on the event day (Day "0"), indicating information efficiency. It is evident from the empirical results of the event day that provide statistically significant at 5% level. The shareholders are able to earn positive AARs of 1.46% to the split announcement day. They obtain positive AARs 24% of the days (16 days) and negative AARs 76% of the days (5 days) surround the 21 days window period. This indicates that most of the days earned negative AARs around the event day. There is an evidence of a negative anticipatory effect (CAARs = -3.1%) during the pre announcement period (-10,-1) and also large negative CAARs (-6%) is observed during the post announcement period of (0, 10) due to investors adjustment quickly to the information and a less amount of time passes before the prices fully incorporates relevant information in split announcement. This speed response has the potential of negative generating abnormal returns based on publicly available

information, which runs counter to the semi strong efficient market hypothesis. Above findings reveal that average abnormal returns are positive significant to the stock split announcement day and sample companies of Colombo Stock Exchange is a semi strong form efficient market. However, capital market efficiency not only depends on information such as historical price, public and private information but also on the implementation of the existing rules and regulations of the stock market and administrative efficiency of the same.

There are fewer attempts taken to study of stock split announcement and impact on stock prices in Sri Lankan context. The future research could be extended on this phenomenon for different sectors and comparison for effect of bonus issue and cash dividend announcement. Also this study could be further expanded in other areas like right issue, earnings, mergers and acquisitions, stock repurchases and their impact on stock prices. Furthermore, a study can be conducted to extend this study too, since this study considers only a limited number of variables. It is obvious that economic, political variables and trading frequency may be important for determinations of stock prices.

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Appendix 1 reports 3 events and their respective alphas and betas for the study period 2009.

Appendix 1

Event	Sample Company Name	Stock Name	Sector	Announcement Date	α	β
1	Hotel Services	SERV-N-000	Hotels and Travel	11-May-09	0.00155	-2.40576
2	Asiri	ASIR-N-0000	Health Care	14-Dec-09	0.00246	0.60909
3	Chevron	LLUB-N-0000	Manufacturing	18-Dec-09	0.00258	0.26779

Appendix 2 presents 30 events and their respective alphas and betas for the study period 2010.

Appendix 2

Event	Sample Company Name	Stock Name	Sector	Announcement Date	α	β
1	Renuka Holdings	RHL-X-0000	Hotels and Travel	26-JAN-10	0.004609	0.333366
2	Renuka Holdings	RHL-N-0000	Hotels and Travel	26-JAN-10	0.031743	-1.27129
3	Tokyo Cement	TKYO-N-0000	Manufacturing	01-FEB-10	0.003023	-0.07086
4	Sampath	SAMP-N-0000	Banks, Finance and Insurance	25-MAR-10	0.005059	0.052902
5	Kelani Cables	KCAB-N-0000	Manufacturing	31-MAR-10	0.00686	0.075029
6	Sunshine Holding	SUN-N-0000	Diversified Holdings	05-APR-10	0.009102	1.291998
7	SMB Leasing	SEMB-N-0000	Banks, Finance and Insurance	21-APR-10	-0.00359	0.628033
8	First Capital	CFVF-N-0000	Banks, Finance and Insurance	20-MAY-10	-0.00193	0.173858
9	Amana	ATL-N-0000	Banks, Finance and Insurance	16-JUN-10	0.000825	-0.45432
10	Commercial Bank	COMB-N-0000	Banks, Finance and Insurance	21-JUN-10	0.000792	-0.4527
11	Commercial Bank	COMB-X-0000	Banks, Finance and Insurance	21-JUN-10	-0.00113	0.028093
12	Hemas Holdings	HHL-N-0000	Diversified Holdings	08-JUL-10	-0.00183	-0.0213
13	Touchwood	TWOD-N-0000	Land and Property	15-JUL-10	-0.0024	-0.06802
14	Vidullanka	VLL-N-0000	Power and Energy	27-JUL-10	0.000794	0.034896
15	John Keells	JKL-N-0000	Services	31-AUG-10	-0.00056	0.071952
16	Trans Asia	TRAN-N-0000	Hotels and Travel	06-SEP-10	0.005327	-0.31998
17	CFT	CFT-N-0000	Trading	17-SEP-10	0.001422	-0.59678
18	Watawala	WATA-N-0000	Plantations	27-SEP-10	-8.2E-05	-0.03268
19	Richard Pieris	RICH-N-0000	Diversified Holdings	08-OCT-10	-0.00265	0.101513
20	Aitken Spence	SPEN-N-0000	Hotels and Travel	11-OCT-10	0.001285	0.330631
21	Sampath Bank	SAMP-N-0000	Banks, Finance and Insurance	12-OCT-10	0.011779	-0.00031
22	Ceylon Investment	CINV-N-0000	Investment Trust	26-OCT-10	0.008561	0.003394
23	Elpitiya Plantations	ELPL-N-0000	Plantations	26-OCT-10	0.004877	0.167485
24	Central Industries	CIND-N-0000	Manufacturing	28-OCT-10	0.005478	-0.49875
25	Kelani Tyres	TYRE-N-0000	Manufacturing	08-NOV-10	0.003004	0.37409
26	Bogawantalawa Tea	BOPL-N-0000	Plantations	22-NOV-10	0.007586	0.735569
27	Ceylon Guardian Inv	GUAR-N-0000	Investment Trust	22-NOV-10	-0.00211	0.067851
28	Lanka Orix Leasing	LOLC-N-0000	Banks, Finance and Insurance	22-NOV-10	0.006327	-0.12693
20	Aitken Spence Hotel	AHUN-N-0000	Hotels and Travel	26-NOV-10	0.006435	0.118968
30	Nawaloka Hospitals	NHL-N-0000	Health Care	29-NOV-10	0.002443	0.112295

Appendix 3 shows 27 events and their respective alphas and betas for the study period 2011.

Appendix 3

Events	Sample Company Name	Stock Name	Sector	Announcement Date	α	β
1	Vallibel Finance	VFIN-N-0000	Banks, Finance and Insurance	8-Feb-11	0.009655	-0.72266
2	Browns Beach	BBH-N-0000	Hotels and Travel	8-Mar-11	0.001546	0.626757
3	Nat. Dev. Bank	NDB-N-0000	Banks, Finance and Insurance	5-Apr-11	0.003721	-0.14971
4	Singer Sri Lanka	SINS-N-0000	Trading	6-Apr-11	0.005827	0.123497
5	HNB	HNB-X-0000	Banks, Finance and Insurance	6-Apr-11	0.003802	-0.27814
6	HNB	HNB-N-0000	Banks, Finance and Insurance	6-Apr-11	0.005609	-0.09584
7	Malwatte	MAL-N-0000	Plantations	8-Apr-11	0.003772	0.118374
8	Malwatte	MAL-X-0000	Plantations	8-Apr-11	0.008026	-0.98219
9	E- Channelling	ECL-N-0000	Information Technology	18-Apr-11	0.00433	-0.05195
10	Fort land	CFLB-N-0000	Diversified Holdings	6-May-11	0.011536	0.074609
11	Serendib Hotels	SHOT-N-0000	Hotels and Travel	6-May-11	0.007764	-0.83452
12	Serendib Hotels	SHOT-X-0000	Hotels and Travel	6-May-11	0.00853	-0.4377
13	Pan Asia	PABC-N-0000	Banks, Finance and Insurance	8-Jun-11	0.009338	-0.15463
14	Union Assurance	UAL-N-0000	Banks, Finance and Insurance	29-Jun-11	0.003927	0.165377
15	JKH	JKH-N-0000	Diversified Holdings	30-Jun-11	0.003415	-0.06713
16	Ahot Properties	AHPL-N-0000	Hotels and Travel	1-Jul-11	-0.00365	0.027075
17	Trans Asia	TRAN-N-0000	Hotels and Travel	4-Jul-11	0.003151	-0.06361
18	Print Care PLC	CARE-N-0000	Manufacturing	4-Jul-11	-0.00296	1.098619
19	Tea Smallholder	TSML-N-0000	Beverage, Food and Tobacco	5-Jul-11	0.002558	0.218206
20	John Keells	JKL-N-0000	Services	5-Jul-11	-0.00289	-0.31359
21	Cold Stores	CCS-N-0000	Beverage, Food and Tobacco	18-Aug-11	-0.00916	1.034091
22	Central Finance	CFIN-N-0000	Banks, Finance and Insurance	25-Aug-11	-0.00212	0.174668
23	Commercial Bank	COMB-X-0000	Banks, Finance and Insurance	15-Sep-11	-2.4E-05	-0.05674
24	Commercial Bank	COMB-N-0000	Banks, Finance and Insurance	15-Sep-11	-0.00034	0.010417
25	Eastern Merchant	EMER-N-0000	Trading	20-Sep-11	0.025433	1.044238
26	Morisons	MORI-N-0000	Chemicals and Pharmaceuticals	28-Dec-11	0.013374	-0.08958
27	Morisons	MORI-X-0000	Chemicals and Pharmaceuticals	28-Dec-11	0.011019	0.29546

Appendix 4 describes 4 events and their respective alphas and betas for the study period 2012.

Appendix 4

Events	Sample Company Name	Stock Name	Sector	Announcement Date	α	β
1	Kandy Hotels	KHC-N-0000	Hotels and Travel	17-JAN-2012	0.002461	-0.60909
2	HDFC	HDFC-N-0000	Banks, Finance and Insurance	08-MAR-2012	0.008199	-0.2713
3	Swarnamahal Fin	SFS-N-0000	Banks, Finance and Insurance	02-APR-2012	0.007692	-0.1961
4	Regnis	REG-N-0000	Manufacturing	04-APR-2012	0.003098	-0.29366