The Impact of Announcements of Rights Issues on The Share Prices of the Companies Traded on the Colombo Stock Exchange - An Event Study Analysis

H.M. Ali Sabri*

4

Abstract

Rights issue has been one of the popular ways of financing businesses in Sri Lanka. Financial literature has shown a considerable interest on the effects of this method of financing on share prices. Many empirical studies conducted in developed and emerging markets have shown contradictory results. Some studies have found a negative effect while others have concluded no price effect for rights issue announcements. This study examines the effects of rights issue announcements on share prices traded on the Colombo Stock Exchange. Abnormal returns were calculated from daily share returns by using the market model benchmark; the most popular benchmark employed in the event studies. The findings showed that the announcement of rights has a negative effect on share prices; share prices suffered a drop throughout the test period. The results of this study also showed that Colombo Stock Exchange does not confirm to the semi-strong version of market efficiency hypothesis. No significant price adjustments were observed during the announcement period of rights issues.

Keywords: Stock price, Rights issue, Abnormal return, Excess return

Introduction

The stock markets provide the trading forums, the liquidity and the familiarity with securities and companies. They facilitate the determination of market prices of outstanding securities of companies, which gather the widespread attentions of investors. Since a secondary market provides these facilities, it plays a vital role in the development of the stock market. Low price volatility and high trading volume in the secondary stock market should lower the cost of financing the primary market and facilitate capital accumulation and economic development. The existence of markets for securities is of advantage to both issuers and investors. Since the investors are expecting optimum rcturn from their investment through price gain and dividends, they are interested in price reactive information. While a sophisticated secondary market motivates investors to place their funds in the

market, many pieces of information particularly influence their investment decisions.

There are many factors affecting the price of a share. Therefore, it is important to study about share prices and the trends in share price movements and also to find out those factors, which have major influence on the price of shares. In this sense, various factors have impact on share price movement in various ways. This study covers rights issue announcements which increase the supply of total outstanding shares of the issuing company in the market place, thus causing concern to investors over their effect on share prices.

The empirical studies on market price behaviour have yielded theory of market efficiency. Research evidences show that in many of the capital markets, the forces that set the prices of individual shares cause pricing efficiency to occur. The market is efficient in the semi-strong sense, if current prices of shares not only reflect all informational content of historical prices but also reflect all publicly available information about the companies being studied. This theory of market efficiency has been extensively studied in the financial literature. Research studies on relationship between firm specific information and prices of shares have yielded theory of semi-strong form of efficiency of the market

The main objective of this study is to examine how share prices respond to the information that is implicit in the events of rights announcements by the companies traded on the Colombo Stock Exchange (CSE). If an investor in the CSE treats rights issues as useful information, the researcher should be able to observe significant price adjustments to such information. This must be reflected in the stock returns of such companies during the period of announcement of rights issues. The secondary objective of this study is to observe whether the CSE is conforming to semi-strong form of efficient. As it has already been mentioned, in a semi-strong form efficient market all the publicly available information should be reflected in stock prices. Therefore, if the CSE is semistrong form efficient, we should be able to observe a quick and unbiased price reaction to rights issue announcements.

The theoretical literature of finance has developed three differing hypotheses to predict the price effects of new additions to outstanding shares. These three hypotheses can be classified in to three groups as no-price effect, negative-price effect, and positive-price effect hypotheses.

The proponents of no price effect hypothesis assume that the demand-curve for a firm's shares is essentially horizontal. Even though stock splits were taken under these studies, their effects were similar to a rights issue (Levy, Haim & Sarnat 1971).

The second hypothesis advanced is the negative price effect hypothesis. Scholes (1972) tested the rights issue effects via an approach similar to Fama et al (1969) and found that the cumulative abnormal return (CAR) is positive prior to the date of issue and fall by 0.3% on the month of issue but experienced no abnormal returns thereafter.

The third hypothesis offers positive price effect where rights issues is said to be associated with favourable information about planned investments of the issuing company and value enhancing from financial leverage reduction. However, empirical evidences supporting this hypothesis are lacking. Based on these theoretical and empirical evidences this study hypothesizes that "rights issue announcements have a negative impact on the share prices of listed companies in the Colombo Stock Exchange." and " Colombo stock market confirms to semistrong form of market efficiency."

Literature Review

The schools of thoughts are normally categorized into three groups on the matter of security price evaluation. Advocates are normally classified as (1) fundamentalists, (2) Technicians and (3) Efficient market advocates.

The fundamental analyst focuses on the intrinsic value of the stock. This intrinsic

 γ

value depends on the earnings potential of the security. Fundamentalists would buy the stock, if its market price is below its theoretical value or sell the stock, if the price exceeds underlying value. For fundamentalists, such matters as earnings, dividends, asset values and management are the basic ingredients in determining underlying security values.

Technical analysis, on the other hand, takes an alternative approach to predict stock price behaviour. The technical analyst believes that the forces of supply and demand are reflected in patterns of price and volume of trading. Technical analysts believe that all innumerable fundamental factors, considered in fundamental analysis are summarized and represented by the market prices of stocks. Volume changes are believed by most technicians to be prerequisite to any change in price.

The third theory to stock price behaviour, which has voluminous body of literature, is called the theory of efficient market. It accepts that a stock should have an intrinsic price dependent on the fortunes of the company and the expectations of investors. The key feature of efficient market theory is that although stock prices will have an intrinsic value, this value will be altered as new information becomes available.

Fama's study was designed to measure the degree of randomness with which stock prices fluctuated. He thought that financial information arrived randomly and assuming that prices responded efficiently to the new information hypothesized that the prices should fluctuate randomly too. Fama delineated three levels of market efficiency namely the weak form, the semi-strong form and the strong form of the efficient market hypothesis.

The weak form of the efficient market hypothesis (EMH) says that current prices of shares already fully reflect all information that is contained in the historical sequence of prices. The findings of early researches conducted in developed stock markets such as USA and UK tend to confirm that the share prices follow a random walk. These tests addressed two questions: (i) do prices over time have sufficient serial dependence to allow investors to predict future price movements by studying trends? and (ii) can trading strategies based on price movements provide opportunities for abnormal profits? For example, the study by Kendall (1953) tried to observe whether mechanical rules based on historical share price information could be used to predict future stock prices in an attempt to earn profit in excess of the average market return. King (1966) did a study on the 63 US companies and Cootner (1962) used 45 US stocks in his tests of weak form of efficient market hypothesis. All these studies provided supportive evidence to EMH concluding that US stocks follow a random walk. Niarchos (1972) did a study on the Greece stock market using 15 companies, Preatz (1969) on 16 indices and 20 companies of Australia, Jennergren (1975) tested on 15 Norwegian stocks and Young (1990) tested on 170 stocks traded in Malaysian stock exchange. These studies provide an excellent literature regarding the weak form of efficiency of some of the world's newest stock markets. The findings of these studies were mixed, but most studies concluded that non-US markets do deviate from the weak form of the EMH. Abeyratna and Power (1995) tested weak - form efficiency for the Sri Lankan market using share price data from the companies traded on Colombo stock exchange. They found that the behaviour of the series of price changes were inconsistent with the weak form of the efficient market hypothesis.

The semi-strong form of the efficient market hypothesis says that current prices of shares not only reflect all informational content of historical prices but also reflect all publicly available knowledge about the companies being studied. Furthermore, the semi-strong form says that efforts by analysts and investors to acquire and analyse public information will not yield consistently superior returns to the analyst. If security prices seem to reflect the superficial view of the action and not the rational one, it would imply that the market was not efficient in the semi-strong form to lack of knowledge or information of investors. Fama, Fisher, Jensen and Roll (1969) made a major contribution to the semi-strong form of the efficient market hypothesis by analysing share price reactions to the announcement of new information. The result of this study is consistent with the semi-strong form of market efficiency. Ball and Brown (1968) conducted another study by analysing the stock market's ability to absorb informational content of reported annual earnings per share information. They explored the relationship between security price changes and earnings changes. They found a significant association between the sign of the price changes and the sign of the earnings changes. One of the influential studies on market price adjustments following new security issue announcements is the study conducted by Asquith and Mullins (1986).

The strong form of the efficient market hypothesis maintains that not only is publicly available information to the investors or analysts but also all information that is available, be it "public" or "inside", cannot be used to consistently earn superior investment returns.

Stock Price Reaction to Rights Issue Announcements

Making issue of new shares to existing shareholders is called rights issue. This method offers existing shareholders to take-up additional shares, for cash, at a price usually significantly below the market price at which outstanding shares are traded in the market. Since new additional shares are offered, the supply of total outstanding shares of issuing company increases. This creates concern to investors over its effect on share prices. Many studies have examined how share prices are adjusted when the numbers of outstanding shares are increased through a rights issue. Conclusions of these studies tend to support both no price effect and negative price effect hypotheses to new additional share issue announcements. Studies of Hansman, West and Langay (1971) and Levy, Haim and Samat (1971) concluded that price adjustments after new additional share issues were not associated with the announcement but rather by its implication of the future dividend expectations. Therefore, their findings showed that investors could not obtain any systematic abnormal returns and thus they supported to no price effects of these announcements. On the other hand studies of Scholes (1972), White and Lusztig (1980), Asquith and Mullins (1986) and Kit (1990) found negative price effects after rights issue announcements. This negative price effect was found permanent in nature that is a permanent price reduction after the announcement, in Scholes and Asquith and Mullins' studies. However, White and Lusztig and Kit found a temporary negative price effect after the announcements.

Data

This study examines the behaviour of share prices around new announcements using a sample of Sri Lankan companies, which announced rights issues during the period from January 1994 to December 2001.

Through the process of this examination the study attempts to observe how effective and efficient the share market is in setting prices, which reflects the worth of the shares, traded in the market. For this purpose a sample of rights issue announcements for eight years has been taken with relevant daily share prices of issuing companies and parallel to all share price index. Apart from the study of overall sample it is further classified into two subdivisions. That is, the sample is sub classified on the basis of size of the company and size of the rights issue. This classification would help to test whether the price performance differ from one group to another when companies are grouped on their specific features.

The sample consists of 144 rights issues. The sample was reduced to 144 due to two reasons. The non-availability of daily share prices for 190 days prior to the announcement date was the first one. This is mainly because some of these companies have received listing status on the CSE less than 190 days before the announcement date and very thin trading in some cases. For few companies the researcher could not find computerized daily share price data from the CSE. Secondly, the study intends to observe the effect of a rights issue announcement, such an event should be isolated from all other confounding events. Thus, the samples should satisfy the requirement that there were no announcements of any other kind either simultaneously or within 10 days surrounding the rights issue announcement date for the sample data. Twelve observations were dropped from the sample due to this reason.

The data used in this study consists of rights issue announcement dates obtained from Colombo Stock Exchange computerized database. In gathering data care was taken to ensure that the event date, t, was the day on which first public information received to the market. Interviews with CSE officials and stock brokers confirmed that the first public announcement day is the day, which has recorded in the CSE database. These sources further confirmed that issuing companies do not make the announcement earlier than this day through any other sources.

From the same CSE data base the researcher gathered daily closing share prices for 190 days before the rights issue announcement and 10 days after the announcement day. In calculating daily return for each company the researcher faced a problem, which is common to all developing share markets. That is, there were days with no transactions. This problem has encountered by many researchers in the developing countries. Heinkel and Kraus (1988) have suggested three possible alternatives in dealing with days with no transactions. One possibility is to ignore the days with no trading and use only return data for trading days. A second approach is to assign zero return for days with no transactions. The third approach is to construct a linear model, which can be used to estimate the true return for the day with no return, based on the assumption that prices change when there is information, regardless of whether or not there is trading. In this study, the second approach is followed due to few reasons. First, it is not quite appropriate to ignore the days with no trading since non-trading is a characteristic of a thinly traded market. Secondly, by employing a linear model to fill the missing observations, the values we used are not the actual ones, but rather the estimates. Finally, assigning zero return to the days with no trading will at least reflect the actual return of that particular day. With a view to calculate market return, the all share price index was used from the same CSE database.

Methodology

Event study methodology being employed to test whether stochastic behaviour of share prices is affected by the disclosure of rights issue announcements. This is a well-established and broadly accepted method of empirical investigation of the relationship between security prices and economic events. Among the number of alternative specifications of the benchmark for calculating abnormal returns, which have been used in the literature, the researcher used the market model benchmark in this study. Both abnormal returns and excess returns are calculated to examine test period returns behaviour.

The basic structure of the standard form of the event study requires calculating the abnormal return for each company around the announcement date within the test period. This study considers 10 days prior to the announcement, the announcement day, and 10 days after the announcement day as the test period.

In an event study it is common to observe abnormal share returns behaviour during the test period. Therefore, daily abnormal returns for the 21-day event period were calculated as follows:

$$AR_{ii} = R_{ii} - E(R_{ii})$$
 _____ (1)

Where $AR_{it} = Abnormal return for i th share$ $for the t th day, <math>R_{it} = Return for i th share for$ $the t th day, and <math>E(R_{it}) = Expected$ return for ith share for the tth day.

Daily abnormal share returns are averaged for all firms for the test period and tstatistic was employed to examine whether abnormal returns for the rights issue announcement are statistically significantly different from zero. If the share market is efficient in semi-strong form, then announcement day abnormal return should be significantly different from zero.

In calculating daily returns for both individual companies and market, logarithmic returns were considered. Empirically, logarithmic returns are more likely to be normally distributed and so confirm to the assumptions of standard statistical techniques. Thus, following identity was used to calculate daily share returns for individual companies.

$$R_{it} = Ln(P_{it}/P_{it-1})$$
 (2)

Where R_{ii} = the return on security i in time t, Ln = natural logarithm, P_{ii} = the price of share i in time t, P_{ii-1} = the price of share i in time t-1.

Theoretically, return from a stock should include dividend received as well. However, the return of this study has not included dividends. Since daily stock prices have been used to calculate return in this study, this will not affect the results seriously. During the estimation period of 180 days there might be only one dividend payment. To calculate return of the market, following model is used:

$$R_{mt} = Ln(A_t/A_{t-1})$$
 (3)

Where R_{mt} = the return on market portfolio in time t, Ln = natural logarithm, A_t = all share price index in time t and A_{t-t} = all share price Index in time t-1.

The market model benchmark was used to generate expected return. This model assumes that the company return is depended on market returns. Therefore, the market return exists as the independent variable while company return plays the role of depended variable. This relationship can be expressed by using a regression model, which takes the following form:

 $E(R_{it}) = \alpha_{i} + \beta_{i} R_{nt}$ (4)

Where $\alpha_1 = \text{constant}$ and $\beta_1 = R_{\text{mt}}$, co-efficient.

The estimation of α and β used in the market model is based on previous share return data. In estimating the parameters of the market model the number of observation used varies widely in the literature. For example on daily data, Lambert and Larker (1985) used as few as 60 observations while Dodd et al (1984) used as many as 600 values. In practice, there is a trade-off between increasing the number of observation to improve statistical accuracy of the estimated a and b and not going too far back from the test period in case the parameters of the model change through time. For the purpose of this study 180 observations were used to estimate α and β by using the regression. That is, from day -190 to day -11 is used as the estimation period for computation of α and β .

This study also examines the stock market response to rights issue announcement by

examining the excess returns earned by the shares during the test period. The excess return means the return different between raw return of the shares and the market portfolio returns. For this purpose the study assumes that the excess returns are generated by the "zero-one" model. This model assumes an α of "zero" and α β of "one" of the following regression model;

$$R_{it} = \alpha + \beta R_{int}$$
 (5)

Since $\alpha = 0$ and $\beta = 1$, the excess return of the company i in time t can be calculated as follows:

$$ER_{ii} = Rit-R_{iii}$$

Where $ER_n = excess$ return on share i in time t, $R_n = actual$ return on share i in time t and $R_{mt} = return$ on market portfolio in time t.

The excess returns, which are calculated for day t-10 to day t+10, are used to confirm the results obtained from abnormal return performance of the stocks.

The Results

With a view to get an overall view of share market reaction to announcements of rights issues, total sample of 144 announcements were tested. For this purpose, abnormal returns, and excess returns which were calculated for 144 announcements for the period from day t-10 to day t+10, are averaged across firms and t - statistics were calculated. Table 1 presents the results for this examination. The table contains the mean abnormal return (MAR), cumulative mean abnormal return (MAR), mean excess return (MER), cumulative mean excess return (CMER), and respective t-values.

Day	MAR	CMAR	T-VALUE	STD.DEV	MER	CMER	T-VALUE	STD.DEV
-10	-0.0114	-0.0114	-1.060	0.0827	-0.0007	-0.0007	-0.188	0.0291
-9	-0.0132	-0.0246	-1.261	0.0807	-0.0032	-0.0039	-0.805	0.0312
-8	-0.0060	-0.0307	-0.600	0.0770	0.0046	0.0006	1.542	0.0229
-7	-0.0143	-0.0450	-1.273	0.0866	-0.0030	-0.0029	-0.523	0.0450
6	-0.0085	-0.0536	-0.763	0.0861	0.0003	-0.0021	0.047	0.0493
-5	-0.0133	-0.0670	-1.322	0.0777	-0.0028	-0.0050	-1.167	0.0189
-4	-0.0067	-0.0737	-0.534	0.0964	0.0043	-0.0007	0.540	0.0614
-3	-0.0114	-0.0851	-1.073	0.0815	0.0000	-0.0006	0.010	0.0311
-2	-0.0072	-0.0923	-0.658	0.0839	0.0030	0.0024	0.593	0.0398
-1	-0.0131	-0.1055	-1. <u>17</u> 5	0.0861	-0.0019	0.0004	-0.383	0.0399
0	-0.0139	-0.1194	-1.127	0.0951	-0.0037	-0.0033	-0.483	0.0598
1	-0.0086	-0.1281	-0.475	0.1394	-0.0023	-0.0056	-0.155	0.1155
2	-0.0058	-0.1339	-0.530	0.0840	0.0052	-0.0004	1.194	0.0336
3	-0.0120	-0.1459	-1.144	0.0808	-0.0036	-0.0040	-0.730	0.0382
4	-0.0132	-0.1592	-1.157	0.0882	-0.0044	-0.0085	-0.718*	0.0474
5	-0.0260	-0.1853	-2.054*	0.0972	-0.0130	-0.0216	-1.697	0.0591
6	-0.0130	-0.1983	-1.179	0.0846	-0.0032	-0.0248	-0.611	0.0405
7	-0.0075	-0.2058	-0.642	0.0906	0.0007	-0.0240	0.118	0.0494
8	-0.0137	-0.2196	-0.802	0.1317	-0.0117	-0.0357	-0.841	0.1069
9	-0.0136	-0.2333	-1.143	0.0919	0.0007	-0.0350	0.181	0.0313
10	-0.0143	-0.2476	-1.327	0.0828	-0.0030	-0.0381	-0.715	0.0328

Table 1: Mean Abnormal Return and Excess Return for the Total Sample

As can be seen, the overall picture shows a negative MAR and CMAR, which persists throughout the test period. The table reveals that mean abnormal return on announcement day is -1.39% having a t - value of -1.13. The announcement day abnormal return is negative but not statistically significant. On the other hand, announcement day standard deviation (0.0952) does not seem to deviate significantly from the standard deviations of the non-announcement days. The observations of minimum and maximum abnormal returns tend to give the same picture. In summary, the observation of table 1 indicates that the rights issue . announcements have not been received by the market with surprise. This may indicates that information about rights issue have already been leaked to the market beforehand. This picture is more apparent in cumulative abnormal returns which were negative over the 21-day test period and no significant price adjustments are observed on day t.

The table further shows share market response to rights issue announcement in excess return view as well. The main purpose here is to see whether the results obtained based on mean abnormal returns could be reinforced with the excess returns criteria. For this purpose the excess returns for the total sample were calculated. These excess returns are then averaged for the test period from day t-10 to t+10.

An observation of excess return in the table 1 reveals the same picture emerged in abnormal return criteria. The negative excess return on day t (-0.38%) was not statistically significant. announcement-period return volatility does not remarkably differ from non-announcement days. A significant stock price adjustment cannot be observed on day t. These results are totally in conformity with the results of abnormal returns analysis.

		Large Companie:	S	Small Companies			
Day	MAR	CMAR	T-VALUE	MAR	CMAR	T-VALUE	
T-10	-0.037156	-0.037156	-1.201454	0.004670	0.004670	0.921183	
T-09	-0.032351	-0.069507	-1.107560	-0.001298	0.003373	-0.212357	
T-08	-0.026840	-0.096347	-0.935576	0.008827	0.008827	1.817822*	
T-07	-0.032898	-0.129245	-1.151229	-0.001535	0.007292	-0.292928	
T-06	-0.025668	-0.154913	-0.920044	-0.015106	-0.015106	-1.234434	
T-05	-0.034600	-0.189513	-1.189816	-0.001871	-0.016977	-0.367858	
T-04	-0.006870	-0.196383	-0.191539	-0.008022	-0.008022	-0.933493	
T-03	-0.033555	-0.229938	-1.153280	-0.006438	-0.014460	-0.841903	
T-02	-0.033272	-0.263210	-1.139466	0.012102	0.012102	1.380212	
T-01	-0.030713	-0.293923	-1.038251	-0.002891	0.009211	-0.271070	
Т	-0.046617	-0.340541	-1.391621	-0.004034	-0.004034	-0.565926	
T+01	-0.012164	-0.352704	-0.372541	0.025527	0.021493	1.622561	
T+02	-0.024935	-0.377639	-0.836836	0.004739	0.004739	0.435650	
T+03	-0.036257	-0.413896	-1.295783	0.002735	0.007473	0.386178	
T+04	-0.036608	-0.450504	-1.235136	-0.006671	-0.006671	-0.777710	
T+05	-0.032203	-0.482707	-1.058608	-0.024535	-0.031206	-1.281780	
T+06	-0.037573	-0.520280	-1.270941	-0.006398	-0.006398	-0.582103	
T+07	-0.031586	-0.551866	-1.089136	0.012359	0.005961	0.711129	
T+08	-0.072960	-0.624825	-1.740956*	0.014775	0.014775	0.974263	
T+09	-0.023128	-0.647954	-0.672045	-0.013355	0.001421	-1.470796	
T+10	-0.038355	-0.686309	-1.276556	-0.003927	-0.003927	-0.581455	

Table 2: Mean Abnormal Return for Large and Small Companies

However, both abnormal returns and excess return analysis show that they are negative (but not statistically significant) for the majority of the days in the test period. This may indicate that even though the news about rights issues have been exposed beforehand, it has been recognized as a negative signal by the market. This behaviour is consistent with the idea that companies go for a new issue whose shares are overvalued and in response stock market reacts adversely to such information.

The overall sample was sub divided using two-classification criteria to examine abnormal and excess returns behaviours. The first classification of the sample was based on the company size. The size of the company was decided based on its sales value in relevant years. Among the companies, which were involved in 144 rights issue announcements; some are blue-chip companies while others are ordinary companies. With a view to see any effect of the company size, the sample was split into two groups as large companies and small companies. Each category consists of 48 announcements. Table 2 presents mean abnormal return values of the largest and smallest companies.

The sample of largest companies reveals more or less the same pattern of abnormal returns and t-values as the overall sample. Abnormal returns of the announcement day is the lowest during the test period except for day t+8, which is statistically significant lowest abnormal return at 90% confidence level. The smallest companies of the sample, reveals some different behaviour from the overall results. Here the abnormal returns show positive values

	Hig	hest 20 Rights Is	sues	Lowest 20 Rights Issues			
Day	MAR	CMAR	T-VALUE	MAR	CMAR	T-VALUE	
T-10	0.001556	0.001556	0.611519	-0.004323	-0.004323	-0.447180	
T-09	-0.007425	-0.005869	-0.880602	0.001522	-0.002801	0.216534	
T-08	0.008551	0.002682	1.777587*	0.004755	0.001955	1.156605	
T-07	0.011216	0.013897	1.291357	-0.002807	-0.000852	-0.452613	
T-06	-0.012897	100100.0	-0.937916	0.001581	0.000729	0.513233	
T-05	0.003252	0.004253	0.917038	-0.008227	-0.007498	-1.671027*	
T-04	-0.001159	0.003094	-0.162839	-0.007548	-0.015047	-0.656751	
T-03	-0.001700	0.001394	-0.195643	-0.001769	-0.016816	-0.218256	
T-02	0.007347	0.008740	0.695204	-0.000792	-0.017608	-0.082586	
T-01	0.006020	0.014760	0.635697	0.000805	-0.016803	0.114633	
Т	0.000912	0.015672	0.089444	-0.006798	-0.023601	-0.839395	
T+1	-0.001533	0.014140	-0.120704	-0.023036	-0.046637	-0.578228	
T+2	-0.001620	0.012519	-0.274612	0.012900	-0.033737	1.259269	
T+3	0.007229	0.019748	0.937545	-0.005415	-0.039152	-0.657081	
T+4	-0.013991	0.005756	-1.903571*	0.002207	-0.036945	0.141869	
T+5	-0.017960	-0.012203	-1.729819*	-0.005622	-0.042567	-0.364044	
T+6	-0.010157	-0.022360	-1.335451	0.006212	-0.036355	0.497014	
T+7	0.002833	-0.019528	0.251403	-0.008154	-0.044509	-0.961884	
T+8	-0.027532	-0.047060	-0.884199	0.018101	-0.026408	0.923995	
T+9	-0.001193	-0.048253	-0.446719	-0.002050	-0.028458	-0.322956	
T+10	-0.003617	-0.051870	-0.788422	-0.007545	-0.036004	-1.056608	

Table 3 Mean Abnormal Return for Highest and Lowest Rights Issues

on days t-10, t-8, t-2. t+1, t+2, t+3, t+7 and t+8. Among these eight days day t-8 shows a significant return at 90% confidence level. This result might indicate the dominance of the larger companies in overall results. Excess return calculations for the same above classification showed more or less the similar pattern of behaviour as the overall results. This also should have the effect of larger companies' price behaviour have a bear on overall results.

The second classification of the sample was based on the size of the rights issue. The 144 announcements considered in this study include as high as 1 for 13 stock and as low as 1 for 0.25 share issued as rights to the existing share holders. The purpose of this classification is to see whether this size of the announcement has any effect on market's behaviour. In view of this purpose the overall sample was split into three groups as highest medium and lowest issues. Effects of the highest and lowest groups are observed. Table 3 presents the mean abnormal return results of the highest and lowest issues.

This classification did not suggest any clear differences. The exceptional difference is in Table 3, the sample of highest issue size earned positive abnormal returns on day t, t-1 and t-2 but these returns are insignificant. Other than this difference both classifications show almost same pattern of mixed positive and negative values in either side of the announcement day line. In general this classification suggests that the investors in Colombo stock market do not consider size of the issue as special information to react differently. When comparing this table with overall results a difference can be identified in the pattern of the mean abnormal return. While overall results show negative return throughout the test period this table showed a mixed return behaviour as the other classification of the sample. Mean excess return criterion showed, in general, similar pattern as the abnormal return of the table 3. The result of this classification is also compatible with the overall mean excess return results.

Conclusion

The main purpose of this paper is to examine price effects of a rights issue announcement and to test whether the market confirms to the semi-strong version of market efficiency hypothesis. This study calculated abnormal and excess returns for a 21-day period from day t-10 to day t+10 employing event study methodology.

As the results show, the general conclusion reached here is similar to that found by White and Lusztig (1980). Negative price effects were experienced from a rights issue announcement. As far as mean abnormal return criteria is concerned, even falling price trend is experienced before the announcement. However, these abnormal returns are not statistically significant. This price decline continued even after the announcement day. No significant price adjustments were observed on the announcement day. Thus these results did not reject the hypothesis that the market was not efficient in the semi-strong version. An excess return criterion is also compatible with the above conclusion. Excess return showed mixed performance return before the announcement day with no any statistically significant returns. The null hypothesis was rejected by excess returns criteria too. Therefore, the results of the

test of the semi-strong version of MEH clearly indicates a departure from this version of MEH. The market does not instantly and in an unbiased manner impound all publicly available information into its share prices as accepted by the semi-strong version of MEH. Thus, in the strict sense of the semistrong version of MEH, new and publicly available information could be used as a valuable tool in making investment decision. The conclusion reached here is similar to that found by Lewke Bandara (1995) for earnings announcements and of Azeez A. A. (1995) for dividend announcement (Unpublished theses) in the Colombo stock market. However, the negative abnormal returns and excess returns observed before the announcement day may indicate that information is exposed to the market before they are formally released by companies.

This overall conclusion is further supported by the results of both classified samples. Both classifications showed agreement with the above conclusion with some differences, which are not statistically significant. On the other hand, these classifications gave some inside information, which may be valuable to the investors as well as future researchers; information such as rights issues of small companies seemed not to have immediate negative price effects.

References:

Abeyratna, G. and Power, D. M. (1995), 'A Test of the Weak form of the Efficient Market Hypothesis: Evidence Using Daily Data from the Colombo Stock Exchange - Sri Lanka', *Journal of Social Sciences*, Vol. 18, 41-53.

Asquith, P. And Mullins, D. W. (1986), 'Equity Issues and Offering Dilution', Journal of Financial Economics, Vol. 15 61-89. Ball, R. And Brown P. (1968), 'An Empirical Evaluation of Accounting income Numbers', *Journal of Accounting Research*, Vol. 6, 159-178.

Cootner, P. H. (1962), 'Stock Prices: Random Vs. Systematic Changes', Industrial Management Review, Vol. 3, 24-45.

Dodd, P., Dopuch, N., Holthausen. R and Leftwich. (1984), 'Qualified Audit Opinions and Stock Prices : Informational Content, Announcement Dates and Concurrent Disclosures', *Journal of Accounting and Economics*, Vol. 6, 3-38.

Fama, Fisher, Jensen and Roll. (1969), 'The Adjustment of Stock Prices to New Information', *International Economic Review*, Vol. 10, No. 1, 1-21.

Hansman, W. H., West, R. R. and Langay, J. A. (1971) 'Stock Splits, Price Changes and Trading Profits: A Synthesis', *Journal of Business*, Vol. 44, No. 1, 69-77.

Heinkel, R. and Kraus, A. (1988), ' Measuring Events Impact in Thinly Traded Stocks', Journal of Financial and Quantitative Analysis, 71-88.

Jennergren, L. P., (1975), 'Filter Tests of Swedish Share Prices', in Elton and Gruber eds., *International Capital Markets*, Amsterdam, North - Holland, 55-67.

Kendall, R. (1953), 'he Analysis of Economic Time Series, Part 1 : Prices, *Journal of Royal Statistical Society*, Vol. 96, Part 1.

King, B. F. (1966), 'Market and Industry Factors in Stock Price Behaviour', *Journal* of Business, Vol. 39, 39-90.

Kit, P.M. (1990), 'Right Issue and Its Effects on Security Prices, *Malaysian Management review*, Vol. 25, No. 3, 41-48.

Lambert, R. A and Larcker, D. F. (1985), 'Golden Parachutes, Executive Decision Making and Shareholder Wealth, *Journal of Accounting and Economics*, Vol. 23, 181-191.

Levy, Haim, and Sarnal, M. (1971), 'Risk, Dividend Policy and the Optimal Pricing of a Rights Offering', *Journal of Money, Credit* and Banking, Vol. 4, 840-849. Niarchos, N. A. (1972), 'The Stock Market in Greece : A Statistical Analysis', *Athens Stock Exchange.*

Preatz, P. D. (1969), 'Australian Share Prices and Random Walk Hypothesis', *Australian Journal of Statistics*, No. 11

Scholes, M. S. (1972), 'The market for Securities: Substitution Versus Price Pressure and the Effects of Information on Share Prices', *Journal of Business*, Vol. 45, No. 2, 179-211.

White, R. W. and Lusztig, P.A. (1980), 'The Price Effects of Rights Offerings', Journal of Financial and Qualitative Analysis, Vol. 15, No. 1, 25-40.

Young, O. (1990), 'Thin Capital Markets : a study of Stock Market Efficiency of Malaysian Stocks ', *Malaysian Management* review, Vol. 25, No. 3, 49 - 61.