Identification of Impact of Stock Splits on Liquidity Aspect of Stocks

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Introduction

Stock splits are a common and a very popular tool used by the corporations to increase the liquidity of stocks in the equity markets. A stock split can be defined as the increase in the number of outstanding shares of stock while making no changes in shareholder's equity. Splits are usually announced to create liquidity in a firm by reducing its share price and increasing the number of shares outstanding. While this does not impact on the intrinsic value of firms, it attracts retail investors as it is more affordable to them.

The primary objective of a share split is to make a certain share more affordable to small investors by splitting the share at an agreed ratio. However, a stock split does not change the intrinsic value of a stock and market capitalization of it at the time of the announcement of the split. Increased liquidity is the main advantage of stock splits. Liquidity can be generally defined as "the ability to trade large quantities quickly at low cost with less price impact". Through a stock split a corporation tries to increase the liquidity of the equity stock in the secondary market and the organization can reduce the cost of capital since the organization does not have to concern on the liquidity premium that the shareholders of the company are expected.

This study attempted to identify the impact of stock splits on liquidity of a share. Therefore, this study aimed to address the question of, what is the liquidity behavior of a share after a stock split. Effect of stock split on liquidity of a share compared to the period before the split is analyzed in this study. Furthermore, this study identified the change of liquidity behavior of a share after the split in relation to the market. This study was based on 20 share splits which had been undertaken in Colombo Stock Exchange in the years of 2009 and 2010.

Methodology

Data of 19 companies which had undertaken stock splits from 2009 - 2010 October are gathered from the Colombo Stock Exchange for this study. Each company's stock split data divided into pairs namely, period prior to the split of shares and period after the split of shares. Twenty day window was used for the comparison of behaviors of shares. This study basically considered the fundamental measures and activity measures to determine liquidity of shares and price, amount of traded shares and number of trades are used as the dimensions of liquidity of a share.

Firstly, the data which relate to share price, trade volume and number of trades were standardized and then Normality tests were performed for each variable to identify the distribution type and based on the distribution, further analyzing tools were determined. Since most of the variables of the data set do not follow a normal distribution, nonparametric statistical techniques were used as statistical tools in this study. Sign Test was used to compare the data since the data are paired. Three basic hypotheses were used to compare the data for each dimension.

In determining the market liquidity of the share, a new measure of liquidity named Relative Liquidity Ratio which was introduced by Lalith P. Samarakoon, 'A New

Measure of Market Liquidity of Shares: The Case of Colombo Stock Exchange' ,1999, was used. Therefore, the liquidity of a share is determined in two aspects.

Results and discussion

The liquidity of shares has been determined by their behavior in traditional dimensions of share price, trade volume and trade frequency. In addition, market liquidity of the share was determined according to the Relative Liquidity Ratio.

According to the results, 60% of shares have an increased liquidity after the split since liquidity has been increased in most dimensions. In determination of overall liquidity of shares, priority was given to trade frequency and then to price and lastly to trade volume. Liquidity of 35% of shares stay constant after the split and 5% has been reduced after the split.

In the perspective of the Relative Liquidity Ratio – ratio which is used to determine the market liquidity of a share, most of stocks which have undertaken stock splits account for an increase of market liquidity by 70%. 15% of stocks indicated a reduction of liquidity in the market while other 15% of stocks indicated a constant liquidity.

According to the results it is evident that liquidity of a share increases in the perspectives of 'liquidity of share before the split' and 'market liquidity' after undertaking a stock split.

Conclusions

As a whole, it can be concluded that the liquidity of a share is increasing in the perspectives of the share with compared to period before the split and in the perspective of market subsequent to the stock split.

References

Baker, H. K and P. L.Gallagher 1980.Management's view of stock splits.Journal of Financial Management.9:73-77.

Copeland ,T.1979.Liquidity Changes Following Stock Splits. Journal of Finance.34: 115-141.

Liu, W. 2006. A Liquidity Augmented Capital Asset pricing Model.Journal of Financial Economics.77.

Samarakoon, L.P. 1999. A New Measure of Market Liquidity of Shares: The Case of Colombo Stock Exchange.Department of Accounting and Financial Management,University of Sri Jayawardanapura.