The Impact of Stock Split Announcements in the Share Prices of the Companies

Pritha Chaturvedi,
Faculty Member,
ICFAI University Jharkhand

Abstract:
Investors consider stock split as an opportunity to trade more. The reduced price after a company splits a stock is able to attract many investors as it becomes affordable for many of them to demand the same shares which they could not demand because of the then prevalent price. The primary motivation for a company to split its stock is to make the price more attractive to the average retail investor. The stock split announcement draws attention to a company's success. This results in increased buying and higher prices. Stock market plays a major role in the economic development and it is true that information content of events and its dissemination determine the efficiency of the stock market. The present study is an attempt to test the the impact of the stock split announcements in the share prices of the companies listed under the Bombay Stock Exchange.

Key words: Stock split, Bombay Stock Exchange, Investors

Introduction:
Stock splits don't actually change the intrinsic value of a stock, but they do often create euphoria among shareholders and potential buyers that can propel a stock's price sharply higher. The reason behind is that an investor will prefer to buy a stock at Rs. 50 than at Rs. 100. To some it just makes more sense to invest in buying 100 shares of a Rs. 50 stock, than just 50 shares of Rs. 100 stock. This behavior of the investors is purely psychological but is the essence of the entire market. A 1996 study by David Ikenberry of Rice University measured the short and long-term performance of stock splits. His research included all the 1,275 companies whose stock split 2-for-1 between 1975 and 1990. Mr. Ikenberry compared the split stocks to a control group of stocks for similar-sized companies in similar sectors that had not split. His results were startling. The split stock group performed 8% better than the control group after one year, and 16% better after three years. Stock splits
are carefully executed and not a spur of moment decision. Companies are required to announce a stock split before it takes place. Before the actual stock split, though, speculation about a company's future can drive the price of the stock up drastically, in some instances, investors may be able to buy the stock before the stock split occurs. Websites such as www.stockspills.net will generally provide announcements of any impending stock splits.

Stages of a stock split:

Pre-announcement: Stocks usually enter this initial stage quietly and without fanfare after a long period of healthy growth. However, in some cases emergence into the Pre-Announcement stage occurs quickly, as an unexpected windfall causes a rapid increase in the stock price. This stage of a stock split is often associated with significant appreciation in share price. The key to profiting from this stage is being able to determine which stocks are the most likely to split and when.

Announcement: The upbeat atmosphere of a stock split often pulls in a large number of new buyers. This influx of traders and investors can lift the stock price higher, giving exceptional gains for those positioned in the stock prior to the split stock announcement. For those who are not in the stock before the split announcement, this stage usually offers low-risk setups for timing short-term trading entries.

Dormancy: There is generally a return to normal price behavior in the weeks following a split announcement as the initial interest subsides. The shorter the time between the announcement and the split date, the less subdued this stage will be.

Pre-split run: For many stocks this is the most powerful phase of the split cycle as investors dramatically bid up the price of the limited supply of shares.

The Split: The day of the stock split provides more investor awareness of the already well publicized stock split. Many investors who watched the stock rise at the announcement and again during the pre-split run will now buy shares at the lower split prices. These final buyers can push prices even higher.

Post-split: After the last buyers are in, investor excitement for the split stock can begin to fade. Prices will often retreat for a while as shares are sold to lock in profits. This stage of a stock split can deliver excellent shorting prospects. While some split stocks will pullback
and consolidate for a while, strong performers often dip, quickly rebound and then continue to fly higher.

Reasons behind the stock split:

Stock splits are marketing incentives offered by companies looking to attract new investors. When companies perform well and meet earnings expectations, they will look to make additional shares available to investors if the demand for the stock exceeds the current supplies available. A split in this sense would allow additional investors to take advantage of and invest in a company. Stock splits are also initiated when companies think that the price of stock shares is too prohibitive for the average investors and so decide to reduce the price per share by increasing the numbers available. Many investors are under the illusion that a company splits a stock that it’s definite upswing in the company’s fortune. Some of the other reasons for a stock to split could be as mentioned below:

- **Affordability of each share is improved:** Each share of the stock with stock split will have lower value than before. Someone who could not buy a share that costs Rs. 2500 but may buy it if the same is available for Rs. 1250. So the universe of the potential buyers of a stock may increase if the price of each share is lowered through a stock split.

- **More shares are available so one can have a wider ownership base:** Literally the more a stock has been split, the larger the quantity of individual shares that exists.

- **Investor’s expectations of price range:** Investors are often puzzled by the cost of each share of a stock that has’nt been split even when share value goes beyond certain limit.

- **Certain group of investors prefer stock s that keeps splitting:** Since very successful companies (Intel, Microsoft, etc) generally keep splitting their stock every few years during their growth phase, there is an aura of vitality around a company that need to keep splitting its stock to keep it in the Rs.5 to Rs. 200 range per share. The investors generally connect stock splits with the future prospects of the companies.

- **Splitting it themselves helps them to avoid having other people split their stock:** If a company split its stock, other people can create a business where by they sell shares of their entity that owns shares of the stock that won’t split.
Objective of the study:
To test the impact of the stock split announcements in the share prices of 8 selected blue chip companies (Wipro, HLL, Cipla, Jindal Steel, Bharti Airtel, Sterlite, HDFC and Hindaleo).

Research Methodology:
The concept of correlation is a statistical tool which studies the relationship between two variables. "Two variables are said to be in correlation if the change in one of the variables results in a change in the other variables."

The coefficient of correlation: One of the widely used statistics is the coefficient correlation "r" which measures the degree of association between two values of related variables given in the data set. It takes the values from +1 to -1. If two sets of the data have r = +1, they are said to be perfectly positively correlated and are perfectly negatively correlated if r = -1.

The formula used to determine the coefficient of correlation is

\[ r = \frac{n \sum xy - \sum x \sum y}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}} \]

Sample Selection

<table>
<thead>
<tr>
<th>Company name</th>
<th>Date in which the news of stock split struck the market</th>
<th>Stock split ratio</th>
<th>Share price before split news</th>
<th>Share price after split news</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wipro</td>
<td>01-05-1999</td>
<td>1:5</td>
<td>7597</td>
<td>3696.75</td>
<td>2.77</td>
</tr>
<tr>
<td>HLL</td>
<td>21-02-2000</td>
<td>1:10</td>
<td>2489.15</td>
<td>2689.15</td>
<td>8.03</td>
</tr>
<tr>
<td>Cipla</td>
<td>19-03-2004</td>
<td>1:5</td>
<td>1128</td>
<td>1191.51</td>
<td>5.63</td>
</tr>
<tr>
<td>Jindal Steel</td>
<td>28-12-2007</td>
<td>1:5</td>
<td>14200</td>
<td>15212.55</td>
<td>7.13</td>
</tr>
<tr>
<td>Bharti Airtel</td>
<td>15-07-2009</td>
<td>1:2</td>
<td>773.35</td>
<td>780.3</td>
<td>0.90</td>
</tr>
<tr>
<td>Sterlite</td>
<td>26-04-2010</td>
<td>1:2</td>
<td>795.19</td>
<td>842.5</td>
<td>5.95</td>
</tr>
<tr>
<td>HDFC</td>
<td>29-04-2010</td>
<td>1:5</td>
<td>2810.44</td>
<td>2868.9</td>
<td>2.08</td>
</tr>
<tr>
<td>Hindaleo</td>
<td>12-07-2010</td>
<td>1:1028</td>
<td>1246</td>
<td>1256</td>
<td>0.80</td>
</tr>
</tbody>
</table>
A sample of 8 blue chip companies were selected which have undergone a share split from BSE between 1999 to 2010. Reason for the selection of BLUE Chip Companies is stable earnings and not having extensive liabilities.

**Data for Research**

**Determining the coefficient of correlation**

<table>
<thead>
<tr>
<th>Company name</th>
<th>Denominator by which the face value of the stock would be divided (X)*</th>
<th>Percentage change(Y)</th>
<th>(X)* (X)</th>
<th>(Y)* (Y)</th>
<th>(X)* (Y)</th>
</tr>
</thead>
<tbody>
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<td>2.77</td>
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<tr>
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<td>5.63</td>
<td>25</td>
<td>31.70049372</td>
<td>28.15159574</td>
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<tr>
<td>Jindal Steel</td>
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<td>7.13</td>
<td>25</td>
<td>50.84593843</td>
<td>35.65316901</td>
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<tr>
<td>Bharti Airtel</td>
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<td>0.90</td>
<td>4</td>
<td>0.807639273</td>
<td>1.797375057</td>
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<tr>
<td>Sterlite</td>
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<td>5.95</td>
<td>4</td>
<td>35.39680606</td>
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<tr>
<td>HDFC</td>
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<td>2.08</td>
<td>25</td>
<td>4.32682157</td>
<td>8.025682183</td>
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<tr>
<td>Hindalco</td>
<td>10</td>
<td>0.80</td>
<td>100</td>
<td>195.9713015</td>
<td>190.1418065</td>
</tr>
</tbody>
</table>

* NOTE- Denominator by which the face value of the stock would be divided also represents the extent by which it turns economical to the common investor and hence it has been taken for calculation.

**Formula to determine the coefficient of correlation**

\[ r = \frac{n\sum{xy}-(\sum{x})(\sum{y})}{\sqrt{(n\sum{x}^2-(\sum{x})^2)(n\sum{y}^2-(\sum{y})^2))}} \]

By substituting the values in the formula we get

\[ r = 0.11 \]
Result: It can be concluded that a stock results in a positive movement of the respective stock price of the company since we have a moderate positive coefficient of correlation which stands at 0.11.

Conclusion:

A stock split is a corporate action where the company divides the existing outstanding shares in order to boost the liquidity of shares. Companies split their stock when they think the price of their stock exceeds the amount smaller investors would be willing to pay. It is aimed at making the stock more affordable and liquid from retailer’s point of view. As the price per share is lowered, investors are attracted to make the plunge because of the speculation that the values will go up. Initially investor buys the stock, causing a jump in the individual share price. This is called split effect. Once the novelty of investor speculation decreases, the post split depression takes place, and prices level off. As applicable for investments, careful research should be investor’s initiative prior to the actual purchase.

References:

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